

University of Cape Town



School of Management Studies

**INTERVIEWER BIASES: CAN FIRST IMPRESSIONS BE CHANGED BY DISPLAYING
STEREOTYPICAL OR NON-STEREOTYPICAL BEHAVIOUR?**

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ABSTRACT

In South Africa, where there are many recruitment and selection challenges due to scarce skills and education gaps that exist within the country, the employment interview process may contribute to maintaining racial and gender gaps if decision making is discriminatory. The purpose of the research was to determine whether interviewers base decisions on stereotypical information, and whether interviewer first impressions can be influenced and changed when interviewees display stereotype congruent or incongruent behaviour in the employment interview. A total of 360 psychology students from the University of Cape Town participated in the study. Participants completed one of eight randomly assigned versions corresponding to eight experimental conditions, in which they either rated a black male, black female, white male or white female face in terms of competence, likeability and trustworthiness. Participants rated the same face again after receiving additional information portraying the presented person as either assertive or nice. Results revealed that males and females are seen as equally likeable and equally competent, although females are seen as more trustworthy than males. White and black individuals are seen as equally competent however; white females rate white individuals as more competent than black individuals. Black individuals are seen as more likeable than white individuals. White individuals rate white faces as more trustworthy than black faces, while black individuals tended to rate black and white faces as equally trustworthy. Competence and trustworthiness ratings increased when individuals displayed assertive behaviour, regardless of candidate race or gender. Likeability ratings, however, were influenced by candidate race and gender, and were in line with stereotypical assumptions about behaviour. Results thus indicate that out-group biases still exist, and that being assertive, regardless of whether it is congruent with an individual's race or gender stereotype or not, increases perceptions of competence.

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1. INTRODUCTION

Studies relating to first impressions have shown that people make specific trait inferences from very limited information about an individual, such as a stranger's face, a handshake, a smile, or even the way in which a person is dressed (Barrick, Shaffer, & DeGrassi, 2009; Stewart, Dustin, Barrick, & Darnold, 2008), and that these trait inferences can be characterised as fast, intuitive and effortless (Ambady & Rosenthal, 1992; Willis & Todorov, 2006). People need to form accurate impressions of others to predict and control not only their own environments (Bar, Neta, & Linz, 2006; Kardes, 2006), but also business environments, where accurate first impressions can influence organisational decisions such as which companies one will do business with, hiring the right candidate for the job, or deciding where to invest company money (Borkenau, Mauer, Riemann, Spinath & Angleitner, 2004).

South Africa is a multiracial, multi-ethnic, and multilingual society (Gibson & Claassen, 2010), and as a country proposes many challenges in relation to scarce skills and education gaps. For economic reasons, many skilled workers have left South Africa in search of better opportunities overseas which has led to a highly competitive recruitment environment in the race to attract and retain not only talented employees, but more specifically, skilled equity candidates (The Ideal Employer, 2006).

The employment interview, defined as a conversation designed to elicit specific information (McClelland, 1974), is the most frequently used technique for selecting employees (Dougherty, Turban & Callender, 1994), however, the interview process is vulnerable to discriminatory decision-making when interviewers are racially or gender biased (Mullins, 1982). Willis and Todorov (2006) state that certain decisions are influenced by person attributes inferred from facial appearance, and often the effects of these trait inferences on decisions may be subtle and not instinctively identified. According to McClelland (1974), knowledge of the ways in which an interviewer may,

intentionally or not, influence the replies of respondents is essential to the interpretation of those replies. In a study relating to the impact of applicant race and gender on ratings by black and white participants, it was found that black individuals tended to rate black individuals higher than white individuals, and that white individuals tended to rate white individuals higher than black individuals (Hamner, Kim, Baird & Bigoness, 1974, as cited in Mullins, 1982). Experimental research has shown that the group membership of candidates (for example race or gender group membership) is an important source of personality inferences drawn by the interviewer, if behavioural information is scarce, but that its importance decreases rapidly as soon as additional behavioural information becomes available (Krueger & Rothbart, 1988 as cited in Borkeanu et al., 2004). Individuals also communicate certain stimulus information, whether consciously or unconsciously, and these 'signals' are then interpreted by the perceiver, who then forms an initial impression of the individual (Ambady & Rosenthal, 1993). Racial stereotypes, such as white individuals being seen as more competent and trustworthy than black individuals (Bavishi, Madera & Hebl, 2010; Kao, 2000), or black individuals being seen as more likeable than white individuals, as well as gender stereotypes, such as women being more concerned with the welfare of other people, being affectionate, kind and sensitive and men being more concerned with getting ahead, being aggressive, assertive and independent, can influence the interviewers first impression of a candidate (Rule & Ambady, 2009; Timmers, Fischer & Manstead, 2003). This has wide ranging implications in a South African context, where the endeavour to ensure that companies are not only Broad Based Black Economic Empowerment compliant, but are representative in terms of their workforce profile in relation to the South African profile, remains a struggle.

The purpose of the research is to determine whether interviewers base decisions on stereotypical information. Candidates may often attempt to transform impressions interviewers may have, and thus increase their chances of being selected as the right candidate for the job, thus the study

also aims at identifying whether the interviewer's first impression can be influenced and changed when interviewees display stereotypically congruent or incongruent behaviour in the employment interview. The dissertation starts with an outline of literature related to first impressions, and is then followed by the method section which describes the research design, participants and sampling method, as well as the procedure followed and materials used. Thereafter, the results section is presented, followed by a discussion of the results and concluding comments.

2. LITERATURE REVIEW

The literature that follows outlines specific aspects of first impressions and impression formation, and looks at factors influencing these impressions, and whether or not first impressions can be changed.

First Impressions

When we notice a person in a social situation, visible details such as level of attractiveness, body language and facial expression are one source of input into the impression we form of that person. Additional information outside the focus of awareness may also have an effect, for example, irrelevant cues such as negative ideas primed in an earlier conversation, the mood we happen to be in, or the clarity of what we see may influence impressions (Sansom-Daly & Forgas, 2010). This information is then cognitively transformed into an ultimate score, or first impression, based on personal and subjective importance (Schiller, Freeman, Mitchell, Uleman, & Phelps, 2009). Impression formation, as defined by Sanders (2010, p. 148), is a “cognitive process whereby a perceiver, or person forming the impression, analyses and brings together information (i.e., physical and personality characteristics, behaviours, beliefs, personal values, etc.) to form an ‘understanding’ of an individual or target”, about whom the impression is formed. This cognitive process can be further explained by dual-process models of social cognition (Chaiken & Trope, 1999; Chen & Chaiken, 1999; Fiske & Taylor, 1991; Petty & Cacioppo, 1986) that suggest that person perception consists of both an automatic stage and a controlled stage.

Dual-Process Models of Social Cognition

Dual-process models of cognition in social psychology argue for the most part that social judgements can be formed on the basis of more and less thoughtful cognition, and propose two basic modes of processing by which these social judgements can be made – the heuristic and systematic modes of processing (Chaiken & Trope, 1999; Chen & Chaiken, 1999; Srull & Wyer, 1980).

Heuristic processing involves the use of judgemental rules, such as schemas or stereotypes, and occurs without much effort on the part of an individual, in other words, this automatic processing does not demand considerable use of an individual's cognitive resources (Chen & Chaiken, 1999). These automatic processes have typically been characterised as processing four distinguishing features: a lack of intention, of conscious awareness, and of control, as well as high efficiency in that these judgements can co-occur with other tasks, and are not vulnerable to information overload, time pressure, or distractors (Ambady, Krabbenhoft & Hogan, 2006; Peracchio & Luna, 2006). Bos and Dijksterhuis (2011) go on to define unconscious thought as a cognitive process that takes place while conscious attention is directed elsewhere, and individuals appear to be able to process larger amounts of information through unconscious thought which can, therefore, lead to relatively good decisions on complex matters.

By contrast, conscious or systematic processing requires cognitive ability and capacity, and is intentional, controllable, and within the awareness of the individual. Conscious thought processes are said to be strategic, and inherently hierarchical. Most dual-processing models predict that systematic processing is more likely when the motivation and the ability to process information carefully is high, but that intuitive, automatic processing is more likely when motivation or ability to process information is low, for example, people rely more on stereotypes when the impression formation situation becomes more complex or more demanding (Bos & Dijksterhuis, 2011; Kardes, 2006).

According to Bos and Dijksterhuis (2011), automatic processing is a bottom-up process requiring little or no use of cognitive resources, but rather relying on perceptual, visual and sensory cues (Koji & Fernandes, 2010), whereas systematic or conscious thought is a top-down process, relying on cognitive processes in the absence of visual input (Mechelli, Price, Friston & Ishai, 2004). When thinking consciously, individuals apply their cognitive resources

and rely on stereotype-congruent information, while suppressing stereotype-incongruent information. Top-down processes can result in a very different impression than bottom-up processes. When processing in a top-down manner, information that fits the schema or stereotype will be used more actively when forming an impression than information that does not fit the schema. A black person being both helpful and mildly aggressive may be perceived mainly as aggressive when the active stereotype is 'black people are aggressive'. When processing in a bottom-up manner, the same information would be processed differently, in that the black person would mainly be perceived based on the information presented; that is, helpful and aggressive. Top-down processes rely on contextual and knowledge-based information such as beliefs, expectations, or selective attention, which can alter bottom-up, or data-driven processes based on information derived from the stimulus material alone. For example, Righart and de Gelder (2008) showed that emotional context can alter our perceptions of faces, in other words, knowing the scene context can improve the recognition of facial expressions, and cause one to rely less on stereotypical information.

The Rate at Which a First Impression is Formed.

When meeting an individual for the first time, we very rapidly form an impression of them. This impression is often based on biases or stereotypical assumptions already inherent in the perceiver's mind. Subjective preferences and biases shape how we weight different types of information, and help us to determine which information is selected for additional processing (Schiller, et al. 2009). People can form remarkably similar impressions in some of their judgements of complete strangers, thus demonstrating high consensual accuracy. These judgements can be surprisingly accurate in predicting targets' self-reported traits, even when they are based on very brief interactions (Ambady et al., 2006; Ambady & Rosenthal, 1992, 1993; Borkenau et al., 2004; Rule & Ambady, 2008). According to Schmid Mast, Bangerter, Bulliard and Aerni (2011), even non-experts in interpersonal

assessment are capable of judging others' personality traits, intelligence, emotions, and motivations. Willis and Todorov (2006) found that inferences of competence based on one second of exposure to faces of electoral candidates predicted their actual success in the election. One hundred and seventeen people participated in one of Willis and Todorov's main experiments in which they were presented with a photograph of a face and then asked to make attractiveness judgements (20 participants); liking judgements (25 participants); competence judgements (23 participants); trustworthiness judgements (24 participants), and aggressiveness judgements (25 participants). Willis and Todorov found that for all five types of judgements, those made after 100-milliseconds exposure to a face were highly correlated with judgements made in the absence of time constraints, thus supporting the suggestion that people form impressions at a rapid rate (regardless of whether they are accurate or not) and that these impressions remain. It is important to note, however, that different trait judgements can have different time thresholds. For example trustworthiness in a face may be inferred earlier than competence in a face because the detection of trustworthiness is directly linked to activity in the amygdala (a subcortical part of the brain structure involved in the detection of potentially dangerous stimuli) and, according to evolutionary psychologists, is essential for human survival (Cosmides & Tooby, 1992).

How Often is a First Impression Right?

While the selection of appropriate criteria against which to evaluate predictions in the area of social and clinical psychology is difficult because most of the criteria in these areas themselves often involve judgements, for example self-report measures and third-person judgements (Ambady & Rosenthal, 1992), research by Ambady and Rosenthal (1993) indicates that information conveyed in short assessments of behaviour is surprisingly accurate, even when there is no interaction between targets and raters. The researchers showed participants video clips of teachers and then asked

participants to rate the teachers on certain criterion variables in three separate experiments, each with different exposure time (10 seconds, 5 seconds and 2 seconds, respectively). They found that there were no significant differences in the accuracy of judgements based on video clips of the three different lengths. One would believe that more information would lead to greater accuracy of judgements, however, Kardes (2006), suggests that too much knowledge and similarly, too much analysis, can actually reduce the accuracy of intuitive judgement.

According to Ambady et al. (2006), the accuracy of impression judgements is dependent on the trait being measured as well as the type of task being perceived. For example, variables that are highly observable, and more easily expressed in behaviour such as confidence and extraversion or highly affective, such as warmth, can be measured with fairly high reliabilities, while variables that are less observable and affective, such as intelligence, neuroticism and being analytical, have fairly low reliabilities, which is consistent with findings in personality and social psychology research (Kenny, Horner, Kashy & Chu, 1992; Schmid Mast et al., 2011). From a recruitment perspective, cognitive abilities are highly related to job performance, but not easily inferred accurately from first impressions.

In a study by Human and Biesanz (2011), the authors examined how psychologically adjusted individuals tend to see new acquaintances, directly comparing their levels of distinctive accuracy (accurately perceiving others' unique characteristics), normative accuracy (perceiving others as similar to the average person), and assumed similarity (perceiving others as similar to the self). They found that perceivers tended to draw on self-knowledge as a source of information when there was little information about a target, that is, assumed similarity tended to be greater than accuracy when forming an initial impression of a stranger. More specifically, well-adjusted individuals tended to be more accurate in their judgements of others when perceiving others as similar to themselves, while at the same time being able to accurately understand what others tended to be like. Schiller et al. (2009) further support

this notion and state that people assign their own subjective value to certain traits on the basis of their personal preferences and self-knowledge, but also mention that perceivers may vary in their judgements even when they may be presented with the same information about participants. This provides a critical insight into the recruitment aspect of human resources, in that it suggests that recruiters that are well-adjusted, mature individuals may judge potential candidates more accurately than recruiters that are not well adjusted individuals, as they tend to have a more accurate perception of the world and themselves (Human & Biesanz, 2011).

Factors Influencing First Impressions

Koji and Fernandes (2010) suggest that identifying factors which influence our initial impressions of others are valuable when developing an understanding of why potential first impressions are formed. Individuals may draw on stereotypical beliefs when information about the person being perceived is absent, for example using race and gender stereotypes to form a first impression. Race and gender are particularly salient categories in South Africa due to the political and social landscape that has changed in many ways since 1994 (Finchilescu & Tredoux, 2010). South Africa is a multi-group context, with individuals being part of a history of unequal and segregated forms of life that were characterised by the racism of the colonial and apartheid contexts (Durrheim, Tredoux, Foster & Dixon, 2011). There are however, many indications that the old hierarchy of white individuals as the dominant group and black, coloured, and Indian individuals as the subordinate groups, is perceived to have changed. This, and the increasing interaction between racial groups, has brought changes in intergroup attitudes and behaviours, including group identities and prejudices (Gibson & Claassen, 2010).

In South Africa, which is a country rich in history of racial conflict, apartheid laws and policies created a hierarchy of four distinct races, somewhat isolated from each other and were provided with unequal access to resources and education, such that the number of South Africans enrolled in higher education is not proportionate to the racial demographic distribution in South Africa (Finchilescu & Tredoux, 2010). Gender inequalities due to cultural norms are also prevalent, especially given that there are so many different cultures in South Africa. The challenge for recruiters is being able to source skilled black candidates for skilled positions, and work towards a racially representative labour force. Race, gender and stereotypes will be reviewed below.

Race, Gender and Stereotypes

Stereotyping means processing and generalising information about a member of a certain group according to the characteristics associated with the group and can lead to prejudice and discrimination when people assess others (Gordijn, Finchilescu, Brix, Wijnants & Koomen, 2008). Another explanation is that people judge a person's fit with a group by assessing the extent to which the individual person matches the group norm (Fiske, Cuddy, Glick & Xu, 2002; Hoegg & Lewis, 2011). Stereotypes affect people's behaviour and attitudes toward others and often lead to detrimental outcomes for the people who are the targets of stereotypes (Schmid Mast, 2005), for example, Anderson (2010) mentions an incident where a West African immigrant, who, when reaching into his pocket for his wallet, was shot to death by police officers who presumed he was reaching for a gun, perhaps basing their assumption on the association of race with crime. This is just one example of the severe consequences associations of first impressions with stereotypes can have. On the other hand, initial judgements based on common stereotypes that might possess a kernel of truth, may lead to perceptions that targets' physical characteristics are related to judgements of various attributes of their personality. This could lead to positive outcomes for individuals, for

example, attractive candidates may be more likely to be hired than unattractive candidates (Dipboye, Arvey & Terpstra, 1977). Research has shown that our expectations, which are influenced by stereotypes, affect our behaviour toward others, which in turn modifies their behaviour to confirm these expectations, creating a self-fulfilling prophecy (Ambady & Rosenthal, 1992).

Anderson (2010) suggests that race and ethnicity play a significant role in how people interact with others. Racial stereotypes, such as black individuals being less competent than white individuals (Bavishi, et al., 2010; Kao, 2000; Phelan & Rudman, 2010), or being linked more to violence and crime than white individuals (Major & Coleman, 2008) can influence first impressions. Equally so, gender role expectations, such as men being perceived as more competent than women (Phelan & Rudman, 2010), can influence how people are perceived. For example, if women behave in traditionally masculine typed manners, such as being assertive and engaging in self-promotion instead of more feminine typed manners, such as having conformed opinions, being modest and apologising more frequently, they are violating normative gender role expectations which could lead to negative consequences such as interviewers allowing impressions they have formed about a candidate to influence their interview style or questions, thus influencing the behaviour of the candidate and possibly the outcome of the interview (Dipboye, 1982; Guadagno & Cialdini, 2007; Schmid Mast, 2005). Along these lines, expectancy-violation theory (Allport, 1958 cited in Jussim, Coleman & Lerch, 1987) explains how individuals process social stereotypes. The theory predicts that when an individual's characteristics are not in line with stereotype-based expectations, perceptions of individuals will become more extreme in the direction of the violation. In other words, a positive violation leads to a more positive perception than otherwise expected, and a negative violation leads to a more negative perception than expected (Jones, Moore, Stanaland & Wyatt, 1998). It is conceivable that candidates who behave in a manner that is incongruent with stereotypes related to their race or gender

group membership would be seen as less favourable in a selection interview than candidates who behave in a way that is congruent with these same race and gender stereotypes.

According to the Employment Equity Act (1998), no person may unfairly discriminate against an employee on one or more grounds, including (specific to this study) race and gender, ethnic or social origin, colour or culture. This proves difficult for recruiters, due to the fact that one of the most widely used selection methods, the job interview, may be vulnerable to discriminatory decision-making against minority applicants when interviewers are racially biased (Mullins, 1982). According to Mullins (1982), early studies of race and ratings specifically of performance and leadership potential in flight training squadrons in one example, found that raters were likely to give members of their own racial group higher ratings, suggesting that black applicants may be unfairly discriminated against when interviewed by white interviewers. Carter (2004) further suggests that in cases where the interviewer and interviewee do not share the same ethnic identity, stereotypical assumptions are likely to be made more explicit than where the interviewer and interviewee share the same identity. In contrast Abreu (1999) conducted a study where participants had to rate Mr X without knowing his race and then rate Mr X again after his race was revealed as being black. He/she found that ratings were changed in a more positive direction once Mr X's racial group membership had been revealed. One explanation for the finding that Mr X was rated more favourable after revealing that his race was black is that participants made a conscious effort to avoid biases or stereotypes in their evaluation. Interestingly, Anderson (2010) suggests that white people attempt to appear to not notice race because of pressure to appear colour blind, but they actually do.

Deviating from racial stereotypes may, according to Phelan and Rudman (2010) result in backlash, leading members of ethnic minorities to behave defensively to avoid it. In an attempt to identify whether people who violate racial stereotypes are at risk of negative reactions, Phelan and Rudman

conducted an experiment to ascertain whether prejudicial evaluations of a black and a white rapper were present. The authors found that, although perceivers listened to the identical song, the white rapper was rated as less likeable, talented and worthy of economic support than the black rapper. This suggests that violation of racial stereotypes not only leads to backlash, but is also a stumbling block in efforts to reverse cultural stereotypes.

Stereotypes about a certain group can potentially hinder advancement as individuals may develop unconscious attitudes about the attributes of the members of such groups and as a result negatively evaluate them (Fiske & Taylor, 1991). Even though the Commission for Employment Equity Annual Report (2012) indicates that women represent 45.4% of South Africa's economically active population, there remains a significant gender difference in women's career progression, as men progress faster and advance higher than women do. Despite the benefits of promoting women, such as increased diversity which can encourage creativity and better problem solving and increased return to shareholders, women remain underrepresented in upper management with females accounting for 19.1% and males accounting for 80.9% of top management (Commission for Employment Equity Annual Report, 2012), and are often lower paid in comparison to men with the same credentials and experience. A potential reason for these differences is that traits typically associated with men are important for workplace success, which makes it more difficult for women to advance in the workplace (Schneider, Tinsley, Cheldelin & Amanatullah, 2010). Gender stereotypes can also influence first impressions. In a study by Rule and Ambady (2009), it was hypothesized that females would be rated higher on communal traits such as likeability and trustworthiness, while males might be rated higher on agentic traits, such as competence, dominance and facial maturity. Findings, however, indicated that males and females were not perceived differently in line with gender stereotypes about agency and communality. The study also found that male raters are more likely to apply gender stereotypes than female raters. Results of this study suggest that when male and female social roles

are the same, perception of traits do not significantly differ by gender. Rule and Ambady further suggest that women and men who exhibit a masculine appearance were found to be perceived as more competent leaders and more mature-faced men and women were judged as both more powerful and more likely to be the financial providers in their families in the United States of America. Contrary to this, feminine appearing women are typically found to be more attractive but are also often seen as less competent leaders, whereas masculine appearing women are typically found to be less attractive but are often seen as better leaders.

In the workplace, communal qualities are perceived to be less important and positive than agentic qualities (Bavishi et al., 2010). The gender differences in perceived communal and agentic qualities provide an explanation for findings which found that CV's labelled 'male' were rated higher than those labelled 'female'. For example, female agency and male communality are viewed negatively in job applicants and can lead to discrimination in hiring and promotion decisions, negative performance evaluations, and even sabotage. Women of colour often have to contend with another concept – that of 'double stigma' which says that being both a woman and black places added stigmatisation on a black woman (Bavishi et al, 2010). In order to counteract possible discrimination based on stereotypes, among other things, the Broad-Based Black Economic Empowerment Codes of Good Practice (2007) were created to assist disadvantaged black female employees to advance in the workplace.

In summary, research indicates that gender and racial stereotypes, among others, can create difficulties for individuals, especially in a job interview situation, where a certain amount of interviewer bias may be present, which can ultimately affect interviewee success.

Changing a First Impression

There has been much research relating to whether or not a first impression can be changed. On the surface, findings reported by Ambady and Rosenthal (1992) and Borkeanu et al. (2004) seem to indicate that first impressions cannot easily be changed due to evidence that predictions based on observations under 0.5 min in length did not differ significantly from predictions based on 5-min observations. However, research seems to indicate that explicit impressions about others are fairly easy to change, as long as the basis for the original belief is undermined, discredited, or counteracted in some way, while implicit impressions tend to be less flexible (Wyer, 2010).

According to Rydell and McConnell (2006), explicit impressions are systematic, clear, detailed and unambiguous attitudes which people can easily report and change through the use of fast-learning and rule-based reasoning (see dual-process model of cognition). Wyer (2010) suggests that explicit beliefs change when previously learned information is unambiguously false, which is supported by Rydell and McConnell's (2006) study designed to demonstrate that implicit and explicit attitudes reflect different systems of reasoning by presenting counter-attitudinal information to change explicit but not implicit attitudes. The study found that moderate amounts of counter-attitudinal information were sufficient to reverse participants' explicit judgements of a target.

Implicit impressions are uniquely predicted spontaneous behaviours, and involve automatic processing. They are implied but not stated, and are exclusively affected by associative information about the attitude object that was not available for higher order cognition (Rydell & McConnell, 2006). According to Wyer (2010), initial (stereotype-based) beliefs can often be detected using implicit measures, even when explicitly reported beliefs have changed, and that the manner in which perceivers initially categorise others can have a lasting influence on their implicit impressions. In other words,

stereotype-based impressions may continue to influence judgements even after the information on which those impressions are based has been discredited or changed. In contrast, however, further research demonstrates that implicit beliefs are more easily influenced and changed than originally suspected. Implicit out-group prejudices can be modified through a number of manipulations, including counter-stereotypic imagery (Blair, Ma, & Lenton, 2001) and exposure to positive group members (Dasgupta & Greenwald, 2001). Koji and Fernandes (2010), in their study investigating how the emotionality of visual background context influenced (perceptual) ratings of faces, indicate that context plays a significant role in determining how we evaluate people based on first impressions, and suggest that our evaluation is changeable depending on the context in which we encounter the person. Individuals may also search for or display certain characteristics depending on the context of the situation they are in, in order to influence the outcome of the perception.

Context

According to Guadagno and Cialdini (2007), individuals seek to create different impressions in different audiences based on their intended outcome of the interaction, and these intentions may vary depending on the context of the situation (e.g. presenting oneself as competent in a job interview versus at a family gathering). From the perceiver's point of view, detecting a specific trait or attribute of an individual depends on the context in which the target is being observed. For example, honesty may be easier to detect when observing a salesman than when observing a teacher (Ambady & Rosenthal, 1992).

In two experiments conducted by Koji and Fernandes (2010), a total of 60 Canadian undergraduate psychology students rated neutral faces presented on backgrounds of different valence (positive, neutral, negative) chosen from the International Affective Picture System (IAPS), and a total of 36 Canadian undergraduate psychology students rated happy, neutral and angry faces on

backgrounds of different valence (positive, neutral, negative). Faces viewed in a positive context were rated as appearing significantly more positive than when viewed in a neutral or negative context, and faces in negative contexts were rated as more negative than when viewed in a neutral or positive context. Koji and Fernandes (2010) also concluded that emotional context can influence the speed of face processing; expressions of positive emotions (such as happiness) are usually recognised faster than expressions of negative emotions. They also found that female faces presented in a neutral or positive context were rated more positively in terms of emotional or neutral facial expressions than male faces, and deduced that females may have a greater range of expression compared to males, and that contextual information may be considered less necessary to make accurate judgements of females. It may also be that females are simply better at expressing their emotions, leading participants to be less biased by the context in which the female face is seen. The authors concluded that human judgements of faces are relative and significantly influenced by contextual factors such as emotional valence. Steele (2010), supports the notion that context plays an important role in person perception. He conducted a study in which women took a difficult maths test in groups of three test takers. The results were better for women in all women groups or in groups with only one male test taker than in groups with two male test takers. The female test takers were affected by context: a background cue they may have been expected to overcome, or were unaware of. In other words, Steele (2010) assumed that women know there is a stereotype that women are not as good at maths as men. In the presence of men that stereotype gets activated and prevents women from performing to the best of their ability.

Contextual cues can be seen as priming, which involves the incidental activation of concepts and knowledge below the threshold of consciousness typically producing a prime-congruent effect on evaluations. For example, priming hostile words produces more hostile evaluations of a target and affective priming also has significant effects on judgements and social

behaviours (Sansom-Daly & Forgas, 2010). Srull and Wyer (1980) conducted a study in which subjects were asked to perform a sentence construction task in which they were exposed to instances of hostile or kind behaviour. After completing the sentence construction task, subjects participated in an impression formation task, where they read a paragraph describing the events in one afternoon of a target person's life and rated the target person on a series of trait scales. In one condition, the paragraph described behaviours which were ambiguous with respect to hostility, and in another condition ambiguous with respect to kindness. It was revealed that exposure to ambiguously presented hostile or kind behaviours activated and increased accessibility of the trait schema. Further to this, Ikegami (1993) suggests that priming effects are more pronounced and durable when prime words are negative (or ambiguous) than when they are positive. In other words, more priming was required to activate favourable trait schemata than unfavourable ones. This implies that negative stereotypes have more influence than positive stereotypes. In the absence of other contextual information it is likely that visible characteristics of people and stereotypes associated with those are used to provide a basis for judgement. Based on Ikegami's (1993) findings it would be particularly negative stereotypes that have an influence of people's evaluations of others. As outlined earlier, in South Africa race and gender are likely to be thus particularly important visible characteristics which people use to draw inferences about others (Gibson & Claassen, 2010).

The Recruitment Interview: Common Traits That Interviewers Look For

A study by Barrick, Swider and Stewart (2010) showed that initial impressions of competence, which are often based on physical appearance/attractiveness (Willis & Todorov, 2006) and perceived personality (Ambady & Rosenthal, 1992), predicted performance and employment decisions. Participants were asked to rate candidates in a mock interview situation. The same candidates were then interviewed by accounting firms a week later. In both the mock interview and the real interview, an initial impression formed during the rapport

building stage at the beginning of the interview was related to interviewer evaluations during the structured interview indicating that even in an interview situation impressions are formed quickly. Competence is important for both social and economic interactions and encompasses traits such as intelligence, reliability and effectiveness (Hoegg & Lewis, 2011). Often, little or no prior behavioural observations exist on which the interviewer can base an evaluation of a candidate. Interviewers may thus draw at least partly on stereotypes in order to evaluate candidates (Guadagno & Cialdini, 2007). Stereotype research has found that individuals use stereotypes to draw inferences about individuals belonging to particular groups on three dimensions, which include competence, likeability, and trustworthiness (Hoegg & Lewis, 2011; Rule & Ambady, 2008). Research related to ratings on the three dimensions is reviewed below.

Fiske et. al (2002) and Brambilla, Rusconi, Sacchi and Cherubini (2011) suggest that judgements of others and the self can be measured on two basic content dimensions of warmth and competence, which are critical for individuals' survival in the social world. The warmth dimension addresses individuals' perceptions of others' intentions towards them and whether these intentions are beneficial or harmful, while the competence dimension addresses whether the perceived intentions of others can be adequately accomplished. Brambilla et al. (2011) define the competence dimension as comprising of traits such as intelligence, competence, skill and ability, and suggest that the warmth dimension can be further defined in terms of sociability traits (i.e. friendly, warm, likeable) and morality traits (i.e. sincere, honest, trustworthy).

Competence

Interviewer perceptions of competence can be influenced by certain stereotypes relating to the race and gender of the interviewee. Women who have been found to be competent, dominant and non-traditional (e.g. career women, feminists, athletes) are often judged harshly on social and interpersonal dimensions as they appear to be more masculine and they are seen as acting too much like men (Curhan & Overbeck, 2008). Fiske et al. (2002) found that people in low status groups, such as disadvantaged black individuals and traditional, likeable, dependent women (e.g. housewives) were perceived as being low on competence but high on likeability and trustworthiness, while other research indicates white individuals and men being viewed as more competent relative to racial minorities and women (Biernat & Kobrynowicz, 1997; Foschi, 2000; Major & Coleman, 2008; Martin & Durrheim, 2006; Pratto & Pitpitan, 2008; Ridgeway, 2001). It is thus hypothesised that an interview candidate's gender affects how competent he or she is seen by an interviewer:

H1: Males as seen as more competent than females.

In addition, the interaction between candidate race and impressions of competence would result in white candidates being seen as more competent than black candidates by interviewers:

H2: White individuals are seen as more competent than black individuals.

Often, positive stereotypes about members of these minority groups' likeability and trustworthiness arise when they display low competence and high warmth, as they do not pose a competitive threat to the majority group, although the trade-off is that they are then seen as incompetent. In a study by Kao (2000), focus groups were conducted with a group of 63 high school students in Chicago in order to determine descriptions of group images and race and gender stereotypes that existed. The study found that white individuals and black individuals perceived white individuals as more academically competent than black individuals. This conflicts with what

Durrheim et al. (2011) and Mullins (1982) found, which was that individuals are in fact more likely to give members of their own race higher ratings. It is thus hypothesised that an interaction between candidate race and gender and interviewer's gender would occur:

H3: White females rate white individuals as more competent than black individuals.

Phelan and Rudman (2010) state that individuals who violate stereotypes often suffer social and economic penalties, particularly when behaviour is incongruent with race and gender stereotypes. Branscombe and Smith (1990) indicate that when black individuals behaved in a stereotypically congruent manner, they were seen as less competent than stereotype-incongruent targets. Similarly, Subich (1984) postulates that when males and females behaved in ways that were incongruent with their gender role/stereotype, they were judged to be less competent than those who behaved in gender typical manners. According to Buttner and McEnally (1996), female job applicants who use assertive influence tactics are evaluated less positively than those who are more rational, and the reverse is true for males. This indicates that when males behave in an assertive manner, this behaviour is congruent with the stereotypical beliefs about men, and they will thus be evaluated more positively. For example, white male executives who expressed anger (which can communicate strength or competence) were conferred higher status and an even higher salary than those who did not express anger (Livingston & Pearce, 2009). Based on these findings, it was further hypothesised that:

H4: Impressions of competence for males increase when males display stereotypically congruent behaviour (being assertive), while the opposite holds true for females.

Likeability

Likeability suggests caring and sociability (Hoegg & Lewis, 2011) and is an important factor on which to build trust. Vonk (1996) suggests that negative information involving liking often has a greater impact on impression formation

than positive information, and that negative impressions are often more difficult to change (Rydell & McConnell, 2006). In line with this, Weisbuch, Ambady, Clarke, Achor and Veenstra-Vander Weele (2010) found that people who exhibit more positive behaviour may be judged as more likeable than those who behave in a negative manner.

A dilemma often faced by women in the professional world is the double bind between being perceived as competent or as likeable (Fiske et al., 2002; Schneider et al., 2010). Both qualities are important for success but the incongruity of typical female roles (warm, nurturing) with characteristics perceived necessary for professional success (independence, assertiveness) means that women are either seen as likeable, but incompetent, or as competent, but unlikeable (Livingston & Pearce, 2009). In a study by Branscombe and Smith (1990), 192 participants were asked to examine photographs and trait descriptions of job candidates and then asked to rate the job candidates on these traits. In order to assess the impact of the use of gender and race stereotypes, the trait descriptions were manipulated, so that they were either stereotype-consistent, stereotype-inconsistent, or neutral. It was found that males and females differed in their likeability ratings, and that females were rated as more likeable than males and were seen as more likely to possess stereotype-consistent traits such as being dependent or emotional. They also found that black individuals were rated as more likeable than white individuals.

Juodvalkis, Grefe, Hogue, Svyantek and DeLamarter (2003) conducted a study to investigate interactions between gender stereotypes (for jobs), applicant gender, and communication styles used by male and female applicants during a job interview. Subjects were asked to read a job description and then listen to audio tapes of applicants exhibiting a dominant (assertive), submissive (nice), or neutral communication style. The subjects then rated the applicants on five dimensions, one of which was likeability. The study found that gender inappropriate behaviour, such as men behaving in a

submissive manner, was penalised, while findings showed that for women, gender inappropriate behaviour, such as being assertive, resulted in decreased perceptions of likeability, but could improve overall impressions made by interviewers thus making them more desirable to hire. Similarly, when individuals behave in a manner that is incongruent with racial stereotypes, impressions of likeability decrease (Phelan & Rudman, 2010).

In light of the literature reviewed above, the following hypotheses were derived:

H5: Females are seen as more likeable than males.

H6: Black individuals are seen as more likeable than white individuals.

H7: Impressions of likeability for black females increase when black females display stereotypically congruent behaviour (being nice).

Trustworthiness

Trustworthiness involves morality and honesty (Hoegg & Lewis (2011), and evolutionary psychologists theorise that detection of trustworthiness is critical for human survival (Todorov, Pakrashi & Oosterhof, 2009; Willis & Todorov's, 2006) and a key ingredient in successful social interactions (Zaidel, Bava & Reis, 2003). According to Todorov et al. (2009), judgements of honesty made after brief exposures are able to accurately reflect information specific to trustworthiness, and untrustworthy-looking faces evoke a stronger response of feelings of trustworthiness than trustworthy-looking faces.

Gibson and Claassen (2010) showed that assessments of trustworthiness are related to racial group memberships. In an effort to assess changes in interracial reconciliation attitudes in South Africa between 2001 and 2004, they compared the results of two studies that used an interracial reconciliation measure. Their measure included traditional indicators of prejudice, such as 'they are untrustworthy', 'I don't believe what they say', and 'South Africa would be a better place without any of them'. They found that black individuals

were significantly less 'reconciled' than white individuals and that the attitudes of black individuals towards white individuals had become more negative whereas the opposite was true for white individuals' perceptions of black individuals. Their study also indicated that over 50% of black individuals felt white individuals were untrustworthy, while 29% of white individuals felt the same way about black individuals, signifying that both groups had feelings of untrustworthiness towards members of the other racial group. Simpson, McGrimmon and Irwin's (2007) study supports this finding. Their research revealed that trusting behaviour was significantly higher within race categories than across race categories.

Differences in evaluations of trustworthiness have also been found for males and females. According to Chamberlin (2000) and Subich (1984), behaviours considered to contribute to perceptions of trustworthiness include behaviours seemingly correspondent with the feminine gender role stereotype such as friendliness, cheerfulness, sincerity and warmth, as opposed to masculine behaviours such as assertiveness, dominance and analytical ability, thus implying that females are seen as more trustworthy than males (Simpson et al., 2007). In Subich's (1984) study, 80 male and 86 female participants were asked to listen to an audiotape of a counselling interaction in which the male or female counsellor behaved in a stereotypically masculine or feminine way. They then rated the counsellor on impressions of trustworthiness, among other traits. Results indicated that, regardless of stereotypically congruent or incongruent behaviour, the feminine counsellor role was seen as more trustworthy than the male counsellor role, indicating that typically feminine traits elicit perceptions of trustworthiness more than masculine traits do. Based on the literature, it is hypothesized that candidate's gender would have an effect on how interviewers rate the trustworthiness of these candidates:

H8: Females are seen as more trustworthy than males.

Fiske et al. (2007) and Weisbuch et al. (2010) suggest that (behavioural and) stereotypical incongruencies can lead to perceptions of dishonesty, which in turn is associated with negative impressions because discrepancies imply deceit. Glaeser, Laibson, Scheinkman and Soutter (2000) support this notion and suggest that individuals that are closer socially tend to rate each other higher on trustworthiness and that trustworthiness declines when individuals belong to different racial groups.

H9: White individuals rate white individuals as more trustworthy than black individuals, while black individuals rate black individuals as more trustworthy than white individuals.

Further to this, it is expected that individuals belonging to different racial groups, although rating each other as less trustworthy than members of their own group, would improve perceptions of trustworthiness if the person being perceived behaves in a stereotype-congruent manner:

H10: White individuals rate black individuals as more trustworthy when black individuals display stereotypically congruent behaviour (being nice) and less trustworthy when they display stereotypically incongruent behaviour (being assertive).

Summary of hypotheses

In summary, the following hypotheses will be tested in the results that follow:

H1: Males are seen as more competent than females.

H2: White individuals are seen as more competent than black individuals.

H3: White females rate white individuals as more competent than black individuals.

H4: Impressions of competence for males increase when males display stereotypically congruent behaviour (being assertive), while the opposite holds true for females.

H5: Females are seen as more likeable than males.

H6: Black individuals are seen as more likeable than white individuals.

- H7: Impressions of likeability for black females increase when black females display stereotypically congruent behaviour (being nice).
- H8: Females are seen as more trustworthy than males.
- H9: White individuals rate white individuals as more trustworthy than black individuals, while black individuals rate black individuals as more trustworthy than white individuals.
- H10: White individuals rate black individuals as more trustworthy when black individuals display stereotypically congruent behaviour (being nice) and less trustworthy when they display stereotypically incongruent behaviour (being assertive).

3. METHOD

This chapter describes the study's design, the procedure and materials employed as well as the sample procedure and sampling used.

Research Design

The research design was experimental in order to test the influence of the independent variables, namely the gender, race, and stereotypical behaviours of a fictitious interview candidate being rated by participants on participants' impressions of the person's likeability, competence and trustworthiness. An artificial setting was selected for maximum control over external influences and higher internal validity. In order to analyse interactions between the independent variables, a 2 (candidate gender) x 2 (candidate race) x 2 (stereotypical behaviours – assertive/nice) cross-sectional between subjects factorial design was used.

Participants and Sampling

Participants in the study were undergraduate psychology students from the University of Cape Town (UCT), who were required to participate in research for course credits. Each of these students has to participate in a certain number of research hours per psychology undergraduate course taken. As indicated in Table 1, a minimum of 272 participants were required (34 per group x 8 groups) in order to gain a power of .80 at a significance level of 5% and effect size of $r = .25$. The required sample size was determined using the statistical software package G*Power (version 3.1.5). A convenience sampling approach was taken by inviting a total of 1535 undergraduate psychology students via email to participate in the study. The reason for choosing convenience sampling was easy accessibility to the Psychology student base, as well as the potential that students would respond more willingly. In total, 453 surveys were started, with 75 participants not continuing past the first page of the survey. These responses were disregarded. Eighteen response sets were partially incomplete and thus were disregarded too, leaving 360

complete responses. This equates to an overall response rate of 29.5% and a valid response rate of 23.5% respectively.

Table 1

Breakdown of Minimum Participants Required (n = 272) versus Actual Participants Obtained

Stimulus Characteristic			Stimulus Behaviour			
Race	Gender	Required	Assertive Obtained	Required	Nice Obtained	
Black face	Male	34 participants	46 participants	34 participants	47 participants	
	Female	34 participants	49 participants	34 participants	48 participants	
White face	Male	34 participants	47 participants	34 participants	43 participants	
	Female	34 participants	40 participants	34 participants	40 participants	

The average age of participants was 20.14 years, with a standard deviation of 2.29. The minimum age of participants was 17 years, and the maximum age was 37 years. Table 2 lists the sample characteristics. Participants comprised of 55.3% white, 19.2% black, 14.7% coloured, 5.8% Indian participants, and 5% preferred not to answer. Participants were also mainly female, accounting for 80% of the participant group, with white female participants being over represented (44.17%), while male participants made up 19.4% and 0.6% preferred not to answer.

Table 2
Sample Characteristics

Gender	Race	Frequency	Percent
Female	Black	52	14.44
	Coloured	43	11.94
	Indian	19	5.28
	White	159	44.17
	Prefer not to answer	15	4.17
	TOTAL:		288
Male	Black	17	4.72
	Coloured	10	2.78
	Indian	2	0.56
	White	39	10.83
	Prefer not to answer	2	0.56
	TOTAL:		70
Prefer not to answer	Prefer not to answer	1	0.28
	White	1	0.28
	TOTAL	2	0.56

Of the 360 respondents, the majority of participants were first year psychology students ($n = 159, 44.2\%$) followed by second year students ($n = 110, 30.6\%$), third year students ($n = 89, 24.7\%$) and Honours students ($n = 2, 0.6\%$).

Procedure and Materials

A survey was set up using Qualtrics Survey software. In order to ensure anonymity of participants, a link at the end of the Qualtrics survey was created to a separate survey tool, Zoomerang, where students could input their student number so that student research participation points (SRPP) could be allocated to each student accordingly. This ensured that it was not possible to link a student's student number to questionnaire responses. The link to the Qualtrics survey was then posted on the SRPP Vula project site. Vula is a web-based content management tool used by all students at the University of Cape Town. Access to psychology courses' Vula sites was obtained from the relevant departmental secretaries, so that points could be loaded for each student that participated in the study. A communication was created indicating

the name and purpose of the study, time needed to take the study (no more than one hour), and how many SRPP points would be granted (one point). An automatic email was then sent to each student containing a link to the survey. Participation was voluntary. Upon clicking on the link, the participant was directed to the survey landing page, where instructions on how to complete the questionnaire were displayed. A photograph of either a black male, black female, white male or white female was then displayed as indicated by the photographs in Figure 1 below:



Figure 1. Images Presented to Research Participants

The faces in the four photographs were kept the same size and had neutral expressions, with no beards, moustaches, earrings, eyeglasses or visible make-up – which, according to Krendl, Magoon, Hull and Heatherton (2011), can influence a persons' judgement of another, especially if it is directly related to the perceivers' evaluative goals. For example, Dipboye et al. (1977) found that male recruiters were more willing to hire a physically attractive candidate for a supervisory position than an equally qualified unattractive candidate, thus adding to the variety of interviewer biases that already exist.

Photographs were obtained from the www.faceresearch.org website, which allows the use of standard photographs from a database for research purposes. The website includes a facility to merge two faces to generate a 'new' face. This was done to ensure the faces viewed by participants were in no way familiar to participants. The background of each photograph was then adjusted to be plain white. The photographs were randomly assigned to participants, which was made possible by using a randomisation function in the survey software. Each participant was allocated to one of the conditions outlined in Table 3 and shown one of the faces.

Table 3
Survey Version Distribution (n = 360)

Condition	Frequency	Percent
Black Female Assertive	49	13.6
Black Female Nice	48	13.3
Black male Assertive	46	12.8
Black Male Nice	47	13.1
White Female Assertive	40	11.1
White Female Nice	40	11.1
White Male Assertive	47	13.1
White Male Nice	43	11.9

The participants were then asked to rate the person in the photograph on 21 traits related to likeability, competence and trustworthiness on a 7-point Likert type scale, with 1 being 'Not at All' and 7 being 'Highly'. The scale was derived from a scale used by Jones et al. (1998) in their study assessing salesperson credibility. This particular scale was used due to the fact that the face validity as well as the reliability of the instrument as observed and measured by Cronbach's alpha in Jones et al.'s study had been high ($\alpha = .92$ for trustworthiness, $\alpha = .86$ for likeability, and $\alpha = .95$ for expertise/competence). Each trait consisted of a number of subscale items as indicated in Table 4 below:

Table 4
Scale Items per Factor

Factor	Item
Competence	Expert
	Experienced
	Trained
	Reliable
	Knowledgeable
	Qualified
	Skilled
	Competent
	Authoritative
	Reputable
	Powerful
Likeability	Friendly
	Likeable
	Respectable
	Understanding
Trustworthiness	Honest
	Dependable
	Trustworthy
	Credible
	Open-Minded
	Good

After completing their initial ratings, subjects were prompted to proceed to the next screen. Here the same photograph that had been presented at the beginning of the questionnaire was displayed again, with a fictitious name (Cathy, Peter, Bongji, or Thabo). Candidates' names were kept the same length and were typical of the culture of the face being displayed. In addition, participants were presented with a scenario describing an excerpt from an alleged selection interview with the person in the photograph (as the interview candidate). Depending on the condition the candidate either displayed assertive or nice behaviour in the interview excerpt. For an example see Figure 2 and Figure 3 below, and Appendix A for the remainder of the scenarios presented.



Imagine the person above, Cathy, has arrived for a job interview and is shown to the meeting room. Cathy then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Cathy replies, "That's no problem at all, I'm not in a hurry", although Cathy actually has another meeting to attend and the delay will mean her being late.

The interview proceeds and the interviewer then moves on to discuss salary expectations. Cathy's current salary is market related, and when the interviewer asks what Cathy's salary expectations are, she replies, "I am happy with whatever you are willing to offer me".

How did Cathy come across to you?

Figure 2. Interview Excerpt – 'Nice' Condition for White Female Face.



Imagine the person above, Cathy, has arrived for a job interview and is shown to the meeting room. Cathy then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Cathy replies, "That is unfortunate, I need to be at another meeting so must leave at the time agreed, I cannot be late".

The interview proceeds and the interviewer then moves on to discuss salary expectations. Cathy's current salary is market related, and when the interviewer asks what Cathy's salary expectations are, she replies, "An additional R2000 more than my current salary would meet my expectations, as I will need to pay additional travel expenses".

How did Cathy come across to you?

Figure 3. Interview Excerpt – 'Assertive' Condition for White Female Face.

A pilot study was conducted as a manipulation check to determine whether the additional information provided to participants about the face they had viewed was interpreted correctly. The main reason for conducting the pilot study was to ascertain whether the scenarios of job applicants displaying assertive or nice behaviour were perceived as assertive and nice, respectively by participants. Eight participants, who were colleagues and family members of the researcher, were each given one different paper version of the full survey. There were eight different versions. Only the responses to the manipulation check for the assertive or nice section of the survey were analysed. See Appendix B for pilot survey details and structure.

The manipulation check consisted of four items: participants had to indicate on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much) how emotional, assertive, nice and unemotional they perceived the candidate. The mean score for the 'assertive' rating was $M = 4.75$ ($SD = .50$, $n = 4$) across all faces in the assertive condition. Due to the fact that the average score for 'assertive' was 1.75 points above the mid-point of 3 on a 5 point scale, participants viewed the faces as being assertive after reading the condition portraying assertive behaviour, which is the desired result. The mean score for assertive in Table 5 was also much higher than the mean ratings on the emotional and the nice items providing further evidence that the scenario was understood as intended.

Table 5
Descriptive Statistics for Assertive condition (n = 4)

	Assertive	Emotional	Nice	Unemotional
Mean	4.75	1.75	2.50	3.75
Standard Deviation	.50	.96	.58	1.89
Minimum	4.00	1.00	2.00	1.00
Maximum	5.00	3.00	3.00	5.00

The mean score in Table 6 for 'nice' in the scenario describing a nice person was $M = 4.50$ ($SD = .58$, $n = 4$) across all faces, which was 1.50 points above the mid-point of 3 on a 5 point scale, while the mean score for 'assertive' was $M = 1.50$ ($SD = .58$, $n = 4$). This indicates that the average score for 'nice' was much higher than that for 'assertive', demonstrating again that the manipulation was effective.

Table 6
Descriptive Statistics for Nice condition (n = 4)

	Assertive	Emotional	Nice	Unemotional
Mean	1.50	4.00	4.50	1.25
Standard Deviation	.58	.00	.58	.50
Minimum	1.00	4.00	4.00	1.00
Maximum	2.00	4.00	5.00	2.00

Tests to determine whether the scores were statistically different were not run as the sample size was too small, however, the differences in the means were so pronounced that it was assumed that the scenarios did fulfil their intended purpose. The same items as in the pilot study also followed the faces in the main study to enable manipulation checks.

Participants were then required to click 'next'. This took them to the next screen, where they repeated the same likeability, trustworthiness and competence rating exercise that they completed after having viewed the photograph for the first time. Demographic variables that were included at the end of the questionnaire were race, gender, age and year of study. Permission for the study was granted by the Commerce Ethics in Research committee prior to collecting data, as well as by the Director of Student Affairs to use students as participants. The main ethical concern was that of participant anonymity, which was ensured by storing the responses and student numbers on separate survey software with no direct link between the two sets of information.

Data Analysis

All analyses were conducted using the Statistical Package for the Social Sciences, version 20. The reliability for the scales relating to trustworthiness, likeability and competence were measured using Cronbach's alpha. The validity of the scales was tested using principal component analysis. Descriptive statistics for the scales were also determined. Hypotheses 1 – 3, 5, 6, 8 and 9 were tested using independent-samples t-tests, while hypotheses 4, 7 and 10 were tested using paired-samples t-tests. An analysis was also done on the participants' race and gender to see if there was any relationship between the participant and the person being rated. Analyses were also conducted separately for cross-group (e.g. white females rating black females) and same group ratings (e.g. white females rating white females). For the purposes of analysis in this study, black individuals include black Africans, while coloured and Asian's were excluded from the analyses.

4. RESULTS

This chapter first describes the validity and reliability of the scale used in the study, followed by the manipulation check results of the main study and finally, a detailed analysis of each of the ten hypotheses.

Scale validity

As the 21-item rating scales comprising items related to Competence, Likeability and Trustworthiness were administered to each participant twice (before and after a scenario describing the presented face as either nice or assertive) two principal component analyses (PCA) with orthogonal rotation (varimax) were conducted to determine whether the items would load on three distinct factors (competence, trustworthiness and likeability) as had been assumed. According to Kaiser (1960), only factors with eigenvalues greater than one should be considered relevant. Using the Kaiser criterion, three components emerged for the 'before' as well as for the 'after' items. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis as superb for the 'before' and 'after' set of scores, KMO = .93 in both cases (Field, 2009). Bartlett's test of sphericity $\chi^2 (210) = 4852.25, p < .001$ (before) and $\chi^2 (210) = 6368.39, p < .001$ (after) indicated that correlations between the items was sufficiently large for PCA to be appropriate. Table 7 indicates the eigenvalues and proportion of variance that each component explains:

Table 7
Eigenvalues and % Variance for the Competence, Trustworthiness and Likeability Items Before and After the Manipulation

Component	Rotation Sums of Squared Loadings BEFORE		Rotation Sums of Squared Loadings AFTER	
	Eigenvalue	% of Variance	Eigenvalue	% of Variance
1	5.24	24.94	6.26	29.80
2	5.12	24.40	5.09	24.21
3	2.95	14.04	3.74	17.80

As Table 8 shows item loadings suggest that component 1 represents competence, component 2 likeability, and component 3 represents trustworthiness.

Table 8
Item Loadings on Initial Rotated Principal Component Analysis (highest loadings shaded in grey).

Component	Item Before	Component Loadings			Item After	Component Loadings		
		C 1	C 2	C 3		C 1	C 2	C 3
Competence (C 1)	Expert	0.73	-0.04	0.40	Expert	0.81	-0.02	0.27
	Experienced	0.74	0.29	0.06	Experienced	0.87	0.05	0.16
	Trained	0.80	0.23	0.14	Trained	0.89	0.09	0.11
	Reliable	0.24	0.17	0.79	Reliable	0.29	0.32	0.73
	Knowledgeable	0.59	0.26	0.41	Knowledgeable	0.77	0.21	0.30
	Qualified	0.79	0.19	0.12	Qualified	0.83	0.11	0.16
	Skilled	0.71	0.28	0.27	Skilled	0.84	0.25	0.22
	Competent	0.55	0.25	0.49	Competent	0.66	0.23	0.43
	Authoritative	0.71	-0.20	0.15	Authoritative	0.57	-0.60	0.28
	Reputable	0.38	0.15	0.58	Reputable	0.49	0.48	0.38
Powerful	0.71	-0.02	0.14	Powerful	0.69	-0.34	0.25	
Likeability (C 2)	Friendly	-0.05	0.80	0.27	Friendly	-0.08	0.91	0.07
	Likeable	0.16	0.73	0.26	Likeable	0.03	0.85	0.15
	Respectable	0.31	0.45	0.57	Respectable	0.31	0.62	0.34
	Understanding	0.07	0.63	0.51	Understanding	-0.01	0.88	0.10
Trustworthiness (C 3)	Honest	0.05	0.29	0.76	Honest	0.26	-0.24	0.73
	Dependable	0.13	0.12	0.84	Dependable	0.17	0.37	0.73
	Trustworthy	0.13	0.22	0.82	Trustworthy	0.24	0.37	0.78
	Credible	0.37	0.16	0.73	Credible	0.41	0.24	0.69
	Open-minded	0.25	0.66	0.14	Open-minded	0.20	0.70	0.17
	Good	0.23	0.31	0.60	Good	0.21	0.72	0.33

As can be seen from Table 8, most items expected to be belonging to a dimension loaded on one component. Exceptions formed the items 'reliable' before and after, 'reputable' before, 'respectable' before, 'open-minded' before and after, and 'good' before and after. These items were removed to

increase the construct validity. A PCA with varimax rotation was repeated without the problematic items, using the revised subscale items per trait. The results are listed in Table 9 with KMO = .92 in both the before and after case (Field, 2009), and Bartlett's test of sphericity χ^2 (153) = 4027.62, $p < .001$ (before) and χ^2 (153) = 5419.03, $p < .001$ (after) indicating that correlations between the items remained sufficiently large for PCA to be appropriate.

Table 9
Revised Principal Component Analysis

	Item Before	Component Loadings			Item After	Component Loadings		
		C 1	C 2	C 3		C 1	C 2	C 3
Competence (C 1)	Expert	0.74	-0.03	0.39	Expert	0.81	-0.08	0.28
	Experienced	0.74	0.28	0.05	Experienced	0.87	0.00	0.18
	Trained	0.80	0.21	0.13	Trained	0.89	0.04	0.13
	Knowledgeable	0.61	0.25	0.38	Knowledgeable	0.77	0.14	0.32
	Qualified	0.80	0.18	0.11	Qualified	0.84	0.06	0.17
	Skilled	0.72	0.27	0.23	Skilled	0.85	0.18	0.25
	Competent	0.57	0.26	0.44	Competent	0.66	0.16	0.46
	Authoritative	0.71	-0.20	0.12	Authoritative	0.53	-0.66	0.24
Powerful	0.71	-0.01	0.09	Powerful	0.66	-0.41	0.23	
Likeability (C 2)	Friendly	-0.04	0.81	0.26	Friendly	-0.03	0.91	0.13
	Likeable	0.17	0.75	0.23	Likeable	0.07	0.83	0.21
	Understanding	0.10	0.64	0.50	Understanding	0.04	0.87	0.16
	Open-minded	0.26	0.66	0.12	Open-minded	0.24	0.69	0.23
Trust-worthiness (C 3)	Honest	0.07	0.30	0.77	Honest	0.23	-0.31	0.71
	Dependable	0.15	0.13	0.85	Dependable	0.19	0.32	0.76
	Trustworthy	0.16	0.24	0.84	Trustworthy	0.25	0.30	0.81
	Credible	0.39	0.18	0.73	Credible	0.41	0.18	0.71
	Reliable	0.27	0.19	0.77	Reliable	0.29	0.25	0.76

A number of items had cross-loadings, which, according to Tabachnick and Fidell (2001) is when an item loads at .32 or higher on two or more components. The authors suggest that the cross-loading items should be dropped from the analysis if there are several strong loaders (.50 or better) on

each component, and each component consists of at least three items. For this reason, 'knowledgeable', 'competent' and 'credible' were removed as cross-loadings occurred both on the before and the after scale for these items, and the PCA was rerun. The Kaiser-Meyer-Olkin (KMO) measure remained superb for both the 'before' and 'after' set of scores in the final PCA, KMO = .89 in both cases. Table 10 indicates the revised eigenvalues and proportion of variance that each component explains:

Table 10
Eigenvalues and % Variance Statistics

Component	Rotation Sums of Squared Loadings BEFORE		Rotation Sums of Squared Loadings AFTER	
	Eigenvalue	% of Variance	Eigenvalue	% of Variance
1	4.21	28.06	4.74	31.57
2	2.60	17.34	3.83	25.52
3	3.27	21.76	2.76	18.42

Bartlett's test of sphericity $\chi^2 (105) = 3053.52, p < .001$ (before) and $\chi^2 (105) = 4290.57, p < .001$ (after) indicate that correlations between items were sufficiently large for PCA to be appropriate. Table 11 shows the final component loadings after varimax rotation.

Table 11

Final Principal Component Analysis (Rotated Solution – Varimax Rotation)

	Item Before	Component Loadings			Item After	Component Loadings		
		C 1	C 2	C 3		C 1	C 2	C 3
Competence (C 1)	Expert	0.76	-0.00	0.37	Expert	0.82	-0.04	0.27
	Experienced	0.75	0.30	0.05	Experienced	0.87	0.03	0.17
	Trained	0.81	0.24	0.12	Trained	0.90	0.07	0.12
	Qualified	0.81	0.21	0.09	Qualified	0.85	0.09	0.16
	Skilled	0.70	0.29	0.21	Skilled	0.84	0.22	0.22
	Authoritative	0.73	-0.19	0.14	Authoritative	0.55	-0.64	0.28
	Powerful	0.72	-0.00	0.10	Powerful	0.68	-0.38	0.26
Likeability (C 2)	Friendly	-0.05	0.81	0.27	Friendly	-0.06	0.91	0.10
	Likeable	0.16	0.75	0.23	Likeable	0.04	0.84	0.21
	Understanding	0.09	0.64	0.50	Understanding	0.02	0.88	0.12
	Open-minded	0.25	0.68	0.10	Open-minded	0.22	0.70	0.22
Trustworthiness (C 3)	Honest	0.09	0.31	0.78	Honest	0.24	-0.28	0.75
	Dependable	0.17	0.13	0.86	Dependable	0.19	0.36	0.76
	Trustworthy	0.17	0.25	0.83	Trustworthy	0.25	0.34	0.78
	Reliable	0.28	0.19	0.78	Reliable	0.30	0.29	0.75

The validity of the scale was thus sufficient, with high loadings of each item on to the relevant component after cross-loading items had been removed. Seven items remained for competence, 4 items for likeability and 4 items for trustworthiness.

Scale reliability

The reliability of the three final scales was determined using Cronbach's alpha. The alpha coefficients and minimum/maximum corrected item-total correlations for each of these can be seen in Table 12. All scales produced high reliability statistics, thus indicating that the scale consistently measures the construct(s) it is intended to measure, which in this case are competence, likeability and trustworthiness.

Table 12
Reliability Statistics

	Cronbach's Alpha	No of Items	Minimum item-total correlation	Maximum item-total correlation
Competence Before	.89	7	.60	.75
Competence After	.91	7	.61	.81
Likeability Before	.80	4	.50	.70
Likeability After	.90	4	.67	.84
Trustworthiness Before	.89	4	.72	.79
Trustworthiness After	.83	4	.48	.76

Item-total correlations for all items for the before and after condition can be viewed in Appendix C.

Descriptive statistics

Average scores were calculated based on the 7-item competence, 4-item likeability and 4-item trustworthiness scales. The average scores for each trait are displayed in Table 13.

Table 13
Descriptive Statistics for the Competence, Likeability and Trustworthiness Scales Before and After the Manipulation (n = 360).

	Competence		Likeability		Trustworthiness	
	Before	After	Before	After	Before	After
Mean	3.89	4.23	4.36	4.35	4.59	4.69
Standard Deviation	1.04	1.22	1.02	1.46	1.09	1.14
Minimum	1.00	1.29	1.50	1.00	1.25	1.00
Maximum	7.00	7.00	7.00	7.00	7.00	7.00

Scores for competence, likeability and trustworthiness were above average in all cases, with scores for competence and trustworthiness increasing after the manipulation, and scores for likeability decreasing after the manipulation, albeit by a minimal amount. Average ratings for competence showed the biggest difference for before and after the manipulation.

Manipulation check

To ensure that the manipulation worked in the main study, participants were also requested to rate whether the interview candidate came across as assertive or nice after reading the scenario depicting either assertive or nice behaviour of the interview candidate. The results are indicated in Table 14 and 15 below:

Table 14
Descriptive Statistics for the Assertive Condition

	Assertive <i>n</i> = 182	Nice <i>n</i> = 182
Mean	4.09	2.43
Standard Deviation	.92	.96
Minimum	1.00	1.00
Maximum	5.00	5.00

Although certain participants rated the faces as not at all assertive for the assertive condition, this only accounted for 1.6% of the total ratings (*n* = 3), while ratings of 4 and 5 (very much) accounted for 80.8% in total (*n* = 147). Ratings of faces as 'nice' in the assertive condition accounted for 52.7% of scores when combining ratings of 1 and 2 (not at all).

Table 15
Descriptive Statistics for the Nice Condition

	Assertive <i>n</i> = 178	Nice <i>n</i> = 178
Mean	1.93	4.23
Standard Deviation	1.07	.91
Minimum	1.00	1.00
Maximum	5.00	5.00

Participant's ratings of faces as 'nice' for the nice condition indicate that ratings of 1 (not at all) and 2 accounted for 75.8% of scores (*n* = 135), while only 2.8% of participants rated the faces as 'assertive' for the nice condition (*n* = 5). Eighty percent of participants rated the faces as being very nice when given the nice condition (*n* = 143), while less than 1% of participants rated the

face as assertive ($n = 1$). These results indicate that the manipulation check that was also employed in the main study produced the desired results and that the assertive condition was met by high ratings of assertiveness by participants, and that the faces in the nice condition were rated as nice. Figures 4 and 5 are graphic representations of these results.

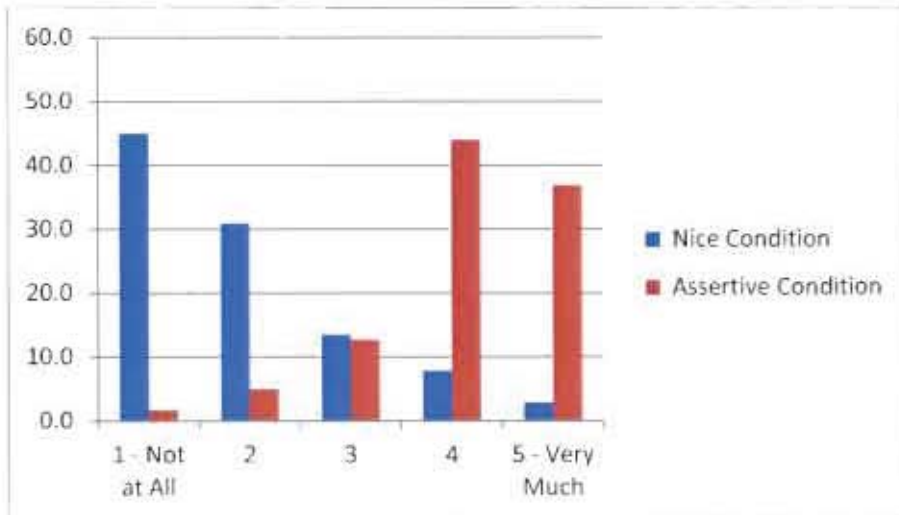


Figure 4. Assertiveness Ratings in Both Conditions

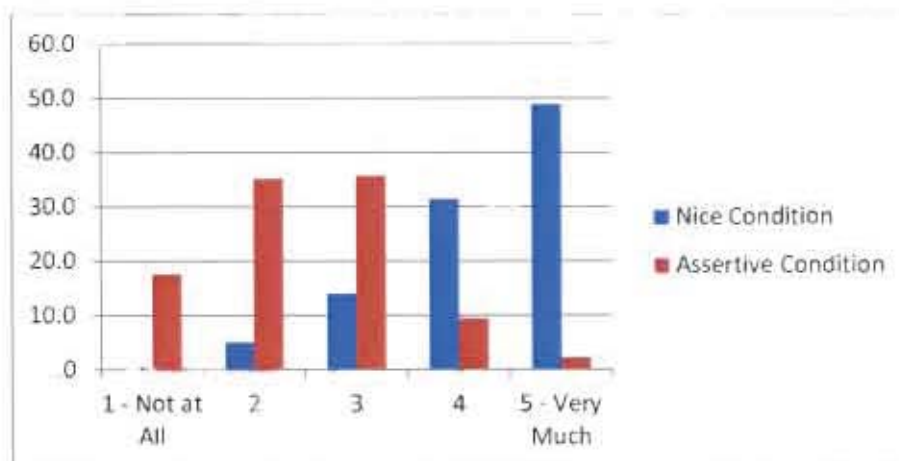


Figure 5. Niceness Ratings in Both Conditions

Analysis of the hypotheses

In order to test hypotheses 1, 2, 5, 6 and 8, independent-samples t-tests were run. Hypotheses 1, 5 and 8 were analysed using the same independent variable, namely the gender of the candidate. In order to counter alpha inflations, Bonferroni correction was used to adjust the significance level of $p < .05$ to account for the risk of finding significant results when there are none. As three independent-samples t-tests were conducted, the significance level was adjusted to $p < .017$. Similarly, the independent variable (candidate race) for hypotheses 2 and 6 was common, thus using Bonferroni correction resulted in an adjusted significance level of $p < .025$ for these two hypotheses.

Hypothesis One: Males as seen as more competent than females.

The average competence scores for male and female candidates were compared. The score was merely based on the presentation of a face without further contextual information. The before condition was selected as this score did not present a confounding variable that could influence the outcome of the score. On average, participants rated females ($n = 177$, $M = 3.88$, $SD = 1.07$, $Min = 1$, $Max = 6.57$) and males ($n = 183$, $M = 4.02$, $SD = .93$, $Min = 1.43$, $Max = 7$) as similarly competent. Levene's Test showed no significance ($F = .84$, $p = .36$), thus indicating that the variances in both groups are likely to be equal. The t-test was not significant $t(358) = .09$, $p = .93$, thus it can be concluded that there is no significant difference between the means of the two samples, which does not support the hypothesis that males are seen as more competent than females.

Hypothesis Two: White individuals are seen as more competent than black individuals.

Scores of competence for white faces and black faces were compared using the before condition. The race of the face being rated was used as the independent variable and the competence rating as the dependent variable. Table 16 shows the descriptive statistics for the t-test results:

Table 16
Descriptive Statistics for Competence Scores of Black and White faces.

	Competence Score – black faces	Competence Score – white faces
n	190	170
Mean	3.94	3.83
Standard Deviation	.94	1.13
Minimum	1.00	1.43
Maximum	6.43	7.00

Levene's test showed that the variances for competence in the two racial groups were different ($F = 5.85, p = .016$). The t-test, however, (adjusted for non-equal variances) was not significant $t(330.002) = 1.04, p = .301$, which indicates that the null hypothesis cannot be rejected and that black individuals and white individuals are seen as equally competent.

Hypothesis Three: White females rate white individuals as more competent than black individuals.

The average score of competence for white faces was compared to the average score for competence of black faces when the participant was a white female. This was done using an independent-samples t-test. On average, white females rated black faces ($n = 78, M = 3.93, SD = .81, Min = 2.29, Max = 6$) as more competent than white faces ($n = 81, M = 3.61, SD = 1.05, Min = 1.43, Max = 5.71$). Levene's test for equality of variances indicated significance in the variances ($F = 5.28, p < 0.05$), meaning that equal variances were not assumed. The difference in the means between black faces and white faces when rated by white females was significant with $t(149.90) = 2.15, p < .05$. The results indicate that white females rate white individuals as being more competent than black individuals, thus supporting the hypothesis, however, the effect size was minimal ($r = .17$), explaining only about 10% of the variance.

Hypothesis Four: Impressions of competence for males increase when males display stereotypically congruent behaviour (being assertive), while the opposite holds true for females.

The average score of competence for male candidates before the assertiveness manipulation was provided and the average competence score for males after receiving the manipulation were compared using a paired-samples t-test ($n = 93$). On average, participants rated males as more competent after they had received the assertive condition ($M = 4.65$, $SD = 1.09$) than before ($M = 3.88$, $SD = 1.07$). The difference in the means between competence before and after the assertive condition was significant with $t(92) = 7.18$, $p < .001$ and effect size $r = .60$ thus accounting for roughly 25% of the variance. In other words, participants' ratings of competence in males were significantly higher after receiving the assertive condition than before.

The paired-samples t-test was repeated ($n = 89$), this time to compare participants' ratings of competence for female candidates, after reading a scenario in which the female candidate was portrayed in an assertive manner. Results indicate that participants rated females as more competent after they had received the assertive condition than before. The difference in the means between competence before ($M = 3.94$, $SD = 1.13$) and after the assertive condition ($M = 4.77$, $SD = 1.16$) was significant with $t(88) = -7.56$, $p < .001$, with an effect size of $r = .63$. In other words, participants' ratings of competence in females increased after receiving the assertive condition, indicating that gender does not influence competence ratings, and males and females are both seen as more competent when behaving in an assertive manner.

Hypothesis Five: Females are seen as more likeable than males.

The average scores for male and female faces for likeability were compared, using the before condition. On average, participants rated females ($n = 177$, $M = 4.46$, $SD = 1.08$) as being more likeable than males ($n = 183$, $M = 4.26$, $SD = .95$). Levene's test showed that the variances for likeability could be assumed to not be equal for participants who had rated either male or female faces ($F = 4.34$, $p < .05$). The t-test for assumed unequal variances was not significant with $t(348.331) = 1.89$, $p = .06$ and effect size $r = .10$. This means that the hypothesis was not supported and that males and females are seen as equally likeable.

Hypothesis Six: Black individuals are seen as more likeable than white individuals.

Likeability scores for black and white faces were compared in order to determine whether there was a difference between the means for both racial groups. The before condition was used to ensure that no confounding variables would influence the results. Table 17 indicates the mean, standard deviation and minimum and maximum values of likeability for both white and black faces:

Table 17
Descriptive Statistics for Likeability Scores of Black and White Faces

	Likeability Score – black faces	Likeability Score – white faces
n	190	170
Mean	4.60	4.09
Standard Deviation	.93	1.06
Minimum	2.00	1.50
Maximum	6.75	7.00

On average, participants rated black faces as more likeable than white faces. Levene's test was not significant ($F = 3.43$, $p = .07$), indicating that equal variances are assumed. The t-test showed significance $t(358) = 4.89$, $p < .01$

in other words the average scores of the two racial groups were significantly different, while the effect size was small $r = .25$. These results suggest that the null hypothesis can be rejected and that black faces are seen as more likeable than white faces.

Hypothesis Seven: Impressions of likeability for black females increase when black females display stereotypically congruent behaviour (being nice), but decrease when they display stereotypically incongruent behaviour (being assertive).

Table 18
Descriptive Statistics for Likeability Scores of Black Females Before and After Receiving the Nice and Assertive Condition

	Nice Condition		Assertive Condition	
	Likeability Score Before	Likeability Score After	Likeability Score Before	Likeability Score After
n	48	48	49	49
Mean	4.78	5.27	4.75	3.80
Standard Deviation	1.04	.97	.91	1.40
Minimum	2.00	2.75	2.25	1.00
Maximum	6.75	7.00	6.50	7.00

According to results indicated in Table 18, participants rated black females as being more likeable after receiving the nice condition than before receiving it, and less likeable after receiving the assertive condition than before receiving it. The difference in the means between likeability before and after the nice condition was significant with $t(47) = 3.56$, $p < .01$ with a medium effect size $r = .46$ thus accounting for roughly 9% of the variance. The results indicate that participants' ratings of likeability in black females were significantly higher after receiving the nice condition. The difference in the means between likeability before and after the assertive condition was also significant $t(48) = 5.86$, $p < .001$ and effect size $r = .65$.

Hypothesis Eight: Females are seen as more trustworthy than males

The average scores for trustworthiness for males and females were compared (before manipulation) using an independent samples t-test. Participants rated females ($n = 177$, $M = 4.86$, $SD = 1.08$) as more trustworthy than males ($n = 183$, $M = 4.33$, $SD = 1.05$). Levene's Test for equality of variances was not significant ($F = .35$, $p = .56$), thus equal variances of trustworthiness for males and females can be assumed. The t-test showed significance $t(358) = 4.76$, $p < 0.001$ and represented a relatively small effect $r = .24$ thus supporting the hypothesis that females are seen as more trustworthy than males.

Hypothesis Nine: White individuals rate white individuals as more trustworthy than black individuals, while black individuals rate black individuals as more trustworthy than white individuals. Two independent-samples t-tests were conducted using the trustworthiness ratings of the before condition. In one t-test, only ratings of white participants were included in the analysis, while in the other, only ratings of black participants were included. White participants rated white face ($n = 103$, $M = 4.79$, $SD = 1.02$) as more trustworthy than black faces ($n = 96$, $M = 4.50$, $SD = 1.06$). Levene's Test for equality of variances was not significant ($F = 1.03$, $p = .31$), thus equal variances of trustworthiness for black and white faces were assumed. The t-test, however, showed significance $t(197) = 1.99$, $p < 0.05$. The difference represented a relatively small effect $r = .14$. Interestingly, black participants rated white faces ($n = 29$, $M = 4.75$, $SD = 1.31$) as more trustworthy than black faces ($n = 40$, $M = 4.62$, $SD = 1.16$). Levene's test was not significant ($F = 1.19$, $p = .28$), thus equal variances were assumed, while the t-test did not show significance either, $t(67) = .44$, $p > .05$ and $r = .05$. Based on these results it can be inferred that white individuals rate white faces as significantly more trustworthy than black faces, while black individuals tended to rate black and white faces as equally trustworthy.

Hypothesis Ten: White individuals rate black faces as more trustworthy when black individuals display stereotypically congruent behaviour (being nice) and less trustworthy when they display stereotypically incongruent behaviour (being assertive).

Table 19
Descriptive Statistics for Trustworthiness Scores of Black Faces Before and After Receiving the Nice and Assertive Condition

	Nice Condition (n = 52)		Assertive Condition (n = 44)	
	Trustworthiness Score Before	Trustworthiness Score After	Trustworthiness Score Before	Trustworthiness Score After
Mean	4.58	4.70	4.40	4.85
Standard Deviation	1.03	1.05	1.10	1.15
Minimum	2.50	2.00	2.25	2.50
Maximum	7.00	7.00	6.50	7.00

According to the results indicated in Table 19, white participants rated black faces as being more trustworthy after receiving the nice condition than before receiving it, and more trustworthy after receiving the assertive condition than before receiving it. The difference in the means between trustworthiness before and after the nice condition was not significant with $t(51) = .81, p = .42$ with an effect size $r = .11$, while the difference in the means between trustworthiness before and after the assertive condition were, however, significant $t(43) = 2.98, p < .05$, effect size $r = .41$. The results indicate that white participants' ratings of trustworthiness for black faces did not significantly increase after receiving the nice condition, but did significantly increase after receiving the assertive condition. These results do not support the hypothesis.

5. DISCUSSION

The following section provides a summary and interpretation of the main results; limitations and recommendations for future research; and concluding comments.

Summary and interpretation of results

The present study set out to investigate whether race and gender bias still exists, particularly in a recruitment and selection context in South Africa. Candidates have to ensure that they are seen as top talent in order to be selected, especially due to the competitive job market in South Africa which gives rise to a low supply of jobs and a high demand for these same jobs. Race and gender biases were assessed with regards to perceived competence, likeability and trustworthiness. The study also explored whether these first impressions can be changed when candidates display stereotype congruent or incongruent behaviour. Upon reviewing the relevant literature, ten hypotheses were derived. This section presents a discussion of all results found, under headings relevant to the ten hypotheses.

Impressions of competence

The results of hypothesis one, which assessed whether males were perceived as being more competent than females, indicated that males and females were in fact seen as equally competent. This contradicts prior literature which indicates that minority groups or out-groups, such as women and black individuals, are often viewed as being less competent than individuals belonging to majority or in-groups, such as men and white individuals (Bavishi et al., 2010; Fiske et al., 2002; Phelan & Rudman, 2010). These findings may differ between America and South Africa due to the fact that black individuals are the majority in South Africa in terms of demographics, while they are a minority group in America. The finding could further be explained by the fact that the average age of participants was 20 years, with most participants falling into the age group often labelled as Generation Y, consisting of

individuals born between the mid-1980's and 2000 (Smith, 2010). This age group is characterised as being more educated than previous generations, with women completing more education than men, as well as being socialised with an expectation of equality and a strong social conscience (Eisner & Harvey, 2009). For this reason, participants likely had more liberal views and were less likely to discriminate between men and women. Although Generation X and Generation Y is an American concept based on the social and political history of the country, it may be relevant in a South African context, more specifically in relation to the Generation Y definition, as the youth have more access to technology and education. However, even though South Africa is moving towards racial integration, this may only hold true for certain more previously advantage racial groups than others. Another explanation for this finding is that women tend to rate women more favourably than men would rate women (Rudman, 1998). As three quarters of the participants in the study were in fact female, this could possibly have contributed to higher competence ratings for women than would be expected.

The second hypothesis stated that white individuals are seen as more competent than black individuals, which was not supported by the study's findings. The study found that white individuals and black individuals were rated as equally competent. Due to the fact that white individuals represented more than half of the total number of participants in the study, while black individuals represented only a fifth of participants, this finding can be explained by the fact that white individuals attempt not to notice race because of social pressures to appear as non-racist and racially reconciled (Anderson, 2010). This is supported by evidence that white South Africans are in fact more racially reconciled than black South Africans (Gibson & Claassen, 2010) and consequently did not rate members of the opposite racial group differently to members of the same racial group.

Hypothesis three stated that white females would rate white individuals as more competent than black individuals. Durrheim et al. (2011) and Kao (2000) indicate that people tend to give members of their own race higher ratings

than those that do not belong to the same race group. The results of the analysis indicated that this did in fact hold true, and that white females tended to rate white faces as being more competent than black faces. This finding proves interesting when compared to the findings of the previous hypothesis. White individuals are seen as equally competent to black individuals, but when analysing whether the race of the participant influenced these ratings, competence impressions were significantly different for white individuals' rating individuals of the same race than individuals of a different race. This finding can be explained by Social Identity Theory and has implications for interview candidates in that interviewer bias in favour of members of the same racial group still exists and may potentially influence whether members of different racial groups are hired or not. The Commission for Employment Equity Annual Report (2012) supports this finding and indicates that 60.4% of promotions and 48.8% of recruitments accrued to white individuals, thus demonstrating that recruitment of disadvantaged individuals remains a challenge for South Africa.

The fourth hypothesis stated that impressions of competence for males would increase when males displayed stereotype congruent behaviour by being assertive, with the opposite holding true for females. This hypothesis was partially supported, in that males were rated as more competent after displaying assertive behaviour, but females were also seen as more competent after being displayed as assertive. These findings indicate that regardless of whether such behaviour is stereotype congruent or incongruent, assertive behaviour is associated with perceived competence and is not influenced by gender. This is similar to findings by Branscombe and Smith (1990). These findings also have implications for interview candidates, particularly female interview candidates, in that they provide support that female individuals should behave in an assertive manner in order to appear more competent in an interview. However, Rudman (1998) cautions that this increased perception of competence may negatively influence hiring decisions made by the interviewer. This becomes an unfortunate 'catch-22' for females

candidates – if they behave assertively, they are viewed as being more competent, but if they are viewed as more competent, they may in fact decrease their chances of being hired. To counteract this, applicants can, however, increase their chance of being selected by utilising impression management strategies, such as displaying personality attributes that are in line with the specific position that is being recruited for. For example, a candidate may display assertive behaviour when being interviewed for a sales representative position which requires one to actively pursue new business for the organisation (Buttner & McEnally, 1996). Joudvalkis et al. (2003) supports this notion and suggests that women in the interview process would benefit more if they behaved in a manner that was stereotype congruent with the occupation as opposed to stereotype congruent with gender expectations. In this study, however, the type of job was not made available to participants and this could thus not be tested.

Impressions of likeability

Hypothesis five stated that females are seen as more likeable than males. Interestingly, this hypothesis was not supported, with results indicating that males and females were in fact seen as equally likeable. This is contradictory to research by Schneider et al. (2010) which indicates that impressions of likeability may differ based on an individual's race or gender, for example, likeability is often associated with more feminine typed characteristics and behaviours such as warmth, communality, and being caring and helpful as opposed to traditionally masculine behaviours such as being independent, assertive and self-reliant. Juodvalkis et al., (2003) however, found in their study to investigate the interactions between gender stereotypes for jobs, applicant gender, and the communication styles used by male and female applicants during an interview, that even when male and female applicants were viewed as equally likeable, participants still wished to hire a male candidate over the female candidate as male applicants were seen as more ideal applicants for academic positions. A reason for male and female candidates being perceived as equally likeable could be that participants may

have needed additional information to be able to make an informed decision, as Willis and Todorov (2006) suggest that different trait judgements can have different time thresholds. Trustworthiness in a face, for example, may be inferred earlier than competence or likeability in a face. Vonk (1996) suggests that dislikeable behaviour is more informative than likeable behaviour because it can have more serious consequences, thus implying that there is no need for people to make decisions on likeability as it may seem that likeability judgements do not have an immediate effect on the perceiver, and are somewhat irrelevant. From a recruitment and selection perspective, traits such as competence may receive preference over judgements of likeability as the interviewer is essentially looking for a candidate that can perform in the job and secondly fits into the organisation culture.

Hypothesis six stated that black individuals are seen as more likeable than white individuals. On average, participants rated black faces as being more likeable than white faces. These findings thus supported the hypothesis. According to Schneider et al. (2010), individuals often have to choose whether to be perceived as competent or likeable, but tend to be rated more favourably on one of these two traits. Stereotypes relating to perceptions of competence indicate that white individuals are generally perceived as being more competent than black individuals (Martin & Durrheim, 2006), which would then lead to the assumption that if white individuals are seen as more competent than black individuals, they would be seen as less likeable than black individuals (Bavishi et al., 2010). Another reason for these findings could again be the fact that the majority of participants were white, and due to these participants being more racially reconciled than black participants (Gibson & Claassen, 2010), they may feel members of an opposite racial group do not pose a competitive threat to their current in-group status (Phelan & Rudman, 2010).

The seventh hypothesis that was assessed stated that impressions of likeability for black females would increase when black females displayed stereotypically congruent behaviour by being nice, but decrease when they

displayed stereotypically incongruent behaviour by being assertive. This hypothesis was supported by the results of hypothesis six indicating that black individuals are generally seen as being likeable. In addition, the findings in the results analysis indicated that differences in likeability ratings were significantly more positive after participants received the nice condition and significantly more negative after receiving the assertive condition. Evidence in the literature indicating that female applicants who behave in stereotypically gender-appropriate manners are considered more likeable and more desirable to hire than those behaving in stereotypically incongruent manners (Juodvalkis et al., 2003; Schneider et al., 2010) generated further support for hypothesis seven. This implies that race and gender stereotypes relating to likeability impressions remain and that conforming to these stereotypes is necessary in order for interview candidates to be perceived in such a way that it will enhance their opportunities to be successfully selected.

Impressions of trustworthiness

Hypothesis eight stated that females would be seen as more trustworthy than males. This hypothesis was supported by the results. According to Todorov et al. (2009), perceptions of trustworthiness are a reliable and accurate predictor of general evaluations of faces, and response times of judgements of trustworthiness are faster than judgements of other personality traits such as competence and likeability. Trustworthiness is often strongly correlated to perceptions of attractiveness, specifically for females (Subich, 1984; Zaidel et al., 2003), which could have impacted on the perceptions of trustworthiness being more positive for females than males. Stereotypical male behaviour, such as being assertive and efficient, relates to impressions on the competence dimension, while characteristics relating to warmth, such as being trustworthy, friendly and kind, are often associated with female individuals (Brambilla et al., 2011). This supports the findings suggesting that females are perceived as more trustworthy than males, as they generally display behaviour pertaining to the warmth dimension.

Hypothesis nine stated that white individuals would rate white individuals as more trustworthy than black individuals, while black individuals would rate black individuals as more trustworthy than white individuals. The results indicated partial support for the hypothesis, in that white individuals rated white individuals as more trustworthy than black individuals, while black individuals tended to rate black and white individuals as equally trustworthy. These findings are interesting and somewhat surprising, especially since literature indicates that individuals trust in-group members more than out-group members and that those individuals on the negative side of inequality, i.e. black individuals in South Africa have more reason to be less trusting of their fellow humans than do people on the positive side of inequality (Simpson et al., 2007). In a South African review of racial reconciliation attitudes based on data from 2004, Gibson and Claassen (2010) report that 52.7% of black participants believed white individuals to be untrustworthy, with only 29% of white individuals believing the same about black individuals. When compared to the findings of Gibson and Claassen (2010), the findings of this study (black individuals' perceive white and black individuals as equally trustworthy) indicate that perhaps racial reconciliation is improving, particularly as racial integration increases and previously disadvantaged individuals enter the mainstream economy and have more access to the same educational and other benefits that white individuals traditionally had access to. It also suggests that perhaps the younger generation of South Africans have more in common with each other in terms of shared values and viewpoints that are emerging amongst the South African youth (Smith, 2010).

The final hypothesis stated that white individuals would rate black individuals as more trustworthy when black individuals displayed stereotype congruent behaviour by being nice and less trustworthy when they display stereotype incongruent behaviour by being assertive. This hypothesis was not supported in that white participants' did not increase their perceptions of trustworthiness of black individuals when black individuals displayed nice behaviour, but did

perceive black individuals as more trustworthy when they were assertive. A reason for this could be that people who are nice could be seen as not being genuine, and consequently not trustworthy. If someone is assertive one could think at least one knows where one stands, thus perceptions of trustworthiness would likely be better than if the individual was perceived as nice. Glaeser et al. (2000), in an attempt to measure levels of trust between individuals of different racial groups in an American sample, found that 44.2 percent of white individuals agreed that 'most people can be trusted', compared to 16.1 percent of black individuals. The authors also report that trust is much higher among wealthier more educated individuals and that college graduates are more than 30 percent more likely to answer yes to the trust question than high school dropouts. These findings support the findings of Gibson and Claassen (2010) as well as the current study in that perceptions of trust are higher among white individuals as they are more racially reconciled than black individuals in South Africa, and suggest that education level and participant race influence perceptions of trustworthiness in members of an opposite racial group.

Limitations and Recommendations

Certain limitations relating to the study were found. The pilot study, which served as a manipulation check to ascertain whether participants viewed the assertive and nice conditions as intended, was based on only eight responses, which could have posed a risk for the external validity of the main study. The manipulation check was repeated in the main study, though, and it was found that participants understood the scenarios correctly here, too.

Secondly, for convenience purposes, students were chosen to participate in the study as opposed to real recruiters. Students may not necessarily have been exposed to actual recruitment procedures or been in the position of a recruiter, thus responses may have been different to what actual recruiters responses would have been, as recruiters would likely be more trained and experienced in detecting certain personality traits and identifying candidate

suitability based on first impression inferences. It is recommended that for future research actual recruiters are targeted as sample participants. This would ensure more realistic opinions relating to first impressions of recruitment candidates, and may prove interesting when compared to the results of this study that included students as participants.

Thirdly, although the sample size was sufficient, participants in the sample were predominantly white with regard to race, and female with regard to gender. This could have affected the results in that responses of white or female individuals were compared to a relatively smaller sample of black or male individuals, that, had the sample been larger, may have produced different results when making race and gender rating comparisons. For this reason, effect sizes were included in the results, as they are not dependent on the sample size. Although it is difficult to ensure even distribution of participants in terms of racial group membership, it may be valuable to conduct similar studies where the racial group is predominantly black, especially as black individuals represent the demographic majority in South Africa.

A fourth limitation is the use of software that at times may be unreliable. When reviewing the responses that needed to be excluded it was apparent that a number of the surveys that had been started were incomplete from the same question number on the same day. It was also noted that the interface between the two software packages used to record responses and student numbers for course credits was at times faulty, leading to certain student numbers not being recorded. This may have had an effect on the response rate, if students that had already participated reported this to other students or chose not to complete the questionnaire again after a failed attempt.

Finally, participants were exposed to faces of hypothetical interview candidates for a brief period of time, and were given limited information about the candidate in the excerpt. The decision to give participants limited information and exposure to candidates' faces was based on literature, which

indicates that judgements of others are made rapidly and are highly likely to be accurate with minimal exposure to a face. However, in real-life first impressions are based on a complex process consisting of a number of attributes, and thus the artificial setting may have influenced the results in that certain pieces of vital information, such as body language cues, were absent. Future research using video clips to simulate the interview situation may produce more realistic impressions of candidate personality traits, as verbal and non-verbal cues would be available to the perceiver.

6. CONCLUSION

First impressions are often lasting, and being aware of the impression one is creating in the mind of the perceiver can assist job seekers in ensuring they are selected as the right candidate for the job. Race and gender biases still exist in South Africa and stereotypes relating to race and gender are still used by perceivers to make certain assumptions about others, especially when little or no information is available. Behaving in a manner that is inconsistent with stereotypical behaviours can have an effect on whether an individual is selected for a job. Applicants need to be aware of this and ensure that their behaviour is aligned accordingly, and recruiters need to be aware of this so that they can try to avoid making snap judgements.

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APPENDIX A

White Male – ‘Nice’ condition



The candidate above, Peter, has arrived for a job interview and is shown to the meeting room. Peter then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Peter replies, "That's no problem at all, I'm not in a hurry", although Peter actually has another meeting to attend and the delay will mean him being late.

The interview proceeds and the interviewer then moves on to discuss salary expectations. Peter's current salary is market related, and when the interviewer asks what Peter's salary expectations are, he replies, "I am happy with whatever you are willing to offer me".

White Male – 'Assertive' condition



The candidate above, Peter, has arrived for a job interview and is shown to the meeting room. Peter then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Peter replies, "That is unfortunate, I need to be at another meeting so must leave at the time agreed, I cannot be late".

The interview proceeds and the interviewer then moves on to discuss salary expectations. Peter's current salary is market related, and when the interviewer asks what Peter's salary expectations are, he replies, "An additional R2000 more than my current salary would meet my expectations, as I will need to pay additional travel expenses".

Black Female – 'Nice' condition



The candidate above, Bongi, has arrived for a job interview and is shown to the meeting room. Bongi then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Bongi replies, "That's no problem at all, I'm not in a hurry", although Bongi actually has another meeting to attend and the delay will mean her being late

The interview proceeds and the interviewer then moves on to discuss salary expectations. Bongi's current salary is market related, and when the interviewer asks what Bongi's salary expectations are, she replies, "I am happy with whatever you are willing to offer me".

Black Female – 'Assertive' condition



The candidate above, Bongi, has arrived for a job interview and is shown to the meeting room. Bongi then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Bongi replies, "That is unfortunate, I need to be at another meeting so must leave at the time agreed, I cannot be late".

The interview proceeds and the interviewer then moves on to discuss salary expectations. Bongi's current salary is market related, and when the interviewer asks what Bongi's salary expectations are, she replies, "An additional R2000 more than my current salary would meet my expectations, as I will need to pay additional travel expenses".

Black Male – 'Nice' condition



The candidate above, Thabo, has arrived for a job interview and is shown to the meeting room. Thabo then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Thabo replies, "That's no problem at all, I'm not in a hurry", although Thabo actually has another meeting to attend and the delay will mean him being late.

The interview proceeds and the interviewer then moves on to discuss salary expectations. Thabo's current salary is market related, and when the interviewer asks what Thabo's salary expectations are, he replies, "I am happy with whatever you are willing to offer me".

Black Male – ‘Assertive’ condition



The candidate above, Thabo, has arrived for a job interview and is shown to the meeting room. Thabo then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Thabo replies, "That is unfortunate, I need to be at another meeting so must leave at the time agreed, I cannot be late".

The interview proceeds and the interviewer then moves on to discuss salary expectations. Thabo's current salary is market related, and when the interviewer asks what Thabo's salary expectations are, he replies, "An additional R2000 more than my current salary would meet my expectations, as I will need to pay additional travel expenses".

APPENDIX B

UNIVERSITY OF CAPE TOWN



Informed consent for participation in an academic research study

Section of Organisational Psychology

Dear Respondent,

You are invited to participate in an academic research study conducted by Jade (de Beer) Keogh, a Masters student from the Section of Organisational Psychology at the University of Cape Town. This study aims at identifying people's impressions of others based on photographs that are presented.

Please note the following:

- All responses you provide will be treated as strictly confidential.
- All responses are anonymous, however, your student number is required in order to allocate Student Research Participation points. This will be stripped out immediately upon receipt of your response as it serves no purpose within the findings. If your student number (optional) is not provided, no SRP points will be allocated.
- You may choose not to participate or withdraw from participation at any time should you wish.
- Please answer the attached questionnaire as completely and honestly as possible. This should not take more than 10 minutes of your time.
- The results of the study will be used for academic purposes only, and may be published in an academic journal. Upon request you will be provided with a summary of the findings for this research.
- Please feel free to contact my study supervisor, Ines Meyer (021 650 3829; ines.meyer@uct.ac.za) if you have any questions, concerns or comments regarding the

ORGANISATIONAL PSYCHOLOGY MASTERS' RESEARCH CONFIDENTIAL
QUESTIONNAIRE

INSTRUCTIONS:

Once you have read through this instruction page you will be required to click on the **NEXT** button to proceed with the questionnaire.

The screen that follows will display a photograph of an individual for you to view. You will then be asked to rate the photograph you have just viewed on a number of criteria, using a 1 – 7 scale, where 1 represents 'Not at All' and 7 represents 'Highly'.

Once you have completed the ratings, you will need to click **NEXT**. A description of a scenario as well as two photographs will then appear. Once you have read through the scenario, click **NEXT** to proceed.

You will then be asked to assess the scenario based on certain criteria, using a 1 – 5 scale, where 1 represents 'Not at All' and 5 represents 'Very Much'. Click **NEXT** to continue.

The screen that follows will display the same photograph of an individual which you rated in the first exercise. You will then be asked to rate the photograph again based on the same criteria and rating scales.

--- >>>>>

Mrs Jade (de Beer) Keogh (DBRJAD001)

Cell: 084 727 8895

NEXT



INSTRUCTIONS:

- Please complete all questions
- Please answer the questions by placing an X in the appropriate block
- Click NEXT once completed

Please rate the person you just saw in the photograph on each trait that follows using a 1 – 7 scale:

	Not at All						Highly
	1	2	3	4	5	6	7
Open-minded							
Experienced							
Trained							
Qualified							
Good-looking							
Likeable							
Skilled							
Competent							
Good							
Reputable							
Powerful							
Friendly							
Knowledgeable							
Respectable							
Understanding							
Honest							
Dependable							
Trustworthy							
Credible							
Expert							
Authoritative							
Attractive							
Reliable							



The candidate above, Bongi, has arrived for a job interview and is shown to the meeting room. Bongi then waits 10 minutes for the interviewer to arrive. The interviewer apologises for being late to which Bongi replies, "That is unfortunate, I need to be at another meeting so must leave at the time agreed, I cannot be late".

The interview proceeds and the interviewer then moves on to discuss salary expectations. Bongi's current salary is market related, and when the interviewer asks what Bongi's salary expectations are, she replies, "An additional R2000 more than my current salary would meet my expectations, as I will need to pay additional travel expenses".

INSTRUCTIONS:

- Please complete all questions
- Please answer the questions by placing an X in the appropriate block
- Click NEXT once completed

How did Bongi come across to you?

	Not at All				Very Much
	1	2	3	4	5
Assertive					
Emotional					
Nice					
Unemotional					



INSTRUCTIONS:

- Please complete all questions
- Please answer the questions by placing an X in the appropriate block
- Click NEXT once completed

Please rate the person you just saw in the photograph on each trait that follows using a 1 – 7 scale:

	Not at All						Highly
	1	2	3	4	5	6	7
Open-minded							
Experienced							
Trained							
Qualified							
Good-looking							
Likeable							
Skilled							
Competent							
Good							
Reputable							
Powerful							
Friendly							
Knowledgeable							
Respectable							
Understanding							
Honest							
Dependable							
Trustworthy							
Credible							
Expert							
Authoritative							
Attractive							
Reliable							

SECTION B – DEMOGRAPHICS ***Note for statistical purposes only*

Please indicate your ethnic group:

White African Coloured Asian Prefer not to Answer

Please indicate your gender:

Male Female Prefer Not to Answer

Student number (this will be stripped out and is merely for SRP point allocation):

APPENDIX C

	Competence	
	Corrected Item-Total Correlation Before	Corrected Item-Total Correlation After
Expert	.73	.81
Experienced	.68	.80
Trained	.75	.80
Qualified	.74	.74
Skilled	.67	.75
Authoritative	.60	.61
Powerful	.62	.72

	Likeability	
	Corrected Item-Total Correlation Before	Corrected Item-Total Correlation After
Friendly	.70	.84
Likeable	.62	.81
Understanding	.66	.79
Open-minded	.50	.67

	Trustworthiness	
	Corrected Item-Total Correlation Before	Corrected Item-Total Correlation After
Honest	.72	.48
Dependable	.79	.72
Trustworthy	.79	.76
Reliable	.73	.74