What enables inclusion in the workplace: An attributional analysis from diverse perspectives

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Georgina Anne Kirk
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Abstract

The inclusion of people with disabilities in all aspects of life is an issue of basic civil rights. There is currently a gap in inclusion and disability research at work in how to incorporate the different experiences and perspectives of people with disabilities into the inclusion framework. The first step is identifying a difference, which could theoretically be done through Actor-Observer theory. The current study aimed to assess whether employees with disabilities perceive inclusion at work differently to employees without disabilities, and if this relationship could be explained through attribution theory. A questionnaire that used a reversal technique (as per Storms' 1973 reversal) placed employees with and without disabilities as both Actors and Observers by switching positions in two given scenarios. Through the participation of 93 employees in a range of occupations, two measures with psychometric properties looking at workplace culture and attitudes were distributed. Findings showed when participants with disabilities were placed as 'Actors' they responded that 'situational' factors (e.g. policies) were more important for inclusion than did the comparison group of employees without disabilities (Observers). When roles were reversed in a different scenario, employees with disabilities (Observers) responded significantly more strongly to dispositional items (i.e. rated others as more likely to think negatively or positively) for one factor, and showed a trend of responding more strongly to the dispositional factors in general compared to the employees without disabilities (Actors). The current exploratory study showed support for the use of actor-observer theory in identifying that differences in viewpoints (actor/observer) contributed to a difference in perspective that prevented understanding of barriers to inclusion. Findings demonstrated that in order to create meaningful change, the perspectives of people with disabilities must be considered to address the attribution of responsibility in policy and practice at work.

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Chapter 1 – Critical Literature Review and Thesis Question

One out of every seven people in the world—or some 1 billion people—has a disability (International Labour Organisation, 1996-2016). Between 785 and 975 million of them are estimated to be of working age, and while many are successfully employed and fully integrated into society, as a group, persons with disabilities often face disproportionate poverty and unemployment (International Labour Organisation, 1996-2016). In New Zealand, disabled adults are much less likely than non-disabled adults to be employed (45 percent compared with 72 percent), a pattern which is consistent across both sexes and for each main age group (Statistics New Zealand, 2013a). Social activists and advocates for people with disabilities have conceptualised disability as a political topic and an issue of basic civil rights (Bickenbach, Chatterji, Badley, & Ustun, 1999; Lang, 2007). However while research is growing on how to get people with disabilities into the workplace ('Access'), social and work psychological perspectives in the area of enabling people with disabilities in the workplace in order to stay in the workplace ('Treatment') are lacking. Inclusion plays a central role in the integration of people with disabilities into every aspect of society, and for the current study, increasing levels of access, involvement and influence for people with disabilities in the workplace.

Operationalising Disabilities

The World Health Organisation (WHO) (2015) defines disabilities as an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. However there continues to be a wide-ranging and fiercely contested debate about how disability should be understood (Albert, 2004).

The development of the "social" model of disability asserts that people with disabilities are disadvantaged not because of their "impairments", but as a result of the limitations imposed on them

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by social, cultural, economic, and environmental barriers (Albert, 2004). Following this model disability is not about health or pathology but about discrimination and social exclusion (Albert, 2004). The benefit of the social model related to inclusion of people with disability is that by seeing impairment as an ordinary part of life, and disability as the result of discrimination and exclusion, the social model pushes for the mainstreaming of disability concerns in all development policies and practices. Further, this theory places the perspective of disability on society, in that everyone is involved in some way with disability concerns. Thus the role of perspectives and how these can influence attitudes, developmental policies and practice is acknowledged through the social model but not necessarily acknowledged as society's responsibility by mainstream policies and practices in and out of the workplace.

A major catalyst for the development of disability as a human rights concern has been the social model's emphasis on the material and structural causes of disadvantage for people with disabilities (Barnes, 2012). This is related to both access for people with disabilities into schools, work and other social systems, and also the treatment biases that occur when in these systems. A central tenet is that disabled people are subject to oppression and negative social attitudes, which inevitably undermine the personhood and status as full citizens (Lang, 2007). Underlying the notion that disabled people are oppressed is the assumption that societies are characterised by conflict between two competing groups, the dominant and subordinate (Lang, 2007). Following this it is theorised that the dominant group has superiority and control, and the subordinate lacks control (Lang, 2007). In terms of the workplace, this identifies a potentially systematic and reoccurring gap in the inclusion of those with disabilities as theoretically a combination of structural disadvantage and lack of control that is not identified by those with superiority and control contributes to the exclusion of people with disabilities in different social systems such as the workplace.

The social model has provided a powerful framework for promoting the idea that disabled people should be actors in their own lives, rather than passive recipients of care (Albert, 2004). By projecting disabled people into a leading role in defining and controlling their lives, the social model offers a powerful device for the liberation of those who remain the poorest of the poor in all countries, both developed and developing (Albert, 2004). Albert (2004) concluded that a human rights approach to disability offers both a platform for such societal transformation and a way for disabled people to transform their sense of who they are - from stigmatised objects of care to valued subjects in their own lives. For people that are poor or oppressed this is a key starting point of any meaningful process of social and economic development (Albert, 2004). Thus following the social model the empowerment of people with disabilities through all aspects of their lives is raised as a key human rights issue.

The idea that it is society's responsibility to empower those with disabilities by considering their perspectives and making them valued subjects in defining what their needs are is important as although it is established in this theory, this is not well established in practice through different social structures such as the workplace. Applying the social model to the practical elements of life within social systems for people with disabilities raises the question of how much control do people with disabilities really have in defining their needs to become empowered members of society?

Research into policy development and the empowerment and inclusion of people with disabilities within societies has been established in fields outside of the workplace. The creation of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) was the first legally binding instrument with comprehensive protection of the rights of persons with disabilities, and it set out the legal obligation on states to promote and protect the rights of persons with disabilities worldwide (United Nations Enable, 2008-2011). Disability is now regarded in policy circles as not simply a medical issue, but also a human rights concern (Barnes, 2012). With the

establishment of disability as a human rights concern and research into the empowerment of people with disabilities in other social structures such as the health system (Mannan, McVeigh, Amin, MacLachlan, Swartz, Munthali & Van Rooy, 2012) it is essential to look at where there may be social gaps inside of the workplace with retaining employees with disabilities and empowering them to function within the workplace structure.

Disabilities in the Workplace

In order to increase the disproportionately low number of employees with disabilities, as a form of Treatment *bias*, factors that may contribute to the low retention rate of workers with disabilities must be considered. For example "inclusion", is defined by Mor Barak & Cherin (1998) as the extent to which individuals can access information and resources, are involved in work groups, and have the ability to influence decision making processes, plays an important role in integrating those with disabilities in the workplace to the same extent others are included. As the example indicates therefore, Social and work psychological perspectives may contribute to enabling or inhibiting inclusion via work and at work.

Inclusion may be influenced in some way by how people perceive each other, and in particular how people make attributions of responsibility for *fostering* inclusion. For instance at work, structures, from buildings to social networks and formal and informal meetings, may be seen as responsible for enabling inclusion by some people, or alternatively people may be seen as responsible for including themselves; depending on the person's point of view. If there is any discrepancy between the perceptions or attributions of responsibility for fostering inclusion, then inclusion itself may suffer, due to a lack of understanding where emphasis needs to be placed. For example a person in a wheelchair may see access as a blocker for their inclusion to a workplace function, while the other employees may think that the person in a wheelchair is choosing not to attend workplace function, or

simply not be mindful of their exclusion, leading to a gap or misunderstanding that may not be acknowledged.

Attribution theory could provide the theoretical framework to answer the question of whether people with disabilities view inclusion in the workplace differently due to their different experiences. If observers of a situation or scenario related to inclusion perceive the responsibility for inclusion to be dispositional (i.e. it is the responsibility of the person in the situation or actor to include themselves), while actors (people with disabilities) experience the situations/structures that are barriers to their inclusion, such as access, working hours, or other barriers that observers do not necessarily notice. Further, according to the social model those in dominant groups lack understanding of perspectives of other groups, creating misconceptions around disability and a lack of control for those with disabilities. This gap, identified by both the social model of disability and a key theory surrounding perspectives, may prevent any positive changes for those with disabilities in the workplace.
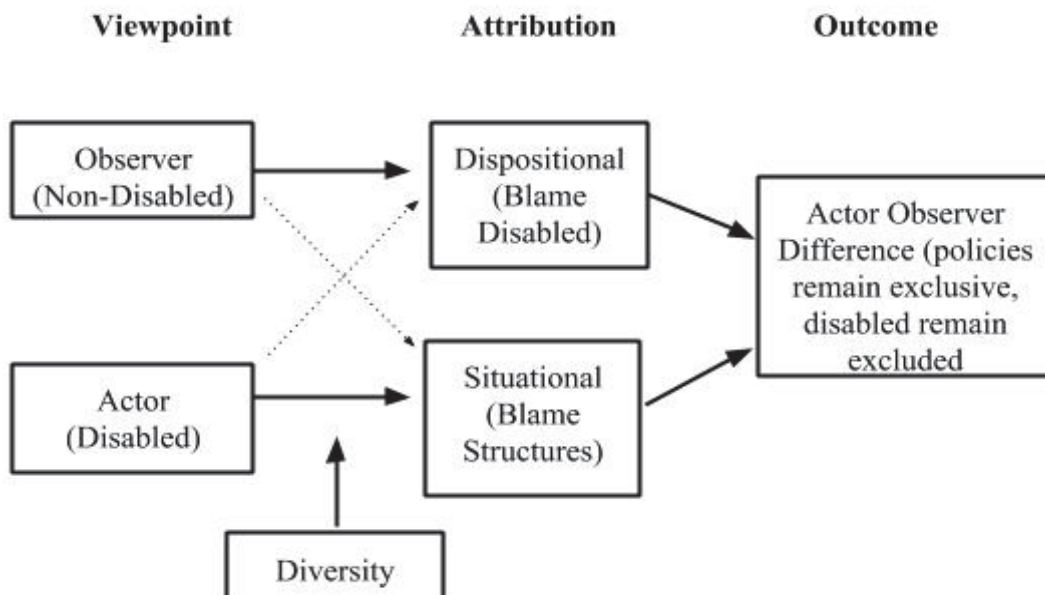
Attribution Theory

Figure 1. Is inclusion attributed to structures or personality? A model of diverse 'actor' - 'observer' perspectives.

Attribution theory's major focuses examine how, where and on whom people place the responsibility for social events and states, including work behaviours and circumstances, such as inclusion versus exclusion (Martinko, Douglas & Harvey, 2006). Theoretically attribution theory could be applied to the way different groups of people measure any aspect of work culture, such as inclusion. Specifically outcomes relating to inclusion may be influenced by the ways that different groups of people attribute responsibility, as shown in Figure 1. Differing perceptions of creating inclusion, such as people with disabilities joining in versus access barriers seen by people with disabilities create an overall barrier to the creation of inclusive workplaces.

Attribution Theory in Organisations

In an organisational setting, attribution theory has been applied to a number of scenarios, for example the first major stream of attribution research looked at the theory of leadership, which emphasised how attributional processes shape leader-member relations (Martinko *et al*, 2006). Findings from Martinko *et al.* (2006) outlined a tendency for leaders/supervisors to make attributions toward the employee (for instance they are late because they are lazy), while the employee is more likely to attribute the outcome to situational factors (the bus was late). Behind this Actor-Observer difference are at least three reasons; perspective, information and culture **(Carr, 2003).** Attribution theory has since contributed to a wide variety of topics such as performance appraisal, interview and selection processes, counterproductive behaviours, learned helplessness and burnout, gender, age and culture, with the benefit of creating increased awareness and understanding of discrepancies, leading to change (Martinko *et al.*, 2006). The wide range of applications of attribution theory in topics related to perspectives in workplace relations increases the likelihood that considering various perspectives is also relevant to workplace inclusion, and that the application of attribution theory here could be

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appropriate because there is currently a lack of awareness around processes of inclusion, creating concrete barriers to inclusion (as seen in Figure 1).

The bigger picture of attribution theory has also generated several common attributional biases that appear to distort causal perceptions, in other words creating discrepancies in the attribution of responsibility for different groups. The distortion of causal perceptions are important because they have the potential to disrupt strategic planning efforts, reduce reliability and effectiveness of selection interviews, and promote conflict between leaders and subordinates (Martinko *et al.*, 2006). Thus understanding that depending on where an individual is placed they may have a different perspective, is the first step to avoiding discrepancies in the attribution of responsibility. Thus there is a need to identify whether this is happening in workplace inclusion, as understanding perspectives could make a meaningful difference in eliminating barriers to inclusion.

One key example of an attributional bias that is relevant to inclusion at work is the actor-observer bias, which refers to the 'pervasive tendency of actors to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable personal dispositions' (Jones and Nisbett, 1972). This bias appears to be a common human tendency, as observers have less context and background, while actors have the context of their situation and are less likely to attribute errors or 'responsibility' to their inherent attitudes or personality. Actor-observer bias can affect the workplace in the way of disagreements concerning the assignment of responsibility, and training prescriptions, and could also influence less measurable outcomes such as workplace attitudes and inclusion. However the actor-observer bias has faced critiques that there is more than one actor-observer asymmetry in behaviour; that the actor-observer asymmetry in explanations typically described as a broad effect involving person versus situation causes, while actually some studies have found a more complex pattern of results, involving multiple parameters of explanation and three distinct actor-observer asymmetries (Malle, Knobe & Nelson, 2007). People may not always fit into

two distinct groups adopting one perspective according to well-defined groups. Thus the idea of an actor-observer bias is yet to be tested with inclusion at the center of the attributional focus; and with significant criticism the current study can clarify whether actor-observer bias can explain perceptions in inclusion through the use of a reversal technique where both groups of participants (with or without disabilities) are placed as both the actor and observer in different scenarios.

Actor-observer theory has been previously used to explain processes in the workplace that can create misunderstandings (Martinko *et al.*, 2006). For example if an employee fails at a task, a supervisor might be inclined to attribute the outcome to a cause such as lack of ability or motivation (both dispositions), while the employee (in terms of Figure 1, an 'actor') is more likely to attribute the outcome to situational factors such as resource levels (Martinko *et al.*, 2006). This may mean that the supervisor may never see the structures or situations identified as problematic by the employee, leading to a gap or misalignment that continually prevents the employee from improving in this task. Findings have shown that subordinates (actors) make situational attributions more frequently than leaders (observers) because actors are more aware of the external circumstances affecting their performance, whereas leaders (observers) are more likely to only see the outcome and attribute it to employee ability (Martinko *et al.*, 2006). This relationship is demonstrated in Figure 1 through the discrepancy in understanding leading to a gap or lack of awareness that contributes to further issues. The varying perspectives that cause this discrepancy between leaders and subordinates could also be applied to different groups regarding inclusion, for instance someone with a disability may see a barrier to inclusion that a person without a disability is unable to see, preventing understanding and changes to promote inclusive policy and practice that allows for diversity.

The role of 'actor' and 'observer' in the attribution process was first explored by Storms' (1973) reversal study, where it was postulated that there is a simple difference between actors and observers; actors watch their environment more than they watch their own behaviour, while observers

watch the behaviour of the actor more than they watch the actors situation (Storms, 1973). Thus Storms (1973) set up an experiment where two 'Actor' subjects engaged in a brief unstructured conversation while two matched 'Observers' looked on. The conversations were videotaped, and replayed to subjects before they were asked to complete an attributional questionnaire. Some actors and observers saw no videotape replay, while others saw a tape that repeated their original conversation from their point of view (Storms, 1973). For both of these conditions the actors attributed relatively more to the situation than observers (Storms, 1973). A third group of participants then saw a videotape taken from a different perspective (i.e. some actors saw a tape of themselves, while some observers saw the other participant that their matched actor had been conversing with), and with this re-orientation the self-viewing actors attributed relatively more to their own dispositions than observers (Storms, 1973). These results indicated the powerful influence that orientation (in this case visual) had on the inferences made by actors and observers about the cause of the actors' behaviour. This study created a foundation that identifies the discrepancy shown in Figure 1 and identifies that these perspectives have the potential to change with the adoption of a different point of view. The gap remains as to whether this difference can also be seen between groups of people, such as people with disabilities and people without disabilities or whether these are more inherent differences. A reversal technique through cognitive perspective sharing may be able to identify whether an actor-observer bias is present in the inclusion context, through shifting the different groups into roles of both 'actor' and 'observer' and seeing whether there is a shift in attributions.

Attribution Theory and Disability

Attribution theory has been applied to disability research in a number of sectors; for example negative attitudes toward people with disabilities (dispositional attributions by observers) have been examined regarding students with learning disabilities and teacher attributions. For example Woodcock and Vialle (2011) surveyed 444 Australian pre-service primary school teachers using

vignettes and Likert-scale questions to ascertain their responses to students with and without learning disabilities. These teachers held a negative attributional style toward students with learning disabilities; meaning they perceived students with LD as lacking ability in comparison with others in the class (Woodcock & Vialle, 2011). The researchers concluded that it is essential that teachers be trained to understand the attributional information they convey to students with LD and how the aptitudes of students with LD can be enhanced by skilled teaching (Woodcock & Vialle, 2011). This finding is important as it suggests, from Figure 1, that observers may be biased toward making dispositional attributions. Research in this area (Woodcock & Vialle, 2011; Noh, 2014) shows that identification of differing perspectives or attitudes is the necessary first step towards addressing issues that may be present around attributions and disabilities, which could also be relevant to workplace inclusion and attitudes. For instance only once it was recognised that teachers held negative attributional styles that training could be implemented and specific attitudes or discrepancies in understanding could be addressed. Thus the gap that is currently preventing the workplace inclusion of those with disabilities could also be aided by an increase in awareness.

A further study looked at the nature and impact of teachers' negative and stigmatising comments on the school performance of 123 youths in foster care and special education in America (Noh, 2014). Using a qualitative method of examining youth's individual education plans along with longitudinal quantitative analysis of the associations of negative and stigmatizing comments in individual education plans and the youths' school attitudes, behaviour, and performance (Noh, 2014). The study revealed that almost three-fourths of individual education plans included one or more negative comments, and a substantial proportion specifically included stigmatising features that could convey negative attitudes or perceptions about the youth to others (indicating dispositional attributions from observers in scenarios, toward actors in the scenario as per Figure 1), included biased reports from other teachers, low expectations and little attention to context or reason (Noh, 2014). These

findings demonstrated that negative dispositional attributions may be prevalent toward disabilities in schools, and also that they can have serious harm to educational outcomes, and potentially inhibit inclusion (Woodcock & Vialle, 2011; Noh, 2014). Workplaces also make developmental plans for employees, hence the workplace could be an area where attributions of responsibility for inclusion of those with disabilities could create treatment bias toward people with disabilities as per students requiring special education. For instance, any increased prevalence of negative comments around disability in development planning could be a structural barrier toward the organisation taking responsibility for the inclusion of people with disabilities.

Past research showing attributional biases in education (Woodcock & Vialle, 2011; Noh, 2014) raises the question of whether these attributions may also be prevalent as people with disabilities progress into a working environment. As dispositional attributions and bias are shown through teachers working with students with disabilities, this could be predictive of a relationship between employees and employees with disabilities because it highlights the presence of a difference of perspectives and differing attributions of responsibility.

If supervisors or other employees in the workplace have similar attitudes to teachers in the studies outlined above, they may not attribute responsibility for the inclusion of people with disabilities to the organisation or situational factors, but to the people with disabilities themselves, causing an inherent and unaddressed barrier to inclusion. Additionally research has indicated that these teacher-student relationships are detrimental to outcomes for students with disabilities (Woodcock & Vialle, 2011); thus if this is transferred to the workplace these differing perceptions and negative dispositional attributions between actors and observers in workplace scenarios could be preventing positive outcomes in the workplace. The teachers (as observers) in both studies displayed a strong dispositional attribution toward students with disabilities (actors) (Woodcock & Vialle, 2011;

Noh, 2014). Figure 1 and the associated research predicts that as teachers and students fit this model, employees placed as either actors or observers (depending on the scenario) could also fit too.

Attribution theory has been applied to people with disabilities in the workplace, assessing the causes of job loss. Lanctôt, Bergeron-Brossard, Sanquirgo and Corbière (2013) assessed the causal attribution pattern (i.e. the attributions that employees that had lost their jobs made towards dispositions or situations) to explain job loss for 126 people with psychiatric disabilities using a prospective study design. Data was collected using a 9-month follow up phone interview with the subjects following job loss. Approximately 73 percent of participants had voluntarily ended their jobs and for the majority the reasons the participants gave to explain job loss were related to external and uncontrollable factors (Lanctôt *et al.*, 2013). For example external and uncontrollable factors could be elements of a job such as scheduling and accessibility. This can be shown in Figure 1 as situational response, which fits with the theory that as actors in the scenario, the participants saw situational issues that managers/supervisors may not have been aware of as observers. By analogy, people with disabilities (as actors) perceived situational issues that others as observers were not aware of (Figure 1), which were so problematic that these individuals left their jobs.

As shown in Figure 1, and indicated through past research, attribution theory predicts that inclusion and the experiences of people with (actors) or without disabilities (observers) may be perceived in a number of ways. Specifically people without disabilities may attribute a lack of inclusion to the person with disability, while the person with a disability may see flaws in the environment because that is their experience. Actor-observer bias that has already been found in a number of workplace scenarios, such as employer-employee relations, also fits theoretically with Figure 1 and attribution theory. This could also follow indications in other disability research surrounding inclusion that negative dispositional attributions exist around disability in a number of

domains, such as bias seen in teachers, and discrimination in the workplace (Chan *et al.*, 2005; Woodcock & Vialle, 2011; Noh, 2014).

Inclusion of diversity

Inclusion of diversity is widely documented to be a significant issue for organisations (Roberson, 2004). Moreover, organisations have realised that the extent to which these demographic workforce changes are managed has an impact on organisational functioning and competitiveness, which has led to diversity initiatives and management programmes (Roberson, 2004; Mukherjee, Gambhir & Yaswi, 2015). While inclusion can be viewed as a form of diversity management, inclusion also extends beyond this removal of barriers. Various studies have investigated organisational inclusion as a key construct, concluding that inclusion is the degree to which an employee is accepted and treated as an insider by others in a work system (Pelled, Ledford & Mohrman, 1999), and that while diversity focuses on organisational demography, inclusion focuses on the removal of obstacles to the full participation and contribution of employees in organisations (Roberson, 2004).

In order to make the shift to an inclusive workplace 'culture' that will be sustainable over time, a much deeper and broader approach is required compared to diversity strategies (Winters, 2014). Winters (2014) established an 'inclusion equation' model to help depict the interrelated variables necessary to create and sustain inclusive work cultures (see Figure 2). The two broad components of the inclusion model are displayed as macro and micro inclusion practices. Macro inclusion processes refer to systemic issues, such as organisational culture and organisational systems, while micro processes are the ongoing behaviours that impact the experiences of individuals on a day-to-day basis. Specifically, the model identifies individual cultural competence and emotional intelligence as the two core requirements that create and sustain inclusion (Winters, 2014). As attribution theory relates to everyday perceptions and biases, but also contributes to broader structures and systems in the

workplace, inclusive practices occurring at the micro and macro level are relevant to the current study, as both can be perceived as causes and solutions to inclusion. Through the addition of various perceptions shown in Figure 1, the gap of subjective experiences could be filled in Figure 2, to create a full picture of creating inclusion for different groups that operate within the workplace system.
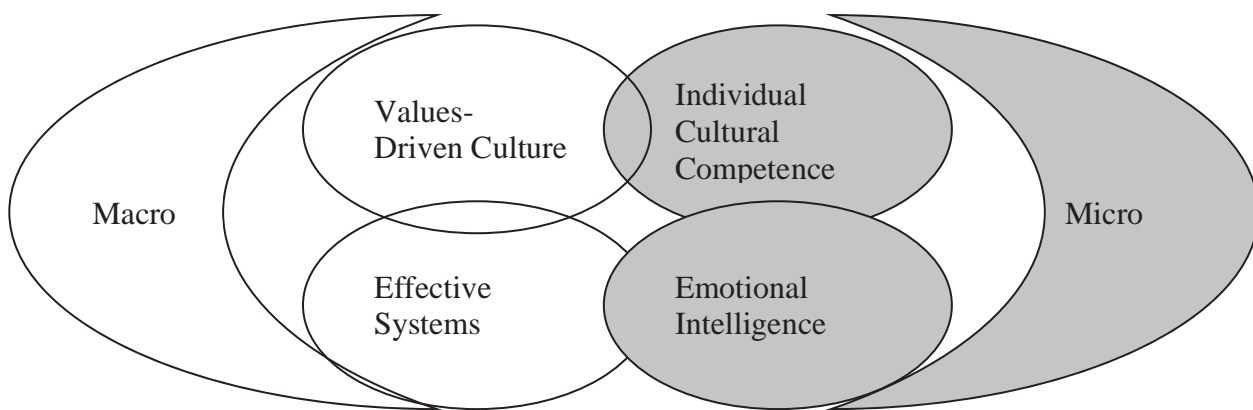
Figure 2. The Inclusion Equation (Winters, 2014) demonstrates the macro and micro factors that jointly enable inclusion.

At the micro or individual level, inclusion or exclusion involves the daily experiences that individuals have with managers and peers as well as outside vendors and suppliers; this is where micro-inequities as well as unconscious bias occur most often (Winters, 2014). For instance if someone with a disability is consistently spoken to in a different way than other colleagues by their manager, others may not necessarily notice, but the person with the disability will feel that micro-inequality. The concept of micro-inequities refers to small events that are often hard to prove, often unintentional, frequently unrecognised by the observer, which can occur wherever people are seen to be 'different' (Rowe, 2008). This concept could be extremely relevant to attribution theory, as while the observer may not realise the creation of an external barrier to inclusion for another person, this could be perceived by the actor as a structural barrier to inclusion. For instance, if an organisation sends out invitations that may be insensitive to LGBT people or women (for example "Bring your wife") (Winters, 2014), this situational issue may not be identified by the organisation in general as

problematic, but for women or LGBT people this could be felt as a lack of inclusion in the workplace.

Winters (2014) established that inclusion requires individuals to become culturally competent, through awareness of micro-inequities and their conscious and unconscious biases. This requires ongoing learning to develop skills and abilities to recognise, accept, and adapt to cultural differences and similarities (Winters, 2014). Both systems and people need to be on board with the inclusion mentality and the attributional framework could contribute to the harmonisation of systems and people. The first step in this process could be to understand whether different groups of people see different attributions of responsibility for inclusion as important (i.e. dispositions or situations); this could help define what practices need to be adjusted to allow all individuals to feel the same level of inclusion in the workplace. Thus the current study aims to take the first step in this process and investigate whether attribution theory, and the role of actor-observer bias, fills the gap in Figure 2 that is necessary for making steps toward a more inclusive workplace for people with disabilities.

The inclusion of people with disabilities in New Zealand

In New Zealand the implementation of the UNCRPD was developed under the title of the Health and Disability Long Term Work Programme, with a particular focus on work and employment, which recognises the right of disabled people to work on an equal basis with others (Ministry of Social Development, 2014). The report states a number of principles underpinning the implementation of the work programme, such as a number of goals to improve accessibility and control, build employer confidence in hiring people with disabilities, and the promotion of accessible and flexible services and supports (Ministry of Social Development, 2014). Further, the report also states that integral to the implementation of the work programme is commitment from various sectors, cultural change focusing on partnerships with people with disabilities, inclusion in the everyday way of various working cultures, and accessibility of information (Ministry of Social

Development, 2014). These goals consider and build towards a change in culture of inclusion, but people with disabilities could be empowered through consideration of their perspectives on the issues surrounding their lives to acknowledge and understand the full picture of what is happening for different groups in the workplace. The combination of the theoretical concepts in the social model of disability, attribution theory (shown in Figure 1) and the 'inclusion equation' (shown in Figure 2) indicate that we need to create empowerment and control through the acknowledgement and understanding by dominant groups toward people with disabilities and their diverse experiences of the workplace, which could be done through the application of attribution theory to an inclusive model at the micro and macro level.

The inclusion of people with disabilities in the workplace is not only an issue of human rights and equality; there are benefits to inclusive practice that reach beyond the individuals with disabilities. It is increasingly apparent that people with disabilities not only have a valuable contribution to make to the national economy but that their employment also reduces the cost of disability benefits and may reduce poverty (International Labour Organisation, 2002). Further business wise employing people with disabilities can be extremely effective because they are often qualified for a particular job; and similarly continuing the employment of people who become disabled is effective because they have valuable expertise through the job and work-related training (International Labour Organisation, 2002).

Many organisations and their networks are now contributing to facilitating the employment, job retention and return-to-work opportunities for disabled persons and thus policy and practice surrounding inclusion of people with disabilities in an organisational setting is becoming better established (International Labour Organisation, 2002). For instance one study looked at the need to increase the number of disabled people working in disability support services (DSS) in New Zealand and thus interviewed 10 DSS employers and 12 disabled employees (Te Pou o Te Whakaaro Nui,

2013). Key findings were that all employees had experienced difficulties in the past applying for jobs in either DSS or general workplaces, in part due to discrimination, not getting interviews, a lack of self-confidence, and low expectations from others (Te Pou o Te Whakaaro Nui, 2013). These elements appear situational and dispositional in nature, but the person with disability could as an actor have situational attributions as to why they had a lack of self-confidence – making all these elements potentially situational. The study also reported that half the disabled employees required flexible working practices (Te Pou o Te Whakaaro Nui, 2013). Although studies like this are beneficial for indicating issues for people with disabilities it is difficult to transfer these findings from the disability sector into the general workforce. Research can assist with widening the sample of employees with disabilities, and through the application of Figure 1, perspectives of those with disabilities can be considered more generally across the workforce to see if there are any Actor-Observer differences to benefit people working generally with disabilities.

Hagner, Dague and Phillips (2015) assessed the strategies and barriers involved in including employees with disabilities. Using the same measure as the current study, 53 'trained employment specialists' (who completed an online training programme) interviewed and visited clients with disabilities in the workplace and completed the assessment instrument (Measures section) during the course of their visits (Hagner *et al.*, 2015). A shorter schedule, different schedule or alteration in the design of the job, were the most common structural barriers to inclusion (Hagner *et al.*, 2015). Further in many cases, non-inclusion of people with disabilities in these situational barriers had a spill-over effect for other 'elements', by removing the employee from consideration for promotion or participation in incentives programs, or causing the individual to be unavailable for meetings and celebrations (Hagner *et al.*, 2015). For example the study found that if an employee with a disability has to work a different schedule than other employees, this then removed the employee from a number of normal practices that make any employee feel included. This research supports the

prediction in Figure 1 that a misalignment of perspectives can lead to employees with disabilities feeling excluded, while those without disabilities may not be aware of the situational barriers, creating a clear gap in understanding and preventing the inclusion of those with disabilities.

This study by Hagner *et al.* (2015) used the employment specialist's (or observer's) assessments of people with disabilities (or actors) and again did not directly consider or measure the perspectives of those with disabilities in what enables and creates barriers for them at work. Figure 1 demonstrates that an observer may not understand the situational barriers, and therefore the experience of the person directly 'acting' in the scenario may provide more insight into direct barriers. It also only encompassed those with disabilities who needed employment specialists to help them at work, therefore not including many others in the working disabled population. The present study will address these shortfalls by asking employees with disabilities as well as employees without disabilities directly about inclusive practice, which should allow an accurate comparison of perspectives of observers and actors. Additionally through using a reversal technique and placing both groups as the 'actor' and 'observer' it could be possible to look at whether a change of context can also change perceptions or attributions of responsibility.

Employers' attitudes and skills in helping people with reduced function return to work after an injury has also been previously researched in relation to disability and inclusion (Jakobsen & Svendsen, 2013). Fifteen managers from different regions in Norway and a variety of organisations were analysed through group discussions in order to understand the inclusion process from the employer's perspective (Jakobsen & Svendsen, 2013). The study indicated that positive return to work was based on the workplace leader's communication skills, the necessary adaptations being made in the workplace, the effective coordination of public services, and the way in which providers presented their assistance, as essential for a positive work re-entry process for employees with reduced function (Jakobsen & Svendsen, 2013). This study identifies the importance of structures and

leadership, or 'situational' factors, but it remains unknown whether people from various viewpoints can identify these factors, or as per Figure 1, the best way of identification is by asking the actors in the scenarios.

In line with other research the study conducted by Jakobsen and Svendsen (2013) illustrated how the supervisor's' attitude and the organisations ability to view its responsibility beyond wages (or the attribution of responsibility) seem to be crucial when a person with reduced mobility returns to work (Jakobsen & Svendsen, 2013). This study has extremely relevant findings in that it gives an employer perspective of reintegrating people with reduced mobility into the workforce. However, the perspective of the person with the disability on what was best required for their integration was ironically excluded. Further only people with reduced mobility were considered, which leaves the consideration of perspectives of employers and employees with other types of disabilities unexplored.

In order to begin to develop substantial movement toward inclusion it is important to consider that inclusion in the workplace may not be perceived in the same way for all employees, and the attribution of responsibility may differ when developing policies and practices to enable inclusion. In a case study based workplace culture analysis, inclusion was assessed using the workplace culture survey also used in the current study (Fillary & Pernice, 2005). The research explored the potential of the workplace culture survey (Hagner, 2000) to identify inclusive characteristics of eight New Zealand workplaces where people with intellectual disability were employed by surveying eight employers (Fillary & Pernice, 2005). Eight workers with intellectual disability and eight co-workers were surveyed to assess inclusion levels (Fillary & Pernice, 2005). From this very small sample Fillary and Pernice (2005) drew the tentative conclusion that there was a difference between levels of inclusion for people with disabilities compared to co-workers, indicating that the workplace experience is harder for those with disabilities and that people with disabilities may view the level of inclusiveness in a workplace in a different way from other employees. For instance workers with

higher support needs reported less inclusion (Fillary & Pernice, 2005), indicating that inclusion is not a fixed objective measure of everyone (as Figure 2) suggests, but depends on unique experiences of different groups, whether they have the control to create change, and whether they can appropriately and accurately attribute responsibility to barriers that are preventing inclusion (Figure 1). It was difficult to draw reliable conclusions from the study, due to a small sample size, identifying a need for further research in the comparison of the level of inclusion people with disabilities identified, compared to co-workers or the general working population (Fillary & Pernice, 2005).

Although diversity management and policies surrounding how to employ and retain staff with disabilities is available, the issue of inclusion and how to enable people with disabilities seems to be lacking perspectives from all involved. Although perspectives are given from employers, and some case studies have looked at employees with disabilities, there is yet to be any comparison of perspectives *between* employees on this issue. The attribution of responsibility for inclusion needs to be addressed before effective and complete inclusion models can be established. Actor-observer bias may provide a partial explanation as to why there are inclusive barriers in the workplace, as a subtle misalignment of perspectives could eventually lead to a gap in the inclusion framework that is currently missing in research and practice. In consideration to the social model of disability, the empowerment of those with disabilities can only come through control over their surroundings, while attribution theory could explain why a lack of control in policy means that the situational elements that make up inclusion are currently not being identified. Very few studies directly consider ratings of inclusiveness from employees with disabilities and those without, which the current study has done.

The current study

The current study utilised the roles of 'actor' and 'observer' for people with and without disabilities to look at their various viewpoints and if these changed when there was a reversal of perspectives.

Purpose of the current study

The primary aim of the study is to assess whether employees with disabilities perceive responsibility for inclusion in a more structural/situational way than dispositional way, compared to employees without disabilities, and if this relationship could be explained through attribution theory. Figure 1 predicts that theoretically this relationship could have significant consequences on the emphasis that people put on various elements that make up inclusion.

Hypotheses

1.   Actor-Observer Difference: People with disabilities (as Actors) will attribute the responsibility for fostering their sense of inclusion at work to situational features of work (e.g. same uniform as other staff) compared to people without disabilities (as Observers). People without disabilities (as the observers) would rate dispositional items as more important for including people with disabilities (e.g. choosing to participate).

2.   Actor-Observer Reversal: The difference in hypothesis 1 should reverse when people with disabilities (reversed into the role of Observer) and people without disabilities (reversed into the role of Actor) are asked to respond to how a 'typical' employee is likely to respond to a person with a disability. Observers should rate the dispositional scale more strongly than Actors.

Chapter 2 - Methods

Participants

All organisations and participants remained anonymous throughout the study and participated under conditions of informed consent. Eight large organisations were contacted, based on the statistic that 24% of the New Zealand population were identified as disabled at the last measure in 2013 (Statistics New Zealand, 2013a). From this statistic it can be assumed that a relatively substantial number of organisations would have some people with disabilities. Also this collection method is ethically viable because people with disabilities were not being targeted by the recruitment method.

Five organisations eventually participated in the study; including private organisations, government organisations and disability focused organisations. The organisations consisted of one public sector organisation, two private sector organisations and one charitable organisation. The final group consisted of people who did not state their organisation or were from organisations outside of other organisations. A total of $n=93$ participants in total responded to the questionnaire, with $n=21$ people that stated they did have a disability (22%), and $n=72$ people stating they did not (78%), which corresponds with the statistic that 24% of people in New Zealand have a disability (Statistics New Zealand, 2013a). Participants were made up of 19 males, 65 females and 9 unspecified. Ages varied from 21 and under to 64, and level of education ranged from 'lower secondary' to 'master or equivalent, with most people responding to 'bachelor or equivalent' (38). 32 of the respondents indicated that they were currently participating in voluntary work of some kind.

Questionnaire Measures

Demographic measures

Disabilities

The current study required a clear definition of disabilities, in order to establish who did or did not have any disabilities according to one clear definition. Thus the current study utilised the following definition from the WHO (2015).

For this research disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.

Following this definition a statistic (taken from Statistics New Zealand, 2013b) was given to indicate to participants how common disabilities are in New Zealand, and a few examples were given surrounding what counts as a disability under the WHO (2015) definition.

24% of the New Zealand population report having a disability of some kind, which can be physical or mental (for example anxiety disorders or depression).

In order to measure disability, the Sheehan Disability Scale (SDS) was adopted. The SDS was developed to assess functional impairment in three inter-related domains; work/school, social and family life (American Psychiatric Association & Rush, 2000). Because of its simplicity, brevity and high face validity, and because of the lack of competing brief measures of functional impairment, the SDS has become a widely used outcome measure in clinical trials (Hodgins, 2013). The SDS has been found to have 83% sensitivity and 69% specificity for patients with any of the following six mental disorders (alcohol dependence, drug dependence, general anxiety disorder, major depressive

disorder, obsessive-compulsive disorder and panic disorder (American Psychiatric Association & Rush, 2000)

The SDS has been previously used in a wide number of different domains. While it was developed as a mental disability measure, it has been previously used as an assessment tool for physical disability in a past study, which concluded that the SDS can just as well be used to assess disability caused by physical disorders (Ormel, Petukhova, Chatterji, Aguilar-Gaxiola, Alonso, Angermeyer, Bromet, Burger, Demyttenaere, de Girolamo, Haro, Hwang, Karam, Kawakami, Lepine, Medina-Mora, Posada-Villa, Sampson, Scott, Ustun, Von Korff, Williams, Zhang & Kessler, 2008). Hence its use in this study was confirmatory.

Section 1: Situational and Dispositional Elements of Inclusion

Section 1 aimed to examine whether employees with disabilities rated situational factors of inclusion as more important to creating an inclusive environment, compared to non-disabled employees.

Section 1 of the questionnaire began with a definition and explanation of inclusion. This was an adaptation of Mor Barak & Cherin's (1998) definition of inclusion, which states that inclusion is the extent to which individuals can access information and resources, are involved in work groups, and have the ability to influence decision-making processes. The current study stated that:

In our everyday jobs, people can feel included or excluded. Inclusion can take different forms, for example whether people have access to information, whether they are involved in work groups, and whether they can influence decisions.

Hagner's (2000) Workplace Culture Survey (WCS) was developed as a tool to assess and understand workplace cultures and inclusion, and adapted for usage in this study. Specifically, in Hagner's (2000) WCS workplace culture is broken down into thirty-one elements; for each element a question is framed that can be used to assess whether the element is present or relevant in a particular

workplace culture. These elements are listed by Hagner (2000) as: longevity, joint tasks, shared tasks, co-worker help, work schedule, social times, gathering places, mealtimes, break times, orientation, employee training, initiation pranks, special terms and jargon, items issued to employees, shared equipment, dress and appearance, name display, workspace personalisation, social interactions, group customs, staff meetings, performance review, pay distribution, celebrations, company-sponsored social activities, outside activities, employee assistance and wellness programs, carpooling/transportation, employee incentives, work/family policies and opportunities for advancement. These items could arguably be categorised as dispositions versus situations (Figure 1).

The WCS has been utilised in a New Zealand context for people with disabilities but only for a case study purpose (Fillary and Pernice, 2005), which means it has been deemed appropriate, tested and used in the New Zealand context before. However, the WCS has not previously had its structure tested or adapted in order to be placed into a dispositional versus situational setting (shown in Figure 1). Some adaptations needed to be made to the WCS in order to achieve specific outcomes of the current study and these adaptations made the measure exploratory in nature. These specific changes are shown in Table 2.

The current study took Hagner's (2000) WSC 31 elements of workplace 'culture' and the items (or questions) created for each element as a basis for Section 1 of the questionnaire. The questions were then adapted to ask participants about what factors they *attributed as important* (or not important) for fostering inclusion (attribution of responsibility), which makes the usage of the measure exploratory (Table 2, Column 2). This was because the aim was not to measure differences in inclusion as such but to measure if employees with disabilities attributed inclusion differently from employees without disabilities (Figure 1). The rewording of each item is shown in Table 2, Column 2). Further two items were not included in the current study because they were not relevant in a New Zealand context; these are shown as items 18 and 28 in Table 2.

Table 2. Adaptations of Hagner's (2000) WCS items

Hagner's (2000) WCS Part B	Current Study Adaptation	Predicted Factor Loading
1. Has the employee been with the company for a year or more?	Employees have worked at the organisation for a substantial amount of time.	Situation
2. Does the employee work on some tasks together with one or more co-workers?	All employees are able to work on some tasks together with one or more co-worker.	Situation
3. Does the employee's job include those tasks at work that almost everyone does?	Employees with disabilities are included in tasks at work that almost everyone does.	Situation
4. Are co-workers available or close by enough to give help or support if the employee has a problem?	Co-workers are available or close by enough to give help or support if there are problems.	Situation
5. Does the employee's work schedule match that of others in the work area or department?	Employees with disabilities have work schedules that match that of others in the work area or department.	Situation
6. Does the employee work during times when it is easier or more likely for workers to talk socially?	Employees with disabilities work during times when it is easier or more likely for workers to talk socially.	Situation
7. Does the employee have access to gathering places at appropriate times?	People who have disabilities have access to gathering places at appropriate times.	Situation
8. Does the employee eat lunch (or other meal) with co-workers?	People with disabilities decide to eat lunch (or other meal) with co-workers.	Disposition
	People with disabilities feel comfortable to eat lunch (or other meal) with co-workers).	Disposition
Does the employee share break times with co-workers?	Employees with disabilities choose to share break times with co-workers.	Disposition
10. Does or did the employee participate in formal orientation provided by the company for new workers?	All employees participate in formal orientation provided by the company for new workers.	Disposition
11. Does or did the employee receive training by being paired with a co-worker, or other typical arrangement?	Employees with disabilities receive training by being paired with a co-worker, or other typical arrangement.	Situation
12. Was an initiation prank played on the employee?	All employees had an initiation prank played on them.	Situation
13. Does the employee know and use the special worksite terms or language?	All employees know and use the special worksite terms or language.	Situation
14. Does the employee have items typically issued to employees (e.g. locker, key, uniform, tools)?	Everyone has items typically issued to employees (e.g. locker, key, uniform, tools).	Situation
15. Does the employee's job include using	Employees with disabilities can use equipment	Situation

equipment that the workers share?	that workers share.	
16. Does the employee follow the same code of dress and appearance as others?	Employees with disabilities follow the same code of dress and appearance as others.	Disposition
17. Is the employee's name included on mailboxes, doors, posted schedules, etc.?	Employees with disabilities names' are included on mailboxes, doors, posted schedules, etc.	Situation
18. Is the employee's workspace personalised in some way?	Item deleted	n/a
19. Does the employee sometimes talk socially with one or more co-workers during work time?	Employees with disabilities sometimes talk socially with one or more co-worker during work time.	Disposition
20. Does the employee follow informal worksite social customs, (such as taking turns making coffee)?	Employees with disabilities follow informal worksite social customs, (such as taking turns making coffee).	Disposition
21. Does the employee attend and/or participate in staff or employee meetings?	Employees with disabilities are asked to attend and/or participate in staff or employee meetings.	Disposition
22. Is the employee's job performance formally reviewed by the supervisor in the same way as others?	The supervisor formally reviews all employees' job performance in the same way.	Situation
23. Does the employee receive pay in the same way as other workers?	Employees with disabilities receive pay in the same way as other workers.	Situation
24. Does the employee participate in workplace celebrations such as birthdays?	All employees participate in workplace celebrations such as birthdays.	Disposition
25. Does the employee participate in company sponsored social activities such as an annual picnic or sports team?	Employees with disabilities participate in company sponsored social activities such as an annual picnic or sports teams.	Disposition
26. Does the employee participate in get-togethers outside of work?	Employees with disabilities participate in get-togethers outside of work.	Disposition
27. Does the employee use or have access to an Employee Assistance Program or wellness Program?	All employees have access to a wellness program.	Situation
28. Does the employee use or have access to company sponsored car pooling, public transit discounts or similar assistance?	Item deleted	n/a
29. Does the employee receive or have access to any employee incentives or awards?	Employees with disabilities receive or have access to any employee incentives or awards.	Disposition
30. Does the employee use or have access to company work/family programs?	All employees have access to a wellness program.	Situation
31. Is the employee able to advance to higher positions within the company?	Employees with disabilities are able to advance to higher positions within the company.	Situation

Following the WCS items, a number of open questions were also included in the questionnaire (Appendix III). These questions were asked to allow participants to express whether they had any other thoughts or ideas about inclusion that were *not* included in the items given. Ideas were:

- Attitudes and awareness of people with and without disabilities, co-workers and employers (which was included in the second section of the questionnaire)

- The use of feedback with managers and support agencies.

Section 2: Attitudes toward Inclusion

Section 2 aimed to assess whether the actor-observer bias is also present when the actor in the scenario is shifted from employees with disabilities to employees without disabilities. This technique shifted the actor-observer roles around, in order to effectively examine whether it is the groups themselves that reflect different viewpoints, or whether it is the group's position in a scenario, as actor or observer, that leads to different responses. This design is following Storms' (1973) reversal technique of making participants both actors and observers at different stages, to more accurately test whether it is attribution theory that is specifically causing these responses.

In order to understand whether there was an actor-observer bias, it was critical to put both groups of participants in both scenarios (i.e. as the actor and the observer). Findler, Vilchinky and Werner (2007) developed a self-report instrument for the measurement of attitudes toward persons with disabilities, called the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS). This adopted the multidimensional construct of attitude, containing affective, cognitive and behavioural dimensions (Findler *et al.*, 2007). This measure allowed the investigation of whether inherent attitudes were responsible for feelings, thoughts and behaviours around disabilities or whether actor-observer bias could be seen in this scenario with a role-reversal for the same participants through switching the focus from 'people with disabilities' to the 'typical employee'.

A second measure was adopted in the current study surrounding attribution theory and inclusion for people with disabilities. This was adopted in order to assess the attitudes of both people with and without disabilities in an inclusion framework. This was also included in order to utilise Storms' (1973) reversal, which allowed the study to look at whether there is an inherent difference in how actors and observers would respond in different scenarios or whether it was related to the individuals themselves by asking participants what they think would be a typical employee's attitude toward people with disabilities; in other words by asking the observers (people without disabilities) to put themselves in the shoes of actors (people with disabilities) by becoming the focus of the scenario. **In this way, the actor became the observer** (group with disabilities would associate less with a 'typical employee) **and the observer became the actor** (group without disabilities associate with the 'typical employee' and so respond as an actor). Thus the MAS measure was reframed to fit with the aim of the current study. The three dimensional nature of the measure (measuring emotions, cognitions and behaviours) was retained, as well as the scale and all the attached elements. However the *vignette* and wording introducing each section was adjusted. This is shown in Table 4 ('*Adapted Script*') below.

Table 4: The original MAS compared to the adapted script for the current study.

MAS	Adapted Script
"Imagine the following situation. Joseph/Michelle went out for lunch with some friends to a coffee shop. A man/woman in a wheelchair, with whom Joseph/Michelle is not acquainted, enters the coffee shop and joins the group. Joseph/Michelle is introduced to this person, and shortly thereafter, everyone else leaves, with only Joseph/Michelle and the man/woman in the wheelchair remaining alone together at the table. Joseph/Michelle has 15 minutes to wait for his/her ride. Try to imagine the situation."	Now we need to get a sense of how a typical employee in your workplace would feel about interacting with people in the workplace. Imagine your workplace lunchroom, a new employee with a disability enters the lunch room. Please describe what you think a typical employee would do next.
MAS *Affect* subscale	
People experience a variety of *emotions* when they are involved in such a situation. In the next column is a list of possible emotions, which may arise before, during, and/or after such a situation. Please rate on each line the likelihood that this emotion might arise in Joseph/Michelle:	Given what you have written in the box above, did any of these feelings play a role for the typical employee?
MAS *Cognition* subscale	
People experience a variety of *cognitions* when they are involved in such a situation. Following is a list of possible thoughts that may arise before, during, and/or after such a situation. Please rate on each line the likelihood that this *cognition* might arise in Joseph/Michelle:	What is the likelihood that any of these thoughts played a role for the typical employee?
MAS *Behaviour* subscale	
People experience a variety of behaviours when they are involved in such a situation. Following is a list of possible *behaviours* that may arise before, during, and/or after such a situation. Please rate on each line the likelihood that Joseph/Michelle would *behave* in the following manner:	Would a typical employee do any of the following?

The adaptations were made to the MAS in order to allow participants to reflect on a typical employee rather than themselves so that people would respond more honestly and any biases could be reduced. Because the measure asked participants about a hypothetical situations, a box was added so the person could clearly describe what they thought would happen, which would give them a clear point of reference to help them to answer the scales that followed. The way in which the MAS was written was also simplified to aid understanding for the participants. Each question also reiterated

that they were answering the scale in regard to what 'a typical employee' would do, to avoid any confusion.

A prize draw was added on the end of the questionnaire and was configured as a separate questionnaire in order to keep participants' responses anonymous. This item asked if participants would like to be in the prize draw, and if so what their email is.

Procedure

The questionnaire was based on the informed consent principle, which implies that anyone can choose whether or not they would like to participate.

The nature of the questionnaire and the vulnerable population that it was targeting led to ethical requirements to be met initially in the process, before distributing the questionnaire for participation. Following ethics approval from the Massey University Human Ethics Committee (MUHEC), consultation with an expert in the School of Māori Art, Knowledge and Education around any issues surrounding Māori involvement, and consultation with a culture at work specialist regarding the questionnaire, a number of organisations were approached about participating in the study.

Participants were recruited through approaching a number of different organisations. These organisations were sent a copy of all the questions asked in the questionnaire and a letter of permission outlining what was required of them as an organisation. If they consented to these requests, a member of the organisation, or 'gatekeeper', distributed the questionnaire throughout the organisation. This was an important aspect as it allowed employees to remain anonymous to the researcher and the organisation.

The questionnaire was distributed to all employees either via email, posted on the organisation's intranet system, or handed out as hard copies where neither of these systems were available. This was the case for 26 people within one organisation. Participants from all other

organisations completed the questionnaire through available online systems. This method of distribution gave employees the choice to participate in the study. Employees were given permission to take the time out of their working day to fill in this questionnaire, in order to ensure no employees faced any issues if they choose to complete the questionnaire at work. Further, the gatekeeper of the organisation (i.e. point of contact in the organisation) provided details about where participants could get help if they found any items in the questionnaire distressing or harmful in any way.

The questionnaire web link presented participants with an information sheet outlining the questionnaire and specifying details of the study (see Appendix I). They were required to read through the information sheet and consent through selecting 'yes' to proceed to the questionnaire. Following this, participants were asked a range of demographic questions (Appendix II). Following this, participants were shown a definition of disability, and then asked to select whether or not they have any disabilities. If they responded yes they were then presented with the SDS and asked to respond to how disruptive their symptoms have been in regard to three different elements (work or school work, social life or leisure, family life or home responsibilities).

The next step was referred as 'Section 1', which is outlined above (Measures Section) Participants were asked to rate each adapted item from the WCS from 0 (unlikely to foster inclusion) to 10 (likely to foster inclusion), followed by a number of open questions.

'Section 2' was subsequently presented to participants (outlined in Measures above). Participants described what a typical employee would do in the hypothetical situation in their own words, and were then presented with three subscales that they were asked to fill out 'given what they had written in the box above'. Participants were asked to answer each item from the adapted MAS on a scale of 1 (not at all) to 5 (very much). Participants could choose not to answer any of the items in the questionnaire.

An end page was displayed after 'Section 2' was completed, which thanked participants for taking part in the anonymous survey. The contact details of the researcher were given as well as information about who to contact if the questionnaire was found to be distressing or harmful in any way. Participants were then presented with another section of the survey that was separate from earlier answers and provided the opportunity to take part in a prize draw. Participants were asked if they wished to enter the draw and then were given the option to give their email address. All this was done to ensure anonymity for participants' responses on the questionnaire.

After the completion of the questionnaire, there were no follow-up measures required of participants. Information from the study was then distributed through organisations and made accessible for all participants in the form of a results summary sheet. In some cases this could occur through general staff databases, but this sometimes was not a possibility. In these cases the researcher distributed summary sheets to the organisation by putting them in communal spaces, for example the staff common room.

Chapter 3 - Results

There were three main phases to the data analysis (1) data reduction, (2) analysis of variance (ANOVA) of the differences between actors (with disabilities) versus observers (without disabilities), and (3) ANOVA between employees without disabilities (reversed into the role of actor) versus employees with disabilities (reversed into the role of observers).

(1) Data reduction

(a) Protocol

For all measures in the questionnaire, factor analyses were performed. Exploratory factor analysis was preferred over Confirmatory, because the instruments in question are still in the development stage, have been adapted and have never before been used in this kind of study. Kaiser-Meyer-Olkin Index was run to see if it was above the suggested minimum of 0.60 (Luciano, Bertsch, Salvador-Carulla, Tomás, Fernández, Pinto-Meza, Haro, Palao, & Serrano-Blanco, 2010). The Bartlett test of sphericity was tested for significance.

Following previous initial studies for both the SDS (Luciano *et al.*, 2010) and the MAS (Findler *et al.,* 2007), Principal Component Analysis (PCA) was run. Rotation was Direct Oblimin to allow for correlation between factors. The criterion for a significant factor loading was 0.30 (Burt-Banks formula). Items that loaded significantly on more than two factors were removed if the two loadings were of similar value. Items that failed to load, or loaded on the 'wrong' factor (according to Findler *et al.,* 2007) were removed, and the PCA was re-run. Reliability analysis (Coefficient Alpha) was run on each factor. Any good measure should have a Cronbach's Alpha of at least .60 and preferably closer to .90 (Aron *et al.*, 2009). If an item significantly brought down Cronbach's Alpha, the item was removed and the EFA protocol above was re-run.

(b) Disability measure

The measure of 'severity of disability' was excluded from results due to the limited numbers of respondents with disabilities, which did not allow for analysis of the relationship between the factors and the severity *level* of disability.

(c) Section 1: Situational and Dispositional Elements of Inclusion

Section 1 of the questionnaire consisted of the Workplace Culture Survey (WCS), which also showed a correlation matrix suitable for factor analysis; Kaiser-Meyer-Olkin Index = 0.775, and Bartlett's test was significant at $p < 0.001$. Following *(a) Protocol* 19 items in the PCA were removed, leaving three factors, shown in Table 5. However one factor (that had two items loaded on it) was removed because the factor was uninterpretable. The internal consistency for each of the tested factors: 'disposition' ($\alpha =.867$), 'situation' ($\alpha =.826$), was satisfactory. Correlation between the two factors was .413. Once a satisfactory factor solution was reached, all items were transformed by taking the means for each item, adding them together and dividing throughout by the number of items. These factors were then used to compute two new variables for further analysis, each of which was a mean score per item per factor.

Table 5. Factor Solution of the adapted Hagner's (2000) WCS in Section 1.

Item on WCS rated on a scale of Irrelevant to Inclusion (0) or Essential to Inclusion (10).	Component	
	Disposition	Situation
Employees with disabilities participate in get-togethers outside of work	.895	
People with disabilities decide to eat lunch (or other meal) with co-workers	.814	
Employee with disabilities receive or have access to any employee incentives or awards	.713	
People with disabilities feel comfortable to eat lunch (or other meal) with co-workers	.670	
Employees with disabilities participate in company sponsored social activities such as an annual picnic or sports teams	.562	
All employees have access to company work/family programs		.920
All employees have access to a wellness program		.874
All employees are able to work on some tasks together with one or more co-worker		.643
Employees with disabilities are able to advance to higher positions within the company		.570
Eigenvalues	5.16	1.49
Percentage Variance	46.88	13.52
Coefficients Alpha	.87	.83

Note: Loadings > .4 have been suppressed

(c). Section 2: Attitudes toward Inclusion

Section 2 of the questionnaire, the multidimensional attitudes scale towards persons with disabilities (MAS) measure, was suitable for factor analysis with a Kaiser-Meyer-Olkin Index = 0.702, and a significant Bartlett's test (< 0.001). Following the same protocol as Section 1 PCA was also applied to this measure, with the same guidelines of removal of items. This yielded a total of five factors shown in Table 6. Three of these factors (complied with the initial PCA test on the MAS)

identified separate factors for feelings, thoughts, and behaviours (Findler *et al.,* 2007). However an

additional two factors were found reflecting 'Positive Behaviours' and 'Positive Feelings'.

Table 6. Factor Solution of the MAS attributions measure.

MAS: following Vignette (Method: Section 2: Attitudes Toward Inclusion) participants rated these on a scale of Not at all (1) to Very Much (5).	Component				
	Negative Feelings	Positive Thoughts	Positive Feelings	Positive Behaviours	Negative Behaviours
Upset	.904				
Fear	.829				
Shyness	.821				
Depression	.808				
Guilt	.800				
Stress	.787				
Nervousness	.756				
Pity	.733				
Alertness	.679				
Shame	.667				
Disgust	.644				
Helplessness	.579				
Tension	.576				
I enjoy meeting new people		.863			
He/she looks friendly		.862			
We may get along really well.		.840			
He/she will enjoy getting to know me		.812			
Why not get to know him/her better?		.800			
He/she seems to be an interesting guy/girl		.734			
He/she looks like an OK person		.723			
I can always talk with him/her about things that interest both of us		.681			
I can make him/her feel more comfortable		.650			
Serenity			.823		
Calmness			.806		
Initiate a conversation if he/she doesn't make the first move				.915	
Start a conversation				.850	
Read the newspaper or talk on a cell phone					.863
Get up and leave					.827
Move away					.750
Continue doing what he/she was doing					.712
Move to another table					.698
Find an excuse to leave					.671
Eigenvalues	11.32	7.28	2.06	1.56	1.33
Percentage of Variance	35.38	22.74	6.44	4.88	4.16
Coefficients Alpha	.953	.938	.942	.876	.912

Note: Loadings > .4 have been suppressed

Following the protocol (above), reliability for each factor was also tested using Cronbach's Alpha. The final internal consistency found for each factor, after following protocol outlined above to delete and re-run without items that decreased Cronbach's Alpha, was; 'Negative Feelings' (α =.953), 'Positive Feelings' (α =.942), 'Positive Thoughts' (α =.938), 'Negative Behaviours' (α =.912), and 'Positive Behaviours' (α =.876). Pairwise deletion was used. As these scores were all close to the preferable alpha score (α =.9), results were adequate to proceed with the rest of the data analysis. As per protocol (a), the overall means were calculated for each of the five factors, and utilised for the rest of the analyses.

(2) Section 1: ANOVA with employees with disabilities as actors and employees without disabilities as observers

Descriptive statistics for each factor were generated (Table 7). From Table 7, the group with disabilities (as 'Actors') tended to respond more highly to each factor compared to the group of employees without disabilities (as 'Observers'). Hypothesis 1 predicted that people with disabilities would rate situational factors as more important than people without disabilities, whilst people without disabilities would rate 'dispositional' items as more important than people with disabilities. The twin prediction was only partly supported by the relative means in Table 7; the group with disabilities ('Actors') rated both situational and dispositional factors as more important than the group without disabilities (Observers) (Table 7).

Table 7. Descriptive Statistics for Section 1 using estimated marginal means

(Note: scale runs from 1 (not at all) – 10 (essential)).

	Disability (means)	
	Yes (Actor)	No (Observer)
Situation	8.88	7.76
Disposition	8.58	8.41

In order to test the significance of the differences in Table 7 between actors and observers, an ANOCOVA was performed separately for each factor. MANOCOVA was not possible due to having random effects in the model, from having organisation as a random co-variate that needed to be initially tested for significance. The covariates age, gender, and education were initially entered into each ANOCOVA, and Organisation was coded as a random effects variable from 1-5 and entered into the analysis as a random factor, in order to allow and statistically control for any level two effects of organisation. However for each factor in the covariates and the random factor of organisation was consistently non-significant. Thus covariates and the random factor of organisation were removed and the ANOCOVA was rerun, to preserve statistical power.

Univariate ANOVA tests found that responses on the 'disposition' factor were not significantly different between those with disabilities and those without disabilities ($F(1,73) = .107$, $p = .745$, $\eta_p^2 = .002$). The 'situation' factor however was (marginally) significant in the ANOVA test ($F(1, 71) = 4.117$, $p = .046$, $\eta_p^2 = .056$). Thus the group with disabilities rated situational attributions significantly higher than the group without disabilities.

Post hoc, the relatively high scores per item for all factors in Table 7 indicated possible ceiling effects occurring in the data, which may have been problematic because the outlined method of ANOVAs assumes a normal distribution. Thus, frequency distributions were computed for both 'Situational' and 'Dispositional' factors. These are shown in Appendix IV.

It was clear from Appendix IV that the data did not follow a normal distribution and so a non-parametric test that compares two groups was used, as these are less dependent on the assumption of a normal distribution. A Mann-Whitney U test was used to test Hypothesis 1 (that there would be a significant difference between 'Actors' and 'Observers' in their responses to situational and dispositional items). The Mann-Whitney U test gives a more conservative 'measure' than parametric tests. The results are shown in Table 8 below. For the 'situational' factor, employees with disabilities

and groups without disabilities again responded significantly differently ($p = .015$). Specifically Actors (with disabilities) saw situational factors as significantly more important for enabling inclusion than did observers (without disabilities).

Table 8. Mann-Whitney U Test Hypothesis Test Summary.

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Situation is the same across categories of Do you have any disabilities?.	Independent-Samples Mann-Whitney U Test	.015	Reject the null hypothesis
2	The distribution of Disposition is the same across categories of Do you have any disabilities?.	Independent-Samples Mann-Whitney U Test	.374	Retain the null hypothesis

(3) Section 2: ANOVA with employees without disabilities as actors and employees with disabilities as actors

The following section was made up of a reversal of roles (as pre Storms' 1973 study) by asking both groups of participants (disabled and non-disabled) how the 'typical employee' would react to a person 'with a disability' in the scenario. Conceptually, this has been argued (Chapter 1) to reposition the group 'with disabilities' as more of an 'Observer' in the scenario, in so far as they are quite literally asked to focus on the typical employee (who is not disabled in the scenario). They are less likely than people without disabilities to associate themselves with the 'typical employee', and are more likely to be 'observing' the 'typical employee's' behaviour toward someone with a disability (who they are more likely to associate with). In the same way, the scenario re-framed the group without disabilities as the 'actor', as they are asked to imagine what a 'typical employee' in their workplace is likely to do, think and feel. Those without disabilities are more likely to reflect on their own thoughts, feelings and behaviours toward people with disabilities, and thus more likely to place themselves as the 'typical employee' and become the 'Actor' in the scenario.

Protocol outlined above was also adopted for Section 2 of the questionnaire, as the means shown in Table 9 and Table 10 were not near the minimum response of 1 or maximum response of 5, there was no indication of floor or ceiling effects and so ANOCOVAs could be utilised.

Univariate ANOCOVAs were performed for each attitude factor in the MAS scale with the independent variable of Non-Disability/Disability or Actor reversed into Observer and Observer reversed into Actor. Each ANOCOVA also included all covariates and the random factor of organisation, in order to assess whether the random factor of organisation was significant.

On all factors in Section 2 of the questionnaire, the random factor of organisation was non-significant, with the exception of the factor 'Positive Feelings' ($p = .038$). Therefore this factor was analysed on its own as a univariate ANOCOVA and excluded from any subsequent multivariate analysis. Descriptive statistics for 'Positive Feelings' are shown below (Table 9). ANOCOVA showed that none of the covariates was significant, but that there was a significant relationship between 'Positive Feelings' and organisational code ($F(4, 54) = 6.159$, $p = .038$, $\eta_p^2 = .835$). Descriptive statistics showed that one organisation consistently responded lower on this factor ($x = 2.3214/5$) than other organisations ($x_1 = 3.2/5$, $x_2 = 3.0/5$, $x_3 = 3.3/5$, $x_4 = 3.3/5$), possibly indicating a different workplace culture/level on this particular facet of inclusion from the other organisations. However, the size of the effect (eta-squared here) was small, and the relationship between the factor 'Positive Feelings' and disability was non-significant ($F(1, 63) = .030$, $p = .864$, $\eta_p^2 = .001$). Thus in Table 9 there was no significant difference between responses from people with disabilities (as 'observers') and people without disabilities (as 'actors') on this factor.

Table 9. Estimated Marginal (Corrected) Means for 'Positive Feelings'.

	Disability	Mean	Std. Error
Positive Feelings	Yes (observer)	3.105	.454
	No (actor)	3.045	.332

For all other dependent variables the random factor of organisation was non-significant so following protocol (as outlined in Section 2 of Results) a MANOCOVA was performed. Initially all covariates were included in the analysis, if the covariates were non-significant they were removed and the test was re-run. All covariates in the MANOCOVA were found to be non-significant apart from education (F (4, 53) = 3.29, p = .0.18, η_p^2 = .199). A significant relationship between education and negative behaviours was found; meaning that as education increased, so did the strength of response toward associating negative behaviours to the typical employee (r = .318).

The uncorrected means generated from descriptive statistics are reported in Table 10 below, with estimated marginal means reported under each mean in parentheses. The corrected means (Table 10) identify a pattern that the Observers in the scenario (group with disabilities) responded consistently higher than Actors (group without disabilities) to each dispositional factor, regardless of whether these were positive or negative attributions. This meant that people with disabilities now viewed the 'typical employee' as making stronger dispositional attributions overall than what people without disabilities. This pattern fits with the hypothesis that people with disabilities (reversed into the role of observer of a scenario) responded more strongly to dispositional scales about emotional, behavioural and cognitive responses of the typical employee compared to employees without disabilities (as Actors in the same scenario).

Table 10. Descriptive statistics for Section 2, with the strength of attributional responses for each factor, from both the group without disabilities (reversed into the role of 'Actors'), n= 45, and the group with disabilities (reversed into the role of 'Observers'), n = 14.

	Disability	Mean	Std. Deviation	n
Negative Feelings	Yes (Role = Observer)	2.35 (2.27)	1.23 (.24)	14
	No (Role = Actor)	1.87 (1.88)	.80 (.13)	45
Negative Behaviours	Yes	2.33 (2.06)	1.28 (.22)	14
	No	2.18 (2.12)	.84 (.13)	45
Positive Thoughts	Yes	3.87 (3.93)	.76 (.20)	14
	No	3.43 (3.43)	.88 (.12)	45
Positive Behaviour	Yes	3.75 (3.57)	.97 (.26)	14
	No	3.53 (3.55)	1.11 (.150)	45

In order to test the significance of these apparent differences, MANOCOVA was run on the dependent variables as a set. There was no significant difference found in the MANACOVA between people with disabilities (in the role of 'Observer') and people without disabilities' (in the role of 'Actor') responses on the factors in the MAS as a set (F (4, 53) =1.27, p = .295, η_p^2 = .087).

However, from Table 10 there was a trend toward higher responses to the dispositional measure from observers (employees with disabilities) compared to the actors in the scenario.

Post hoc, Actor-Observer status looked to be having a borderline significant effect on two factors, with p = .10 being supported in other studies as borderline significance for exploratory research (Grimm & Yarnold, 1995). In the MANOCOVA the factor 'Negative Feelings' showed scores approaching significance, as did 'Positive Thoughts' and thus the relationship between the independent variable of perspective in the scenario (i.e. actor or observer) and the dependent variable

of attribution of responsibility (i.e. dispositional) were further investigated by performing further exploratory univariate ANOCOVAs.

The relationship between 'Negative Feelings' and disability was non-significant in the following univariate ANOCOVA ($F(1, 63) = 2.052$, $p = .157$, $\eta_p^2 = .033$). However the trend in the means between groups (shown in Table 10) and the 'approaching' significance score for 'Negative Feelings' in the MANOCOVA ($F(1) = 2.678$, $p = .107$, $\eta_p^2 = .046$) indicate that there could be a possible relationship, with people with disabilities (Observers) possibly rating perceived 'Negative Feelings' towards them as stronger or more present than people without disabilities (Actors), but this relationship is currently lacking in power.

For the factor 'Positive Thoughts', the relationship found in the univariate ANOCOVA was significant. This means that the strength of ratings toward 'Positive Thoughts' and whether or not people had a disability were significantly related; specifically people with disabilities (reversed into the role of Observer) rated positive thoughts towards people with disabilities to be significantly stronger or more present than people without disabilities (reversed into the role of Actor) ($F(1, 64) = 4.322$, $p = .042$, $\eta_p^2 = .065$).

In summary, the results showed an indication of a higher response to dispositional items from the group that were observers (employees with disabilities) in the scenario, compared to the actors (employees without disabilities) in the scenario. Thus when the roles were reversed between the two groups, the group with disabilities (Observers) gave a stronger attribution to dispositions, indicating that they in this scenario there was a stronger attribution of responsibility toward people without disabilities (as Actors in this reversed scenario). However, only the factor 'Positive Thoughts' identified this relationship as significant.

Chapter 4 - Discussion

The current study aimed to assess whether employees with disabilities perceive inclusion in a different way to employees without disabilities, and if this relationship could be explained through attribution theory. Findings showed that the hypothesis for Section 1 was partially correct, in that people with disabilities (as actors) did rate situational items as more important for inclusion than did the group of people without disabilities (as observers). However, people without disabilities (observers) did not rate dispositional items as more important in this section of the questionnaire. The hypothesis for section 2 stated that when roles were reversed (through a cognitive switch in perspectives) people with disabilities should respond more strongly to dispositional scales about emotional, behavioural and cognitive responses of the 'typical employee' compared to employees without disabilities. Findings showed that there was a trend that people with disabilities as a group did respond more strongly to each factor on dispositional scales, however this relationship was only found to be significant for the 'positive thoughts' factor.

Findings from the first section surrounding inclusion showed that people with disabilities rated the 'situational' factors significantly higher than people without disabilities, which was consistent with the hypothesis. This finding supports the theoretical notion put forward by attribution theory that people with disabilities, as actors in the scenario, put more emphasis on situational factors because their view of inclusion presents more structural barriers than observers of inclusion for people with disabilities, as shown in Figure 1. These findings give initial support for the link between inclusion and actor-observer bias.

Findings from the second section which looked at strength of attributions using a reversal technique following Storms (1973) reversal, displayed a clear trend of the group with disabilities consistently responding more strongly to all factors, regardless of whether they were positive or negative, which also demonstrated the possibility of an attributional element. The higher responses

for both positive and negative attributions demonstrated that the group with disabilities (reversed into the role of observer) did not respond more negatively or positively, but took on an observational role, and so following Figure 1 responded more strongly to each type of response. Further, interestingly the elements that were more subject to attributions being made were emotions and cognitions compared to behaviours; this could be because emotions and cognitions are less tangible and so could be more prone to attributions being made.

Current findings and Storms' Reversal (1973) method

These findings that examined both inclusion and attributions provide substantial evidence that attribution theory can be applied to disability in the inclusion setting. This is the first time this relationship has been shown. Following Storms' (1973) method of making the same participants both the actor and observer at different stages, the current study displayed that the attributions did not necessarily occur through discrimination or only from people without disabilities judging those with disabilities, but demonstrated the possibility that both people with disabilities and people without disabilities judge others according to actor-observer bias. The actor-observer relationship outlined in Figure 1 represented a relevant theoretical explanation of the relationship, which became especially prevalent when the actors became observers and observers became actors.

By switching around the relationship, the study ensured that the effects of attribution theory using Storm's reversal were clearly demonstrated. The second section of the study demonstrated that people without disabilities did not think that the 'typical employee' would view a person with a disability any more negatively or positively than the people with disabilities in the group. In fact overall they were less likely to attribute strong negative or positive thoughts, feelings or behaviours to the situation than people with disabilities, with one of these responses being significantly different between groups. Contrary to studies around discriminatory beliefs for students with disabilities (Woodcock & Vialle, 2011; Noh, 2014), findings from the current study show initial support for the

idea that that discrepancies in the inclusion model in the workplace is not surrounding discrimination but a lack of understanding or awareness around 'situational' barriers.

Storms' (1973) method demonstrated that people could be made aware of the effect of adopting different roles on perceptions. In this way, the current study represents a possibility of change through understanding and awareness of differences in responses depending on the point of view of the person; especially regarding awareness that a person may act in a certain way, not because of negative attitudes but because of a lack of understanding of the other person's perspective. A key finding of the current study is a discrepency in one group understanding the needs of another, which is the first step in making change. If there is a general appreciation that having different perspectives creates a different reality for people with disabilities, the incorporation of this notion into workplace policy may help to build more accurate and inclusive policies.

Current findings and attribution theory

The current findings give some support to the application of attribution theory to inclusion and disability research. Figure 2 demonstrates the integration of a number of features, both at a micro and macro level that work together to create inclusion. As the model highlights unconscious bias and micro-inequalities, the first stage to addressing these is identifying these, which cannot be done without considering the perspectives of different groups. The model (Figure 2) lacks the influence of perspectives of different groups, which the current study offers an explanation for. Thus linking the theoretical actor observer bias demonstrated in Figure 1, and the support from results that responses from people in scenarios around disability can possibly be predicted by whether they are an actor or observer, this could help to explain and move Figure 2 forward. This combination could further contribute to creating awareness around the elements that create inclusion from various perspectives. This is demonstrated in Figure 3, where the accurate understanding of perspectives from different

groups around what creates inclusion is considered in the model, and thus creates more accurate

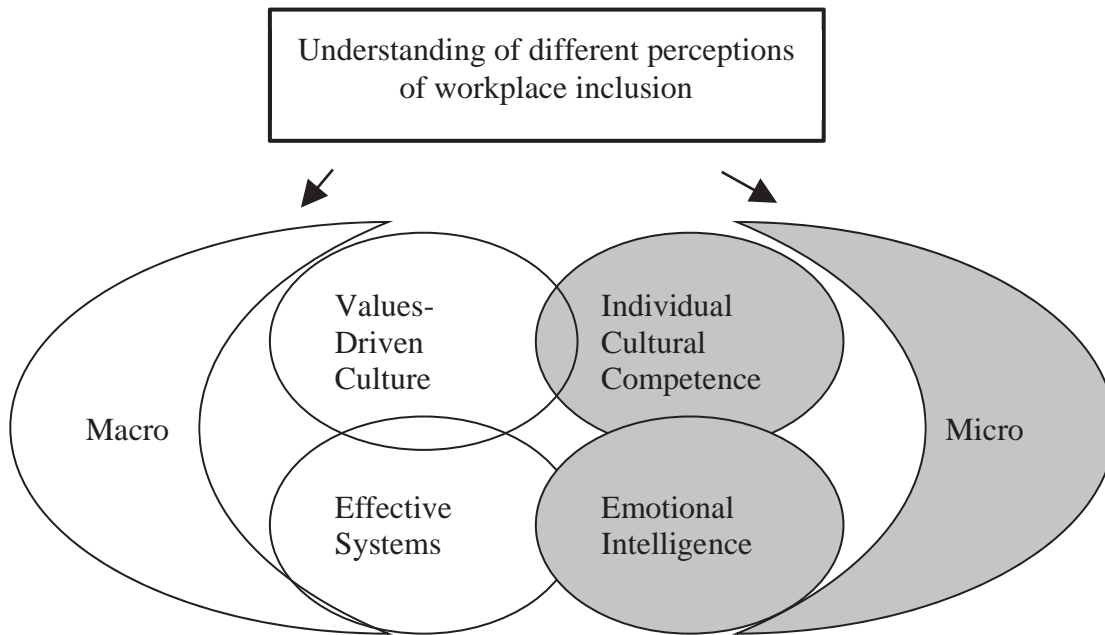micro and macro structures in the inclusion model.

Figure 3. The consideration of different perspectives in the inlusion equation (Winters, 2014).

The combination of objective elements that contribute to inclusion at a micro and macro level

with the addition of the human element of unique perspectives that depend on where any individual is

placed in a situation (i.e. actor or observer), or 'experiences' of the workplace, could be useful in

moving forward to create more inclusion around disabilities. The current findings suggest that this fit

could accurately represent the different perspectives around disability.

Consideration of how these findings fit with other research and models is essential to establish

a complete picture of topic. For example the current findings fit with Jakobsen and Svendsen (2013)

study, which found that supervisors' attitudes and the organisation's ability to attribute responsibility

to the organisation and not the person with a disability was a crucial element of helping someone

with reduced mobility return to work. This finding reflects that when the attribution of responsibility

is 'dispositional' or attributed as a responsibility of the individual with a disability, a lack of

understanding of creates a gap or misalignment in perspectives that makes it much more difficult for

a person with a disability to integrate back into work and feel included. This research, along with the current study, which encompasses all types of disabilities, demonstrates that perspectives play a very important role in the inclusion process, and justifies the addition of perspectives to Figure 3.

Results found in the current study can help to interpret the findings from Lanctôt *et al.* (2013) that 73% of people with mental disabilities in their study left their jobs because of 'external and uncontrollable factors'. By finding that people with disabilities in the workplace identify more 'situational' factors as important to creating inclusion, the current study is verifying the findings that there are barriers to inclusion and to work for people with disabilities that 'observers' or those without disabilities fail to perceive as important, and so never address these barriers. This can lead to considerable negative outcomes for people with disabilities, such as individuals leaving their jobs. The attribution of responsibility as to who should create more inclusive environments and look into issues of retention of people with disabilities can be better understood with consideration to different perspectives shown in the current study.

On the other hand, criticisms of the actor-observer theory have stated that these are too simplistic to represent real relationships. While the current study may show initial support that practices around inclusion of people with disabilities are not intentionally discriminatory but better represented by a lack of understanding around different viewpoints in a situation (actor-observer), it still needs to be considered whether inclusion of disability in the workplace can be completely explained by attribution theory. Disability as a concept is an umbrella term for a lot of types of disabilities, and so an important next step is to look at whether the actor-observer relationship is relevant for all people and disabilities that come under this term.

One study previously looked into this issue, specifically the utility of attribution theory in determining drivers of workplace discrimination against people with disabilities (Chan *et al.*, 2005). This North American study was based on Corrigan's (2004) judgement that attribution theory was a

useful paradigm for understanding stigma and discriminatory behaviour. Specifically stigmatising attitudes held by observers can be examined in terms of perceived controllability of the impairment; meaning the extent to which the person is responsible for the condition and its remediation, and stability of the impairment; the extent to which a specific condition is expected to change or improve over time (Corrigan, 2004). Previous research has indicated that the general public seems to discriminate among various disability groups, view people with mental illness as having more controllable and stable conditions (Chan *et al.*, 2005). This means that the way disabilities are perceived and understood could be influenced by the type of disability, specifically the relationship between people with disabilities and people without disabilities in the workplace could be mediated through type of disability and its perceived controllability.

The study was conducted by using 375,763 allegations of discriminations filed by people with disabilities under the employment provisions of the Americans with Disabilities Act, and separated disabilities into Group A; impairments deemed uncontrollable and stable (e.g. people with physical disabilities), and Group B; controllable unstable impairments (e.g. mental illness). Methods revealed that *perceived* workplace discrimination does occur at higher levels for Group B (as measured by allegations filed under the act), especially when serious issues involving discharge and disability harassment are involved. However they found that actual discrimination occurs at higher levels for people with 'uncontrollable' disabilities (as measured by the number of resolutions of the allegations) (Chan *et al.*, 2005). This is an interesting finding as it could be possible that perceptions of discrimination and inclusion also differ within the group of employees with disabilities. Placed in the theoretical framework of actor-observer bias shown in Figure 1, it could be possible that the type of disability itself may mediate the role of actor-observer theory in disability.

Chan *et al* (2005) concluded that the origins of negative attitudes toward disability are complex and as our understanding improves regarding this formidable barrier to inclusion around helping

people with disabilities to prevent discrimination, our likelihood of containing discrimination becomes more imminent (Chan *et al.*, 2005). In regard to the current study although findings have indicated that there is a lack of understanding rather than discrimination, this may be over simplistic when considering specific types of disability. However attribution theory applied to other inclusion research fills a gap that was not previously addressed (Figure 3). Although the relationship between disability and inclusion is likely more complicated and multi-faceted, the current study provides exploratory evidence, and a model to begin to address this.

Limitations of the current study and future research

Despite finding a relationship between attribution theory and the inclusion of people with disabilities for the first time, there were a number of limitations in the study that were problematic. The first issue surrounded participants; there were a limited number of participants, especially for the group of employees with disabilities, which restricted the findings. The limited number of participants with disabilities was especially problematic as it prevented the analysis of data comparing severity of the person's disability with responses to both the importance of inclusion and the attribution of emotions, cognitions and behaviours; this is definitely an area for future research as there is a large range of people with disabilities, and the severity of disability could have affected the strength of individual responses. It could have also had effects on the results, as a previous study has found that type of disability impacts levels of discrimination among other things (Chan *et al.*, 2005). Additionally the people who were able to answer the questionnaire was potentially restricting, as the distribution method could have restricted who could answer the questionnaire (for example people with intellectual disabilities could be less likely to have a desk job and be accessed via email).

The lack of participants with disabilities was also problematic when looking at attributions of people with disabilities when they played the role of observer (Results: Section 2). Despite the trend in the means showing that the group with disabilities responded more strongly to all factors, only one

of these relationships was significant (and one close to significance). This could be due to the data lacking power because of too few participants in the group with disabilities. In order to confirm this trend the measure would need to be re-examined with more participants with disabilities involved in the study.

Another limitation was the measure for assessing the importance of inclusion (Results: Section 1). Specifically, it was difficult to determine whether items were dispositional in nature or not because there was room for different interpretations by participants. The development of a model that had clear and precise disposition and situational items was required, but the adapted version of Hagner's (2000) WCS was problematic, especially in consideration of the dispositional items. Some of the dispositional items were unclear, and this could be the reason why the dispositional element of the research did not establish clear findings. Confirmation of the items in this measure as 'dispositional' or 'situational' through further research is necessary to establish the relationship more clearly. Alternatively, another method of measurement for this could to be developed in future research to assess whether observers of inclusion (people without disabilities looking at the importance of including people with disabilities) respond differently than actors on questions regarding dispositional elements of disabilities.

The current study was based on a reversal technique previously utilised by Storms (1973) using a visual reversal (with the use of a video camera). The current study adopted this principle but applied it to a cognitive reversal through imagining a different scenario. This is based on the assumption that both groups (with and without disabilities) would place themselves on different sides of the scenario – the person with the disability associating with the person with the disability and observer of the situation in the scenario and the person without the disability associating with the 'typical employee' acting in the situation. Although this did reflect to show a pattern of higher dispositions shown by the Observer (group with disabilities) in the results (Chapter 3), the extent to which people actually

associated with the different roles in the situation would need to be further investigated. Another study looking at this and asking participants about how they answered the question, would validate this technique for further use.

Other factors, such as level of education, or type of disability, could have an effect on the application of attribution theory to the inclusion of people with disabilities. As indicated by Chan *et al.* (2005) above, disability is a complicated subject, and different types of disability could moderate the relationship. A specific study looking at the effect of type of disability and Figure 3 could look at whether the model of inclusion created in this study would still be the most appropriate model. Another factor that could make a difference in actor-observer around inclusion of disability could be that exposure or close relationships with people with disabilities could make a difference in how people with disabilities are perceived. Further research could look into whether people with close relationships to people with disabilities (e.g. siblings, parents, friends, colleagues) influenced or adjusted the relationship between actor and observer.

Future research examining whether Figure 3 is an appropriate model to inclusive policy needs to confirm results with more participants, look into all other factors that could influence the model's accuracy, and look at the application of the model in real work settings. Case studies could be used to ensure that this model was the best representation of what is actually happening with the inclusion of people with disabilities. As this study is an initial exploratory study, findings need to be looked at in more detail; however, the development and assessment of an inclusion model for people with disabilities in the workplace, established in this study is an important first step to making real and substantial change.

Another factor that could be looked into in the future could be the influence of time. The current study looked at systems involved in inclusion, however time must be important to how included people feel and how this changes over time. Future research could look at whether the

inclusion that people feel changes over time and how this varies for people with disabilities compared to people without disabilities. Additionally a study that addressed the model (Figure 3) and made the associated changes, then tracked the level of inclusion felt for people with disabilities over time, would paint a holistic picture of the benefits of embracing the perspectives of people with disabilities when creating inclusive policies in the workplace.

Implications of the current study

The current study presented the first evidence supporting the application of attribution theory to the inclusion of people with disabilities in the workplace. There are a number of theoretical and practical implications to these findings. Firstly it places inclusion as another measure of the workplace that is not concrete, but subject to employee's perspectives - depending on whether they are 'actors' or 'observers' in the scenario. This means that for example while the observer may not realise the creation of an external barrier to inclusion for another person, this could be perceived by the actor as a structural barrier to inclusion. By highlighting the importance of different perspectives, the first step in further development of workplace inclusion policy and practice surrounding people with disabilities can be made by empowering people with disabilities to outline their own experiences of inclusion.

The current study shows that attribution theory can be applied to help eliminate everyday unconscious biases and micro inequalities that prevent inclusion in the workplace. Figure 1 shows the different dimensions that can influence how perspectives can shift a person's experience of a given situation. The results justified the use of this theory by showing significant differences between groups depending on whether people were 'Observers' or 'Actors' in a scenario. Figure 2 demonstrates that although there is a model for inclusion, up until now perspectives have not been considered in the equation. Thus the combination of models (Figure 3) created through findings that perspectives can have an effect on the importance of structures and attributions of responsibility in

the 'inclusion equation' could make a meaningful difference in how work policy surrounding inclusion for those with disabilities is created.

The study showed through a link between attribution theory and the inclusion of people with disabilities in the workplace that different perspectives lead to different conclusions. Although this is an initial study and further findings are required, the support shown for this connection in the results demonstrate that when it comes to including people in the workplace with disabilities, people with disabilities may see structures or situations that are important for inclusion that people without disabilities as observers cannot. Further, the inherent belief outlined in the social model of disability is that people with disabilities need to be empowered to make their own decisions, and thus there is clear need for the involvement of employees with disabilities in the development of inclusive policy and practice. By consulting people with disabilities on changes that need to be made to create inclusion in the workplace, situational and structural barriers that may not have otherwise been identified should be addressed, creating an understanding of differences and filling the gap that is currently blocking inclusive practice. Following the social model of disability, consideration of people with disabilities empowers them, and creates disability in the workplace as a mainstream issue for all employees, which is essential to the progression of people with disabilities.

Policies and developments have previously occurred around inclusion of people with disabilities outside of the workplace. For instance the inclusion of people with disabilities in health policy and practice was established in a model called 'Equiframe' (Mannan *et al.*, 2012). This system looks at evaluating existing health policy from the perspective of vulnerable populations in African low- and middle-income countries (Mannan *et al.*, 2012). It established three principles for measuring health policies (universal, equitable, and accessible), which offered useful methodology for evaluating and comparing human rights and social inclusion across policy documents (Mannan *et al.*, 2012). In the same way, the model established here (Figure 3) could be used as a measure across

disability policies and practice in the workplace to accurately assess and evaluate all the elements of inclusion and where any given workplace sits in this model. By creating a model for inclusion in the workplace the measurement of inclusion can begin to be accurately evaluated and adjusted. Further, by accurately and systematically assessing policies in the workplace with the input of people with disabilities, the low retention rates of disability in the workplace can be addressed, and people with disabilities can become empowered to be actors in their own lives.

At a workplace, or employee level, the current study indicates that there is a gap between how people with disabilities and people without disabilities perceive the importance of situational structures for creating inclusion. This indicates that it is not an inherent belief but a misalignment of perspectives, which can be adjusted. These findings could be used to point towards different training tools and policy development around how to make 'Observers' or people without disabilities aware of the situational barriers that people with disabilities face in their work experience. Past research looking at attributional bias from teachers to children with disabilities has stated that it is essential that teachers be trained to understand the attributional information they convey to students with disabilities, and how the learning of these pupils can be enhanced by positive teacher attitudes (Woodcock & Vialle, 2011). As this study indicated different attributions being made from both people with disabilities and people without disabilities in the workplace, training to understand attributional information in the workplace context could also be relevant. For instance situational awareness training, or role-playing, could be used in organisations to help employees understand the various viewpoints and perspectives that are occurring in any given scenario in the workplace.

Conclusions

While replication and development of the current findings are important, the current study did suggest a link between attribution theory and workplace inclusion for people with disabilities for the first time. Through the use of Storms' reversal (1973) participants were placed as both Actors and

Observers and responded differently according to their viewpoint (i.e. as an Actor or Observer in Figure 1). This is important because it shows that issues with including people with disabilities in the workplace may be due to a lack of understanding and not necessarily intentional discriminatory practice. This lack of understanding or misalignment of attribution of responsibility can be addressed. Additionally, the current findings allowed the creation of a more holistic model that includes perspectives into the 'Inclusion Equation' (Figure 3). This is an important first step when considering the development of more inclusive workplace policies for those with disabilities, as it addresses perspectives and subjective experiences as important and valuable for inclusion in the workplace. As this research is an initial exploratory study, further confirmation and investigation of the model is essential, especially as information about the involvement of other factors such as type of disability is yet to be determined. If there were answers to all these questions related to the inclusion of people with disabilities, the model could be utilised as an evaluation tool for inclusive workplace policy for people with disabilities (as per 'Equiframe' (Mannan *et al.*, 2012) to create more accurate, established and inclusive policy in the workplace. The finding that people with disabilities see 'situations' in the workplace as more important than people without disabilities is indicative of the fact that people with disabilities must be considered in every aspect of development of policy and practice to empower them to feel included in the workplace.

Appendices

Appendix I
Information Sheet

What Enables Inclusion In the Workplace – An Attributional Analysis
INFORMATION SHEET

Researcher(s) Introduction
This research is conducted by Georgina Kirk and is in the field of Industrial/Organisational Psychology, contributing towards a Master of Science qualification at Massey University. This research is a short questionnaire, aiming to find out whether there are any differences in the way different groups perceive inclusion, specifically comparing disabled and non-disabled populations.

Project Description and Invitation
This project is looking at whether inclusion in the workplace is viewed in a similar way for all population groups, or whether inclusion differs for different population groups. It is possible that people with disabilities and people without disabilities view different aspects that make up inclusion as more or less important, so this project is aiming to test that. I would like to invite you to participate in this project if this is something you are comfortable to help with.

Participant Identification and Recruitment
Participants for this project were recruited by getting permission from a number of organisations to distribute this questionnaire among employees. If you wish to participate in this survey your name will remain anonymous. The project is aiming to involve around 100 participants, because this number is statistically sound. A number of questions are asked around inclusion; these questions are not intended to be of any discomfort or risk to participants as a result of participating, as they are not thought to be personal or invasive.

Project Procedures
Participants are asked to complete a short questionnaire, with 28 questions. Permission from the organisation involved has already been given, and so there should not be any conflict of interest from the employer.

Data Management
The data collected from participants answering the questionnaire will be used towards the project in order to draw general conclusions. The data will be stored anonymously as participants will never be asked their names on the questionnaire. The data will be stored and locked on a private laptop only seen by the researcher, and disposed of at the end of the project. A summary of the project findings will be given to the employer of all organisations involved, to distribute throughout the organisation.

Participant's Rights
As a participant as per the Statement of Rights you are under no obligation to accept this invitation. Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question.

Survey Access
Please click on the >> Next button below to proceed to the survey questions.

Many thanks,
Georgina Kirk

Contact information
If you wish to have more information on the project, or have any questions about the project, please do not hesitate to contact the researcher or supervisor.

Researcher

Georgina Kirk
School of Psychology
Massey University

Albany, Auckland
New Zealand
Email: georginaannekirk@gmail.com

Supervisor
Professor Stuart Carr
School of Psychology
Massey University
Albany, Auckland
New Zealand
+64 9 414-0800 ext 43108
S.C.Carr@massey.ac.nz

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 15/029. If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email humanethicsnorth@massey.ac.nz.

Appendix II

Questionnaire demographic items

| Demographic Questions |
| --- |
| What is your gender? |
| How old are you (in years)? |
| What level of education do you have? |
| What organisation do you currently work for? |
| What is your current occupation? |
| Do you participate in any volunteer work or training? Please specify |

Appendix III

Workplace inclusion follow up questions.

Workplace Inclusion Questions
Do you think there is something important to inclusion that has been left out that should be included?
In your own words what do you think is the most important thing an organisation can do to create inclusion?
Do organisations do anything that might actually block or prevent inclusion?

Appendix IV

Frequency distribution of factors in Section 1: Inclusion for A. Disposition; and B. Situation

A.

B.
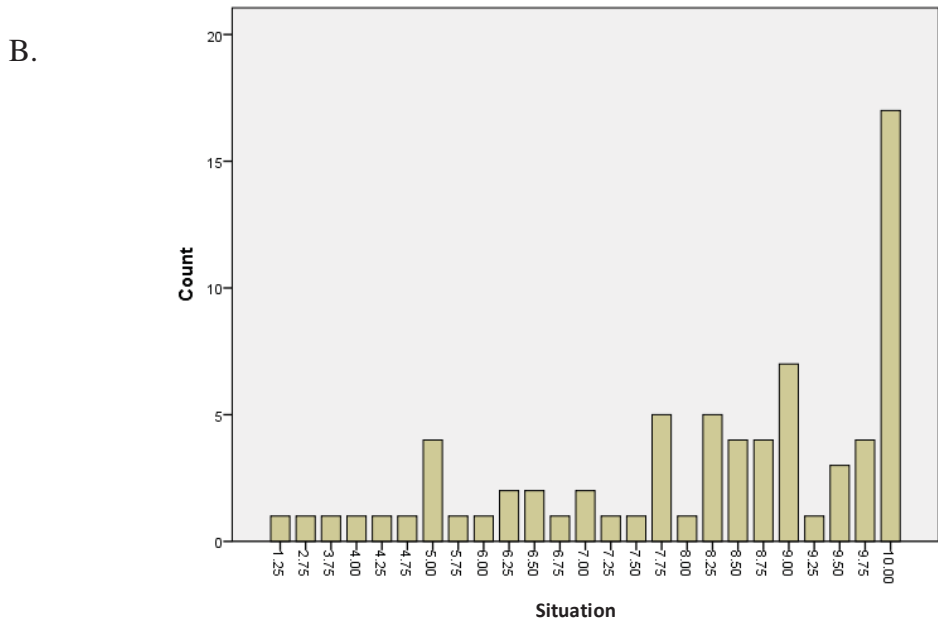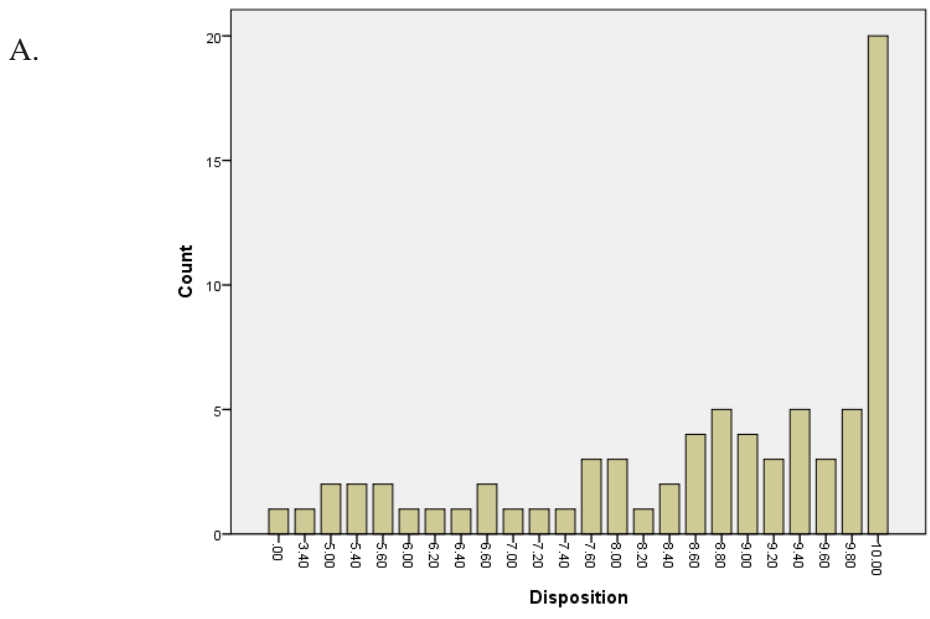
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