The Discrepancy of Perceived Public Stigma and Personal Stigma in Gendered-Dominating Environments.

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

Samantha Locke
Supervised by Dr. Katharina Näswall and Dr. Joana Kuntz

Department of Psychology, Speech and Hearing
University of Canterbury
Contents

Acknowledgements ............................................................................................................. 3
Abstract................................................................................................................................. 4
The Discrepancy of Perceived Public Stigma and Personal Stigma in Gendered-Dominating Environments .................................................................................................................. 6
  Mental Health Stigma .......................................................................................................... 6
  Perceived Public Stigma and Personal Stigma ................................................................. 9
  Workplace Stigma ............................................................................................................... 11
  Group Differences in Mental Health Stigma ..................................................................... 12
  The Present Study ............................................................................................................. 14
Method .................................................................................................................................. 14
  Participants ......................................................................................................................... 14
  Procedure ............................................................................................................................ 15
  Measures .............................................................................................................................. 16
  Personal Stigma Scale ........................................................................................................ 16
  Perceived Public Stigma Scale .......................................................................................... 17
  Turnover Intentions Scale ................................................................................................. 17
  Mental Health Check ......................................................................................................... 17
  Data Analysis ...................................................................................................................... 18
Results ................................................................................................................................... 18
Discussion .............................................................................................................................. 20
  Limitations ......................................................................................................................... 23
  Implications for future research and practice ................................................................. 25
Conclusion ............................................................................................................................ 26
References ............................................................................................................................. 27
Appendix A- Email Advertisement ....................................................................................... 31
Appendix B- Information sheet and consent form .............................................................. 32
Appendix C – Demographic Questions ............................................................................. 34
Appendix D- Day’s Mental Illness Stigma Scale ................................................................. 35
Appendix E - Perceived Public Stigma Scale ..................................................................... 37
Appendix F- Turnover Intentions Scale .............................................................................. 38
Appendix G- Summary of Descriptive Statistics and Correlations .................................... 39
Acknowledgements

I would like to start by thanking the person by my side throughout this process, who was my crutch from beginning to end, my supervisor Dr. Katharina Näswall. Your support and endless days reading and editing the work I put in front of you is phenomenal. It has been an amazing two years and I will be forever grateful for what I have achieved in that time under your expertise and friendly smile.

I would also like to thank the two other APSY lecturers that I have had the pleasure of getting to know over the last 2 years, Dr. Joana Kuntz and Dr. Christopher Burt. You both were always very approachable and friendly as well as having a killer sense of humour when times were rough and sleep was lacking.

A big thankyou to my mum and dad, you have supported me unwaveringly throughout my life and backed me in whatever pursuit I deemed my life path. You believed in me and your constant love and support always made me feel like I could do anything. I would not be where I am today without you.

To all my friends and extended family, you cried with me, you laughed with me and you sympathised with me when I had my breakdowns. It was not an easy road but you made it a lot easier just by being there and coming to my rescue when I needed time out.

To my amazing workmates, working with you on weekends and throughout the week was just what I needed to keep that balance between having my sanity and going insane. I loved escaping with you to a different world and laughing with you (I have heard it’s the best medicine), thank you for you for being there.

Lastly, to Calvin, you were always there to support me and encourage me when I needed it the most. Your love and belief in me got me through till the end and no doubt further still. I appreciate your understanding of my constant study for the past 3 years and I cannot wait to see what comes next!
Abstract

**Purpose:** The purpose of this research is to investigate the discrepancy between perceived public stigma and personal stigma in gendered-dominating environments.

**Design/Methodology:** A self-report online questionnaire was distributed to two different organisations as well as a convenience sample of working adults, at a single point in time. The data was analysed using SPSS (version 25). To test the hypotheses the following analyses were included, a t-test to compare perceived public stigma scores and the seven variables of personal stigma scores, a correlation to explore the relationship between perceived public stigma and turnover intentions and a repeated measures ANOVA to test the discrepancy between perceived public stigma and personal stigma in gendered-dominating environments. A 2x2 repeated measures ANOVA was conducted to test the research question, whether the discrepancy between perceived public stigma and personal stigma will be higher in the minority gender of both environments.

**Findings:** There were no significant differences in scores between perceived public stigma and each of the seven variables of personal stigma. There was no significant relationship between perceived public stigma and turnover intentions. There was one significant finding, the discrepancy between perceived public stigma and one of the seven personal stigma variables, visibility, was shown higher in a female-dominated environments than male-dominated environments. No significant findings were found between perceived public stigma and personal stigma concerning the minority gender of both organisations.

**Research Limitations/implications:** The current study demonstrates the importance of understanding mental health stigma. The more information gathered about mental health stigma the better prepared individuals’ are to mitigate it as well as the impacts it has on our society.
**Practical Implications:** Researching the current state of mental health stigma in a working environment but also New Zealand is important, as it provides information for those creating interventions to reduce stigma in the workplace. This study informs literature by researching variables that have not yet been conducted in a New Zealand population.
The Discrepancy of Perceived Public Stigma and Personal Stigma in Gendered-Dominating Environments

Mental health illnesses impact a variety of factors in an individual’s life. Not only their working life but also their family lives. Over the last decade there has been a steady increase in the recognition of mental health illnesses within communities. It has been reported in 2019 that one in six New Zealand adults have been diagnosed with a mental disorder at some point in their lives (Mental health and illness, 2019). These illnesses can include depression, bipolar disorder and anxiety disorders etc. (Mental health and illness, 2019). The New Zealand government has provided $455 million for primary mental health which provided the budget for 2019 (Bennett, 2019). The amount of funding required for mental health is phenomenal which in itself reveals how important and prominent mental health support is in our society.

The budget provided above may aid in more readily available access to support for those who need the help, although this does not guarantee that those individuals want the help nor go out of their way to seek help. Many New Zealanders decide not to disclose their mental health illnesses for anticipation of discrimination, self-stigmatisation, internalisation of discrimination and discrimination by others when disclosing (Stratton et al., 2018). The aim of this research will be to have a more in-depth understanding of mental health stigma, specifically at work. This research will aid in adding to the current literature on mental health stigma. This research will provide information of New Zealand citizens and their experiences with mental health stigma at work.

Mental Health Stigma

Mental health stigma is very important regarding public health concern (Bharadwaj, Pai & Suziedelyte, 2017). Stigma affects many New Zealanders day to day, further understanding of mental health stigma may help individuals’ create barriers of its negative
impacts from reaching those with a mental health illness. The main focus of this next section is to explain how mental health stigma effects the individual person and how they may react due to experienced stigma, starting with the term ‘stigma-power.’ The term stigma-power is a concept which refers to individuals using processes of stigmatisation to keep other people down with reference to exploitation, control and exclusion of others (Link & Phelan, 2014). When stigma-power occurs, hierarchal social relationships develop and this creates a gap between people with a mental health illness and those without a mental health illness (Link & Phelan, 2014). Individuals’ with a mental health illness are aware of the negative connotations associated and can become concerned with staying within the ‘in’ group (Link & Phelan, 2014). The fear of discrimination and stigmatisation influences an individuals’ actions. This fear may mean that a person hides behaviours they may not want others to see for example, smoking or drinking in secret (Bharadwaj, Pai & Suziedelyte, 2017). Being judged and rejected by others is what the majority of individuals’ try to avoid and this fear of judgement rules certain aspects of human behaviours (Bharadwaj, Pai & Suziedelyte, 2017). This means that people are less likely to participate in any kind of help-seeking actions due to the risks of disclosing their mental illness (Nogues & Finucan, 2018).

Goffman (2009), mentioned that there are three different types of stigma, stigma towards abominations of the body, this means a physical abnormality which is evident to people around them. Secondly, stigma against the persons’ character itself, those who are seen as weak, having rigid beliefs and those who are dishonest, these can manifest into mental health disorders such as, alcoholism or suicidal tendencies etc. Thirdly, tribal stigma exists and this usually targets individuals through race and religion. This research will consider stigma against an individuals’ character, specifically their mental health. Stigma is a negative attitude based on prejudice that is triggered by signs of illnesses and individuals’ acting out of the social norm (Sartorius, 2007). Stigma can create self-esteem issues for each
individual who has had this experience, which in turn can cause consequences for the individual, such as relapses in their mental health (Sartorius, 2007).

Although Goffman, (2009) mentions three different types of stigma there are now many more specified types. Those who experience stigma, their families and even those who participate in treatment for their mental health illness can experience stigmatisation in a variety of settings and with different types of stigma. An example of this would be, self-stigmatisation towards oneself with a mental health illness and self-stigma associated with seeking psychological help (Tucker et al., 2013). Self-stigma is the reduction in a person’s self-worth due to the awareness that they do not fit the social ‘norm.’ (Tucker et al., 2013). Self-stigma against seeking psychological help is a person attempting to distance themselves from the act of seeking help and therefore a mental health illness (Tucker et al., 2013).

One method used to combat stigma are interventions and mental health literacy, which is the knowledge and beliefs about mental health illnesses (Reavley & Jorm, 2011). Research has shown that good knowledge and positive attitudes towards mental health is not sufficient to ensure changes for those with a mental health illness (Shann et al., 2019).

Workplace mental health interventions have been tested at a variety of levels: primary, which is to prevent mental illnesses arising, secondary, which is early detection and early treatment, and tertiary which is to treat and manage existing conditions (Joyce et al., 2016). These three levels are used the most in public and occupational health interventions (Joyce et al., 2016). Primary and secondary interventions, for example, offers of counselling or workplace health promotions tend to be the most common, but they provide a mixed result in terms of effectiveness concerning workplace health (Joyce et al., 2016). Research has provided information that the most successful interventions used are tertiary interventions specifically relating to work and the workplace, although the success of these interventions depends on
employee participation, organisational commitment and feedback channels (Nogues & Finucan, 2018).

The Mental Health First Aid (MHFA) is a programme that has been running since 2017, St John’s have recently launched this as a course. It is used to increase individuals’ knowledge and to eliminate negative attitudes regarding prejudice against mental health, although this programme was not intended for the workplace (Szeto & Dobson, 2010). MHFA is still considered to be one of the more successful interventions whereas online interventions are usually unsuccessful (Nogues & Finucan, 2018). Anti-stigma interventions are on the rise at work as noted by scholars, this type of research is becoming a popular topic in the modern society (Dimoff, Kelloway & Burnstein, 2016). Stigma is a widespread concern, but little is known on how to prevent it.

**Perceived Public Stigma and Personal Stigma**

Perceived public stigma towards mental health illnesses has been investigated over a number of years in order to understand how the public interacts with, perceives and influences those with a mental health illness, not only in everyday life but also in situational scenarios (Corrigan & Shapiro 2010). These situational scenarios can include, within the family, at work or at school, whilst playing sports and more. There are two types of stigma that this research will consider: perceived public stigma. Perceived public stigma is defined as the degree to which an individual feels that the general public holds negative views against a specific group of individuals, in this case, people with a mental health illness (Pedersen & Paves, 2014). Perceived public stigma, in regards to seeking mental health treatment, can be a barrier to accessing help through services such as, counselling (Pedersen & Paves, 2014). Research by Parcesepe and Cabassa, (2013) have identified that perceived public stigma is related to lack of engagement, less use of mental health services and poor treatment outcomes for those with a mental health illness. On the other hand, personal Stigma is defined as how
one would view and treat others with a mental health illness (Pedersen & Paves, 2014). Research by Griffiths, Christensen and Jorm, (2008) found that personal stigma was higher among men, those with less education and those born overseas (those born overseas include any individual who was not born in Australia), which means that these individuals’ are more likely to view others with a mental health illness in a more negative regard than a positive one.

Recent literature has found that participants perceived greater public stigma than personal stigma (Pedersen & Paves, 2014). For example, participants believed that the general public would treat them differently if they engaged in help-seeking behaviours such as counselling, but they themselves would not treat a person differently if they were to seek help for a mental health illness (Pedersen & Paves, 2014). An example from Pedersen and Paves research provide percentages for items related to being seen as weak for seeking help for a mental health illness from both a perceived public stigma and personal stigma view, (e.g., “I would be seen as weak” and “I would view them as weak”), 28.8% agreed that they would be viewed as weak if they sought mental health treatment which indicated participants perceived public stigma, 3.4% agreed that they would view someone as weak if they sought treatment which is personal stigma (Pedersen & Paves, 2014). This provides a discrepancy as more individuals believe that other people would view and treat them differently if they acquired help, compared to how other people would realistically treat the individual if they received help for their mental health (Pedersen & Paves, 2014). Pedersen and Paves, (2014) also found that males, Asian students and those with negative views of treatment are more likely to have stigmatising views of others seeking treatment. The reason for this may be because of early childhood socialisation or learned cultural attitudes, for example ‘boys don’t cry’ (Pedersen & Paves, 2014). This research is testing these two types of stigma because it
has not yet been researched in New Zealand nor in a workplace setting. The first hypothesis for this research is provided below,

**Hypothesis 1:** Perceived public stigma scores will be higher than each of the seven dimensions of personal stigma scores.

**Workplace Stigma**

Stigma at work can be prevalent amongst industries, although there is not much research conducted on stigma at work and turnover intentions. For this reason the current research will look at the relationship between stigma and turnover intentions. Previous research has found that over a quarter of employees will consider not hiring someone with a mental health illness or someone who has previously undergone psychological treatment (Sharac et al., 2010). The caveat to this is that previous research did not distinguish between stigmas towards the mental health illness itself or the possibility that the illness will hinder the individuals’ ability to perform at work (Sharac et al., 2010). This means that it is not confirmed if the discrimination occurs due to the individuals’ mental health illness alone or if they are worried their mental health will affect their work. The employers who have experienced mental illnesses in the past were more likely employ those who have a mental health illness than employers who have not experienced a mental health illness (Sharac et al., 2010). Research by Sharac et al., (2010) provided an insight that many individuals with a mental health illness felt as though they were victims of discrimination from a supervisor in terms of avoidance, treated differently from other workers, dismissed from the job or not hired at all. Although this does not equate to turnover intentions, a worker who has a mental health illness might be discouraged from working if the treatment they get is discriminatory.Whilst there is not much literature surrounding mental health stigma at work and turnover intentions, the research by Sharac et al., (2010) mentioned above that those with a mental health illness experience discrimination by their supervisor and in some cases dismissal can
be the end result. This could provide a barrier to enter into a job and retain the job when discrimination occurs in the workforce for those with mental illnesses and dismissal is the end result. Stigma exists in a variety of settings and also stigmatisation is not standard across groups as shown through research by Hipes, (2019). Those with a mental health illness were considered to be less at fault of their own circumstances when compared to an ex-offender who were considered to be more at fault of their own circumstances (Hipes, 2019). Ex-offenders tend to be more socially excluded from the ‘in’ group than those who have a mental health illness (Hipes, 2019). Research by Renn, Allen and Huning, (2013) found that perceived social exclusion is positively related to self-defeating behaviour and turnover intentions. Overall the study by Renn, Allen and Huning, (2013) has found mental health stigma is negatively correlated to intentions to stay. Previous research has found that ex-offenders start at a disadvantage concerning the workplace due to the stigmatisation surrounding their situation (Hipes, 2019). Ex-offenders are seen as different from ‘the norm,’ as are those with a mental health illness. Like ex-offenders those who have a mental health illness are more likely to be socially excluded from the ‘in’ group compared to those without a mental health illness. This means that those with a mental health illness have the potential to start at a disadvantage, this makes them more likely to have turnover intentions or intentions to stay than those who do not experience perceived public stigma.

**Hypothesis 2:** There will be a positive significant relationship between perceived public stigma and turnover intentions.

**Group Differences in Mental Health Stigma**

Mental health stigma differs in different settings and different groups, in this case, gender groups. This section will consider past research and the impact of mental health stigma in male and female dominated organisations as well as the minority gender in both environments. Clement et al., (2015) produced a systematic review of stigma and barriers to
help-seeking using 144 studies. Through these studies Clement et al., (2015) found that those most impacted by barriers to help-seeking were ethnic minorities, youth, men, military and those in health professions. Stratton et al., (2018) found that knowledge and a positive self-attitude surrounding mental health may be difficult to obtain in male-dominated industries for males because they are less likely to speak out or seek help for their mental health illness. This is especially relevant if they feel environmental and service care support is not present (Stratton et al., 2018). Service care is support from an organisation to ensure that employees are supported both physically and mentally. Service care is important because it allows employees to have access to help if required. A study by Andresen and Blais (2018), completed research on females in a male-dominated organisation, they found that female veterans who reported higher self-stigma were less likely to report their military sexual trauma. Self-stigma is the negative attitudes about mental health taken by those who are diagnosed with a mental health illness and accepted by this person as their identity (Yanos et al., 2015). Previous research has provided support that self-stigma relates to low help-seeking behaviours (Andresen & Blais, 2018). The other minority group in this research are males in female dominated industries. Evans and Steptoe (2002) found that women and men who occupy jobs in which they are the minority gender, tend to have adverse effects that are gender-specific, for example, marital and parental status for women (Evans & Steptoe, 2002). There is a lack of research concerning stigma and females in female-dominated organisations, therefore this research will investigate this environment with the female gender. Due to the experienced stigma by different gender groups, the current study will focus on perceived public stigma and personal stigma in male-dominated and female-dominated organisations.

**Hypothesis 3:** The discrepancy between perceived public stigma and the seven dimensions of personal stigma will be larger in male-dominated environments than female-dominated environments.
**Research question:** Will the discrepancy between perceived public stigma and personal stigma be larger in the minority gender of both organisations than the dominating gender?

**The Present Study**

The current study investigates the present mental health stigma provided by participants within a multitude of organisations. This research will consider how employees, specifically in male-dominated and female-dominated organisations rate perceived public stigma and personal stigma, what will be taken into consideration is whether they are in a male-dominated or female-dominated workplace. This study will also consider the consequences that stigmatisation has on those with mental health illnesses in terms of turnover intentions. The purpose of this study is to add to the current literature considering the New Zealand environment and to reflect on mental health stigma from differing gendered environments. This study will also give way to some potentially new information regarding stigmatisation on the working individual (e.g., turnover intentions) with a mental health illness.

**Method**

**Participants**

The current study examined the discrepancy between perceived public stigma and personal stigma amongst working individuals with regard to their gender-dominated organisations. Participants in the study were both part-time and full-time workers with a background in many different organisations, from teachers to industrial workers. Initially only two organisations were invited to participate in this research, when it became clear there would not be a sufficient amount of participants, the survey was opened up to any and all individuals. One organisation that was asked to participate was a school in Christchurch, New Zealand, this school shared the survey to all staff, including admin and relief teachers, 6 responses out of 80 employees were recorded from this organisation. The second organisation that agreed to participate was an industrial organisation, this organisation posted the survey
on their internal drive for staff to be able to access, a total of 13 responses were recorded from this organisation out of a possible 400. From here convenience sampling was used in order to gather more participants. A total of 134 participants completed the survey and of this 107 responses were usable. G-power statistics concluded that the current study has a high statistical power based on a medium effect size.

The responses comprised of 45.8% female respondents and 54.2% male respondents. The mean age of participants was 38.2. To preserve anonymity in responding, age, gender, ethnic group and gender-dominated information were the demographic variables collected.

**Procedure**

A self-report, cross-sectional design was used for this study. Responses were collected at one point of time. The questionnaire remained open over an 8 week period until enough data was collected. An advertising email was sent to the two organisations mentioned above to gain permission to use their staff as participants for the current research. Appendix A provides the details within the advertisement email. Qualtrics links, which is a survey platform online, were provided to organisations to be distributed amongst staff. Following this an invitation to participate in the current research was also posted on Facebook and LinkedIn in order to recruit more participants. If participants agreed to complete the survey they were to click on the link provided to them which re-directed them to qualtrics. Included in this questionnaire was an information sheet (see appendix B) which detailed important notes about the study, what was given to the participants were contact numbers should they need them. Participants consented to completing the survey and understanding the information provided to them by the information sheet once they clicked ‘next,’ in the survey. Participants were informed via the information sheet that the research had been approved by the University of Canterbury Human Ethics Committee. Participants could complete the questionnaire either at work or in their own homes.
Participation of the survey was voluntary, the survey was incentivised by providing a draw that participants could enter once they have completed the survey, the prize equated to 6x $50 petrol vouchers. In order to separate participant’s identity from their data, a separate link was created in qualtrics so they could enter their name and email, this meant that names and data were not linked. Participant’s emails and names were destroyed at the completion of the study and was only used to distribute prizes.

Measures

The participant’s demographic information was collected at the beginning of the survey, this information was to distinguish the person’s gender, age, ethnicity and whether their workplace is male or female dominated. This was to ensure diversity within the population and required information regarding gender for this research. Variables were measured on validated scales. A list of measures and scales may be viewed in appendices C to F.

Personal Stigma Scale

In order to measure overall stigma within the workplace and of the individual person, the Mental Illness Stigma Scale created by Day, (2007) was used. This scale has a total of twenty-eight items on a 7-point scale. The scale tested the stigma of the organisation against those with mental health illnesses. Participants were asked to rate each item, (e.g. 1 completely disagree - 7 completely agree). The items on this scale consider a range of factors that can be associated with mental illnesses. Anxiety, relationship disruption, hygiene, visibility, treatability, professional efficacy and recovery factor items. An example of an item in Day’s survey is “I would find it difficult to trust someone with a mental illness.” Day, Edgren and Eshleman, (2007), reported the Cronbach’s alpha for each sub-scale. The anxiety items showed a Cronbach’s alpha of ($\alpha = 0.90$), relationship disruption, ($\alpha = 0.84$), hygiene, ($\alpha = 0.83$), visibility, ($\alpha = 0.78$), treatability, ($\alpha = 0.70$), professional efficacy, ($\alpha = 0.86$) and recovery, ($\alpha = 0.75$) (Day, Edgren & Eshleman, 2007).
**Perceived Public Stigma Scale**

In order to measure the perceived public stigma of participants, the participants completed the perceived public stigma subscale of the perceived stigma and barriers to care for psychological problems measure. Pedersen and Paves, (2014), reported the perceived public stigma survey to have good internal consistency with a Cronbach’s alpha of, $\alpha = 0.86$ (Pedersen & Paves, 2014). The measure included six items rated on a 5 point scale regarding one’s beliefs about how others would view them if they were to seek mental health treatment. The six items designed to measure perceived public stigma were based on the measure used by Britt (2000) to assess psychological problems among soldiers. Participants were asked to rate each item, (e.g. 1 strongly disagree - 5 strongly agree). The items in this scale showed how each of the six items might affect the participant’s decision to seek treatment for a psychological problem from a mental health professional (e.g., a psychologist). An example of an item in this survey is, “my peers might treat me differently.”

**Turnover Intentions Scale**

In order to measure turnover intentions of the individual participant, the Turnover Intention Scale (TIS-6) was used. Bothma and Roodt, (2013) reported good internal reliability with a Cronbach’s alpha of, $\alpha = 0.89$. The TIS-6 comprises 6 items rated on a 5-point response scale (e.g. 1 Never– 5 always). This scale measures employees’ intentions of either leaving or staying in the organisation (Bothma & Roodt, 2013). An example of an item in the TIS-6 is, “to what extent is your current job satisfying your personal needs.”

**Mental Health Check**

The mental health check questions were used to see whether participants taking part in the survey have a current mental health illness. The participants were asked to check “Yes/No/Prefer not to answer,” as to whether they are currently seeking help for their mental health. This question was completely voluntary for participants.
Data Analysis

All data was analysed using IBM SPSS (version 25). Prior to analysis, all data was collected and merged into one dataset so that organisations could not be identified for the purposes of statistical analysis.

Results

Before hypotheses testing the descriptive statistics, correlations and Cronbach’s alpha were calculated, these can be found in appendix H. The descriptive statistics showed that the mean age for the population is $M=38.2$ with a total of 107 participants and of those 107 participants, 68 of the participants were in male-dominated organisations and 20 were in female-dominated organisations. A total of 19 participants were in neither male nor female dominated environments. All Cronbach’s alpha for the scales were found to be reliable.

Index variables were created for perceived public stigma, turnover intentions and the seven dimensions of the personal stigma survey. Index variables were created by calculating the mean of each scale by adding the items together and dividing by the number of items in each scale. This was also done for the seven dimensions of the personal stigma scale as separate variables. Since the two main variables, perceived public stigma and personal stigma were on different scales, 1-5 scale and a 1-7 scales, the scores for the variables were standardised in order to compare these two sets of scores. The new standardised scores were then used to test the hypotheses.

Hypotheses Testing

To test the studies first hypothesis, a paired samples t-test was conducted to see the discrepancy in scores within participants, between perceived public stigma scores and the scores of the seven dimensions of the personal stigma scale. This analysis is testing whether perceived public stigma scores overall were higher than the seven dimensions of the personal
stigma scores. The results show no significant difference in scores between perceived public stigma and treatability, $t(102) = .121, p = .904$, the difference between means is 0.38, hygiene, $t(102) = .140, p = .889$, mean difference = (0.26), recovery, $t(102) = .134, p = .93$, mean difference = (0.45), visibility, $t(102) = .018, p = .986$, mean difference = (0.59), relationship disruption, $t(102) = .005, p = .996$, mean difference = (0.18), anxiety, $t(102) = .044, p = .965$, mean difference = (0.09) and professional efficacy, $t(102) = .055, p = .957$, mean difference = (2.05). These results show that there were no significant difference in scores between perceived public stigma and any of the seven dimensions of personal stigma, therefore the first hypothesis is not supported.

To test the second hypothesis a correlation was conducted, the second hypothesis predicted that there would be a positive significant relationship between perceived public stigma and turnover intentions. Referring to the correlation table shown in appendix H, there shows no significant relationship between perceived public stigma and turnover intentions, $r(103) = .114, p = .253)$. From these results it is concluded that the second hypothesis was not supported.

In order to test the third hypothesis, whether the discrepancy between perceived public stigma and the seven dimensions of personal stigma were higher in male-dominated than female-dominated environments, were analysed using repeated measures ANOVA. The results showed that there were no significant differences in scores between the different types of environments between perceived public stigma and anxiety, $F(1,84) = 1.466, p = .229$, relationship disruption, $F(1,84) = 1.667, p = .200$, hygiene, $F(1,84) = .087, p = .769$, recovery, $F(1,84) = .175, p = .676$, treatability, $F(1,84) = .885, p = .349$, and professional efficacy, $F(1,84) = 1.192, p = .261$. A significant difference was found between perceived public stigma and visibility in female-dominated environments, $F(1,84) = 5.934, p = .017$. The nature of this difference suggests that those working in a female-dominated organisation
think they can more easily see signs of a mental health illness in individuals. Overall only one significant difference in scores were found between perceived public stigma and visibility between male-dominated and female-dominated environments. These results conclude that the third hypothesis was not supported.

In order to test the research question a 2x2 repeated measures ANOVA was used to analyse results. The two categorical variables used were male/female dominated workplaces and gender. The research question considers whether the discrepancy between perceived public stigma and the seven dimensions of personal stigma will be larger in the minority gender compared to the dominating gender. The first variables analysed were perceived public stigma and anxiety on male-dominated and female-dominated environments. The results showed that there were no significant differences in between the different types of environments when considering the minority gender, between perceived public stigma and anxiety, F(1,82) = 1.203, \( p = .276 \), relationship disruption, F(1,82) = .666, \( p = .417 \), hygiene, F(1,82) = .115, \( p = .735 \), recovery, F(1,82) = .564, \( p = .455 \), treatability, F(1,82) = .613, \( p = .436 \), professional efficacy, F(1,82) = .021, \( p = .886 \), and visibility, F(1,82) = .003, \( p = .956 \).

Overall no significant differences were found between the perceived public stigma and the seven dimensions of personal stigma when considering the minority gender of male-dominated and female-dominated organisations.

**Discussion**

In order to recognise the continued existence of mental health stigma in New Zealand, companies and working individuals’ were asked to provide their own existing experiences with mental health stigma. In addition, male and female dominated organisations were considered to see if there was an impact in the way these two differing environments may react to the mental health stigma. This was researched in order to contribute to the literature and to learn more about mental health stigma. This research also considered whether
perceived public stigma relates to turnover intentions for individuals in these dominated environments. For the third hypothesis this study examined whether the discrepancy between perceived public stigma and the seven dimensions of personal stigma were higher in male-dominated compared to female-dominated environments. A research question was also posed that considered whether the discrepancy between perceived public stigma and personal stigma would be larger in the minority gender of both organisations. In order to analyse these hypotheses, a self-report questionnaire was provided to two organisations as well as distributed to any individual who was working full time. The results showed that there was no discrepancy between perceived public stigma scores and the seven dimensions of personal stigma, anxiety, relationship disruption, hygiene, recovery, treatability, visibility and professional efficacy, therefore the first hypothesis is not supported. This result is not consistent with previous literature. Previous literature found that perceived public stigma is higher than personal stigma which shows that individuals’ perceived greater stigma from others than personal stigma in terms of their mental health (Penderson & Paves, 2014). These non-significant relationships between perceived public stigma and the seven dimensions of personal stigma could suggest that working individuals’ in this New Zealand sample may not perceive there to be as much stigma directed towards them, as well as have a less negative opinion of mental health towards those with a mental health illness.

Results showed there to be a non-significant relationship between perceived public stigma and turnover intentions. These results suggest that there was no real difference depending on levels of perceived public stigma. These two variables were considered because there had been limited research between perceived public stigma and turnover intentions. This research considered these two variables because, Renn, Allen and Huning, (2013), found stigma to be negatively correlated to intentions to stay and they also found that perceived social exclusion, which can be associated with stigma, is positively related to turnover. Those
who have a mental health illness are more likely to be socially excluded from the ‘in’ group compared to those without a mental health illness and therefore are more likely to have turnover intentions compared to those who are not excluded from the ‘in’ group. Individuals with a mental health illness may experience stigma no matter what job they may be in and therefore stay in their current job to avoid a possible increase in discrimination. As the research is very limited future research should explore the relationship between mental health stigma and turnover intentions.

For the third hypothesis, testing the expectation that the discrepancy between perceived public stigma and the seven variables of personal stigma would be higher in male-dominated environments than female-dominated environments. Only one significant relationship was found between perceived public stigma and visibility in female-dominated environments. The results show that personal stigma-visibility is higher in the female-dominated environments than the male-dominated environments. This means that those in female-dominated environments think they can detect mental health illnesses in individuals. More females are found in roles such as nursing where they must treat and look after patients with mental health illnesses. Visibility stigma is not necessarily a negative stigma as those who can recognise it in others have an opportunity to offer aid to those with a mental health illness. In terms of a male-dominated environment, this may mean that the visibility variable, of recognising others with a mental health illness is due to differing experiences. Results showed no significant difference in scores between perceived public stigma and the seven dimensions of personal stigma in male-dominated environments. Research by Griffiths, Christensen and Jorm, (2008) suggest that those who have higher personal stigma are men. Males in a male-dominated environment are less likely to seek help or speak up (Stratton et al., 2018). This may mean that men are more likely to have more stigmatising views of others with a mental health illness and more likely perceived stigma from others. This means that
there would be an expected discrepancy amongst male-dominated organisations. Previous research founded for this hypothesis is not consistent with the current research results.

The research question about whether the discrepancy between perceived public stigma and personal stigma was larger in the minority gender of both organisations than the dominating gender, found there to be no significant results in any of the variables analysed. This may be because the minority gender is unlikely to come forth as they experience more stigma as the minority gender in their specific workforces, this is consistent with what the previous research suggests, by Evans and Steptoe, (2002).

**Limitations**

There are multiple limitations when interpreting the results of this study. The first limitation being that the two questionnaires, the perceived public stigma survey and Day’s mental illness stigma survey were on two different scales. The perceived public stigma scale is on a 1-5 point scale whilst Day’s mental illness stigma scale is on a 1-7 point scale. It would be desirable to have these scales measured on the same scale point.

Another limitation was the number of individuals’ that participated in the study. This research had a small sample size at 107 participants and only 88 of these participants were from male-dominated and female-dominated working environments. Whilst this sample size was adequate, a larger sample size would have preferable to get a more accurate representation of the wider population.

Another limitation of this research was the method used for data collection. A self-report questionnaire was used to collect all the data at one time point (cross-sectional). Self-report data provides the opportunity for individuals’ to provide socially desirable responses to the questions. Considering the questionnaires delved into personal discrimination against individuals’ with a mental health illness, socially desirable responses can be a real issue to take into account. Socially desirable responding has the ability to compromise the validity of
survey data (Steenkamp, De Jong & Baumgartner, 2010). Socially desirable responses can create the possibility for false relationships to be found where there may not be any, this creates a reason for concern (Tomassetti, Dalal & Kaplan, 2016). Socially desirable responding occurs when an individual participates in a self-report measure on a potentially sensitive topic, for example, criminal activity (Tomassetti, Dalal & Kaplan, 2016). The socially desirable responses are to make the participants fit the ‘norm’ and portray results consistent with how they are expected to respond due to society rules and pressures.

Considering stigma is a sensitive topic for many individuals, some people may be more likely to react to the difference stigma questions in a favourable manner compared to what their actual opinion may be. If a participant was to agree with the statement ‘I feel anxious and uncomfortable when I’m around someone with a mental illness;’ this can be seen as a negative and socially undesirable opinion someone has of an individual with a mental health illness.

Despite the potential socially desirable responding, self-report measures were deemed the most viable method in gaining data from the general population considering the time restraints. The type of questionnaires provided and information was of a nature where a third party could not infer nor answer for the individual taking the questionnaire, therefore self-report was deemed the only viable method of collecting data for this research.

The last limitation of this study consisted of the vast majority of individuals who were in the male dominated and female dominated environments. These individuals did not come from the same workplace, therefore there were differing backgrounds and work experiences. The aim of this research was to analyse data containing mental health stigma in male-dominated and female-dominated environments. Considering this it may have been more appropriate if the two environments were to come from the same organisation. This would be
for the purposes of capturing the overall perceived public stigma of one organisation as differing organisations may have different overall perceived public stigma.

**Implications for future research and practice**

The current research aimed to explore the discrepancy between perceived public stigma and personal stigma in male-dominated and female-dominated environments. Whilst the research, in terms of perceived public stigma and personal stigma has been done using a population of college students in America, this research had not been conducted in the New Zealand culture amongst gendered-dominating organisations. Results of the current study contributes to the literature whether the findings were significant or otherwise. Factors such as mental health stigma and turnover intentions had not yet been properly considered prior to this research. Whilst the result provided non-significant findings the results were for a very specific relationships and the stigma may relate to other work-related factors such as, performance, which might be important for future research to take into account. Considering the first hypothesis was non-significant, future research can build upon why this finding was significant in the Pendersen and Paves, (2014) study and not in the current research, and also what this means for the New Zealand environment. This future exploration may consider whether the New Zealand culture does not hold as much stigma towards those with mental health overall or whether the sample size was not large enough to produce a significant finding. Either way future research should consider completing another study within the New Zealand population surrounding mental health stigma.

The second hypothesis was also found to be non-significant, future research on stigma and turnover intentions or exit from the workforce due to discrimination can be another path to consider. Delving into why this finding is non-significant in the current research would add to the lack of literature in this area and shed some light into the impact of mental health stigma on turnover intentions. Whether stigma does in-fact impact turnover intentions would
be a start to the research. Prior research by Renn, Allen and Huning, (2013), has indicated that social exclusion is positively correlated with self-defeating behaviour and turnover intentions. Further research can be done in the area of mental health stigma and turnover intentions as social exclusion can occur with mental health stigma.

Future research can explore many different pathways using the current study as leverage to gain insight into what current mental health stigma may look like today, whether this is using a New Zealand population or expanding to other populations.

**Conclusion**

The discrepancy between perceived public stigma and personal stigma in gendered dominating environments was examined in the current research. This research is the first to examine perceived public stigma and personal stigma using the New Zealand population and therefore is making contributions to the current research regarding mental health stigma. Mental health stigma is an important topic and can benefit from further research in this field. The findings of this research, whilst mostly non-significant, can provide guidance for future researchers in this field in order to further explore mental health stigma in the New Zealand society.
References


Appendix A- Email Advertisement

Good Morning/Afternoon,

My name is Samantha Locke and I am a Masters student at the University of Canterbury. I am recruiting participants for my workplace stigma research that will be run over the next few months. The research will consist of gathering data via surveys. I am currently recruiting participants and I hope that some of you would be willing to spend some time taking part in the study. For your time each participant to complete the study will go into the draw to win one of six $50 petrol vouchers if emails are provided. Survey data will be completely anonymous.

For this study, volunteers must:

- Be working full time
- Be 18 years or older

If you are interested in participating please click the link below to get started.

(Insert link here).

Thank-you for your time and consideration,
Samantha Locke

If you feel as though you need support prior to or during/after the survey see below:

If you are in immediate physical danger, call 111.

Links
https://www.mentalhealth.org.nz
www.depression.org.nz (includes The Journal free online self-help tool)

Mental Health Helpline
Please dial: 1737

Numbers
0800 LIFELINE.
Appendix B- Information sheet and consent form

The Effects of Stigma on the Working Environment.

School of Psychology, Speech and Hearing Department University of Canterbury

Researchers: Samantha Locke, Dr. Katharina Näswall, Department of Psychology, University of Canterbury.

My name is Samantha Locke and I am an Applied Psychology Masters student at the University of Canterbury. I am conducting research about the effects of stigma in the working environment. This research is to go towards the completion of a Masters degree under the supervision of Professor Katharina Näswall. If you choose to take part in this study your involvement will involve filling out a surveys about stigma at your workplace, perceived stigma and other relevant surveys which should take approximately 25-30 minutes.

Purpose of Research:
The research aims to investigate how mental health stigma impacts the working individual. The study looks at the effects of mental health stigma of environments dominated by one gender.

Contact Information:
If you have questions about the research in general or about your role in the study, please feel free to contact Samantha Locke (email: sm1146@uclive.ac.nz or 0276668645) or Dr Katharina Näswall (Katharina.Naswall@canterbury.ac.nz).

What Will You Be Asked To Do:
The experiment will involve you (the participant) to complete surveys. Initially, we want you to complete basic demographic information, then you will complete five surveys. Following these surveys you must click ‘submit,’ in order to save the data you have provided. If you wish to go into the draw to win one of 6 $50 petrol vouchers you must follow a link provided on the last page. This will take you to a separate page so you can enter your email. This page will also ask you if you wish to be provided with the summary of the research results. You are under no obligation to provide your email but in doing so you will not be in the draw to win vouchers nor receive a summary of results for the research.

Risks and Discomforts:
There are risks in this study, the participants may find some of the content distressing. If you feel uncomfortable with the research at any time, you may withdraw from the research and you may request that all the information provided by you be discarded. Participation in this study is voluntary and your responses will be entirely confidential. If you feel you need further support see links below for information furthermore, if you have any further questions or feel as though the surveys are breaching culturally sensitive issues please contact Katharina or myself via email.

Withdrawal from the Study:
You are able to stop participating or skip questions/sections in the study at any time, for any reason, if you so decide. At any time you may also leave the study to consider your participation, if you would like to proceed you may do so using the link via the email. You can stop your data from being used in research up until you click “submit,” following this your data may not be retrieved as this information will be anonymous.

**Anonymity and Confidentiality:**
All information you supply during the research will be held in confidence and your name will not appear in any report or publication of the research. Only researchers directly involved in the project will have access to the data provided. To ensure confidentiality the link to the draw and request for survey results will be independent from the data which means the two will not be able to be linked. Once data collection has been completed all identifying information will be destroyed. Data will be securely stored on the university servers in password protected files on password protected computers. Only the researcher and supervisor will have access to the raw data. After five years, all raw data will be destroyed. A thesis is a public document and will be available through the UC Library.

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

**Extra Support** (If you are in immediate physical danger, call 111).

**Links**
https://www.mentalhealth.org.nz
www.depression.org.nz (includes The Journal free online self-help tool)

**Mental Health Helpline**
Please dial: 1737

**Numbers**
0800 LIFELINE.
Appendix C – Demographic Questions

In this section of the study, we would like to ask a few background questions about you.

Which gender do you identify with?
☒ Male
☒ Female
☒ Gender Diverse

What year were you born? ____________

What ethnic group applied to you:
(Please tick all that applies)

☒ New Zealand European
☒ Māori
☒ Samoan
☒ Cook island Maori
☒ Tongan
☒ Niuean
☒ Chinese
☒ Indian
Other, please state ________________

Please indicate which gender dominated your workplace:

☒ Mainly Males (Male-dominated)
☒ Mainly Females (Female-dominated)
☒ Neither

What male-to-female ratio do you consider there to be in your organisation? (Please state below):

_________________________
Appendix D- Day’s Mental Illness Stigma Scale.


This scale is measuring 7 dimensions of stigma towards others with a mental health illness. These dimensions are, treatability, relationship disruption, hygiene, visibility, recovery, anxiety and professional efficacy.

Scale Items:

1. There are effective medications for mental illnesses that allow people to return to normal and productive lives. (T)
2. I don’t think that it is possible to have a normal relationship with someone with a mental illness. (RD)
3. I would find it difficult to trust someone with a mental illness. (RD)
4. People with mental illnesses tend to neglect their appearance. (H)
5. It would be difficult to have a close meaningful relationship with someone with a mental illness. (RD)
6. I feel anxious and uncomfortable when I’m around someone with a mental illness. (A)
7. It is easy for me to recognize the symptoms of mental illnesses. (V)
8. There are no effective treatments for mental illnesses. (T)-R
9. I probably wouldn’t know that someone has a mental illness unless I was told. (V)-R
10. A close relationship with someone with a mental illness would be like living on an emotional roller coaster. (RD)
11. There is little that can be done to control the symptoms of mental illness. (T)-R
12. I think that a personal relationship with someone with a mental illness would be too demanding. (RD)
13. Once someone develops a mental illness, he or she will never be able to fully recover from it. (R)-R
14. People with mental illnesses ignore their hygiene, such as bathing and using deodorant. (H)
15. Mental illnesses prevent people from having normal relationships with others. (RD)
16. I tend to feel anxious and nervous when I am around someone with [a mental illness]. (A)
17. When talking with someone with a mental illness, I worry that I might say something that will upset him or her. (A)

18. I can tell that someone has a mental illness by the way he or she acts. (V)

19. People with mental illnesses do not groom themselves properly. (H)

20. People with mental illnesses will remain ill for the rest of their lives. (R)-R

21. I don’t think that I can really relax and be myself when I’m around someone with a mental illness. (A)

22. When I am around someone with a mental illness I worry that he or she might harm me physically. (A)

23. Psychiatrists and psychologists have the knowledge and skills needed to effectively treat mental illnesses. (PE)

24. I would feel unsure about what to say or do if I were around someone with a mental illness. (A)

25. I feel nervous and uneasy when I’m near someone with a mental illness. (A)

26. I can tell that someone has a mental illness by the way he or she talks. (V)

27. People with mental illnesses need to take better care of their grooming (bathe, clean teeth, use deodorant). (H)

28. Mental health professionals, such as psychiatrists and psychologists, can provide effective treatments for mental illnesses. (PE)

Note. Response choices are: (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; and (5) Somewhat agree; (6) Agree; (7) Strongly agree. Abbreviations used are: (T) = Treatability, (RD) = Relationship Disruption, (H) = Hygiene, (A) = Anxiety, (V) = Visibility, (R) = Recovery, (PE) = Professional Efficacy. If any of these abbreviations have an ‘R’ following, for example (R)-R, then this means that the item has been reverse-scored.
Appendix E - Perceived Public Stigma Scale


This scale is measuring perceived public stigma, the extent to which a person feels they are being stigmatised if they have/had a mental illness.

Scale Items:

1. It would be too embarrassing
2. It would harm my reputation
3. My peers might treat me differently
4. My peers would blame me for the problem
5. I would be seen as weak
6. People important to me would think less of me

Note. Response choices are: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; and (4) Agree; (5) Strongly agree.
Appendix F - Turnover Intentions Scale


This scale is measuring an individuals’ turnover intentions.

**Scale Items:**

1. How often do you dream about getting another job that will better suit your personal needs?
2. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?
3. How often have you considered leaving your job?
4. How likely are you to accept another job at the same compensation level should it be offered to you?
5. To what extent is your current job satisfying your personal needs?
6. How often do you look forward to another day at work?

Note. Response choices are: (1) Never; (2) Sometimes; (3) About half the time; (4) Most of the time; (5) Always
Appendix G - Summary of Descriptive Statistics and Correlations

**Table 1 Summary of Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Dominated</td>
<td>88</td>
<td>1.00</td>
<td>2.00</td>
<td>1.77</td>
<td>.42</td>
</tr>
<tr>
<td>Gender</td>
<td>107</td>
<td>1.00</td>
<td>2.00</td>
<td>1.46</td>
<td>.50</td>
</tr>
<tr>
<td>Age</td>
<td>107</td>
<td>21.00</td>
<td>67.00</td>
<td>38.19</td>
<td>14.55</td>
</tr>
<tr>
<td>Turnover</td>
<td>103</td>
<td>1.67</td>
<td>4.00</td>
<td>2.66</td>
<td>.51</td>
</tr>
<tr>
<td>Anxiety</td>
<td>105</td>
<td>1.00</td>
<td>6.00</td>
<td>2.84</td>
<td>1.13</td>
</tr>
<tr>
<td>Relationship Disruption</td>
<td>105</td>
<td>1.00</td>
<td>5.83</td>
<td>3.11</td>
<td>1.13</td>
</tr>
<tr>
<td>Hygiene</td>
<td>105</td>
<td>1.00</td>
<td>5.75</td>
<td>2.67</td>
<td>1.15</td>
</tr>
<tr>
<td>Recovery</td>
<td>105</td>
<td>1.00</td>
<td>6.00</td>
<td>2.48</td>
<td>1.15</td>
</tr>
<tr>
<td>Treatability</td>
<td>105</td>
<td>1.00</td>
<td>5.67</td>
<td>2.55</td>
<td>.95</td>
</tr>
<tr>
<td>Visibility</td>
<td>105</td>
<td>1.50</td>
<td>7.00</td>
<td>3.52</td>
<td>1.16</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>105</td>
<td>1.00</td>
<td>7.00</td>
<td>4.98</td>
<td>1.25</td>
</tr>
<tr>
<td>Perceived Public Stigma</td>
<td>105</td>
<td>1.00</td>
<td>5.00</td>
<td>2.93</td>
<td>.94</td>
</tr>
</tbody>
</table>

Valid N (listwise) 86

**Note**: These are the unstandardised means.

**Table 2 Summary of Correlations and Cronbach’s Alpha**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Perceived Public stigma</td>
<td>.86</td>
<td>.322*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Anxiety</td>
<td></td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Relationship Disruption</td>
<td>.350*</td>
<td>.700*</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Hygiene</td>
<td>.124</td>
<td>.447*</td>
<td>.450*</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Recovery</td>
<td>.159</td>
<td>.449*</td>
<td>.331*</td>
<td>.331*</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Treatability</td>
<td>.123</td>
<td>.488*</td>
<td>.421*</td>
<td>.420*</td>
<td>.492*</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Visibility</td>
<td>.088</td>
<td>.046</td>
<td>.103</td>
<td>.351*</td>
<td>.418</td>
<td>.002</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Professional efficacy</td>
<td>.030</td>
<td>-.138</td>
<td>-.223*</td>
<td>-.035</td>
<td>-.076</td>
<td>-.493*</td>
<td>.064</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Turnover</td>
<td>.114</td>
<td>.104</td>
<td>.164</td>
<td>.055</td>
<td>.083</td>
<td>-.048</td>
<td>.127</td>
<td>-.025</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Age</td>
<td>.150</td>
<td>.177</td>
<td>.172</td>
<td>-.010</td>
<td>.027</td>
<td>.023</td>
<td>-.085</td>
<td>-.092</td>
<td>.011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Gender</td>
<td>.133</td>
<td>-.027</td>
<td>-.042</td>
<td>.036</td>
<td>-.064</td>
<td>-.153</td>
<td>.024</td>
<td>.202*</td>
<td>-.070</td>
<td>-.233*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Gender Dominated</td>
<td>.049</td>
<td>.198</td>
<td>.207</td>
<td>.006</td>
<td>-.11</td>
<td>.181</td>
<td>-.297*</td>
<td>-.116</td>
<td>-.004</td>
<td>.242*</td>
<td>-.322*</td>
<td></td>
</tr>
</tbody>
</table>

**Note**: ** Significant at p=0.01, *Significant at p=0.05. Cronbach alpha values (α) are displayed on the diagonal. These numbers are based on the standardised scores.**