Body art and its impact on employment selection decisions: Is there a bias towards candidates with visible tattoos?

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Abstract

This thesis investigates whether the presence of visible body art biases selection decision making, and whether the impact of such bias varies as a function of job type. The study utilised a 2 (Job type: blue-collar vs. white-collar) x 2 (Body art: visible tattoo vs. without tattoo) within-subjects experimental research design. Results identified a significant effect, that is, that the presence of a visible tattoo had an impact on job type. This showed for the blue-collar role, the job applicant with visible tattoo was preferred, whereas, there was no difference in job applicant evaluations for the white-collar role. Findings would suggest that in fact, visible body art may work in a candidates favour in certain roles and not in others. This is an interesting and somewhat counterintuitive finding which goes against what the literature suggests, hence it is novel and important.

Keywords: body art, employee selection, decision making, categorical thinking, stigma.
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Chapter One: Introduction

1 INTRODUCTION

1.1 RESEARCH PROBLEM AND BACKGROUND

On Thursday, August 13, 2017, news broke of a young male, aged 19 years who had written a plea on the ‘Auckland Jobs’ Facebook page which read, ‘I just want a job’. The post was accompanied by a photo, which displayed a large tattoo covering the entire lower half of the young man’s face. In capital letters and black shading the tattoo read ‘DEVAST8’ (the man’s nickname). The tattoo was obtained on a whim in prison whilst he was under the influence of alcohol. The man was reported to have reasonable regret over the tattoo’s size. Following his release from prison he struggled to secure gainful employment. Job after job he was being turned away. Perhaps the tattoo was too confronting within many working environments. Alternatively, the presence of the tattoo may have been influencing the selection process through unconscious bias and the social stigma associated with facial tattoos. Regardless, a facial tattoo inked in jail was proving to be a tricky sell for employers (“I Just want a Job”, 2017).

Recruitment processes aim to attract and select the best possible talent to an organisation. Ineffective selection practices can have a detrimental impact on organisational performance given the importance of human capital as a source of competitive advantage. In order to be effective, selection processes need to incorporate valid, and reliable predictors of job-related criteria, and should not unfairly discriminate against job applicants on the basis of factors unrelated to the job. That said, both intentional and unintentional discrimination may arise within all phases of employee selection due to bias, prejudice and stereotyping (Frederiksen, Lange, & Kriechel, 2017; Koch, D’Mello, & Sackett, 2015; Williams, Thomas, & Christensen, 2014). Consequently, understanding how biases might influence selection decision making is important.
Individuals learn to distinguish one person from another in part through physical characteristics, such as hair colour, height and gender. Prior research indicates that these physical attributes can influence employee selection decisions (Desrumaux, De Bosscher, & Leoni, 2009), such that applicants displaying supposedly undesirable physical traits might be subject to unfair discrimination despite their credentials or knowledge, skills and abilities (KSAs) (Adamitis, 2000; Carter, 2016; Koch et al., 2015). Consequently, most developed countries have legislation in place to mitigate against unfair discrimination in employment, and more generally in society. Most commonly such legislation prohibits discrimination on the grounds of religion, age, sex and sexual orientation, ethnicity, marital status, or any group membership (Human Rights Act, 1993). Legislation in New Zealand does not, however, have a specific category that prohibits discrimination based on body art or modification.

There is a substantial body of research that examines how attractiveness and physical appearance affect employee selection decisions (Braun, Peus, & Frey, 2012; Desrumaux et al., 2009; Featherstone, 2010; Hosoda, Stone-Romero, & Coats, 2003). Far fewer studies have examined how the presence or absence of visible body art influences selection decision making. This, despite the fact that tattoos are becoming more commonplace, both within the workplace and society more generally. The limited number of studies conducted thus far indicate that body art and modification are often subjected to negative stereotypes and prejudice in working environments.

Research and anecdotal evidence indicates that there is varied acceptance of tattoos within the workplace, indeed, visible body art can influence employee selection decisions (Lin, 2016; Timming, 2015; MacDonald, 2016). As such, tattoos are considered appropriate blue-collar roles, while similar tattoos in white-collar roles are viewed as inappropriate (Dean, 2010). Blue and white-collar roles are occupational classifications which refer to roles within the workplace and differ based on context and content of the role (Herr, et al., 2015). Blue-collar roles are characterised as involving more physical and labour intensive work, whereas, white-collar roles are office based (Najjar & Fares, 2017). Therefore, this research seeks to investigate whether there is bias towards job candidates with visible body art, and whether the impact of such bias varies as a function of job type.
1.2 THESIS STRUCTURE

This thesis is comprised of five chapters. The present chapter has introduced and discussed the significance of this research. Chapter 2, provides an in-depth discussion on the relevant aspects of the literature. This includes and emphasises body art, employee selection, decision making, and categorical thinking literatures. The following chapter, the method (chapter 3) details the 2 X 2 within-subjects design which was employed to investigate if there is bias towards job candidates with visible body art, and whether the impact of such bias varies as a function of job type. The results chapter (chapter 4) presents results from hypothesis testing. This then leads to the final chapter, the discussion (chapter 5). This chapter contains a discussion on key findings, as well as the implications, limitations and direction for future research.
2 LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides an overview of the literature on body art and employee selection. Over the past 50 years there has been an increasing acceptance of tattoos within social contexts, however, this is yet to be translated within professional settings (French, Maclean, Robins, Sayed, & Shiferaw, 2016). Although these fields of literature are extensive, it is evident that only a limited number of studies have investigated tattoos in an employment context (Timming, 2015). Consequently, while much is known about tattoos in general, less is known about their influence on employee selection decisions. The influence of tattoos on selection decisions is of particular interest given that tattoos have historically been subject to negative stigma in both social and professional contexts (Carnes & Radojevich-Kelley, 2009; Carter, 2016; French et al., 2016; Wohlrab, Stahl, Rammsayer, & Kappeler, 2007). The literature review commences by discussing the history of tattoos as a form of body art and the growing acceptance and implications of tattoos in the workplace. From here the presence and, or influence of, stereotypes and prejudice in employee selection decisions are discussed. The final section of the review outlines the impact that visible tattoos might have on employee selection in various industries and how this might vary according to job type. The literature review concludes by presenting the hypotheses for this study.

2.2 GROWING ACCEPTANCE OF BODY MODIFICATION

Reasons for Obtaining Body Art

The increasing prevalence of body art over the last 50 years would suggest that there are a number of public persona or aesthetic reasons for getting tattoos which may include, but are not limited to; rebellion and liberation, uniqueness and creativity,
fashion and social influence, ritualising and gifting, cultural symbolism, or to signal group identity (Carnes & Radojevich-Kelley, 2009; Pentina & Spears, 2011; Tiggermann & Hopkins, 2011; Williams et al., 2014). Similarly, personal motivations for body art acquisition may be an act of spontaneity and impulse, self-protection or self-assertion, or an act of remembrance toward people or events (Pentina & Spears, 2011). Alternatively, individuals may also obtain body art for no specific reason at all (Williams et al., 2014).

**History of Tattoos**

Human remains found on the Austrian border suggest that the use of body art within ancient cultures, and specifically tattoos, can be traced back to 5,000 B.C, possibly even earlier. (Anotonellis, Berry, & Silsbee, 2017; Carnes & Radojevich-Kelley, 2009; Hoffman, McVicker, & Radojevick-Kelley, 2009; Larkin, 2004). This indicates that tattooing was practiced in the world thousands of years ago. As a result, there are many different cultural beliefs surrounding body art, and reasons for obtaining tattoos differ amongst different cultures (Swager, 2005). In certain cultures individuals obtain body art as the process of acquirement may represent a sacred and spiritual journey, or even signify strength and power within their respective culture or religion (Carter, 2016). The Polynesian culture, for instance, holds this belief (Carter, 2016). Similarly, in Samoan and Hawaiian cultures, tattoos represent religious relationships (Larkin, 2004), whereby individuals ‘carve’ tribal links into their skin (Carnes & Radojevich-Kelley, 2009). Furthermore, in Polynesian and New Zealand cultures tattoos can also be a sign of social status, or a mark of beauty (Carnes & Radojevich-Kelley, 2009; Carter, 2016).

In New Zealand, a Moko (a tattoo) has a significant cultural meaning to Māori, the indigenous peoples of New Zealand. The art of Māori tattooing traces back to 1769 when it was first brought to New Zealand by groups of Eastern Polynesian people (Zealand Tattoo, 2017). Traditionally Māori would carve Ta Moko (facial tattoo) on their chin as a representation of their identity and heritage. A Moko is a cultural design that follows traditional Māori symbolism which can represent social status, identity and genealogy (Museum of New Zealand Te Papa Tongarewa, 2018; Zealand Tattoo,
2017). Due to its entrenched personal meaning, a Moko is (usually) handcrafted by the recipient and therefore, it is likely each design is unique. Anecdotal evidence indicates that although stereotypes of traditional Moko designs are diminishing, this is not necessarily the same for non-cultural tattoos.

Over the past 50 years tattoos have become a globalised phenomenon (Sweetman, 1999), evidenced by an increase in the number of individuals getting tattoos, particularly in European countries and other western nations. This is partly attributable to an increased prevalence of tattoos within popular culture (Carroll & Anderson, 2002). There is evidence of an associated rise in body art and tattoo adornment as individuals seek to conform by making fashion statements and imitating the behaviour of key opinion leaders in society or popular culture (Langman, 2003) or, alternatively, as a means of self-expression (Brailer, Maguire, Smith, & Palm, 2011). The popularity of tattoos in the western world started to increase notably around the 1960s and by the 1980s fringe groups such as ‘hippies’, ‘bikies’ and ‘ punks’ were sporting piercings and tattoos. At the same time body art became easily accessible to those within major cities in the developed world (Langman, 2003; Larkin, 2004). By the early 1990s the tattoo industry was experiencing rapid growth in North America (Larsen, Patterson, & Markham, 2014). Tattoos were arguably more common in New Zealand prior to this, due to cultural significance of tattoos amongst Maori and other Pasifika sub-groups (Museum of New Zealand Te Papa Tongarewa, 2018). As the prevalence of tattoos have become more widespread, so too has the acceptance of tattooing within society.

**Cultural Shift of Acceptance toward Tattoos**

There are a number of aspects that would indicate significant acceptance of body art within society. Indeed, within the past decade body art and the phenomenon of tattoos have been increasingly integrated into visual and print media, such as print, digital and television advertisements, television shows, blockbuster movies, and magazines (Larsen et al., 2014). Characters in television programs and movies visibly display body art, as do sporting icons Sonny Bill Williams and Serena Williams. While this may paint the character as being the ‘bad boy/girl’ or ‘deviant’ and ‘rebellious’ by
nature, in some cases this may have the opposite effect and imply body modification as a good thing when the character is the hero or heroine in the movie, or likewise an icon in the sporting world, as is the case with David Beckham (Carnes & Radojevich-Kelley, 2009). This progress and integration has provided a platform to showcase visible body art and in turn allowed for, or at least created an interest in, tattoos and other available forms of body modification (Carnes & Radojevich-Kelley, 2009). In modern society, fake tattoos or toys which display elements of body art are readily accessible. In sum, the way in which society perceives tattoos appears to have lessened some of the attached stigma to tattooing, and seen it progress into a fashionable and desirable practice for some (Sweetman, 1999).

Generation Y (born during the 1980s and early 1990s) tend to be the most accepting generation due to the prevalence of younger people engaging in the body art practices (Carnes & Radojevich-Kelley, 2009). The literature implies that generational differences likely arise given that tattoos were considered improper and had negative connotations when the older generation were growing up, thus, they are less accepting of tattoos (Carnes & Radojevich-Kelley, 2009; Dean, 2010; Dickson, Dukes, Smith, & Strapko, 2015). Indeed, the increased popularity and acceptance of tattooing has had a particularly positive impact on the number of people amongst Generation Y (millenials) sporting tattoos. The demographic of tattooed individuals is now reported to vary in age and gender, and stem from various social backgrounds and occupations (Dickson et al., 2015). This would suggest that, with time, prejudice towards people with tattoos has, and will continue to change (Carroll & Anderson, 2002; Brailer et al., 2011; Carter, 2016).

**Tattoos in the workplace**

The literature suggests that employers have differing opinions regarding the acceptability of tattoos in the workplace (Carnes & Radojevich-Kelley, 2009). Despite the growing prevalence, and general societal acceptance of tattoos, workplaces generally remain less accepting of tattoos and other forms of body art and modification (Dean, 2011; Ellis, 2015; McElroy, Summers, & Moore, 2014; Mendez, 2016; Miller, McGlashan Nicols, & Eure, 2009; Ruetzler, Taylor, Reynolds, Baker, & Killen, 2012).
As such, these findings indicate that there is a potential for bias in selection decisions as a function of visible body art.

Research suggests that resistance toward job applicants with visible body art may in part be attributable to customer views (Dean, 2010; Ellis, 2015; French et al., 2016; Timming, 2015). In this respect findings indicate that customers often have expectations of what people in certain occupations should look like (Dean, 2010). Similarly, employers were found to be wary of tattooed job applicants as the presence body art could potentially offend some customers (French et al., 2016; Ellis, 2015). This was particularly evident in roles that require direct contact with customers. It is thus likely that employers hold context-specific preferences or expectations of what certain employees should look like and how they should behave (Dean, 2010) within certain roles or working environments. This is likely to encourage organisations to reflect on how their customers will respond to physical attributes (such as tattoos) of employees and determine how this may influence customer engagement toward goods and, or services of the organisation (Antonellis, Berry, Silsbee, 2017; Arndt & Glassman, 2012). Additionally, tattoo design (masculine or feminine) may influence employers’ acceptance of tattoos in the workplace (French et al., 2016). In this regard, feminine tattoos are considered to be delicate and smaller by nature and thus, less aggressive than masculine tattoos. Feminine tattoos include designs such as stars, hearts, butterflies, flowers and quotes. Contrary to this, a mechanical tattoo (visible mechanical parts) is considered to be an overly masculine tattoo. Studies indicate that feminine tattoos on both men and women tend to be viewed more positively in work environments by customers and employers; similarly co-workers were found to be more willing to work around those with feminine tattoo designs (Arndt & Glassman, 2012; Timming, Nickson, Re, & Perrett, 2015).

Clark (2012) also suggests that employers tend to steer away from ‘the tattooed’ in fear that such individual might damage the public image of the firm. ‘The tattooed’ is a term used to refer to those individuals that are heavily tattooed, rather than individuals with small and discrete tattoos (Ellis, 2015). Tattooed individuals are thus likely to be subjected to a greater level of scrutiny in selection processes. Related to this, studies reveal that employers often use a dress code or similar mechanism to limit the body art within their workplace (Antonellis et al., 2017; Bible, 2010; Totten,
Lipscomb, & Jones, 2009). Such policies are legal within the New Zealand context and used to signal to current and potential employees what is acceptable and what is not in terms of workplace attire and presentation.

Given the increased prevalence of tattoos it is important for both the employer and potential applicants to understand whether there is a bias towards applicants with body art and whether this influences selection outcomes (Arndt & Glassman, 2012; Bible, 2010; French et al., 2016; Ladkin & Buhalis, 2016). Prior research has extensively investigated facial and physical attractiveness of job candidates (without body art) to understand whether this influences selection decisions (Adamitis, 2000; Desrumaux et al., 2009; Hosoda et al., 2003; Shannon & Stark, 2003). These studies provide strong evidence of the fact that physical characteristics have an impact on selection outcomes; specifically that higher levels of physical attractiveness are associated with increased employment chances. Thus, attractiveness is demonstrated to have the potential to significantly bias hiring decisions. However, only a limited number of studies have focused on how managers rate job candidates as a function of visible body art (Bekhor, Bekhor, & Gandrabur, 1995; Dale, Bevill, Roach, Glasgow, & Bracy, 2009; Timming, 2017). As such, these studies indicate that the employers own perceptions of tattoos along with industry context, design, and placement of the tattoo influence selection decisions. Furthermore, this showed that tattoos predominantly reduce employment chances. Research has also examined the hireability of tattooed individuals in customer-facing roles (Timming et al., 2015), and the influence of visible body art in screening phases of employee selection, particularly in face-to-face interviews (Antonellis et al., 2017). These findings indicate that tattoos predominantly elicit negative biases and stereotypes in selection decisions. Although employers should refrain from discriminating on grounds other than the candidate’s ability to perform the job, research has identified a connection between visibly tattooed job candidates and lower hireability rates (Timming et al., 2015). This identified a significant difference (p < .01) between tattooed (\(M = 4.03, SD = 1.15\)) and non-tattooed (\(M = 4.58, SD = .97\)) job applicants.

Consequently, in many countries legislation prohibits discrimination within society more generally, and employment specifically. In New Zealand, The Human Rights Act, 1993 serves to protect New Zealanders from discrimination in various areas.
of life, ensuring that they are treated fairly and given equal opportunities regardless of personal characteristics (Human Rights Act 1993). Although this Act does not specifically have a classification for appearance, discrimination based on tattoos appears rather nonsensical given the intention of the Act. In America, the equivalent of this is the Civil Rights Act VII. Similarly, the purpose of this Act is to protect American’s from discrimination arising from sex, race, national origin, colour and religion (Civil Rights Act, 1964). Most importantly visible body art which is of significant religious or cultural value cannot be used against the individual in employment situations as this contravenes the Act (Miller et al., 2009).

2.3 EMPLOYEE SELECTION

The section, which follows, provides a brief overview of typical employee selection practices, prior to discussing on how the presence of tattoos might influence selection decisions.

Selection processes are concerned with finding the most suitably qualified individual from a pool of applicants. Thus, by its very nature employee selection is a process of discrimination, however discriminating between job applicants should be done through valid, reliable and fair means. Employers aim to achieve this by focusing on job-related characteristics of the individual and assessing applicant fit in order to predict future job performance (Cascio & Aguinis, 2008; McElroy et al., 2014). During the first phase of selection employers will find themselves assessing individual-level characteristics (Cascio & Aguinis, 2008). Predictors of performance can be gathered from the applicant themselves as well as other sources (i.e. pre-screening/ contacting past employers and nowadays, social media). Pre-screening background checks, application blanks, interviews and various tests including, integrity, aptitude, personality and drug testing are some of the measures used to evaluate and determine performance (Cascio & Aguinis, 2008; Stone, 2013). Based on scores obtained from the various selection methods used, employers then rank-order candidates to determine the individual(s) selected for the job opening (Cascio & Aguinis, 2008).
While employers should select candidates on fair grounds, the literature indicates that selection processes are open to a certain level of bias and subjectivity (Antonellis et al., 2017; Frederiksen et al., 2017). As such, these studies indicate that screening phases of selection processes and face-to-face interviews have greater potential to elicit biases, particularly as they tend to be subjectively measured rather than objectively (Antonellis et al., 2017; Frederiksen et al., 2017). Prior research also indicates that during face-to-face interviews employers will be assessing a number of things such as, professional attire, professionalism, body art, colour of clothing, and overall grooming. Thus, first impressions in face-to-face interviews are critical to the selection processes (McElroy et al., 2014; Ruetzler et al., 2012; Swagger, 2005; Timming, 2015). As such, it could be suggested that employers use interviews to make inferences about job applicants. Consequently, it is believed that some organisations consider first impressions more critical than job applicant CVs (Ruetzler et al., 2012). Hence, throughout employee selection processes, employers will actively be using cognitive processes, such as sense-making, in order to evaluate job applicants. Such ‘sense-making’ processes can be influenced by categorical thinking, stereotyping and prejudice.

2.4 TATTOOS AND THE POTENTIAL FOR CATEGORICAL THINKING

Social cognition underpins how individuals perceive one another. This notion is also commonly referred to as sense-making. Sense-making is a cognitive process which occurs in everyday life, as it allows us to navigate and make sense of the social world (Macrae & Bodenhausen, 2001). In order to make sense of things and of one another, one must simplify perception processes by using categorical representations or categorical thinking (Macrae & Bodenhausen, 2000). Categorical thinking (or representation) is often considered unavoidable and automatic in person-perception processes (Macrae & Bodenhausen, 2001).

Categorical representations (i.e., stereotypes) are used to streamline perceptual processes as they are ‘economical’ and mentally easier (Macrae & Bodenhausen, 2001). Stereotypes are considered to be beliefs or expectations regarding the qualities and characteristics of particular social groups, and the individuals within social groups
It could be suggested that humans essentially categorise in order to simplify their world, however, when categorising, it becomes easy to over-simplify things and make inaccurate and possibly unintentional biased judgements.

Literature suggests that categorical thinking and sense-making can influence selection decisions (Antonellis et al., 2017; Durkin & Stephen, 2000; Hosoda et al., 2003). Although employers are likely to try to prevent biased decision making (Antonellis et al., 2017; Seiter & Sandry, 2003), preconceived stereotypic views of what job applicants should look, act, and behave like make this extremely challenging. Consequently, when objectively evaluating job candidates, the presence of a tattoo should have no impact, yet the presence of a tattoo would likely impact the subjective judgements of job applicants. Furthermore, judgement of others becomes more stereotypic when the individual (perceiver) has limited time, motivation and cognitive capacity to think deeply (Macrae & Bodenhausen, 2000). For example, in screening phases of selection decisions it is likely that employers are going to have less time to make judgement and thus, it is during this period of the selection process where job applicants may be particularly subjected to prejudice and biases. Comparatively, during face-to-face interviews the employer is likely to have more time to evaluate job applicants and thus make more informed evaluations of job applicants.

As alluded to above, not all stereotyping is intentional. Two types of stereotyping occur: blatant and subtle. Blatant stereotypes are considered to be rare and are explicit and deliberate (Fiske & Taylor, 2017). An example of such stereotype would be, the belief people with tattoos are criminals. However, subtle stereotypes such as tattoos being associated with risky behaviours are more common and implicit (Fiske & Taylor, 2017). Body art has long been associated with negative stereotypes, such as the view that those with tattoos tend to be more aggressive, deviant, risk prone, gang members, or someone with poor judgement (Carnes & Radojevich-Kelley, 2009). Tattoos thus generally carry significant negative stigma within the workplace (Wohlrab et al., 2007; Resenhoeft, Villa, & Wiseman, 2008; McElroy et al., 2014).

There is a certain level of automaticity in stereotypical thinking (Macrae & Bodenhausen, 2001). As such, stereotypical thinking is often used unfairly, thus
creating negative outcomes/perceptions for those subject to the stereotype. For example, employers may mistakenly evaluate a job candidate based on the presence of visible body art even though that tattoos do not capture knowledge, skills and abilities of job applicants (Ellis, 2015). Therefore, when job applicants display favourable traits this is likely to result in favourable evaluations and vice versa. Consequentially those who endorse negative stereotypes are biased (Duguid & Thomas-Hunt, 2015). How such prejudice or bias in selection decisions might vary across different job types, industries, and or organisational settings has yet to be fully considered in the literature. As a result this thesis argues that tattoos are likely to negatively impact on employment opportunities (Carter, 2016).

2.5 BODY ART AND OCCUPATIONAL CLASSIFICATIONS

Previous research suggests that body art acceptability varies according to industry and the nature of the role (Lin, 2016; Timming, 2015). In general, it is noted that the majority of employers have a preference to employ those without visible body art where possible (Braier et al., 2011). Consequently, tattoos are considered acceptable in some roles and industries, yet inappropriate in others. Employers and industries considered to be less flexible on employees with visible body art are hospitality, beauty, retail, and office sectors (Bekhor et al., 1995; Carnes & Radojevich-Kelley, 2009). As outlined in a number of studies this is likely as a result of working in front line roles with direct customer contact (Arndt & Glassman, 2012; Bekhor et al., 1995; Carnes & Radojevich-Kelley, 2009). For example, tattoos were considered inappropriate for travel agents, nurses, accountants, stockbrokers, bank loan officers, and those in childcare roles, whereas, they were considered appropriate for bartenders, hair-stylists and those working on auto mechanics (Dean, 2010; Dean, 2011). As such, findings indicate that job applicants with visible body art may find that this physical attribute impacts negatively on their chances of being hired. This view is commonly expressed in society as evidenced by this comment on a news story on the topic which recently featured on the Stuff.co.nz website, "if it's in a meatworks, I couldn't imagine the employer would give two hoots. If you're the doctor's receptionist or the front face of a professional firm, they may have different approaches to dress standards." (Anonymous, personal communication, September 22, 2016). Anecdotal
comments such as this perhaps indicate a general societal view that body art may be perfectly acceptable in some organisational settings but not in others.

Workplaces vary in the type of work required by employees and hence roles within each workplace are dependent on the business context. Roles are often classified as being either blue-collar or white-collar (Perez-Ahumada, 2017). Despite the ambiguity of these terms, these occupational classifications are commonly accepted means to distinguish between roles in terms of job context and job content (Herr, et al., 2015; Lips-Wiersma, Wright, & Dik, 2016), as well as the level of physical strain and psychosocial demands associated with the role (Ravensteijn, van Kippersluis, & van Doorslaer, 2017). As such, research suggests that there is varied acceptance of body art in blue-collar and white-collar roles (Dean, 2010; Timming et al., 2015). Blue-collar roles are defined or characterized by lower levels of autonomy, intellectual discretion, and task variance (Herr, et al., 2015). Blue-collar roles typically refer to labour intensive and skilled trade roles (Lips-Wiersma et al., 2016). Typically, these roles tend to be more strenuous, monotonous, repetitive, and physically demanding in comparison to white-collar roles (Herr, et al., 2015). They are generally non-supervisory and non-managerial roles, thus, requiring a low level of education and skill acquirement (Najjar & Fares, 2017).

Contrastingly, white-collar work is described as mainly office-bound work; based on words, numbers, ideas, figures and information (Najjar & Fares, 2017). Typical white-collar roles include business owners, supervisors and managerial roles (Lips-Wiersma et al., 2016). White-collar employees tend to be more sedentary at work and spend less time on their feet (Myrtek, Fichtler, Strittmatter, & Brugner, 1999).

Furthermore, research indicates that selection decisions are often influenced by the type of tattoo (cultural or non-cultural) or design (feminine or masculine) (Dean, 2010; Timming et al., 2015). As such, face, neck, and hand tattoos are considered to be less acceptable within many organisational settings (Antonellis et al., 2017; Ellis, 2015). Consequently, visibly tattooed candidates may find themselves subject to biases and reduced employment opportunities as a result of visible body art. Hence, research indicates that tattoo(s) that can be concealed in the workplace are more preferable (Dean, 2010; Dean, 2011). The limited numbers of studies thus far have considered
that there is a potential for bias in selection decisions. Accordingly, the general societal view of tattoos is that while they may be considered inappropriate in some roles, they are deemed perfectly acceptable in others. Therefore, based on the above described literature and findings, this study is guided by the following hypotheses:

Hypothesis 1: Applicants in blue-collar roles with visible body art are likely to be evaluated more favourably than those without visible body art.

Hypothesis 2: Applicants in white-collar roles without visible body art are likely to be evaluated more favourably than those with visible body art.

2.6 CHAPTER SUMMARY

Although employee selection decisions should be based on objectively measurable criteria, this is often not the case. As such, selection processes are susceptible to stereotypes and personal biases, of which are considered to influence selection outcomes. Given the increased prevalence of tattoos in western society, it is likely employers will be faced with tattooed job applicants long into the future, thus, it is important for both the employer and potential applicants to understand whether bias towards applicants with body art influences selection outcomes.
3  METHOD

3.1  STUDY OVERVIEW

This study employed a 2 (Job type: blue-collar vs. white-collar) x 2 (Body art: visible tattoo vs. without tattoo) within-subjects design to investigate if there is bias towards job candidates with visible body art, and whether the impact of such bias varies as a function of job type. Participants were asked to take part in a supposed employee selection task that would require them to evaluate and rank job applications for two different jobs (blue and white-collar) to investigate which applicant they would most likely invite for an interview. The nature of this research meant that some candidates had visible body art in their CV photo and others did not, however, such manipulation was not made explicit to participants until they were debriefed at the end of the study.

3.2  PARTICIPANTS

In total, 87 students from the University of Canterbury participated in the study, including 18 postgraduate students and 69 undergraduate students. In terms of participant demographics, 80.5 percent of participants were female and 19.5 percent male. The age distribution shows 75.9 percent of participants were aged between 18 and 24 years of age, 11.5 were aged between 25 and 30 years of age, 4.6 percent were aged between 31 and 35 years of age, 4.6 percent were aged between 36 and 40 years of age, and the remaining 3.4 percent were aged 40 and over. The majority of the sample (88.5 percent) indicated having prior work experience, only 6.9 percent of participants indicated having no prior work experience. This meant that 4.6 percent of participants did not indicate having any prior work experience. The mean level of those that indicated having prior work experience was 5.93 years (SD= 5.43) with a range of 0.20 – 25.00. The mean level of perceived practical experience of managing or conducting employee selection processes (M= 2.33, SD= 1.70) among participants was stastically less than perceived knowledge of managing or conducting employee
selection processes (M=3.68, SD=1.75). Further participant demographics can be found in the Appendicies (see Appendix 7.3)

3.3 MATERIALS

Application Packs

Each participant received two application packs: one for a blue-collar role and another for a white-collar role. Each application pack contained the following materials: one job description, three CVs, and three evaluation forms (one for each applicant). These materials are described in further detail below, and included in the appendices (see Appendix 7.1). In addition, there were two variations of application packs for both roles - Pack A and Pack B. Experimental research often utilise counterbalanced designs as this controls for order effects among participant evaluations. In half of the packs, Applicant A had the visible tattoo and in half the packs, Applicant B had the visible tattoo. That is, the presence of the visible tattoo was counterbalanced between the applicants applying for each role. Further details are provided below.

Job Descriptions

Two job descriptions were developed. These were for two different roles within the construction industry, namely a Construction Manager (white-collar), and a Construction Labourer (blue-collar). These were constructed with the help of a Human Resource Advisor at a local organisation in the construction industry. The expertise and advice of this industry professional ensured that the two job descriptions accurately reflected a white-collar and a blue-collar role. Both position descriptions were for the same fictional organisation, called ‘Construction Group Ltd’. Each job description outlined the job's overall purpose, key duties, tasks required to be performed, as well as essential and desirable knowledge, skills and abilities (KSAs) required to perform the role. KSAs were categorised as (1) education and formal qualifications, (2) professional or technical experience, (3) professional or technical knowledge and
skills, and, (4) personal attributes and competencies. Please see Appendix 7.1.1 for the job descriptions.

**Applicant CVs**

In total, six CVs were constructed; three for the Construction Manager (white-collar), and three for the Construction Labourer (blue-collar). Only male applicants were used as the targets for employee selection (discussed further below) as the literature suggests that men are traditionally the predominant users of body art and subject to more bias (Wohlrab et al., 2007; Arndt & Glassman, 2012; Williams et al., 2014). Applicant photos were displayed in the top right corner of each of the six CVs as this allowed for body art manipulation (visible tattoo versus without tattoo). Although there were three applications for each role, two CVs were of equal merit and clearly met the selection criteria, and the third, created as a distractor CV, clearly did not meet the stated selection criteria. In order to establish equivalence of CVs, all six CVs underwent two rounds of pilot testing with 21 participants in total (see Appendix 7.4 for mean evaluations). Pilot testing identified that two CVs for each position were of equal equivalence, indicating that both candidates were equally suitable for the role. The third CV for each position was clearly perceived as poor and therefore served as a distractor CV within the study. The reason for including the third, distractor CV, is that it would have been too obvious to have just two CVs, one with a tattoo and the other without, so therefore a third CV was created.

The same industry professional (Human Resource Advisor) that assisted with the creation of job descriptions, also assisted in with the creation of applicant CVs. This was to increase the ecological validity of CVs, such that the information provided in CVs was realistic and as close to an actual CV as possible.

**Body Art Manipulation**

Applicant photos displayed on each of the CVs were required to meet the following criteria: applicants needed to be of Caucasian descent (as ethnicity was not examined as a factor), be of similar age to one another, and depict an upper-body photo.
wearing semi-professional attire. Images labeled for non-commercial reuse with modification were sourced online (Flickr.com). A pool of 11 possible applicant photos underwent two rounds of pilot testing to assess perceived levels of relative physical attractiveness. Attractiveness evaluations were measured on a seven point Likert scale, from low (1) to high attractiveness (7). In order to reduce the pool of 11 possible photos to those actually selected, photos had to depict men with similar stance and attire. Following this, equal attractiveness was found for each of the three applicant photos within each job type (See Appendix 7.5 for mean attractiveness scores). This was to ensure that the placement of manipulated body art remained constant between Applicant A, and Applicant B in each application pack.

Visible tattoos were superimposed using Adobe Photoshop onto respective applicants (see Appendix 7.1.2). The two CVs of equal merit, for both positions, had tattoo versus without tattoo counterbalanced as this controlled for order effects. As such, in half of the packs, Applicant A had the visible tattoo and in half the packs, Applicant B had the visible tattoo. Non-cultural tattoos were selected for this research. This was because the focus of this research was not on cultural or ethnic biases in the selection process, rather, the influence of tattoos on the employee selection process. Tattoo placement was different between the two roles, this was decision was partly driven by photos chosen. Tattoo placement for the construction manager was on the applicant’s neck towards the collarbone, and the tattoo itself was placed to appear slightly covered by the applicant's jumper (see Figure 1). The construction labourer had a visible tattoo on the forearm. The tattoo was placed to appear visible from under the rolled up sleeve of the applicant's shirt (see Figure 2).
Applicant Evaluation Forms

The applicant evaluation form included eight questions for participants to assess each applicant’s CV, designed to align with essential and desirable KSAs (refer to Appendix 7.1.3). Participants were asked to evaluate candidates based on their education and formal qualifications, person-job fit, professional or technical experience, person-organisation fit, professional or technical and skills, and personal
attributes and competencies. These six criteria were measured on a scale from poor (1) to excellent (7). The two remaining evaluation criteria asked participants how likely would they be to invite the applicant for an interview, and how likely would they be to hire the applicant. These two items were measured on a scale from unlikely (1) to highly likely (7). These eight criteria were all fictional. A seven point Likert scale was used due to the reliability and validity that this range provides (Wakita, Ueshima, & Noguchi, 2012).

**Demographic Survey**

This demographic survey was supplementary to the application packs and given to participants upon completion of all applicant evaluations (both blue and white-collar roles). The demographic survey contained 10 questions which asked participants to indicate which degree they were currently studying towards, their age and gender. Participants were also asked to indicate if they had any prior work experience. Those that indicated having prior work experience were asked to specify this experience in years and months in total, as well as briefly describing the type of work experience. The survey also asked participants to indicate separately, their practical experience and knowledge of managing or conducting employee selection processes.

Due to the experimental nature of this research, a manipulation check was added into this survey so that I could determine whether participants realised the true purpose of the research. This question simply asked participants to describe in their own words the intent of the research. Finally, if participants felt comfortable in doing so, they were asked to indicate if they personally had any tattoo(s) as this would indicate pre-existing attitudes towards tattoos. All participants felt comfortable answering this question (see Appendix 7.1.4 for survey).

**Pilot Testing**

Finalised materials (application packs) underwent a round of pilot testing with 17 business students from the University of Canterbury (eight undergraduate students and nine postgraduate students). These participants piloted materials in a laboratory setting that followed the experimental procedure detailed below. Following the
procedure, participants were encouraged to provide any additional feedback relating to the materials, or the procedure itself. No amendments were made to materials as a consequence of this feedback.

3.4 PROCEDURE

Students from the University of Canterbury were recruited for this study. Participants did not require any prior knowledge, or practical experience in employee selection. Initially, students enrolled in Executive Development Programme (EDP) courses and Human Resource Management (HRM) classes were targeted. These groups of students were targeted due to the likelihood of them having work experience, interest, or experience in Human Resource Management processes. However, the vast majority (73.6%) of participants self-selected to participate in the study through one of two recruitment advertisements posted online. A recruitment advertisement was placed on the University of Canterbury Student’ Association’s Facebook page, the University of Canterbury Students’ Association (UCSA) Noticeboard (see Appendix 7.2 for this advertisement). The second advertisement was targeted towards students taking a first year Psychology paper. The psychology department coordinates a participant pool which enables researchers to advertise their experiments to these students. Each invitation explained that their involvement in the study would require them to evaluate and rank applications for two different jobs and determine which applicant they would be likely to invite for an interview. This meant that a total of 11.5 percent of participants were from EDP courses, 14.9 percent of participants were from HRM classes, 29.9 percent of participants participated as a result of the recruitment advertisement on the UCSA Noticeboard, and 43.7 percent of participants participated through the Department of Psychology participant pool.

Participants scheduled their own laboratory session time via an email with me. Upon arrival, they were individually seated, and given a verbal explanation of the study’s purpose and procedure. Participants were advised that any prior experience and/or knowledge of employee selection processes were not necessary to complete the task. Prior to receiving any materials, participants signed a consent form. Participants were then provided with the first application pack. Application packs were
counterbalanced, half of participants received the Construction Labourer (blue-collar role) first, and half of participants were given the Construction Manager (white-collar role) first. Once participants had completed individual applicant evaluations for one role (i.e., applicant evaluation forms), they received their second application pack for the other role. Participants followed the same procedure to evaluate and rank candidates for the second role. This process took participants between 30-40 minutes to complete.

After evaluating and ranking applicants for both roles participants were asked to fill out the demographic survey. Once all experimental materials were collected from participants, they were debriefed. The debrief phase of this experiment was particularly important given the experiment included a cover story and used deception by not disclosing the real purpose of the study to the participants at the outset (Christensen, Burke Johnson, & Turner, 2014). The debriefing stage of this study informed participants that the research was actually seeking to assess the impact of body art on employee selection decisions, in order to understand if there is a bias towards candidates with tattoos. It was identified from the manipulation question in the demographic survey that three participants realised the true intent of this research (prior to reading the debrief). Participants were finally asked that anything discussed, seen, or discovered within the session not be repeated to anyone else. This was to ensure that participants would not disclose the actual purpose of the study to their fellow students who may have participated in the study in the future. As a token of appreciation, participants received an NZ$10 dollar grocery voucher. Please refer to Figure 3 for the study procedure.
Ethical considerations

Ethical implications have been considered for this study. The research was reviewed and approved by the University of Canterbury's Human Ethics Committee prior to any data collection (see Appendix 7.8). Research invitations detailed
participant involvement in the study and explicitly stated that they held the right to withdraw their participation at any time prior to when data analysis began. Participants were asked to sign an informed consent form prior to their participation. As noted, deception was used in this research. Some applicants in the study had a visible tattoo photoshopped onto their applicant photo, but such manipulation was not made explicit to participants. However, when the experiment concluded participants were debriefed and true research nature was explained.
4 RESULTS

4.1 INTRODUCTION

This chapter presents the results of the analysis on the 2 (Job type: blue-collar vs. white-collar) x 2 (Body art: visible tattoo vs. without tattoo) within-subjects design as outlined in Chapter 3. Experimental research by definition is a quantitative approach that seeks to identify cause-and-effect relationships through the use of a controlled experiment (Christensen et al., 2014). This method of data collection was chosen as the literature identifies that extant studies investigating body art and selection decision are predominantly exploratory by nature (Timming, 2011).

Deception was used in this study to increase experimental control and avoid social desirability in participant responses as this is known to affect experimental validity (Hertwig & Ortmann, 2008; Nederhof, 1985). Thus, deception is common in experimental research. It was thought that if participants knew the intent of this research was to determine selection bias as a function of visible tattoos, this could affect their perceptions, thought processes, reactions to candidates, and overall selection outcomes, and thus potentially giving socially desirable answers (Randall & Fernandes, 1991).

All analyses were performed on statistical software, IBM SPSS Statistics (Version 23).

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1 Analyses were conducted to exclude distractor CV; exclusion of this CV will be discussed further below.
4.2 EXPLORATORY FACTOR ANALYSIS

All CVs were evaluated by eight questions. These eight questions were developed for this study and subsequently factor analysed to determine whether they could be combined into a composite evaluation measure. Initially, all blue-collar (BC) evaluation questions were factor analysed together, and all white-collar (WC) evaluation questions were factor analysed together. Following this, factor analyses were run separately for each of the different CVs. All analyses were checked and this identified that running separate analyses for each of the CVs, so six in total, provided the most accurate composite. The criteria for factor inclusion was eigenvalues greater than one (> 1), and items which loaded onto one factor with factor loadings above .40, and no cross loading above .30 (DeVellis, 2012). A principle axis factoring with direct oblimin rotation was used on the basis that it allows for correlations between factors, of which I would expect these evaluation criteria be related (Field, 2013).

The Kaiser-Meyer-Olkin (KMO) score indicates the ratio of squared correlation between variables to squared partial correlation between variables (Field, 2013). KMO scores with values greater than 0.7 are acceptable, and values over 0.8 are preferable (Kaiser, 1974). Therefore, if KMO scores are less than 0.7 this may possibly indicate lack of correlation between variables or that single variables are problematic. Meanwhile, Bartlett’s test of sphericity indicates whether each of the items correlate well with one another, of which I would expect a significant value (Field, 2013). All KMO scores were above 0.7 and Bartlett’s tests for sphericity were significant for each of the six applicant evaluations. Therefore, this indicates that there are significant correlations between the items (> .70, p < .05), and sampling adequacy for factor analysis.

Analyses found that four of the six CVs (BC with tattoo, BC without tattoo, WC with tattoo and, WC distractor CV) had one factor solutions. Despite meeting the criteria above, the remaining two CVs (BC distractor CV and WC without tattoo) did not initially load with one factor solutions.

After examining the pattern matrix for BC distractor CV (see appendix 7.6.1), the analyses indicated that the eight items loaded as two meaningful factors. The
analyses showed that evaluation items, ‘education and formal qualifications’, ‘person-job fit’, ‘how likely would you be to invite this applicant for an interview?’, and ‘how likely would you be to hire this applicant?’ loaded better as one factor. It could be suggested that these item groupings encompass evaluations regarding role suitability of applicants. Similarly, evaluation items, ‘professional or technical experience’, ‘person-organisation fit’, ‘professional or technical knowledge and skills’, and ‘personal attributes and competencies’ loaded separately as another factor. This particular item grouping refers to various skills of applicants. Considering this, separate analyses were re-run for these two factors; role suitability, and skills. These two factors loaded as expected. BC distractor CV – role suitability was found to have an internal consistency of $\alpha = .84$, and BC distractor CV – skills had an internal consistency of $\alpha = .79$. Therefore, two separate composites were created for these factors.

Moreover, the initial factor analysis for the WC without tattoo, identified that item one, ‘education and formal qualifications’ had low communality and a factor loading of .12 (see Appendix 7.6.2). Henceforth, this item was discarded. After re-running the analysis without this item, the remaining seven items loaded as one factor ($\alpha = .90$).

### 4.3 INTERNAL CONSISTENCY

The internal consistency of each construct was calculated to ensure reliability. Values of .7 to .8 indicate acceptable Cronbach $\alpha$ values (Field, 2013). Analyses showed that indeed, each construct was reliable as a result of factor analysis findings (see Table 1 in section 4.4 for reliability scores).

### 4.4 ASSUMPTIONS OF REPEATED MEASURES ANOVA

Repeated measures analysis of variance (ANOVA) was used to analyse the data. The following assumptions were all checked: normality of data, independent observations and sphericity. The data was visually and statistically examined to determine if the assumptions of normality were met. The ANOVA model only requires that the data be approximately normal due to its robust nature (Field, 2013). Shapiro-
Wilk’s test of normality indicates whether the data is normally distributed. This showed that BC distractor (skills) was non-significant, meaning that this variable met the assumption. However, the remaining five dependent variables were significantly different from a normal distribution ($p < .05$). Despite that these variables violated the assumption of normality, I decided to proceed with analyses given ANOVAs are relatively robust to these violations (Chen, Zhao, & Zhang, 2002; Field, 2013). This means that if assumptions are violated, accurate findings can still be found (Troncoso Skidmore & Thompson, 2013).

Further inspection of the data was performed to examine potential outliers. The boxplots for each factor showed a number of outliers for each CV, each outlier was examined to ensure that there were no input errors. Upon examination it was identified that the data accurately reflected participant evaluations of job candidates. To examine the influence of outliers, analyses were conducted with and without outliers. The findings remained identical in both cases, i.e., the inclusion of these outliers made no differences to the findings. Therefore, based on recommendation, these outliers were not removed in order to limit bias, and instead treated as normal data points (Ghosh & Vogt, 2012).

The independent observation assumption requires that observations are independent of each other (Field, 2013). This is not violated given that participant evaluations (observations) have no influence toward each other.

Furthermore, Mauchly’s test assesses sphericity, this is likened to the assumption of homogeneity; Sphericity determines the equality of variances between within-subjects. However, three conditions are required for this to be an issue. As this study only has two conditions (visible tattoo and without tattoo) this assumption was overlooked.

**Distractor CVs**

Distractor CVs were included in this study as it would have been too obvious to simply have two CVs for each job type; one with a tattoo and the other without.
Hence, a third CV for each role was added. The distractor CVs were constructed not to meet selection criteria, with the intention that the participants would evaluate these CVs as significantly poorer than the experimental CVs. It was intended that the distractor CVs could therefore be discarded from analysis. ANOVAs were run for each role to investigate if there was reasonable evidence, which would support excluding these evaluations from further analyses.

Firstly, an ANOVA was run on all blue-collar (construction labourer) evaluations with applicant evaluations as the dependent variable. These outcome variables were, BC with tattoo, BC without tattoo, and BC distractor CV (both factor groupings; role suitability, and skills), $F(2, 174) = 781.54, p = .00$. As expected, these results show that the experimental condition evaluations (visible tattoo and without tattoo) were significantly different to BC distractor CV evaluations$^2$. That is, BC with tattoo ($M= 6.06, SD = .68$) and BC without tattoo ($M= 5.93, SD = .74$) had significantly higher means as compared with BC distractor CV (role suitability) ($M= 2.14, SD = .89$) and BC distractor CV (skills) ($M= 2.74, SD = .99$). This would suggest that participants evaluated distractor CVs as anticipated (significantly worse) and would be logical to exclude from further analyses.

The same analysis (ANOVA) was run on all white-collar evaluations (construction manager). Again, applicant evaluations were run as the dependent variables, these outcome variables were WC with tattoo, WC without tattoo, and WC distractor CV, $F(1, 131) = 697.07, p = .00$). As expected, analyses show the same effect, such that the experimental condition of visible tattoo and without tattoo were significantly different to WC distractor CV evaluations; WC with tattoo ($M= 6.15, SD = .58$) and WC without tattoo ($M= 6.21, SD = .63$), compared to WC distractor CV ($M= 3.12, SD = .97$). Based on this I found evidence for both roles (blue- and white-collar)

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$^2$ An additional ANOVA was run for the blue-collar (construction labourer) role. This was with performed with all items as one factor rather than the two discussed above (role suitability, and skills). Again, and as expected, this showed that indeed, the distractor CV was perceived significantly worse ($M= 2.44, SD = .85$) than experimental condition CVs; BC with tattoo ($M= 6.06, SD = .68$), and BC without tattoo ($M= 5.93, SD = .73$).
that distractor CVs were considered significantly worse as compared to experimental condition CVs. Therefore, as intended, distractor CVs for both roles will not be included in analyses for hypothesis testing.

4.5 HYPOTHESIS TESTING

Descriptive statistics are presented in Table 1 below.

Table 1: Means, Standard Deviations and Coefficient Alphas for the Evaluation Composite Scores

<table>
<thead>
<tr>
<th>Condition</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue-collar tattoo</td>
<td>6.06</td>
<td>.68</td>
<td>.91</td>
</tr>
<tr>
<td>Blue-collar no tattoo</td>
<td>5.93</td>
<td>.73</td>
<td>.90</td>
</tr>
<tr>
<td>Blue-collar distractor CV (role suitability)</td>
<td>2.14</td>
<td>.89</td>
<td>.84</td>
</tr>
<tr>
<td>Blue-collar distractor CV (skills)</td>
<td>2.74</td>
<td>.99</td>
<td>.79</td>
</tr>
<tr>
<td>White-collar tattoo</td>
<td>6.15</td>
<td>.58</td>
<td>.87</td>
</tr>
<tr>
<td>White-collar no tattoo</td>
<td>6.21</td>
<td>.63</td>
<td>.90</td>
</tr>
<tr>
<td>White-collar distractor CV</td>
<td>3.12</td>
<td>.97</td>
<td>.90</td>
</tr>
</tbody>
</table>

Note. Note. N=87; Scale range= seven point Likert scale

In order to investigate whether the presence of a visible tattoo influenced applicant evaluations, I ran a 2 (Job type: blue-collar vs. white-collar) x 2 (Body art: visible tattoo vs. without tattoo) repeated measures ANOVA with applicant evaluations as the dependent variable. The strength of the relationship between variables can be calculated by an effect size; 0.2 is considered small, 0.5 is medium and 0.8, large (Field, 2013). The results showed a significant main effect of job type on evaluations, $F(1, 86) = 8.08, p = .01, \eta^2 = .09$, qualified by a significant interaction between experimental condition and job type, with $F(1, 86) = 4.55, p = .04, \eta^2 = .05$. Please see Figure 4 for significant experimental condition (visible tattoo and without tattoo) and job type interaction. As a result of the main effects, a paired samples t-test was performed which showed that the visible tattoo and without tattoo conditions significantly affected the
evaluation of candidates for the blue-collar, construction labourer, role. On average, participants evaluated tattooed candidates more favourably ($M = 6.06, \ SD = 0.68$) than non-tattooed candidates ($M = 5.93, \ SD = 0.73$). This difference, 0.12, BCa 95% CI [0.02, 0.24], was significant; $t(86) = 2.08, \ p = .04$, and represented a small effect, $d = .22$. The results supported Hypothesis 1 which stated that applicants in blue-collar roles with visible body art are likely to be evaluated more favourably than those without visible body art. Hypothesis 2 stated that applicants in white-collar roles without visible body art are likely to be evaluated more favourably than those with visible body art. However, a paired samples t-test showed no statistical difference between experimental condition of visible tattoo and without tattoo on the evaluation of candidates for the construction manager role. Therefore, there is insufficient evidence to support Hypothesis 2.

![Figure 4: Interaction between Experimental Condition (Visible Tattoo and without Tattoo) and Job Type.](image)
Chapter Four: Results

**Manipulation Checks**

Further analyses were run to show that it made no difference which applicant photo had the tattoo (i.e., whether participants had pack A or B). ANOVAs were run with BC with tattoo, BC without tattoo, WC with tattoo, and WC without tattoo as the dependent variables, and pack (i.e., A vs. B) as a between factor. No significant effect was found as a function of pack, $F(1, 85) = .54, p = .47$. This supports that as intended, it did not make any difference which candidate had the tattoo.

Furthermore, an additional ANOVA was run to investigate whether it made a difference where participants were recruited. Again, BC with tattoo, BC without tattoo, WC with tattoo, and WC without tattoo were the dependent variables, and ‘participation’ the between factor (i.e., where participants were recruited from; EDP Students, HRM Classes, UCSA Noticeboard, or the Psychology participant pool). The findings of this analysis showed no significant effect, $F(3, 83) = 0.49, p = .69$, meaning that where or how participants were recruited made no difference to the evaluations.

Results identified that three participants picked up on research intent (as asked in the demographic survey), and the study was actually to do with tattoos. An ANOVA was re-run without the data for these participants to investigate whether participants knowing the purpose of the study influenced their evaluations. The same results were found for blue-collar evaluations $F(1, 83) = 9.31, p = .00$, and white-collar evaluations $F(1, 83) = 5.05, p = .03$.

### 4.6 POTENTIAL INFLUENCE OF EXPERIENCE ON EVALUATIONS

As a means to further investigate any potential effects the data was analysed in terms of whether participant’s prior knowledge or practical experience of managing or conducting employee selection processes influenced the applicant evaluations. An analysis of covariance (ANCOVA) was performed on the data with experimental condition (visible tattoo and without tattoo) as the within-subjects factor, with the same dependent variables mentioned above (i.e., BC with tattoo, BC without tattoo, WC with tattoo and WC without tattoo) and participant knowledge and practical experience both
as covariates. Analyses found no significant effects (all $ps > .28$). Therefore, it is evident that evaluations were not influenced as a function of participants’ prior practical experience or knowledge of either managing or conducting recruitment or selection processes.
5 DISCUSSION

5.1 INTRODUCTION

This chapter concludes the thesis by discussing the key findings of this research in relation to past research. Following this discussion, the practical and theoretical implications of the research are presented. Finally, the limitations of the study are acknowledged and directions for future research are provided.

Summary of Research Purpose

Despite the growing prevalence and acceptance of tattoos within society, stereotypic views of tattoos remain in western working environments (Timming, 2015). The primary aim of this research was to investigate whether there is bias towards job candidates with visible body art, and whether the impact of such bias varies as a function of job type. Furthermore, the study investigated whether applicants in blue-collar roles without visible body art are evaluated less favourably than applicants with visible body art (H1), and similarly, whether applicants in white-collar roles without visible body art are evaluated more favourably than those with visible body art (H2).

5.2 IMPACT OF VISIBLE BODY ART AS A FUNCTION OF JOB TYPE

Hypothesis 1: Experimental Condition and Blue-collar Workers

The first hypothesis predicted (or anticipated) that job applicants in blue-collar roles with visible body art are likely to be evaluated more favourably than those without visible body art. A statistically significant difference was identified. This indicated that evaluations of blue-collar job applicants were influenced by the presence of job applicants with and without visible body art. Further investigation of this interaction identified that although this effect was weak, tattooed job applicants for this role were...
indeed evaluated more favourably than non-tattooed job applicants thus; job applicants with tattoos have higher chances of employment. Hypothesis 1 is thus fully supported.

These findings indicate that there is a positive bias towards applicants with tattoos for blue-collar roles. These findings support body art and employee selection literature which identifies that certain industries are less concerned about physical appearance and body modification than others (Arndt & Glassman, 2012; Brailer et al., 2011). The building and construction industry was one of the industries identified in the literature that was categorised as being more lenient of visibly tattooed job candidates (Bekhor et al., 1995). In physically demanding roles, such as the construction labourer role, physical attributes (i.e. tattoos) might indicate perceived physical strength, power and toughness; hence, a tattoo could be considered acceptable, or even desirable by employers. Perhaps participants viewed the visible body art on job applicants as sign of increased physical strength and power. As such, when body art is perceived as a positive and desirable physical attribute, job applicants are likely to be evaluated more favourably and thus, increasing the employability of tattooed job applicants.

Hypothesis 2: Experimental Condition and White-collar Workers

Hypothesis 2 predicted (or anticipated) that job applicants in white-collar roles without visible body art are likely to be evaluated more favourably than those with visible body art. No significant difference was found in evaluations between candidates with or without visible body art for the white-collar role. Hypothesis 2 was therefore not supported. While no statistically significant result was found, participants did evaluate non-tattooed job applicants more favourably than tattooed job applicants. The lack of statistical significance may have been a consequence of the size and nature of the research sample. These limitations are discussed further in later sections of this chapter.

Both hypotheses were grounded in literature as well as substantial anecdotal evidence which suggested that non-tattooed job applicants are likely to be evaluated more favourably in white-collar (front-line) roles (Dean, 2010; Timming, 2015;
Zestcott, Tompkins, Kozak Williams, Livesay, & Chan, 2018). Whilst the lack of statistical support for Hypothesis 2 is disappointing, the implication of this finding can be considered positive. That is, the findings suggest that lack of bias increases the hireability and widens employment opportunities for tattooed job applicants when applying for a role(s) of this nature (white-collar). This finding indicates that job applicants have equal chances of gaining secured employment, regardless of whether they have a visible tattoo(s), or not.

5.3 DISCUSSION OF MAIN FINDINGS

As a result of categorial thinking we tend to generate expectations regarding characteristics and qualities of certain people based on personal beliefs and physical appearance (Duguid & Thomas-Hunt, 2015; Macrae & Bodenhausen, 2001). As much as these stertotypic views are attempted to be avoided in screening and selection decisions, based on the automacity (and unconscious nature) of these evaluations it is likely that having a tattoo influences selection decision making. Tattoo designs used in this study were a star for the the white-collar role, and a modern abstract blackwork design for the blue-collar role. Blackwork is a broad term used to describe body art which uses solely black ink (Tattoodo, 2016). The star design could be considered as a feminine tattoo, whereas the blackwork design could be considered masculine (see Appendix 7.1.2 for body art manipulation). As discussed in Chapter 2, the literature on categorical thinking would suggest that the masculine design used for the blue-collar role may have prompted participants to attribute other (possibly masculine) characteristics, such as physical strength, to the job applicant as a function of this physical attribute (visible tattoo). This is one possible explanation as to why tattooed job applicants were evaluated more favourable for the physically demanding blue-collar, construction labourer, role.

Although there was a non-significant general tendency towards preferring the candidate without the tattoo in the white-collar, construction manager, role, it is plausible that the more feminine design used on the white-collar applicant photo may have attributed toward the statistically indifferent evaluations of job applicants. Based on what we know about masculine and feminine tattoo designs, the feminine tattoo
may have resulted in slightly more positive evaluations as compared with a more masculine blackwork. Had job applicants for the white-collar role had the masculine blackwork rather than the feminine star, this may have significantly affected evaluations. This limitation is discussed further later in the chapter.

Employee selection processes should be based upon fair and unbiased measures. However, based on prior literature, it is understood that selection decisions are susceptible to personal bias (Cascio & Aguinis, 2008; Frederiksen et al., 2017). Biases are likely to increase when employers, interviewers, or those involved in selection decisions have limited time or capacity to think deeply and evaluate job applicants (Macrae & Bodenhausen, 2000). Hence, the amount of time spent evaluating each job applicant will likely influence the validity of evaluations in selection decisions. This in part, would explain why tattooed individuals were perceived to be more favourable for the blue-collar role, and why there was a non-significant general tendency towards preferring the candidate without the tattoo in the white-collar role. Given that there were no time constraints for evaluations in this study, it is plausible that participants had sufficient time to think deeply and thus, make more informed and objective judgements; of which has likely limited, or lessened, the level of subjectivity in evaluations.

Moreover, given that time constraint was not a limitation of this study, findings may indicate the type of evaluation criteria (subjective or objective) considered to be important within selection decisions. In this respect, given that tattooed job applicants were considered statistically indifferent, it could be suggested that participants considered objective measures (such as the KSAs of the applicant) to be more important when evaluating job applicants for the white-collar role. Whereas, tattooed job applicants were more favourable for the blue-collar role. Thus, given an evident bias, it is possible that objective measures did not matter so much for this role. As such, it could be that the influence of visible body art was less important, rather, focus was on evaluating which job applicant was the most suitable candidate for the role.

Additionally, body art and selection decision literature suggests that selection decisions involving tattooed job applicants are industry dependent; that is, visible tattoos are considered more acceptable in some industries than others (Bekhor et al.,
1995; Carnes & Radojevich-Kelley, 2009; Timming, 2015). However, tattooed job applicants are considered to have greater difficulty securing employment in white-collar roles despite industry contexts. This may indicate a plausible explanation for the non-significant general tendency towards preferring the job applicant without the visible tattoo for the white-collar (construction manager) role. Similarly, the preference for visibly tattooed job applicants in the blue-collar role may be a consequence of environmental norms of the industry. For example, the building industry is considered to be less concerned with the presence of visible tattoos on job applicants and employees (Bekhor et al., 1995). Thus, it is possible that the industry used in this study attributed toward favourable evaluations of tattooed job applicants in the blue-collar role. Further, findings may be reflective of job types being situated within the construction industry; had the role been situated in a different industry, perhaps this may have influenced evaluations. This limitation is discussed further later in the chapter.

Alternatively, given the increased prevalence and acceptance of tattoos over the past 50 years (Sweetman, 1999) it may be that tattoos are becoming so acceptable that selection decisions are more concerned with other things; such as the qualifications and practical experience of job applicants when determining selection outcomes. Furthermore, the indigenous peoples of New Zealand, the Māori, have an extensive history of tattoos within their culture (Nikora, Rua, & Te Awekotuku, 2007). Consequently, tattoos have a strong cultural prevalence in New Zealand and have been present within society for hundreds of years. It could be that tattoos do not matter so much in New Zealand, and when they do influence decisions, it is in a positive sense. Hence, it is possible that this attributed towards the statistically indifferent evaluation of the white-collar role, and the preference toward visibly tattooed job applicants for the blue-collar role. Contrarily, it could also be considered that increased prevalence also had the opposite effect; that is that participants may have developed stronger negative stereotypes toward those with visible body art.

As dress codes are common in organisations, research supports that if employers wish to limit body art within their workplace they should consider a dress code/policy (Totten et al., 2009). These types of policies are more common in roles that have direct contact with customers as this ensures that all employees maintain a
professional appearance and uphold the company image (Antonellis et al., 2017). Albeit, dress codes must also be relative to the environment of the workplace (Clark, 2012). The implication of having a policy means that employers can refer back to this as a guideline of the appropriate and expected standard of dress when, or if needed (Bible, 2010). Furthermore, job applicants may also find that this allows them to visualise the working environment and determine if they would have to, or even want to cover visible body art in order to secure employment. Provided that body art and tattoos remain as prevalent in western society as they are currently, it is likely that organisations and employers will encounter visibility tattooed job applicants long into the future; thus, this may force employers to consider or update appearance policies to suit their workplace.

5.4 RESEARCH IMPLICATIONS AND CONTRIBUTIONS

5.4.1 Practical Implications

Findings of this study may substantiate or challenge the way in which employers and job applicants perceive body art within working environments. The findings of this thesis have important implications for organisational management and employers following a significant interaction between experimental condition (visible tattoo and without tattoo) and job type. These results may provoke change for future selection decisions involving tattooed job applicants.

The findings indicate that selection decisions and screening phases of employee selection processes are indeed susceptible to subjective evaluations given an evident bias towards visibly tattooed job applicants for the blue-collar role. Thus, organisational management, and those involved in employee selection processes should endeavor to invest time and energy into ensuring that their selection process is effectively unbiased as possible. Hence, organisations could consider training their employers, interviewers, and those involved in selection decisions so that personal biases are limited. In this respect, first, employers should perhaps consider asking job applicants to refrain from placing images onto CVs; alternatively, these may simply be removed from CVs before commencing selection procedures. As such, this would
mean that selection processes would be driven by assessing and evaluating the KSAs of job applicants rather than surface level characteristics; thus, preventing biases based on physical appearance.

Given that innate biases can arise within employee selection processes, findings may suggest that employers may be better advised to use external recruiters. External recruiters are removed from the organisation and thus, are likely to make a less biased judgement. Albeit, perhaps it may only be necessary to use external recruiters in the initial screening phase. Once external recruiters have screened job applicants to find the most suitably qualified job applicants, the employing organisation may conduct a further investigation(s), such as interviews or background checks before making the final selection decision. In turn, this approach to employee selection may lead employers to pursue job applicants that they may have otherwise dismissed in earlier phases of selection. Given that the findings indicate a bias towards job applicants with body art, perhaps employing organisations should also reconsider the use of face-to-face interviews. Hence, interviews could be conducted over the phone, thus, preventing biases based on physical attributes (i.e., tattoos), and other surface-level characteristics.

The findings may also facilitate job applicants to make informed decisions or influence design and placement of tattoos obtained in the future. Alternatively, given that employers and society are thought to prefer non-tattooed candidates, as an attempt to reduce the stigma associated with visible body art in the workplace; careful consideration should, therefore, be taken to recognise times or situations in selection processes where visibly tattooed job applicants should consider their clothing choices and standard of dress as a means to lessen the impact of bias.

5.4.2 Theoretical Implications

This thesis makes contributions to combined body art and employee selection literature and additionally, prejudice literature. Although prior research has briefly explored and alluded to acceptability of body art within certain industries, very few studies to date have investigated the influence of bias within job types. The results of this study will be situated within the emerging literature, which examines body art in
employment contexts, and possible biases in selection decisions. Studies in this field predominantly indicate that visibly tattooed job applicants are considered less favourable than non-tattooed applicants, and thus, likely to face reduced employment opportunities. This thesis adds a positive contribution to the literature in the sense that visibly tattooed job applicants were more favourable for the blue-collar role. Further, no statistically significant result was found between visibly tattooed and non-tattooed job applicants in the white-collar role. This, in turn, widens employment opportunities and increases hireability and employment opportunities for visibly tattooed job applicants.

In this respect, a unique and novel contribution of this research is that tattooed job applicants might even be preferred in certain organisational roles. Findings of this research may somewhat challenge current literature. As such, employee selection decision, and prejudice literature may be more inclined to focus on how employers may be able to divert stereotypical and prejudiced judgements when employers are evaluating job applicants with visible body art. Suggestions for future research are discussed further below.

Finally, this thesis offers an extremely interesting, unique, and enjoyable way for researchers to investigate such biases in selection decisions.

5.5 LIMITATIONS AND FUTURE RESEARCH

As with all research, this study is not without limitations. These are identified and discussed below with recommendations for future research.

In regard to the sample of participants, this did not eventuate as planned. The sample consisted of students from various disciplines studying at the University of Canterbury. Initial intentions were to recruit students with background, or experience, in human resource management as these students cover course topics including employee selection, meaning that they are familiar with knowledge such as validity, reliability, utility, and fairness of selection methods in employee selection processes.
However, this was not feasible given difficulty in gaining sufficient participation numbers. Further to this, participants were asked to indicate their knowledge and practical experience of managing or conducting employee selection process in a demographic survey on a seven point Likert scale. Given that all participants were students, the sample indicated limited knowledge (i.e., 4/7) and practical experience (i.e., 2/7). Therefore, it is possible that lack of selection-related knowledge increased the level of subjectivity in evaluations of job applicants. Future research should replicate the approach taken in this study with Human Resource Management (HRM) professionals. Professionals with a background in recruitment, employee selection and decision making processes obviously have a larger interest and understanding thus, are more likely provide more accurate and reflective evaluations. Moreover, a further limitation of this study concerns the sample size. This research had 87 participants. Whist this was a sufficient sample size given the repeated-measures design of the study; a larger participant pool would have potentially influenced the statistical findings by increasing power. Future research should therefore increase the sample size as this will likely increase reliability and consolidate statistical findings.

A further limitation of this study may stem from industry differences. Research acknowledges that tattoos are considered to more acceptable within certain industries (Bekhor et al., 1995; Timming, 2015). As such, the building industry is typically classified as being less concerned about the presence of visible tattoos on employees (Bekhor et al., 1995). The roles used in this study were within the construction industry; therefore the industry used could be a limitation of this study. Future research should consider investigating within other industries, whether there is a bias on job candidates with visible body art as a function of job type. Moreover, literature explains that bias of visibly tattooed job applicants appears to be higher in industries that predominantly employ females (Bekhor et al., 1995). Therefore, future research should also consider replicating this study within an industry that is more female dominant (e.g. Service industries and Nursing).

Literature provides evidence that there is a greater disadvantage for visibly tattooed females (Bekhor et al., 1995). Furthermore, employers are thought to predominantly prefer tattooed females to tattooed males (Brailer et al., 2011). Therefore, another direction for future research would be to use both males and females
as job applicants. Although this would add complexity (another condition) to the study, this would provide insight as to whether there is a greater bias for visibly tattooed females or males.

Other possible limitations of this study concern the placement and design of body art used. Evidence suggests that design of the tattoo and its placement can significantly influence bias (French et al., 2016; Pentina & Spears, 2011; Totten et al., 2009). As result of the final applicant photos chosen, tattoo placement differed between job types. This was on the neck for the white-collar role, and the forearm for the blue-collar role. As such, it is possible that placement of visible tattoo may have influenced bias and evaluations of job applicants. As such, the placement used for (one or both) the roles may have been less of a concern and thus, lessened bias. Tattoo design also differed between job types. Future research should consider having the same tattoo placement for both job types, and, or consider using the same tattoo design for both roles. Moreover, cultural tattoos were purposefully removed as a variable of this study. However, given the prevalent nature of cultural tattoos in New Zealand future research could focus on potential ethnic biases in addition to possible biases between job types.

Finally, another potential limitation of this research is the possibility that participants did not acknowledge the manipulated stimuli (visible tattoo) on applicant photos. The study relied on participants actively observing applicant photos on each of the CVs. However, I cannot assume that all participants noticed the experimental condition. Therefore, if participants did not notice the body art manipulation on job applicants, this would significantly influence evaluations and the validity of this research. Future research should consider an implicit technique to draw attention to the applicant image without explicitly drawing attention to the tattoo. For example, a manipulation question could be added at the end of this study that asks participants whether or not job applicants had tattoos.

5.6 CONCLUDING REMARKS

This research found that the presence of a visible tattoo influenced selection decisions in the blue-collar role; the tattooed candidate was preferred. However, there
was no difference in evaluations for the white-collar role. Thus, tattooed and non-tattooed job applicants have equal chances of gaining secured employment, despite the presence of a visible tattoo(s), or not, in white-collar roles. These findings are interesting given they are differ to predictions in current literature. Hence, the results of this study are novel and suggest that perhaps tattooed job applicants may even be preferred in some job types. This thesis has also provided a unique and interesting way for future research to investigate such biases within selection processes.
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Appendices

7 APPENDICES

7.1 Application Pack Materials

7.1.1 Job Descriptions

<table>
<thead>
<tr>
<th>POSITION DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Title:</strong> Construction Labourer</td>
</tr>
<tr>
<td><strong>Department:</strong> Civil and Roading Engineering</td>
</tr>
<tr>
<td><strong>Location:</strong> Tuam Street, Christchurch</td>
</tr>
<tr>
<td><strong>Contract term:</strong> Continuing, full-time (37.5 hrs a week)</td>
</tr>
<tr>
<td><strong>Salary range:</strong> $52,105 - $54,670 p/a</td>
</tr>
<tr>
<td><strong>Reports to:</strong> Site Foreman</td>
</tr>
</tbody>
</table>

The Construction Labourer will develop and maintain excellent relationships with the following colleagues, customers or clients:

- **Internal:** Foreman, Supervisors, Operations manager, Project Manager.
- **External:** Clients, CRIT, and General public.

**Job purpose:**
Carry out the physical construction and labouring work needed to complete projects that are of high quality and have met company and contract requirements throughout the job.

**Key duties and tasks:**

1. **Labouring**
   1.1 Operate and maintain small machinery/equipment.
   1.2 Manual excavation and preparation of worksites.
   1.3 Maintain excellent standard of craftsmanship at all times.
   1.4 Ensure that machinery/equipment is serviced and maintained.

2. **Administration**
   2.1 Report all hazards/incidents/near misses.
   2.2 Timesheet and job details documentation are recorded accurately and authorised.

3. **Public Relations**
   3.1 Always act with the customer in mind and positively promote the organisation.
   3.2 Maintain excellent relationships with clients/public in order to improve performance and maximise the possibility of securing future profitable work.

4. **Health and Safety**
   4.1 Comply with health, safety, quality, and traffic management at all times.
   4.2 Participate in workplace team health and safety meetings.

5. **Productivity and Efficiency Gain**
   5.1 Share ideas with foreman and others with regards to better ways to complete the job.
   5.2 Deliver services to specification and on time to achieve high levels of satisfaction.
   5.3 Assist organisational staff when required with technical or practical advice in areas of expertise that the job holder has.
   5.4 Pass on any relevant information, technological advancement or processes, which may assist in developing the business or achieving better financial results.
### PERSON SPECIFICATION

#### Education and Formal Qualifications

**Essential:**
- NCEA Qualification (Level 3)
- Site Safe Qualified
- Full New Zealand drivers licence (Class 1)

**Desirable:**
- Any relevant tertiary education applicable within construction industry
- Drivers licence (Class 2)
- Current First Aid Certificate

#### Professional or Technical Experience

**Essential:**
- Experience working in a team
- Understanding of safe handling of small power tools

**Desirable:**
- Experience of site labouring duties in the construction industry

#### Professional or Technical Knowledge and Skills

**Essential:**
- Active listening skills

**Desirable:**
- Experience in traffic management (or Level 1 certificate)
- Special licences i.e. Wheels, track and Rollers licences (WTR endorsements)

#### Personal Attributes and Competencies

The following competencies (abilities, attributes, characteristics) will need to be consistently displayed in order to achieve KRAs (key result areas) effectively:

**Essential:**
- Willingness to learn
- Physically fit

**Desirable:**
- Able to lift over 20kg
- Able to work independently
# POSITION DESCRIPTION

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Construction Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>Civil and road engineering</td>
</tr>
<tr>
<td>Location</td>
<td>Tuam Street Christchurch</td>
</tr>
<tr>
<td>Contract term</td>
<td>Continuing, full-time (37.5 hrs a week)</td>
</tr>
<tr>
<td>Salary range</td>
<td>$110,000 - $135,000p/a</td>
</tr>
<tr>
<td>Reports to</td>
<td>GM Construction</td>
</tr>
<tr>
<td>Responsible for</td>
<td>Approximately 80 staff</td>
</tr>
</tbody>
</table>

The Construction Manager will develop and maintain excellent relationships with the following colleagues, customers or clients:
- **Internal**: Divisional Manager, General Manager Construction, Contract Managers, and Operations staff
- **External**: Local Authorities, Contractors and Subcontractors, External Suppliers, REAAA, IFENZ, Contractors Federation, and General Public

## Job purpose:
You will lead and manage a sector of the construction division to maximise profitability and service projects/contracts, tender and secure new work and effectively manage staff in your division.

## Key duties and tasks:

1. **Commercial and Operational Performance**
   1.1. Ensuring the business division performs to achieve budget and profit targets.
   1.2. Effectively and efficiently plan and manage day-to-day work schedules, ensuring optimal utilization of machinery, material and staff resources.

2. **Leadership**
   2.1. Responsible for the recruitment of direct subordinates and sourcing skilled individuals to seamlessly integrate into the organisation.
   2.2. Provide leadership to team supervisors (mentoring and coaching which will allow them to effectively manage their staff).
   2.3. Lead and champion health and safety standards/requirements.

3. **Customer Service/ Subcontractor management**
   3.1. Develop and maintain productive relationships with key customers.
   3.2. Ensure that customer requirements are met on time, within scope and budget.

4. **Health and Safety**
   4.1. Comply with contract and company health, safety, quality, and traffic management requirements and standards at all times.

5. **Operational planning**
   5.1. Work with managers and crew to ensure projects are running efficiently and effectively, whilst complying with contract and organisational standards.
# PERSON SPECIFICATION

## Education and Formal Qualification

**Essential:**
- Appropriate Certificate, Diploma or degree qualification (Engineering/operations)
  - E.g. New Zealand Certificate in Engineering (NZCE (civil)), Registered Engineering Associate (REA), New Zealand Diploma Civil Eng.
- Registration with IPENZ or CEng or similar
- Site Safe Qualified
- Full New Zealand Drivers licence (Class 1)

**Desirable:**
- Project Management qualification (PMP, or similar) OR direct experience in Project Management
- Special licences i.e. Wheels, track and rollers licences (WTR endorsements)
- First Aid Certificate

## Professional or Technical Experience

**Essential:**
- A minimum of 10 years’ experience in an engineering and/or construction environment
- A minimum of 2 years’ experience leading a business unit in the construction sector

**Desirable:**
- Relevant experience working in the Christchurch contracting and drainage construction (or maintenance) environment

## Professional or Technical Knowledge and Skills

**Essential:**
- Communication and reporting skills

**Desirable:**
- Prior experience in performance management
- Exposure to business improvement systems and quality systems

## Personal Attributes and Competencies

The following competencies (abilities, attributes, characteristics) will need to be consistently displayed in order to achieve key responsibility areas (KRAs) effectively:

**Essential:**
- Excellent communicator and influencer
- Experience in relationship building
- Teambuilding skills

**Desirable:**
- Practical knowledge and skills for the contracting industry. An ability to communicate with clients and own staff
7.1.2 Applicant CVs

Application Form

First Name: Henry
Surname: Cliff
Contact Phone Number: 0279582633
Email: henry.cliff@gmail.com
Role applying for: Construction Manager

Employability: Please respond with a 'yes' or 'no'
I hold a current New Zealand drivers licence (Full Licence): yes
I am legally employable in New Zealand: yes
Do you give permission to check your criminal record? Yes

Education & Qualifications: In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates)
- Obtained Level 1,2,& 3 NCEA qualifications
- Site Safe qualification
- BE(Hons) Civil Engineering Degree (University of Otago)
- Registered with IPENZ

Experience/ Employment History: Please specify your employment history in the space below. List your most recent employment first
- Project Manager (2011-present)
  Planning, organising and implementation for a well-known company. Overseeing up to 60-70 staff, including junior engineers for large-scale projects, as part of the Canterbury rebuild. Deadlines and targets were met on time and within budget whilst simultaneously managing communications with external stakeholders.
Appendices

- **Site Foreman** (2003-2011)
  Monitoring construction crew, day-to-day processes and targets, organising projects and ensuring time is used effectively, ensuring crew are safe and following Health and Safety regulations and guidelines. Reporting financial and operational progress back to superiors.

- **Undergraduate Civil Engineer internship** (Summer of 2002)
  This was a 4 month summer internship where I accompanied the intermediate level civil engineer in his duties. This allowed me to understand the how to navigate the processes and requirements involved of the role and learn on the job.

**Personal Attributes and Key Competencies:** Please indicate your personal accountabilities and key achievements to date

- Results orientated with a hands-on-approach
- Successful completion of multi-million dollar projects (approx. $30M), these were completed timely and effectively within budgets
- Passion for cohesiveness and team working environments
- Build rapport with clients and colleagues within the Christchurch industry

**References:** Please supply at least 2 points of contact

**Lindsay Fletcher**
Senior Associate Civil Engineer
Phone: (021) 532984
Email: l.fletcher@aecom.co.nz

**Jordan Fitzpatrick**
Associate Civil Engineer
Phone: (021) 853916
Email: j.fitzpatrick@aecom.co.nz

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Application Form

First Name: Jack
Surname: McArthur
Contact Phone Number: 0225844426
Email: jackmcarthur@gmail.com
Role applying for: Construction Manager

Employability: Please respond with a 'yes' or 'no'
I hold a current New Zealand drivers licence (Full Licence): YES
I am legally employable in New Zealand: YES
Do you give permission to check your criminal record? YES

Education & Qualifications: In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates):

- Civil Engineering Degree – University of Canterbury
- BE(Hons) in Civil Eng.
- IPENZ registration
- NCEA Level 3
- Site Safe certified

Experience/ Employment History: Please specify your employment history in the space below. List your most recent employment first:

- Senior Civil Engineer (2011-present)
  Project management role that required me to oversee up to 70 employees, and included schedule preparation and resource forecasting for various projects. Also, ensuring that projects meet specified project plans, whilst simultaneously interacting with clients, contractors and local government officials.

- Intermediate Civil Engineer (2006-2011)
This role required me to be involved in the planning and design phases as well as overseeing preparation of subsequent reports to vendors and clients. Ensuring that organisational standards were maintained, and health and safety regulations abided by. Frequent communication with superiors and subordinates.

- **Graduate Civil Engineer (2002-2006)**
  Supporting engineering projects. Resolving engineering problems by collecting, synthesising and analysing information and data. Communicating essential information where necessary and to whom concerned in a timely and effective manner.

**Personal Attributes and Key Competencies:** *Please indicate your personal accountabilities and key achievements to date*

- Superb verbal and written communication skills
- Attention to detail
- Compliance management skills
- Overseeing the successful implementation of a $28 million dollar community project on time and within budget
- Adequate statistical skills (analysing)

**References:** *Please supply at least 2 points of contact*

**John Watson**  
Senior Associate Civil Engineer  
Phone: (027) 6538871  
Email: johnw@opus.co.nz

**Alex Smyth**  
Associate Civil Engineer  
Phone: (022) 9466294  
Email: asmth@opus.co.nz
Application Form

First Name: Michael
Surname: Johnson
Contact Phone Number: (03) 355 7528 or 027 684 1163
Email: mdj@xtra.co.nz

Role applying for: Construction manager

Employability: Please respond with a ‘yes’ or ‘no’

I hold a current New Zealand drivers licence (Full Licence): YES
I am legally employable in New Zealand: YES
Do you give permission to check your criminal record? YES

Education & Qualifications: In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates)

- NCEA level 2
- BKITO National Certificate in Carpentry (Level 4)

Experience/ Employment History: Please specify your employment history in the space below. List your most recent employment first

- Site Foreman (2011-present)
  Supervising and coordinating the work of crew members, ensuring work plans are progressing timely, while continuously ensuring that subordinates are safe while on the worksite and equipped to perform their job skillfully.

- Apprentice Carpenter (2008-2011)
  I acquired many skills from on-the-job training including, fundamental carpentry and health and safety skills to be competent and independent on a construction site.
**Personal Attributes and Key Competencies**: Please indicate your personal accountabilities and key achievements to date

- Eye for detail
- Passion for success and growth (personally and within team contexts)
- Very competent communication skills
- Strong Health and Safety understanding
- Personally involved in the establishment of 100 infrastructures within the period of a year

**References**: Please supply at least 2 points of contact

**Graham Saunders**  
Liaison Manager  
Phone: (027) 8711164  
Email: graham.saunders@fletcher.co.nz

**Jordan Fitzpatrick**  
Project Manager  
Phone: (027) 2401863  
Email: J.fitzpatrick@aecom.co.nz
Application Form

**First Name:** Lucas

**Surname:** Robson

**Contact Phone Number:** 02726301476

**Email:** lucasrobson@hotmail.com

**Role applying for:** Labourer

**Employability:** *Please respond with a ‘yes’ or ‘no’*

I hold a current New Zealand drivers licence (Full Licence): Yes

I am legally employable in New Zealand: Yes

Do you give permission to check your criminal record? Yes

**Education & Qualifications:** *In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates)*

- Full drivers licence, class 1 & 2
- Special vehicle licence: WTR endorsement class 1
- Site Safe Certified
- NCEA level 3
- First aid certificate - current

**Experience/ Employment History:** *Please specify your employment history in the space below. List your most recent employment first*

- Ashton Building Ltd - General Labourer (2015- present)
  
  Throughout my time in this role I have gained the necessary skills and competencies that allow me to assist in a meaningful way on busy building sites. I am able to follow direction of my superiors, understand the safe handling of small machinery, and effectively set up and move the necessary materials and resources at each site.
Appendices

  This is a family entertainment arcade centre that operates throughout the country.
  This role required me to interact with customers, communicate with other staff in a
  friendly team environment.

- **Williams Bakery - Bakery Assistant** (2009-2012)
  I worked at a local bakery with regular shifts (part-time) and picking up other shifts
  when needed or when they became available. This role was largely customer service
  based.

**Personal Attributes and Key Competencies:** Please indicate your personal
accountabilities and key achievements to date

- Keen, receptive learner
- Consider myself to be both trustworthy and honest
- Enjoy being active

**References:** Please supply at least 2 points of contact

**Bill Watson**
Owner, Ashton Group Construction
Phone: (03) 355 7992
Email: AshtonAdmin@email.co.nz

**Jimmy Henderson**
Store Manager, Timezone
Phone: (027) 6533398
Email: J.Henderson@timezonegaming.com
Application Form

First Name: Jackson
Surname: Patterson
Contact Phone Number: 027 362 9041 (03) 342 0004
Email: jackson.patterson@gmail.com
Role applying for: Labourer

Employability: Please respond with a 'yes' or 'no'
I hold a current New Zealand drivers licence (Full Licence): YES
I am legally employable in New Zealand: YES
Do you give permission to check your criminal record? YES

Education & Qualifications: In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates)
- Certificate from Site Safe NZ
- Class 1 & 2 drivers licence (full)
- Current First Aid Certificate (Sept. 2017)
- STMS (traffic management level 1)
- Level 3 NCEA

Experience/ Employment History: Please specify your employment history in the space below. List your most recent employment first
- Winter Construction Ltd- General Labourer (early 2015- current)
  Responsible to assist experienced trades people on large and busy construction sites where necessary and as directed. This involves carrying out varied tasks such as mixing, pouring and laying cement, operating power tools (such as jackhammers and drills), frequently carrying and moving heavy construction materials.
• Domino’s Pizza (2011-2014)
  My role here involved customer service in the shop, helping make pizzas, and
delivering orders on occasion. In this role I was working in a team environment,
which I thoroughly enjoyed.

• Fresh Choice Supermarket (2009-2011)
  Checkout operator/ customer service. In this role I was assigned a certain number of
hours and shifts each week. I had a tendency to seek extra hours, which in turn meant
that I had a good rapport with my supervisors.

Personal Attributes and Key Competencies: Please indicate your personal
accountabilities and key achievements to date

• Honest, trustworthy and hardworking
• Enjoy learning new things
• Lead an active lifestyle

References: Please supply at least 2 points of contact

Jan Winter
Manager, Winter Construction
Phone: (03) 351 4444
Email: jan.winter@gmail.co.nz

Bill Jones
Supervisor, Fresh Choice
Phone: (03) 568 3912
Email: bill.jones@freemail.com
Application Form

First Name: Jesse
Surname: McCaughey
Contact Phone Number: (03) 351 9753 or 021758391
Email: jesse.f.mccaughey@gmail.com
Role applying for: Labourer

Employability: Please respond with a 'yes' or 'no'
I hold a current New Zealand drivers licence (Full Licence): Learners licence only
I am legally employable in New Zealand: yes
Do you give permission to check your criminal record? yes

Education & Qualifications: In the space provided below please indicate tertiary education (or otherwise) AND relevant qualifications (e.g. special licences and certificates)
NCEA certification level 2

Experience/ Employment History: Please specify your employment history in the space below. List your most recent employment first
Jimmy’s Gardening (5 months)
Mobile gardening service ordered online, worked in a pair to restore client’s gardens and fulfill their gardening needs. Included lawn mowing, weeding, planting, shovelling and watering.
Roasters Café (2 months)
Customer service and Barista role.
Energy Fuel (4 months)  
Customer service, cashier and support person.

Local Dairy (4 months)  
Covering shifts part-time.

**Personal Attributes and Key Competencies:** Please indicate your personal accountabilities and key achievements to date

- Loyal
- Honest
- Truthful
- Love learning new skills
- Active and fit
- Strong

**References:** Please supply at least 2 points of contact

**Edward Chapman**  
Jimmy’s Gardening  
Email: echapman@gmail.com

**Lindsay McLaughlin**  
Manager, Roasters Café  
Email: Lindsay@roasterscafe.co.nz
7.1.2 Applicant Photos

*Construction Labour (Pack A) – ‘Other’ Candidate far right*

- [Image of Applicant 1]
- [Image of Applicant 2]
- [Image of Applicant 3]

*Construction Manager (Pack A) - ‘Other’ Candidate far right*

- [Image of Applicant 4]
- [Image of Applicant 5]
- [Image of Applicant 6]
Construction Labour (Pack B) - ‘Other’ Candidate far right

Construction Manager (Pack B) - ‘Other’ Candidate far right
### 7.1.3 Applicant Evaluation Form

#### Applicant Evaluation/Shortlisting Matrix

**Applicant Name:**

**Position:**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on the information contained in the application form, please rate the applicant on each of the eight criteria below:</td>
<td>Poor 1</td>
</tr>
<tr>
<td>Education and Formal Qualifications</td>
<td></td>
</tr>
<tr>
<td>Person-Job Fit</td>
<td></td>
</tr>
<tr>
<td>Professional or Technical Experience</td>
<td></td>
</tr>
<tr>
<td>Person-Organisation Fit</td>
<td></td>
</tr>
<tr>
<td>Professional or Technical Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td>Personal Attributes and Competencies</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating</th>
<th>Unlikely 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Highly likely 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, how likely would you be to invite this applicant for an interview?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, how likely would you be to hire this applicant?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


7.1.4 Demographic Survey

Employee Selection Questionnaire

1. What degree (tertiary education) have you obtained, or are you currently studying towards?
   e.g. Postgraduate course, Bachelor of Commerce, Bachelor of Arts, etc.

2. Please indicate your gender

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

3. Please indicate your age

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td></td>
</tr>
<tr>
<td>25-30</td>
<td></td>
</tr>
<tr>
<td>31-35</td>
<td></td>
</tr>
<tr>
<td>36-40</td>
<td></td>
</tr>
<tr>
<td>40+</td>
<td></td>
</tr>
</tbody>
</table>

4. Please describe the purpose or intent of this research as you see it:

__________________________________________________________________________
5. Do you have work experience?
(If your answer is 'No', go to question 8)

| Yes | No |

6. You answered YES to question five (indicating that you have work experience), please specify your experience in years and months in total:


7. What was/is the job title of your given work experience?


8. On a scale from one to seven, please indicate your practical experience of managing, conducting or carrying out employee recruitment or selection processes and practices

1 indicates: 'I have no experience with such processes and practices'
7 indicates: 'I am very experienced with such processes and practices'

<table>
<thead>
<tr>
<th>No Experience</th>
<th>Very Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
9. On a scale from one to seven, please indicate your *knowledge* of managing, conducting or carrying out employee recruitment or selection processes and practices

1 indicates: ‘I have no knowledge in regards to such processes and practices’
7 indicates: ‘I am very knowledgeable in regards to such processes and practices’

<table>
<thead>
<tr>
<th>No Experience</th>
<th>Very Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

10. If you feel comfortable in doing so, please indicate if you have a tattoo(s):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Prefer not to say</td>
</tr>
</tbody>
</table>
7.2 Recruitment Advertisement: UCSA Facebook Page

**LOOKING FOR RESEARCH PARTICIPANTS: $10 VOUCHER OFFERED**

Hi all!

I am currently in the midst of my MCom Master's research project and am seeking willing participants for an EMPLOYEE SELECTION TASK.

The research asks that you evaluate and rank applications for two different jobs to determine which applicant you are most likely to invite for an interview. While any prior management experience and/or knowledge may be helpful for the activity, it is not necessary. It is also important to note that there are no right or wrong answers, I am simply interested in opinions.

It is estimated that this study should take no longer than 30 minutes of your time, as a token of appreciation you will receive a $10 Pak’N Save voucher.

If you think you meet the above criteria and would be interested in participating please contact me at simone.woodford@pg.canterbury.ac.nz to arrange a suitable time to take part in the study.

CHEERS!
### 7.3 Demographic Statistics

*Participant demographics*

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLE</th>
<th>CATEGORY</th>
<th>PERCENTAGE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>19.5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>80.50</td>
<td>70</td>
</tr>
<tr>
<td>Age</td>
<td>17-24</td>
<td>75.9</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>25-30</td>
<td>11.5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>4.6</td>
<td>4</td>
</tr>
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<td></td>
<td>36-40</td>
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<tr>
<td></td>
<td>40 +</td>
<td>3.4</td>
<td>3</td>
</tr>
<tr>
<td>Channel of Recruitment</td>
<td>EDP course</td>
<td>11.5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>HRM course</td>
<td>14.9</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>UCSA Noticeboard</td>
<td>29.9</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Psychology Participant Pool</td>
<td>43.7</td>
<td>38</td>
</tr>
<tr>
<td>Participant has tattoo(s)</td>
<td>Yes</td>
<td>19.5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>72.4</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Prefer not to say</td>
<td>8.0</td>
<td>7</td>
</tr>
<tr>
<td>Work Experience</td>
<td>Yes</td>
<td>88.5</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>6.9</td>
<td>6</td>
</tr>
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</table>
7.4 Applicant CV Evaluations (mean evaluations)

**Pilot testing CVs**

<table>
<thead>
<tr>
<th>CV</th>
<th>Evaluation Question:</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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot Phase One</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson Patterson</td>
<td></td>
<td>6.4</td>
<td>5.8</td>
<td>5.8</td>
<td>6.4</td>
<td>5.4</td>
<td>6.0</td>
<td>6.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Lucas Robson</td>
<td></td>
<td>6.6</td>
<td>5.6</td>
<td>5.4</td>
<td>5.4</td>
<td>5.2</td>
<td>5.6</td>
<td>6.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Jesse McCaughey</td>
<td></td>
<td>1.4</td>
<td>3.4</td>
<td>2.4</td>
<td>2.2</td>
<td>2.2</td>
<td>2.8</td>
<td>2.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Michael Johnson</td>
<td></td>
<td>1.6</td>
<td>2.4</td>
<td>3.2</td>
<td>2.4</td>
<td>3.2</td>
<td>4.6</td>
<td>2.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Jack McArthur</td>
<td></td>
<td>6.0</td>
<td>5.8</td>
<td>6.6</td>
<td>5.2</td>
<td>6.2</td>
<td>6.2</td>
<td>6.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Henry Cliff</td>
<td></td>
<td>5.6</td>
<td>6.0</td>
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<td>6.2</td>
<td>6.2</td>
<td>6.4</td>
<td>6.4</td>
<td>5.8</td>
</tr>
<tr>
<td><strong>Pilot Phase Two</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson Patterson</td>
<td></td>
<td>6.4</td>
<td>5.8</td>
<td>5.8</td>
<td>6.4</td>
<td>5.4</td>
<td>6.0</td>
<td>6.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Lucas Robson</td>
<td></td>
<td>6.6</td>
<td>5.6</td>
<td>5.4</td>
<td>5.4</td>
<td>5.2</td>
<td>6.2</td>
<td>6.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Jesse McCaughey</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Michael Johnson</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jack McArthur</td>
<td></td>
<td>5.6</td>
<td>5.8</td>
<td>6.0</td>
<td>5.6</td>
<td>5.8</td>
<td>6.0</td>
<td>6.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Henry Cliff</td>
<td></td>
<td>6.0</td>
<td>6.2</td>
<td>5.8</td>
<td>5.8</td>
<td>6.2</td>
<td>6.2</td>
<td>6.2</td>
<td>5.6</td>
</tr>
</tbody>
</table>

*Note.* Evaluations based on 7 point Likert scale; 1 = poor, 7 = excellent.
### 7.5 Applicant Image Evaluations (mean attractiveness scores)

*Pilot testing, Applicant images - Attractiveness.*

<table>
<thead>
<tr>
<th>Photo</th>
<th>Attractiveness score</th>
<th>Role Image selected for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo 1</td>
<td>3.76</td>
<td></td>
</tr>
<tr>
<td>Photo 2</td>
<td>3.43</td>
<td>Manager (Henry)</td>
</tr>
<tr>
<td>Photo 3</td>
<td>5.14</td>
<td>Labourer (Jackson)</td>
</tr>
<tr>
<td>Photo 4</td>
<td>3.05</td>
<td>Manager (Michael)</td>
</tr>
<tr>
<td>Photo 5</td>
<td>4.24</td>
<td>Manager (Jack)</td>
</tr>
<tr>
<td>Photo 6</td>
<td>4.48</td>
<td>Labourer (Lucas)</td>
</tr>
<tr>
<td>Photo 7</td>
<td>4.10</td>
<td>Labourer (Jesse)</td>
</tr>
<tr>
<td>Photo 8</td>
<td>3.20</td>
<td></td>
</tr>
<tr>
<td>Photo 9</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td>Photo 10</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Photo 11</td>
<td>3.3</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Evaluations based on 7 point Likert scale; 1= Low attractiveness, 7= High attractiveness.
## 7.6 Factor Analyses (Pattern Matrices)

### 7.6.1 Blue-collar Distractor CV

*Exploratory Factor Analysis for the Outcome Variable of Blue-collar Distractor CV*

**Pattern Matrix**

<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Blue distractor education/qualifications</td>
<td>.684</td>
</tr>
<tr>
<td>Blue distractor person-job fit</td>
<td>.665</td>
</tr>
<tr>
<td>Blue distractor professional/technical experience</td>
<td></td>
</tr>
<tr>
<td>Blue distractor person-organisation fit</td>
<td></td>
</tr>
<tr>
<td>Blue distractor professional/technical knowledge and skills</td>
<td></td>
</tr>
<tr>
<td>Blue distractor personal attributes/competencies</td>
<td></td>
</tr>
<tr>
<td>Blue distractor likely to invite for interview</td>
<td>.763</td>
</tr>
<tr>
<td>Blue distractor likely to hire</td>
<td>.802</td>
</tr>
</tbody>
</table>

7.6. **White-collar without tattoo**

*Exploratory Factor Analysis for the Outcome Variable of White-collar Tattoo*

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>White without tattoo education/qualifications</td>
<td>.123</td>
<td></td>
</tr>
<tr>
<td>White without tattoo person-job fit</td>
<td>.824</td>
<td></td>
</tr>
<tr>
<td>White without tattoo professional/technical experience</td>
<td>.568</td>
<td></td>
</tr>
<tr>
<td>White without tattoo person-organisation fit</td>
<td>.805</td>
<td></td>
</tr>
<tr>
<td>White without tattoo professional/technical knowledge and skills</td>
<td>.741</td>
<td></td>
</tr>
<tr>
<td>White without tattoo personal attributes/competencies</td>
<td>.778</td>
<td></td>
</tr>
<tr>
<td>White without tattoo likely to invite for interview</td>
<td>.678</td>
<td></td>
</tr>
<tr>
<td>White without tattoo likely to hire</td>
<td>.827</td>
<td></td>
</tr>
</tbody>
</table>

Appendices

7.6. Human Ethics Approval

HUMAN ETHICS COMMITTEE
Secretary, Rebecca Robinson
Telephone: +64 3 303 4538, Extn 94538
Email: human.ethics@canterbury.ac.nz

Ref: HEC 2017/111

5 December 2017

Simone Woodford
Management, Marketing and Entrepreneurship
UNIVERSITY OF CANTERBURY

Dear Simone

The Human Ethics Committee advises that your research proposal “Selection Bias Based on the Presence of Visible Body Art” has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 16th and 28th November 2017.

Best wishes for your project.

Yours sincerely

[Signature]

Dr Kelly Dombrowski
Deputy Chair
University of Canterbury Human Ethics Committee