

THE UNIVERSITY OF CALGARY

The Effects of Empathy on Social Outcome

by

Dan Larsen

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

CALGARY, ALBERTA

MAY, 1998

© Dan Larsen 1998



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-34972-1

Abstract

This study investigated the effect of dispositional empathy on the social outcome trust as it is modified by social stereotyping. After completing the dispositional empathy questionnaire, participants read one of two randomly assigned stories about the plight of a heterosexual female or lesbian character. Participants then rated the story character according to a measure of male and female stereotypes as well as how likely they were to trust the character.

A path analysis was used to test the hypothesis that dispositional empathy would be related to trust through its influence on social stereotyping. The proposed theoretical model fit the observed data for both groups. Path coefficients from empathy to social stereotyping were not significant in the heterosexual story group, confirming expectations. The hypothesis that all four empathy constructs would be directly related to social stereotyping in the lesbian story group was only partially supported. The only significant path coefficient was between fantasy and social stereotyping. Perspective taking, empathic concern, and personal distress were not directly related to social stereotyping. The hypothesis that the empathic construct of fantasy would be the strongest predictor in the lesbian story group was supported.

Contrary to expectations, those who received the lesbian story version were more likely to trust the target than those who received the heterosexual story version. There was no difference in the social stereotyping of the target. However, those who rated the target as masculine in either group were more likely to trust the target. In general, these findings suggest that dispositional empathy does affect trust through social stereotyping. However, whether the effect is direct or indirect may depend on the context of the task.

Table of Contents

	Page
Approval Page	ii
Abstract	iii
Table of Contents	iv
List of Figures	vi
CHAPTER I: INTRODUCTION	
Introduction	1
CHAPTER II: LITERATURE REVIEW	
Literature Review	4
Hoffman's Developmental Theory and its Antecedents	4
Dispositional Empathy as a Multidimensional Construct:	
The Interpersonal Reactivity Index (IRI)	13
The IRI and Other Social Psychological Constructs	15
Empathy and Social Behaviour: A Theoretical Model	18
The Relation of Empathy to Behaviour	21
Social Stereotypes, Gender, and Sexual Orientation	24
Social Stereotypes	24
Gender Stereotypes	26
Social Stereotypes of Homosexuals	28
Summary and Discussion	31
Questions and Hypotheses	34
CHAPTER III: METHOD	
Method	42
Sample	42
Anonymity of Participants	42
Materials	43
Procedure	45
Statistical Procedures	46
CHAPTER IV : RESULTS	
Results	48
CHAPTER V : DISCUSSION	
Discussion	53
Dispositional Empathy, Social Stereotyping, and Trust: The Predicted Model	53
Dispositional Empathy and Social Stereotyping	54
Dispositional Empathy, Social Stereotyping, and Trust: Model Summary	57
Trust for the Lesbian vs. the Heterosexual Female Fictional Character	58
Social Stereotyping and Trust	59
Social Stereotyping of the Lesbian vs. the Heterosexual Female Fictional Character	60
Limitations	63
Summary of Implications for Future Research	64

Summary and Conclusion	65
REFERENCES	67
Appendix A: Consent for Research Participation	75
Appendix B: Participant Briefing	77
Appendix C: Participant Request Form	79

LIST OF FIGURES

	Page
Figure 1. Path analysis model for the relationship between empathy, social stereotyping, and trust	37
Figure 2. Path analysis model of the relationship between empathy, social stereotyping, and trust for those who received the heterosexual female story	51
Figure 3. Path analysis model of the relationship between empathy, social stereotyping, and trust for those who received the lesbian story	52

CHAPTER I

INTRODUCTION

Investigations have supported the idea that dispositional empathy is both a cognitive and affective multidimensional construct (Hoffman, 1975; Coke, Batson, & McDavis, 1978; Davis, 1980; Eisenberg, Fabes, Bustamante, Mathy, Miller, & Lindholm, 1988). Davis (1980) developed a measure, the Interpersonal Reactivity Index (IRI), based on this approach which explicitly compares the manner in which cognitive and affective personality tendencies affect our reactions to others. The IRI consists of four measurable constructs which contribute to a global concept of empathy. These constructs are perspective-taking, which reflects our tendency to adopt the point of view other people; empathic concern, which reflects our tendency to experience feelings of warmth, compassion and concern for others in distress; fantasy, which reflects our tendency to identify strongly with fictional characters; and personal distress, which assesses our tendency to experience self-oriented discomfort and anxiety when witnessing another in distress.

Studies have subsequently found that empathy influences social outcome (e.g. Davis, 1983a; Davis, Franzoi, & Wellinger, 1985; Davis & Oathout, 1987; Davis & Kraus, 1990). In this regard, a social outcome is operationally defined as “the reactions, judgments, or feelings of the perceiver towards the perceived.” (Davis & Oathout, 1987, p. 77). Empathic tendencies have been found to influence social outcomes such as popularity with peers (Davis, Franzoi, & Wellinger, 1985), loneliness (Davis & Oathout, 1992) and satisfaction with romantic relationships (Davis & Kraus, 1990). The general finding was that those high

in dispositional empathy display social behaviours towards others in ways that minimize social conflict and result in more positive social outcome.

Davis and Oathout's (1987) study illustrated how dispositional empathy was likely to influence the maintenance of existing romantic relationships. It was found that empathy could successfully predict social outcome through its influence on specific relationship behaviours. Empathic concern and perspective-taking were associated with more positive behaviours and less negative behaviours, whereas personal distress exhibited an opposite pattern (the Fantasy scale was not included in Davis & Oathout's study). Furthermore, links were found between relationship behaviours and the partner's perceptions of the behaviours. Positive behaviours were associated with a positive perception towards their partner and negative behaviours predicted the opposite pattern. Finally, in romantic relationships, one's perceptions of the partners behaviour were significant influences on one's satisfaction with the relationship. Davis and Oathout's study established that the suggested links between these constructs exist, however, weak links between some constructs of the model caused speculation that the model may have measurable boundary conditions. As a consequence, Davis and Oathout (1992) furthered their line of investigation by exploring conditions that might limit the suitability of their model.

Davis and Oathout (1992) found that, though fundamentally sound, the processes involved in their original model did not operate as powerfully for some people in some situations. By returning to their investigation of romantic relationships, they discovered that the influence of heterosexual anxiety moderated processes at the first stage of the model; between dispositional empathy and specific social behaviours. Specifically, they found that high levels of heterosexual anxiety resulted in a self-oriented affective reaction that interfered

with the other-oriented empathic response. From this evidence it was concluded that boundary conditions can affect the influence of dispositional empathy on social outcome.

It is the intent of the present study to further explore the applicability of Davis and Oathout's (1992) model on how dispositional empathy affects social outcome and how this process may be influenced by boundary conditions. The current investigation seeks to extend Davis and Oathout's research in two respects. First, it extends the exploration of possible boundary conditions from heterosexual anxiety to homosexual anxiety, specifically anxiety associated with a lesbian target. Second, whereas Davis and Oathout's model was used in predicting the likelihood of satisfaction in existing intimate relationships, this study will test the likelihood of establishing trust in a new hypothetical relationship.

CHAPTER II

LITERATURE REVIEW

The present study investigates the relationship between three psycho-social phenomenon, namely, empathy, social stereotyping, and social outcome. In developing an informed basis for investigation, the evolution of these three phenomenon was recognized according to five landmarks in theoretical and empirical research. The first is Hoffman's developmental theory of empathy which suggests how empathy develops and inevitably forms a platform for prosocial behaviour. The second landmark involves the suggestion that empathy may be characterized as multidimensional and dispositional. In general, this research recognizes that reactions toward others likely incorporates affective and cognitive tendencies and that these tendencies may be stable across situations. The third landmark recognizes the usefulness of the Interpersonal Reactivity Index (IRI), a scale used to measure the multidimensional nature of dispositional empathy, and its relationship to other psycho-social constructs is discussed. The fourth landmark embraces a theoretical model that uses the multidimensional definition of empathy and proposes how it is linked to social outcome. Finally, the fifth landmark recognizes the phenomenon of social stereotyping. Included in this landmark is how social stereotyping plays an integral part in cognitive processing, research in gender and homosexual stereotyping, and ultimately how social stereotyping, empathy, and social behaviour may be linked.

Hoffman's Developmental Theory and its Antecedents

Social psychologists are adhering to a new conventional wisdom that acknowledges the relevance of cognitive and affective phenomenon. Historically, social scientists have been either exclusively cognitive or affective when referring to issues of social evaluation

and empathy. At one end of the theoretical continuum the empathizing process was predominantly described as semantic, involving structural and procedural relationships of attributes and judgements (Dymond, 1949). However, the role of affect in the empathizing process also has been examined by researchers such as Coke, Batson, and McDavis (1978), Hoffman (1977), and Batson, Duncan, Ackerman, Buckley, and Birch (1981). These investigations proposed that affect lends a qualitatively distinct structure to the empathizing process by functioning as a motivator of behaviour. In some cases (Coke, Batson, & McDavis, 1978), affective reports were found to predict behaviour more accurately than semantic judgements. Due to an increase in social concern, social psychological research, particularly the work of Hoffman (1977), has furthered the investigation of cognition and affect in empathic reactivity.

Hoffman's (1977) developmental theory of empathy describes how both affective and cognitive components interact in the empathizing process. His theory succeeds largely due to its roots in the traditional works of Piaget's theory of intellectual development. According to Piaget (1968), children are born with a small number of highly organized reflexes, or sensorimotor schemata, which provide the framework for the child's interaction with the environment. These schemata set limits on the child's experience, however, over time are modified by an increasing number of new experiences. In this respect, new schemata are evolved from those that existed previously. This intellectual development is paralleled by the maturation of the child's cognitive sense of others. The cognitive sense of others can be conceptualized within four stages. During the first year of life, the child displays an egocentric thought process with no distinction between the self and the other. Nearing the end of the child's first year they develop an awareness of others as separate physical entities

and attain what is known as person permanence. By the age of two years the child's awareness of others develops beyond the physical realm to a recognition that others have internal states that are separate from their own (Flavell, Botkin, Fry, Wright, & Jarvis; 1968). Discerning internal states is the crucial and initial step in the role taking process. By late childhood an awareness that others have personalities and experiences beyond the immediate observed situation develops.

According to Piaget's earlier (1932) works, developing an awareness of the separate physical existence of others is rudimentary to the cognitive sense of others. Through empirical studies of object displacement, Piaget posited that children do not experience their world as existing separate from themselves until the age of 6 months. Bell (1970), however, found that person permanence can occur at an early age and that this ability is formed gradually. In his study, a 1-year-old was able to hold the image of the mother long enough to locate her; however, when fatigued the child stopped the search. Bell interprets this as the child being momentarily aware of another as separate from the self; however, this image is not stable and can slip out of focus due to factors such as fatigue and emotional arousal.

A more cognitively advanced sense of the other is knowing that the other has internal states of their own that are separate from the self. Apparently the ability to take the perspective of another and make inferences on other's intentions is an accessible ability in younger children in highly motivating, familiar, and natural settings. For example, Imamoglu (1975) found that 4-year-olds used simple attention-getting language when talking to other children their age but not with adults. Therefore, these children acted as if they had at least a limited understanding between the adult and child perspectives. This ability improves and becomes more complex throughout the child's development (Bell, 1970).

A further cognitive advancement in developing a sense of the other is the recognition that others have identities and life circumstance of their own that exist beyond the immediate perceived situation. Erikson (1950) wrote extensively about this process in terms of the ego identity concept. In brief, Erikson posits that over time one integrates life experiences and forms a self concept. Empirical research suggests that this tendency develops gradually over time, with 6 to 7-year-olds recognizing their identity in terms of their names, physical appearance, and behaviours and 8 to 9-year-olds anchoring their self-conceptualization in terms of personalized differences in feelings and attitudes. It is presumed that once children develop a sense of continuity with their selves, typically occurring between 6 and 9 years of age, they develop this sense in reference to others.

In sum, past research that is pertinent to Hoffman's theory describes our cognitive sense of the other as it develops through four qualitative shifts: (1) a self-other fusion or egocentric world view; (2) the attainment of person permanence and awareness of physical entities as differing from the self; (3) a rudimentary sense of others as having internal and independent internal states; and (4) the awareness of others having personal identities and life experiences beyond the immediate situation (Hoffman, 1977, p.176). Hoffman used this framework to suggest that developing into a social being involves the development of cognitive and affective capabilities. He posited that an individual's tendencies of thought, perception, and emotional arousal inevitably interact to form an empathic response. Therefore, by using Piaget's developmental outline, Hoffman suggested a general sequence where age is associated with an increase in both role taking capacities and the expression of sympathetic concern. He accounted for this sequence with a description of six qualitatively distinct modes of empathic arousal.

Unique to other conceptualizations (e.g., Dymond, 1949), Hoffman (1977) described empathy as having an affective component that is given an increasingly complex meaning as the child progresses through the aforementioned developmental stages. For example, the child's initial empathic response to another's distress occurs without the knowledge or awareness of the other in distress. With the acquisition of person permanence the awareness of the other enters into focus, however, the internal emotional states of the other are assumed to be similar to the observer. With the development of role taking, empathy becomes a more complex response to the other's inner states. Late childhood ushers in the ability to converge an affective response with a mental representation of the other's whole life experiences. Therefore, Hoffman's model illustrates that affective and cognitive components are seen as developing through largely distinct processes, however, they constantly interact and are experienced as a unity. Hoffman's model involves (1977) six developmental modes of empathic arousal. Each mode is qualitatively distinct in the complexity and type of eliciting stimulus (e.g. facial, situational), the depth of processing involved, and the amount of past experience required. These modes are the primary circular reaction, classical conditioning, direct association, mimicry, language-mediated association and role taking.

Primary circular reaction refers to the reactive cry of an infant to another infant's cry. Though there can only be speculation as to the reason for this reactive cry, Hoffman (1976) believes that it may be a circular reaction or that another infant's cry evokes a cry response through an innate internal mechanism. A study by Simner (1971) supports that the cry is not merely a response to a discomforting stimulus, as children did not cry as much in response to equally loud non-human cries. Hoffman (1976) also found evidence that the reactive cry is not a simple mimicking lacking an affective component. The 1-year-old children in his study

displayed a cry that was apparently indistinguishable from the spontaneous cry of a child who was actually in discomfort. Therefore, in line with Piaget's concept of egocentricity, it is apparent that infants respond to distress by personally experiencing distress themselves. Though the reactive cry is a crude and incomplete empathic response, it is an essential beginning to the development of empathic responding.

The second mode of empathic arousal, classical conditioning, occurs in congruence with an increased development in perceptual discrimination. This mode of empathic response results from the typical classical conditioning phenomenon where eliciting cues of another's observed affective experience is paired with the observer's experience. As a result the affect cues of another become conditioned stimuli that eventually produce similar feelings for the observer. As an example, Hoffman (1977, p.104) found that mothers will often communicate anxiety while holding their child, by tightening their muscles or changing the pitch of their voice. These cues are communicated to the child and subsequently influenced by the process of stimulus generalization with further experiences with others.

Direct association refers to eliciting cues, such as voice, facial expression, and/or posture, conjuring up past experiences. These cues lead to a recall of a past experience where reactions to a particular emotion were similar, resulting in the possible elicitation of that emotion. For example, a child who observes another child fall, scrape their knee, and cry may cry as well. It is posited here that the observer child is not feeling the pain of the observed child, rather he/she is responding to the elicitation of a similar past experience of discomfort. With the development of language and experience the variety of these types of associations increase (Piaget, 1968).

The fourth mode of empathic response, mimicry, is seen as an innate response to another's emotional expression. When the observer imitates another's facial expression and other movements, internal kinesthetic cues in the observer result in the observer's understanding and feeling a similar emotion. For example, Laird (1974) directed participants to contract facial muscles that led to either smiling or frowning. Participants reported feeling more happy when their faces were positioned to smile and more angry when positioned to frown. Laird concluded that one's facial musculature may contribute to the actual experience of an emotion.

Language-mediated association is a more advanced version of the direct association mode. In comparison, this mode is based on observed distress cues and the observer's past experience of discomfort. This level of association is experienced indirectly through language. Language cues may be in the form of emotionally laden expressions, such as "I am stressed out!" or with a description of a distressing event, such as, "I slept through my alarm and I'm late for that important interview!" These associations also do not require the physical presence of the victim in distress. In this mode the empathic arousal could occur while reading a book or watching a film portraying someone in distress. Because this process takes place symbolically, it is more advanced than direct association.

The sixth mode, role-taking, involves the more complex cognitive act of imagining oneself in another's place. It has been established that imagining oneself in another's place leads to more empathic arousal than merely observing the other's plight (Stotland, 1969, Toi & Batson, 1982). For example, in Stotland's study, participants saw painful treatment being applied to others. He found that the amount of empathic arousal was dependent on the instructional set applied. Subjects were instructed to imagine how they would feel if exposed

to the same painful heat treatment. These subjects responded more empathically than subjects who were instructed to merely observe the physical movements of the model and those who were to imagine how the target felt while experiencing the treatment. Therefore, Stotland found that imagining the self in place of another led to greater empathy than merely observing or imagining how the other felt.

In sum, Hoffman's (1977) six arousal modes range from the involuntary conditioning of empathic affect to the more complex process of imagining one in another's place. The cognitive component of the process involves the transformation of the affective experience resulting from the awareness that the event is happening to someone else. Hoffman concluded that this awareness progresses through four stages of self-other distinction; from a total self-other fusion, to awareness of the other as a physical entity, as having independent internal states, and as having an existence beyond the immediate observed situation.

It is important to note that Hoffman (1977) did not mean to suggest the modes operate in a linear sequenced structure. The first mode disappears as a result of maturity and the sixth mode is the most deliberate and infrequent. Hoffman stated that the other four modes are likely to appear throughout the lifespan. He added that the modes of arousal require shallow levels of cognitive processing and are, with the exception of role taking, involuntary. Which arousal mode appears is largely dependent on the types and saliency of internal or external cues. In other words, eliciting cues may actively motivate a specific empathic tendency. Hoffman proposes that our empathic reactions to others involves dispositional tendencies that are largely based on learning the positive and negative consequences of empathizing in certain situations. A cognitive guide results that translates empathy to behaviour, and is energized by a person's motivation to empathize. Therefore, though

dispositional empathic tendencies exist, an individual's motivation to start, continue, or to avoid empathizing altogether influences how empathy affects social behaviour.

Research reveals that there are many possible motives for people to empathize as well as to avoid empathizing with others. For example, Hoffman (1974) found that some may attempt to escape from empathizing in situations where they are unable to reduce the other's distress. In this case, the observer becomes overaroused, which motivates the empathic process from other-orientation to self-orientation. Another study by Mathews and Stotland (1973) found nurses, measured as high empathizers, showed no physical signs of emotion while watching an elderly lady die. It was assumed that these nurses became motivated to 'shut-down' the empathizing process by ceasing to imagine how the lady felt as she died. It has also been found that empathizing may be curbed in adversarial relationships (Alumbaugh, 1986). Alumbaugh found that competitiveness caused a greater focus on the competitor's own feelings and thoughts, and less focus on those of the other. In other words, competitors were motivated to avoid imagining the other's feelings to avoid inhibiting their own performance. Other studies have cited possible motives to empathize. For example, an individual may empathize with another person in order to experience that person's joy (Hoffman, 1977, p.179). The motivation to help others may stem from the anticipation of empathic joy which results from helping (Piliavin, Rodin, & Piliavin, 1969). Similarly, a person may help another in anticipation of empathizing later with the other's feeling of relief from distress. An individual may also be motivated simply to understand the feelings of others, even those experiencing distress.

Dispositional Empathy as a Multidimensional Construct: The Interpersonal Reactivity Index

Hoffman's (1977) developmental theory provided a useful guideline for other researchers to further explore the complexity of the empathic process. His theory and use of empirical evidence strengthened the argument that empathy is more than just the cognitive process of understanding another's thoughts and feelings. Hoffman argued that there are emotional and motivational facets to this process. It was his stance that empathy provides a motivational base for prosocial behaviour. Specifically, he felt that empathic distress is experienced throughout the lifespan and translates into behaviours, such as helping, in response to the distress of others.

Hoffman's work also offered insight for those who support the existence of stable personality traits. There is a recognition among many social scientists (e.g. Cantor & Kihlstrom, 1981; Kelly, 1955; Davis, 1980) that the perception of the same stimulus tends to be processed differently by different people. This processing differs among individuals according to personality traits or predispositions to act certain ways in particular.

Davis (1983a) decided to follow Hoffman's lead of conceptualizing empathy as multidimensional. Specifically, Davis conceptualized empathy as "our reactions to others", where reactions could be predominantly cognitive or affective in nature. Davis' approach, therefore, was to consider empathy as a set of related constructs that embrace both cognitive and affective reactions. As a result, Davis developed an individual difference measure of empathy. His Interpersonal Reactivity Index (IRI) provided an opportunity to estimate cognitive and emotional reactivity as independent and interacting processes. The IRI provided an opportunity to estimate how these personality constructs interact and contribute to behaviour. The 28-item IRI is a self report measure consisting of four 7-item subscales,

each tapping some aspect of the empathic process. Davis admits that the four constructs he suggests is by no means exhaustive, however his findings seem to suggest that they do lend relevant insight to the process of empathizing. The four scales of the IRI are perspective-taking (PT), fantasy (FS), empathic concern (EC), and personal distress (PD).

The perspective-taking (PT) scale measures one's tendency to adopt the point of view of another. For example, the item, "I sometimes try to understand my friends better by imagining how things look from their perspective," is included. The FS scale measures the tendency to imaginatively transpose oneself into the feelings of fictitious characters in movies and books. This measure is largely based on the work of Stotland, Mathews, Sherman, Hansson, and Richardson (1978). A sample item from this subscale is, "I really get involved with the feelings of fictitious characters in books, movies, and plays". The other two subscales measure one's emotional reaction to another person and are based on the work of Hoffman (1977), Coke, Batson, and McDavis (1979) and Batson, Duncan, Ackerman, Buckley and Birch (1981). These researchers argued that there are at least two types of emotional reactions to observing others: one being other-oriented and the other being self-oriented. Empathic concern refers to the feelings of warmth, compassion, and sympathy that the observer has for the unfortunate other while personal distress refers to the personal feeling of unease that one can feel when in a situation similar to the observed other. Davis' EC scale measures the personal tendency to experience feelings of warmth, compassion, and concern for others. A sample item from this scale is, "I often have tender, concerned feelings for people less fortunate than me." The PD scale measures the tendency to experience self-oriented feelings of distress and uneasiness in reaction to other's distress

rather than other-oriented responses. A sample item from this subscale is, “Being in a tense emotional situation scares me.”

The IRI and Other Social Psychological Constructs

Davis argued that because each of the four subscales measured some specific aspect of a more general concept, reactivity towards others, there should be distinguishing differences among the scales in how they relate to other social psychological constructs (Davis, 1983b). He studied the relationships among the scales of the IRI and the related constructs of social competence, self-esteem, emotionality, sensitivity to others, and intelligence. Davis’ expectations for the patterns of the relationships were based on previous research, namely of Piaget, (1932), Stotland et al. (1978), Coke et al. (1978) and Hoffman (1977).

Hoffman (1977) presumed that the ability to take the perspective of another in distress is a necessary precursor to acting to alleviate that distress. This ability relies upon the developmental shift from egocentric to other-oriented thought processes. Therefore, an awareness of another’s thoughts and motives should heighten one’s perception of the other’s needs, which acts as a requisite to action to alleviate those needs in the interest of the other person. Davis (1983b) argued that PT scores should be associated with higher social competence. Higher PT scores were also thought to be associated with higher self-esteem. Davis reasoned that self-esteem would be a result of rewarding social relationships which is afforded by the ability to take the perspective of others. Based on the results of his initial study with the IRI (Davis, 1983a), Davis expected no relationship between perspective taking and emotional responding. Finally, Davis predicted that PT scores would be positively related only to other-oriented measures of sensitivity, as is the nature of perspective-taking.

Davis (1983b) expected the FS scale to be highly associated with emotionality due to the research of Stotland et al. (1978). Stotland et al. found that those who scored high on a similar fantasy scale displayed greater emotional arousal to the distress of another depicted in a film. Davis expected no relationship between the FS scale and interpersonal functioning, self-esteem, or sensitivity towards others. Davis argued that projecting oneself into the place of fictitious characters did not seem relevant to how one interacts in a real situation.

The EC scale was not expected to exhibit a patterned relationship with social functioning or self-esteem (Davis, 1983b). Furthermore, the association of empathic concern and emotionality was thought to depend on the measure of emotionality. For example, other-oriented measures of sensitivity, representing feelings of compassion and sympathy, were thought to be highly related to empathic concern; whereas self-oriented measures were not.

Persons likely to feel anxiety in emotional social settings are more likely to have difficulty with social relationships (Batson et al., 1981). It is for this reason that Davis (1983b) expected the PD scores to be negatively related to social functioning. In other words, those who have a high tendency to feel anxious in social situations will be less successful in social functioning whereas those who have a low tendency will be more successful. This pattern was also expected with self-esteem. Because those high in personal distress are thought to have less rewarding social relationships, their self-esteem would consequently be lower. Similar to the other scales, Davis predicted that the PD scale's association with emotionality would vary according to the self or other-oriented measure of emotionality used.

Davis (1983b) gave 667 students enrolled in an introductory psychology the IRI and other self-report measures concerning interpersonal functioning, self-esteem, emotionality,

sensitivity towards others and intelligence in large group sessions. A correlation analysis between the IRI and the other measures produced results as predicted. Although the relationship was modest in size, perspective-taking scores were associated with better social functioning and self-esteem, but not related to the emotionality measures. Perspective-taking was positively related to the other-oriented measure of sensitivity and only slightly negatively related to the self-centered sensitivity towards others. Finally, PT scores were not related to intelligence. The FS score was found to be unrelated to measures of social competence and self-esteem. However, a slight relationship was found between FS scores and three social dysfunctional measures for males. In addition, FS scores were associated with shyness for males only. It was also found that high FS scorers were more susceptible to emotional arousal and more likely to exhibit fearfulness than low FS scorers. Finally, FS scores were positively related to verbal intelligence and tendency towards emotionality. Empathic concern was positively related to shyness and anxiety and negatively related to boastfulness and egotism. Small relationships were found between EC and self-esteem and intelligence. As expected, the strongest relationship was found between EC scores and measures of emotionality and unselfish concern for others. The most significant relationships found in the study were with personal distress, which was very strongly associated with low self-esteem, shyness, and social anxiety. A strong relationship was also found between PD and emotional vulnerability, uncertainty, and fearfulness. Personal distress scores were found not to be related to intelligence.

The benefits of Davis' (1983b) study were two-fold. First, it provided much needed validity results. This allowed the IRI to be considered a useful instrument in studying empathy as a multidimensional process. The second benefit of Davis' study was his word of

caution concerning the correlational data. Though the correlation between the scales and the other measures were in the expected direction, some were modest in size. For example, there was a negative correlation between PT scores and social dysfunction and a positive correlation between PT scores and extraversion. However, the mean correlation of PT scores with all eight measures of interpersonal functioning was -0.15 . It seemed that perspective-taking did not have a powerful direct influence on interpersonal functioning.

Empathy and Social Behaviour: A Theoretical Model

As previously described, Davis (1983b) found it likely that dispositional empathy did not directly affect social outcomes such as interpersonal functioning. Instead, Davis found it more likely that empathic disposition affected mediating variables which in turn influenced social outcome. To follow up on this position, Davis and Oathout (1987) explored how empathy, measured by the IRI, was linked to social behaviour, and eventually satisfaction in a romantic relationship. This lead was based on Hansson, Jones, and Carpenter's (1984) study of relational competence. In general Hansson et al. found that dispositional characteristics (one being empathy) were most important in the development and maintenance of mutually satisfying relationships. Davis and Oathout reasoned that one's general reactivity to the experiences of another should play a vital role in the status of one's relational competence. Specifically, Davis and Oathout supposed that empathy would facilitate the quality of a romantic relationship by affecting the likelihood that specific social behaviours would occur within the relationship. These behaviours, in turn, would either strengthen or weaken the relationship which would subsequently influence relationship satisfaction.

To fully illustrate their predictions, Davis and Oathout (1987) displayed a general theoretical model of how empathy influences social outcome. In general, the model is based

on two suppositions. First, it predicts that the empathic dispositions of one partner will eventually result in the increased satisfaction of the other. However, a vital element that leads to this satisfaction is for the partner to behave in a manner that is congruent to the other partner's happiness. Second, the model presumes that the self –reported behaviour and the partner's perception of that behaviour display a powerful link. However, it is the perception of the partner's behaviour that has the most powerful influence on subsequent satisfaction. With the structure of this model in mind, Davis and Oathout posed three questions (Davis & Oathout, 1987):

1. What impact will the three facets of empathy (PT, EC, and PD – FS was not included in the study) have on interpersonal behaviour?
2. What impact will specific behaviours have on partner satisfaction?
3. What differences exist between men and women?

Their predictions were as follows:

1. PT and EC will be associated with more positive behaviours and less negative behaviours, and PD will exhibit the opposite pattern.
2. Perceptions of positive behaviours will display positive associations with satisfaction and negative behaviours will display the opposite pattern.
3. The personality of a female will more broadly influence male satisfaction.

Two-hundred and sixty four heterosexual couples filled out the IRI, a questionnaire measuring marital adjustment, and a questionnaire that had each partner rate themselves and their partner on the frequency of interpersonal behaviours (Davis & Oathout, 1987). The model was evaluated using a three-step path analysis. Paths were estimated from the three empathy measures to the self reported behaviours, the self-reported behaviours to the

corresponding behaviour perceived by the partner, and the partner's perception of the behaviour to the partner's satisfaction. Analysis of the first step exhibited the predicted effects. PT and EC scores were positively associated with positive self-report behaviours, such as good communication and warmth, and negatively associated with negative self-report behaviours, such as untrustworthiness and possessiveness. PD scores exhibited the opposite pattern. EC had the most broad effect (8 paths), then PT (7 paths) and PD (6 paths) respectively. Also, females exhibited a stronger association between their empathic dispositions and their self-reported behaviour than males. Both males and females yielded strong association between their self-reported behaviours and their partner's perception of the behaviours, providing support for the second link in the model. The third link of the model was also given support by the results of both sexes. Overall, one third of the variation in relationship satisfaction was accounted for by perceptions of partner's behaviour. For example, lower satisfaction was associated with perceptions of untrustworthiness and higher satisfaction was associated with perceptions of the partner's positive outlook on life. It was also found that the perception of positive behaviours for both sexes had a greater influence on satisfaction than negative perceptions. A notable difference between the sexes emerged in the last link of the model: the association between one's perception of the other's behaviour and satisfaction. Females, and not males, were strongly influenced by good communication. As a whole, the results supported the links of the model, showing that empathic personality can influence social outcome through its affect on mediating behaviours. However, it seems curious that Davis and Oathout omitted the FS scale in their study. Their reasoning was that a person's tendency to empathize with fictional characters has little to do with relationship satisfaction. The omission of this measure is ill-advised for two reasons. First, in opposition

to Davis and Oathout, it can be argued that having fantasy-related tendencies may indeed be integral in relationship satisfaction. This position seems intuitively sound, however, taking either stance without empirical evidence may detract from this area of study. Secondly, the basis of the study was to measure empathy as a multidimensional response, therefore it should be tested as such. The FS measure was previously validated (Davis, 1983a) as an empathy construct. Eliminating any one construct from Davis' (1983a) multidimensional model has the potential to frustrate its theoretical and statistical significance.

The Relation of Empathy to Behaviour

Arguably, the most socially relevant research on empathy is its relation to behaviour. A vast amount of research has shown that empathy motivates behaviour prosocial in nature (e.g. Mehrabian & Epstein, 1972; Archer, Fourshee & Davis, 1979; Stotland, 1969; Coke, 1979; Archer, Diaz-Loving, Gollwitzer, Davis & Foushee, 1981; Davis & Oathout, 1992; Eisenberg, Fabes, Murphy, Karbon, Maszk, Smith, O'Boyle, & Suh, 1994; Litvack-Miller & McDougall, 1991). In reference to dispositional empathy, Mehrabian and Epstein (1972) devised an empathy measure that tested empathy's relationship to helping behaviour. In their experiment, subjects were to administer a shock of varying intensity to another when an error was made on a task. Empathy and aggression, in this case aggression was measured by the administration of shocks, were found to be negatively correlated. In other words, those that were measured as high empathizers were less likely to administer a shock and low empathizers were more likely.

A subsequent experiment by Mehrabian and Epstein (1972) examined dispositional empathy and its relation to volunteering. Subject's were approached by a person in need of volunteers to complete an experiment as part of a course requirement. The student in need

appeared desperate and in danger of failing their course if they did not find participants to volunteer from 1 to 3 hours of their time in ½ hour blocks. Results showed dispositional empathy to be positively related to the amount of time volunteered.

Davis (1983b) and Bernstein and Davis (1982) found that the influence of empathy on behaviour was largely dependent on the nature of the behaviour measured. When the behaviour studied involved helping, EC scores were related to helping, even when escape from the situation was provided. When the behaviour studied was not an emotional reaction, or some act strongly affected by an emotional reaction, such as helping, PT scores were more predictive of behaviour than EC scores. For example, EC scores were not found to be predictive of accuracy in person perception (Bernstein & Davis, 1982). Alternatively, PT scores were highly associated with greater success at matching target persons with their self-descriptions. Moreover, the ability to judge other persons accurately was related only to PT scores and not associated with any other IRI measures.

As found by Davis and Oathout (1987), empathy's effect on behaviour is most likely mediated by behaviours and perceptions of behaviours. Mediation of empathy and its eventual effect on social outcome has also been supported by other studies. The tendency to empathize was mediated by the level of arousal dictated by the potential empathizing situation (Mehrabian & Epstein, 1972). In this study arousal manipulations affected the helping of subjects who exhibited high dispositional empathy but did not affect those who exhibited low dispositional empathy. Subjects who scored high in dispositional empathy volunteered to help less in a more aroused state, and low empathizers did not volunteer as much in either the arousal or non-arousal state. Eisenberg and Fabes (1990) examined the effect of arousal on empathy, their position being there are individual differences among

people in the typical level of their vicarious emotional arousal. They found that situationally induced overarousal due to empathy resulted in a shift in focus from an other-oriented to a self-oriented focus. In their experiment empathic overarousal in negative contexts was experienced as personal distress. Specifically, individuals who were unable to control their emotional reactions within endurable range were more likely to experience personal distress and behave in a manner that did not facilitate positive interactions in an emotional social situation. In accordance with this finding, Eisenberg and Fabes discovered that subjects who could respond to others' negative emotion yet maintain their vicarious emotion were more likely to experience sympathy and less likely to become self-focused.

There is evidence that the tendency for empathy to motivate helping behaviour can be curbed by the opportunity for the potential empathizer to escape (Coke, 1979). Coke found that those who exhibited empathic concern were likely to help in an emotional arousing situation even when escape was offered. Those who tended to exhibit personal distress in an arousing situations, however, were more likely to escape from the situation. Toi and Batson (1982) furthered this line of investigation by systematically manipulating the difficulty of escape. Findings were similar to Coke's study with the addition that those who exhibited low empathy were willing to help when escape from the situation was more difficult.

Davis and Oathout (1992) examined the influence of a boundary condition, heterosexual anxiety, on dispositional empathy according to their theoretical model. It was predicted that heterosexual anxiety would procure its influence at the first stage of the model, between the dispositional tendencies and social behaviours. This proposition was based on previous work that revealed those high in heterosexual anxiety demonstrated a number of socially dysfunctional behaviours, such as less adept timing of conversation and less

responsivity to nonverbal cues from the opposite sex (Fischetti, Curran, & Wessberg, 1977; Curran, Little, & Gilbert, 1978). Davis and Oathout predicted that the arousal of heterosexual anxiety would cause a focus shift from the other to the self, making it more difficult to empathize. One hundred and nineteen students involved in romantic relationships completed the IRI, a self-report of relationship behaviours, and a heterosexual anxiety questionnaire. Through a regression analysis this prediction was partially supported. A moderating influence of heterosexual anxiety was not found for negative social behaviours such as possessiveness and insensitivity. However, a moderating influence was found for the positive behaviours of warmth and positive outlook. In other words, there was a stronger association between empathy and social behaviours for those low in heterosexual anxiety and a weaker association with those of high heterosexual anxiety. Evidence also showed a stronger moderating effect for dispositional perspective taking, than empathic concern and personal distress. This evidence is consistent with the belief that perspective taking is an act that is more deliberate and conscious than an affective response to another. As a result, variables that cause a self-focus, such as heterosexual anxiety, have a greater opportunity to disrupt the perspective-taking process. It is the position of the present study that social stereotypes might also provide a boundary effect for the influence of empathy on social outcome.

Social Stereotypes, Gender, and Sexual Orientation

Social Stereotyping

Gordon Allport (1954) was one of the first to note that stereotyping is an integrated form of cognitive processing that is unavoidable and essential. According to Allport, stereotyping filters and reduces the complexity of information into manageable mental

structures. These generalized mental structures then serve as a basis for thought processes, such as remembering, knowing, and judging. Allport reasoned that the whole cognitive system is based upon this reduction and categorization process. The presumption that the processing of physical and social realities may be similar was illustrated empirically by the works of Tajfel and Wilkes (1963) and Tajfel (1970).

Tajfel and Wilkes (1963) illustrated the categorization and subsequent judgement processes involving the physical domain. Subjects were divided into three groups, each of which was given a set of eight lines to evaluate. In group one, four short lines were labeled A and four long lines were labeled B. In group two, four lines were labeled A and the other four B, however, the length of each line had a random relationship to the label. The third group was a control, where lines were presented without labels. After the subjects were allowed to study each of the line presentations, they were asked to begin estimating the length of each line. Results showed that subjects in group one, experiencing the category imposed stimuli, were more likely to exaggerate the differences between the A and B categories. This suggests, in accordance with Allport (1954), that trivial categories are used in interpreting and predicting physical stimuli.

Tajfel (1970) continued with his investigation of Allport's (1954) assumptions by testing the categorization process within the social realm. Specifically, Tajfel investigated the evaluation process with in-group and out-group members. In his study subjects were randomly assigned to groups yet informed that they were part of a group based on specific criteria. The subject's task was to distribute money to others who were in either their in-group or out-group. Even though the actual criteria of the two groups was trivial, Tajfel found, similar to the study in object categorization, that subjects exaggerated group

differences and favoured their in-group members in donations. In sum, these stereotyped categories, regardless of their triviality, constituted the basis of the perceiver's subsequent judgements about both the physical and social world.

In investigating social judgements, Asch (1946) empirically examined how social stereotyping led to the perception of personality. In one of the classic studies done in this area, Asch found that impressions of others are formulated according to perceivable trait characteristics. In his study, Asch gave subjects two lists of character traits. The first list contained the following traits: industrious, determined, practical, intelligent, cautious, warm, and skillful. The second list contained the same character traits except for the trait "warm" which was replaced with "cold." After reading these lists, participants were asked to write a description of the person that the list seemed to suggest to them as well as choose a term from a bipolar list that best matched their description. Asch found a difference in impression between the impressions made from the 'cold' and 'warm' trait lists, where the 'cold' group of descriptions was less positive. Asch concluded that impressions of another can be based solely on traits deemed relevant to the perceiver.

Gender Social Stereotype

Two sets of trait characteristics have been stereotypically associated with each sex in Canadian society (Leung, Bond, Carment, Krishnan, & Liebrand, 1990). Masculine characteristics have been described as instrumental or agentic, involving goal-directedness, assertive activity, self-development, and separation from others. Feminine characteristics have been described as expressive or communal, involving sensitivity, emotionality, nurturance, and interrelationships with others. The traditional sex role ideal prescribes a feminine sex role identity for women and masculine identity for men (Kagan, 1964; Mussen,

1969; Cook, 1985). According to these researchers, there has been little change with regards to these social stereotypes. As suggested by Allport (1954), these gender stereotypes inevitably form social norms of expectations that are shared across individuals and societies.

Gender stereotypes are thought to determine expectancies of behaviour for men and women (Deaux & Major, 1987; Eagly, 1987; Lindsey & Zakahi, 1996). In general, women are expected to be communal and men are expected to be agentic (Allen, 1995). However, deviations or violations, of these expected norms may lead to negative perception and evaluation (Costrich, 1975; Burgoon, Birk, & Hall, 1991). Previous research on the perception of gender role deviation indicates that men and women are likely to be evaluated less positively when they display gender characteristics that depart from what is expected. Costrich et al. (1975) found that the popularity of men and women decreased when women were perceived to act aggressively and men passively. Burgoon et al. (1991) found that female physicians communicating in an aggressive fashion were rated less positively than females who were perceived as more affiliative. However, there exists research on the perception and judgement of female stereotypes that has uncovered findings that seem contradictory.

Women engaging in behaviour perceived as outside their gender expectations, particularly toward the masculine stereotype, have been perceived positively (Murphy, 1988; Willis, 1994; Ricciardelli & Williams, 1995). These studies concluded that when a women was perceived as being successful, she was thought to possess masculine traits. In turn, females perceived as having desirable masculine traits were also accepted as being more socially competent. Also, McCreary (1994) cites that when females deviate from the feminine role, there is often an assumption that they are deviating to elevate their status and

prestige. As a result, they may be viewed more positively and receive a greater social reward. Further investigation is needed into the particular instances where female gender deviation is deemed positive or negative.

Social Stereotype of Homosexuals

Recently, research has shown that the sex roles of homosexuals and heterosexuals, can be evaluated according to similar trait characteristics (Taylor, 1983; Laner & Laner, 1980; Ricciardelli & Williams, 1995). For both male and female homosexuals, social stereotypes tend to be cross-gendered. In other words, male homosexuals are typically described in terms of feminine traits and lesbians in terms of masculine traits (Page & Yee, 1985). Research has also noted the behavioural consequences of the social stereotyping of homosexuals. In general, male and female homosexuals are treated less positively compared to their heterosexual counterparts. For example, people have been found to speak more rapidly to persons believed to be homosexuals (Cuenot & Fugita, 1982), like homosexuals less than heterosexuals (Gross, Green, Storck, & Vanyur, 1980), and believe that gay couples are less satisfied and less in love than are heterosexual couples (Testa, Kinder, & Ironson, 1987). Though most research in this area is based on male homosexuality, there are a few notable exceptions that have investigated female homosexuality or lesbianism (e.g., Taylor, 1983; Bowman, 1979; Goodyear, Abadie, & Barquest; 1981).

The most common stereotypes of lesbians are related to cross-gendered characteristics (Taylor, 1983). In an examination that included the comparison of female homosexuals to female heterosexuals, Taylor found that lesbians were described as less feminine and more masculine than heterosexual females. Specifically, lesbians were described as stereotypically “not needful of others approval, runners of the show, unhelpful, and not expressive of tender

feelings” (p. 45). Lesbians have been described negatively as aggressive and hostile toward men, as well as positively as neat and intelligent. Also, when evaluating females and lesbians according to typical sex-roles, the typical female heterosexual was evaluated more positively than the typical lesbian by both men and women (Goodyear et al., 1981).

Whereas Goodyear et al. (1981) found that the typical lesbian was generally disliked in comparison to the typical female heterosexual, Laner and Laner (1980) explored reasons why this might occur. Their study involved evaluating the likability of both lesbians and heterosexual women as well as rating them on a femininity/masculinity continuum of gender styles. Participants rated three types of lesbian or heterosexual women. Half of the participants read brief descriptions of three college women each named “Jane.” On some questionnaires Jane was described as having the average number of sexual experiences for a woman her age, all of which had been heterosexual. Other questionnaires read the same except that Jane’s sexual experiences were described as homosexual. Additionally, each Jane was described as either masculine, feminine (average), or effeminate. After reading these descriptions participants rated Jane on a 7-point Likert scale of likeableness.

The study resulted in four findings. First, they confirmed Goodyear et al.’s (1981) finding that lesbians were disliked more than heterosexuals. Second, it was discovered that departures toward either end of the femininity/masculinity continuum of gender styles led to general dislike. Third, for the perception of heterosexual females, departures toward either pole of the gender style continuum was generally excepted. Finally, the most intriguing finding was that departure toward either pole for the lesbian character resulted in dislike for the character. From these findings it was assumed that heterosexual women are allowed

more freedom in sex role variance than lesbian women. Also, it seems that a lesbian acting stereotypically feminine or masculine leads to dislike.

Laner and Laner's study (1980) provided an important link that lesbian's are often disliked because they are perceived as deviating from their expected gender role. They measured the likelihood of positive social outcome (liking) after given general characteristics as the basis for judgement. It is often the case, however, that reactions to unfamiliar others are based on little or incomplete information. Also, a perceived other's actions are often indeterminate in relation to their gender style. As Allport (1954) and Asch (1946) suggested, the individual's perception of the event is often more relevant than the event itself. The propositions of Allport and Asch suggest that studying context with social stereotyping is important. However, much of the research to date bypasses this factor. Instead, participants are most often asked to conjure up the image of the 'typical' male/female or heterosexual/homosexual. Although this type of research may add insight into the existence of these types of schemata, it does not necessarily offer an account of how the schemata are translated in real-life situations. Arguably, making judgements about others rarely occurs without a context. Of specific interest to this study will be the investigation of the differences in participants' perception of a lesbian and a heterosexual female target within similar social situations.

In general, past research has indicated that men hold more negative attitudes towards homosexuals than do women (Kite, 1992). Specifically, men hold more negative perceptions for male homosexuals than they hold for lesbians (Whitley, 1988). Less research has been concerned with women's attitudes toward lesbian targets. Research that has touched on the area is largely inconclusive. Herek (1988) found that women evaluated male homosexuals

and lesbians similarly, whereas Whitely (1988) found that women evaluated lesbians more negatively than male homosexuals. Other studies have indicated that heterosexuals tend to have more negative attitudes toward homosexuals of their own sex (Burd, 1983; Herek, 1984). Women's evaluation of, and behaviour toward, lesbians deserves a more thorough empirical investigation.

Summary and Discussion

Davis (1980) proposed a multidimensional view of empathy to link research on reactions to the observed experiences of others. While recognizing both affective and cognitive constructs, Davis also respected the developmental conception of empathy, originally accounted for by Hoffman (1977). Hoffman's developmental proposition was that empathy develops from a self-oriented personal distress reaction to an other-oriented perspective taking mode. This distinction between the earliest form of the affective component of empathy, personal distress, and the more mature and cognitive components of empathy, perspective-taking and empathic concern, are made in Davis' measure. Davis' proposal integrated these conceptualizations with hopes to allow a more explicit understanding of empathy and how it affects behaviour. As a result, he developed an individual differences measure of dispositional empathy to account for these conceptions.

In continuing with this line of investigation, Davis and Oathout (1987) proposed a formal model that accounts for how empathy, as measured by the IRI, affects social outcomes such as loneliness and satisfaction with romantic relationships. Though evidence for the validity of this model has been established, it has been found that there are some boundary conditions, such as heterosexual anxiety, that moderate the influence of empathic tendencies.

The present study proposes that another boundary condition, the anxiety associated with a lesbian target, may also moderate the influence of empathic tendencies.

Allport (1954) suggested that cognitive processes involve making generalizations in perceiving and interpreting physical and social realities. Asch's (1946) work suggested that the social generalizations, or social stereotypes, can form social norms of expectations for behaviour. Subsequent studies have indeed shown that this phenomenon applies to the perceptions of gender (male/female) and sex orientation (heterosexual/homosexual). Research concerning the perception of females deviating from their expected role produced varying results. Females perceived as displaying more negative masculine traits such as aggressiveness have been evaluated negatively. However, when perceived in terms of more positive masculine traits, females were evaluated as socially competent.

Though there has been little focus on research involving the social stereotyping of lesbians, compared to male homosexuals, there are some notable findings (e.g. Goodyear et al., 1981; Laner & Laner, 1981; Taylor, 1983). In general, lesbians are perceived more often as cross-gendered; possessing masculine as opposed to feminine traits. In addition, lesbians are more likely to be disliked than heterosexual females.

There has not been a study directly relating Davis' (1983a) concepts of dispositional empathy to social stereotyping. However, a more recent theory gives reason to believe that a relationship exists. Davis, Conklin, Smith, and Luce (1996) have found it likely that the process of empathizing leads an observer to create cognitive representations of others that overlap the observer's self-representations. As a result, empathizing reduces the observer-observed difference. In other words, those who have a tendency toward empathizing are more likely to evaluate others favorably and in doing so explain the other's behaviour in a

fashion that closely resembles their own. This 'merging' of the observer and the observed takes place on an emotional and cognitive level (Davis et al., 1996). While actively role taking, the observer is more likely to experience emotions that are congruent with the perceived target. This suggests that the merging of the observer and the target ultimately leads to a favorable perception of the target.

The merging of the observer and the target, theoretically, involves one of two processes (Davis et al., 1996). The first involves the observer projecting self-traits on to the target. This is thought to be common in initial encounters when the observer perceives the target as similar and does not require any extra knowledge for the purpose of the interaction. The second process involves the observer including traits of the target within the observers sense of self. This process depends greatly on previously existing knowledge of, or familiarity with, the target being perceived. This position seems to have a number of implications for the relationship between dispositional empathy, social stereotyping, and social behaviour. First, it seems those high in dispositional empathy are more likely to dissolve differences with perceived others, explain their behaviour as they would their own, and as a result avoid social stereotyping. Second, Davis et al. seem to suggest that those who are not adept at empathizing/merging entertain less information about the observed to make a social evaluation, thereby retaining a greater observer/observed difference. This scenario may result in a greater chance of relying on social stereotyping as an information source for social evaluation (Stapel, Koomen, & van der Pligt, 1996). Therefore, dissolving observer/observed differences seems dependent on the observer's perceived similarity or knowledge regarding the target. Although it has yet to be formally determined, Davis et al.'s

theory seems to suggest that the tendency to merge (or empathize) may be disrupted by the lack of knowledge or familiarity with a target.

Questions and Hypotheses

As the aforementioned research suggests, the present study investigates how a lesbian social stereotype influences empathy's affect on prosocial behaviour, namely trust. This investigation encourages a number of research questions:

1. How will empathy's influence on social outcome be moderated by social stereotyping?
2. When they are perceived acting in a similar way in similar environments, will empathy's influence on social outcome (if any) differ between the perception of a lesbian and a heterosexual female?
3. When they are perceived acting in a similar way in similar environments, will there be a difference in the likelihood to trust a lesbian or a heterosexual female?
4. Will there be a difference in the likelihood to stereotype a lesbian or a heterosexual female?

The eventual goal of this study is to accomplish a better understanding of how the empathic process eventually leads to social behaviour, which remains one of the most theoretically interesting and societally important issues addressed by the present study. In general, the evidence supports the view that individual variation in empathic tendencies may be an important factor in influencing interpersonal trust. It also holds that homosexual anxiety, specifically caused by the perception of a lesbian character, may moderate this influence. Based on the aforementioned research questions and review of literature the following hypothesis were developed:

The first hypothesis is a general hypothesis that predicts a path analysis model of how empathy is eventually related to behaviour and is based largely on the model proposed by Davis and Oathout (1992). The model describing this relationship is illustrated in Figure 1. The following hypothesis expresses this relationship:

1. It is predicted that empathy, as measured by the IRI, will be related to interpersonal trust, through its influence on social stereotyping.

No significant paths are predicted between empathy and social stereotyping in the heterosexual group. It should be noted that the predicted 'lack of relationship' between the empathy scales in the heterosexual group and the empathic concern in the lesbian group is not due to any shortcomings of the measures. The psychometric properties and relationships with other psychological measures has been well established. In relationship to the following hypothesis, empathy will contribute as a whole to the structure of the model. However, there will be no single construct that relates to social stereotyping. This prediction is based on the nature of the study, as it relates logically to previous literature, namely that people generally empathize more with similar others and that women have a stronger tendencies to empathize. For example, Trommsdorf and John (1992) suggested that women are more likely to have a generalized social attitude that stresses mutual understanding in social situations. This orientation towards the social environment has been found to include more empathy for others and a greater motivation to decode other's emotions accurately as compared to males. Trobst, Collins, and Embree (1994) record similar findings that females provided social support 30% more often than males. As compared to men, women have relatively higher levels of dispositional empathy (Eisenberg, Fabes, Schaller, Carlo, & Miller, 1991). This prediction does not mean to suggest that empathic tendencies will not play a part in

influencing social behaviour. It is posited that empathic processes may be involved however, because of the reasons stated above, the influence of each individual construct will be minimal.

According to these findings the following hypothesis is postulated:

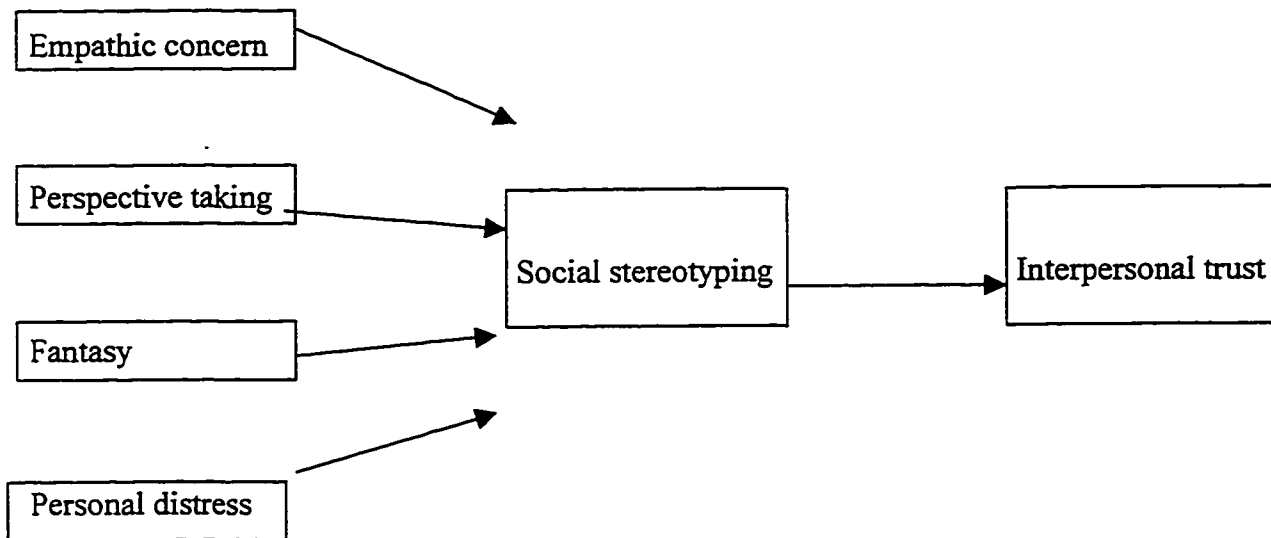
2. It is predicted that empathy, as measured by the IRI, will not be related to social stereotyping for those who receive the heterosexual version of the story.

Most research involving attitudes or behaviour towards homosexuals involve the evaluation of male homosexuals and almost no research has examined lesbian targets (Kite, 1992). One of the purposes for the present study is to focus on the female evaluation of lesbians, an area that includes few investigations, with Taylor (1983), GoodYear, Abadie, and Barquest, (1981), Laner and Laner (1980), and Kite (1992), being notable exceptions. The following prediction is based on previous research involving social stereotyping in initial interactions and the IRI.

Deaux and Major (1987), found that social stereotypes are particularly likely to influence perception and expectations during initial encounters. Initial encounters often involve perceptual ambiguity and result in a reliance on exaggerated characterizations. Another relevant finding is that tolerance for gender role deviation was lower in initial interactions than in more familiar relationships (Cappella & Greene, 1982). How this phenomenon applies to each construct of the IRI is discussed below.

The Fantasy Scale (FS) is one that is the least grounded in empathy related theory (Davis, 1983b), though certain patterns are evident. High fantasizers have the tendency to score on measures of emotionality (Davis, 1983a). In addition, those who score high on the FS scale show a tendency toward social anxiety. Davis (1983b), concluded that such persons

Figure 1. Path analysis model for the relationship between empathy, social stereotyping, and trust.



are intelligent, but also withdrawn and ill at ease in social settings (p. 125). This view also supports Stotland, Mathews, Sherman and Hansson's (1978) findings, that persons who scored high on the Fantasy-Empathy Scale tended to display greater physiological arousal to the observation of another's emotional distress. Therefore, it is assumed that having to evaluate a lesbian character acting in a distressful situations will create social anxiety. Since high fantasizers tend to be susceptible to social anxiety and social anxiety is likely to encourage social stereotyping, it is predicted in the following hypothesis that FS will be related to social stereotyping.

The hypothesis that FS will have the greatest effect on social stereotyping is largely based on Davis and Bernstein's (1983) work. They determined that empathy's effects on behaviour were dependent on the nature of the task and behaviour measured. The task in this study encourages participants to evaluate a fictional character Jane, and then reveal the likelihood of trusting her. It is assumed that this task encourages a specific type of empathy, fantasy. Given this characteristic nature of the experimental task, it was predicted that FS scores will have the strongest relationship with social stereotyping.

It has been found that personal distress (PD) is negatively related to measures of social functioning (Davis, 1983b). In other words, persons who tend to experience feelings of anxiety and discomfort in emotional social settings have more difficulty establishing rewarding social relationships. Indeed, Davis discovered that high PD scores were associated with high levels of social dysfunction and low levels of social competence, with one of the strongest relationships being between PD and social anxiety. Moreover, he found an association between high PD scores and emotional vulnerability and chronic fearfulness and uncertainty. Again, it is assumed that evaluating a lesbian target will result in social anxiety.

Based on Davis, Conklin, Smith, and Luce's (1996) concept of cognitive and emotional merging, it seems likely that low EC and PT scores would be correlated to social stereotyping. The less likely someone is to merge with another on a cognitive or emotional level the more likely they are to social stereotype. However, less clear is the merging process as it applies to high PT and EC scorers in the present study. According to previously stated research, those who have PT and EC tendencies are likely to dissolve the observer/observed difference. Davis et al.'s (1996) work suggests that two processes might lead to this end. First, it may be that merging attempts for those high in PT and EC may be moderated by social anxiety and eventually result in social stereotyping. It is assumed, in this case, that social anxiety would be caused by a limited similarity and lack of information between the participant and the lesbian target. This would inevitably lead to social stereotypic assumptions. However, Davis et al. suggest an alternative process that involves the observer evaluating the other as similar to themselves. This process may be characteristic of high PT and EC scorers who perceive little similarity or have little information about the target. If one uses self traits in evaluating another one might expect little stereotyping. Whether or not this process occurs in this situation has yet to be determined. Since there is less research supporting the latter alternative, the hypothesis is as follows:

3. It is predicted that fantasy (FS), personal distress (PD), perspective-taking (PT), and empathic concern (EC) will be related to social stereotyping for those who receive the lesbian story version. It is also predicted that FS will have the strongest relationship to social stereotyping.

Goodyear et al. (1981) and Laner and Laner (1980), found that behaviour toward women was less positive when the women were known to be a lesbian as compared to

heterosexual. Also, heterosexuals tended to have more negative attitudes towards homosexuals of their own sex (Burd, 1983; Herek, 1984). In general, it was found that persons deviating from expectations were reacted upon less positively than persons conforming to expectations. Based on this information, it seems likely that participants will rate themselves less trusting for the lesbian character than the heterosexual character.

There is, however, an alternative to the above expectation. Research has shown that different perceptions and evaluations result when a target's behaviour deviates from the perceiver's expectations compared to when it confirms expectations (Burgoon et al., 1991; Lindsey & Zakahi, 1996). If the participants expect the lesbian character to act more masculine and indeed interpret her actions as such they may react to her more positively. Also, if participants expect the heterosexual character to act more feminine and interpret her actions as masculine they may react negatively. How expectations interact with observed behaviour for this specific situation has yet to be empirically established. Due to there being greater evidence supporting the initial viewpoint, the following hypothesis is postulated:

4. It is predicted that participants who receive the heterosexual story version will rate themselves as more trusting toward the target than those who receive the lesbian version of the story.

Ricciardelli and Williams (1995), and McCreary (1994) found that women were perceived positively when acting stereotypically male and in a positive way. The measure used in the present study, the Personal Attributes Questionnaire, is based on positively perceived gender stereotypes. Therefore, the following is hypothesized:

5. It is predicted that those who rate the target as masculine will be more likely to trust the target, regardless of the target's sex role.

The research of Kagan (1964), Cook (1985), and Taylor (1983), in general, has shown that heterosexual females are stereotypically perceived as possessing feminine traits while lesbians are stereotypically perceived as possessing masculine traits. Hence, the following hypothesis expresses this relationship:

6. It is predicted that participants who receive the lesbian story version will rate the target as being more masculine than those who receive the heterosexual story version.

CHAPTER III

METHOD

Sample

A total of 107 females participated and were included in the analysis of the present study. Ninety-eight female participants were acquired from two undergraduate classes at the University of Calgary. Of these participants, 10 were excluded due to missing data, leaving a total of 87 participants. The age of these participants ranged from 17 to 38 years and the mean age was 23 years and 6 months. Twenty-seven female participants were acquired in an unsystematic fashion from the Calgary area. Of these participants, all had a university degree. Eight of these participants were excluded due to missing data, leaving a total of 17 participants. The age of these participants ranged from 22 to 27 years and the mean age was 25 years and 11 months. The age of all the participants ranged from 17 to 38 years and their mean age was 24 years and 2 months. Participation in the study was strictly voluntary and treatment of participants was in accordance with the ethical standards set by the University of Calgary.

Anonymity of Participants

Participants were not required to identify themselves in any manner. This anonymity was assured both verbally and on the Consent for Research Form (Appendix A). Questionnaires were given a unique identification number upon being returned to aid in the analysis. Participants signature of consent for participation in the study and their age was recorded separately from the questionnaire package.

Materials

Materials included the Interpersonal Reactivity Index (Davis, 1980), two short stories, the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974), and the Specific Interpersonal Trust Scale – Female (Johnson-George & Swap, 1982).

The Interpersonal Reactivity Index . The Interpersonal Reactivity Index, (IRI), developed by Davis (1980), is a measure of dispositional empathy. The index measures four interdependent constructs which contribute to a global concept of empathy: Perspective-Taking (PT); Fantasy (FS); Empathic Concern (EC); and, Personal Distress (PD). Each construct is represented by an 7 item scale that is measured according to a 5-point Likert format (“not at all like me”; scored as 1 to “exactly like me”; scored as 5). The 7 items for each construct are presented in a mixed order on the questionnaire. A participant’s score is computed by adding the scores of each 7 item scale. Items 7 and 12 of the FS scale, 15 and 3 of the PT scale, 18, 4, and 14 of the EC scale, and 19 and 13 of the PD scale are reverse scored.

The IRI has rendered a test-retest reliability with adults ranging from .62 to .81 (Davis, 1980). Each of the IRI’s subscales –PT, FS, EC, and PD -also possess adequate internal reliability (alphas = .73, .72, . 71, and .76, respectively, as reported by Davis, 1980). The PT subscale has been shown to correlate positively with the EC subscale ($r = .30$ for females and $r = .33$ for males). PT has also been reported to correlate with FS ($r = .12$ for females and $r = .10$ for males) and is inversely related to PD ($r = -.29$ for females and $r = -.16$ for males). FS and PD are also reported to be modestly correlated ($r = .04$ for females and $r = .16$ for males).

The Story. The story afforded an opportunity to study the process of reactivity and social stereotyping of a character acting within a context. The story involves one character's plight to cross a dangerous river to be married with the one she loves. Two versions of the story are used in the present study. The heterosexual story version has the main character 'Jane' as being separated from her love 'Geoffrey' by a river full of crocodiles. After pondering on how to get across she is left with the unsettling option of spending the night with a boat-owner named 'Frank' in return for safe passage. After learning of her actions Geoffrey leaves her. The lesbian version of the story is identical except for the sexual orientation of Jane and the sex and sexual orientation of the boat-owner. In this alternate version, Jane is in love with a young woman named Sarah and spends the night with a boat-owner named Francine.

The Personal Attributes Questionnaire. The Personal Attributes Questionnaire (PAQ) was developed to assess stereotypes of masculinity and femininity along a continuum (Spence, Helmreich, & Stapp, 1974). Although other measures such as Bem's Sex-Role Inventory (1974) were considered, Taylor (1983) used the PAQ to assess the stereotypes of male and female homosexuals and found that masculine-feminine sex role definitions were a highly salient reference point for the definition of homosexuals. Given the PAQ's specific use in the assessment of homosexual and heterosexual stereotypes on the same continuum, it seemed preferable to use the PAQ scale to explore the hypotheses of this study. The PAQ is in the form of 54 bipolar 5 point scales. Each pole is anchored by a female and male stereotype, with a score of 1 being 'extremely female' and a score of 5 being 'extremely male'. The possible range of scores is from 54 (female social stereotype) to 270 (male social stereotype). The reported test-retest reliability with adults ranges from .92 to .98.

The Specific Interpersonal Trust Scale – Female. The Specific Interpersonal Trust Scale – Female (SITS-F) is intended to measure interpersonal trust held by a female for a specific other person (Johnson-George & Swap, 1982). This scale consists of 13 items, each standardized in the Likert format. Responses are generated on a nine-point scale, anchored by a score of 1 for “strongly agree” and score of 9 for “strongly disagree”. The possible range of scores is from 13 (lowest trust) to 117 (highest trust), with a neutral score of 65. The SITS-F has rendered a test-retest reliability with adults ranging from .71 to .83.

Procedure

Questionnaire Administration. All participants in the study were briefed regarding the nature of the study and their role as a participant (see Appendix B). Subjects were encouraged to review the Participant Request and Consent for Research Participation Forms (Appendices C and A, respectively) included in the questionnaire package. Participants were assured that their involvement in the study was strictly voluntary and that their anonymity would be respected. Participants were also reminded that they could withdraw from or be excluded from the study by the experimenter at any time. Participants were asked to respond to the questionnaires as accurately and honestly as possible. Participants were also informed that any questions or concerns would be welcomed by the experimenter during or after their participation in the study. Prior to administration, questionnaire packages were randomly fitted with either the heterosexual or lesbian version of the parable.

Questionnaire Package Completion. Participants were encouraged to read the Participant Request and Consent for Research forms. Participants first signed the Consent for Research form then proceeded with the questionnaire package. The questionnaire

package included the IRI, the heterosexual or lesbian version of the parable, the PAQ, and the SITS-F in that order.

Participants first completed the IRI, a questionnaire measuring their dispositional empathy. They then read their randomly assigned version of the parable. Participants then completed the PAQ, a questionnaire measuring the attributes of the story character 'Jane' according to female and male stereotypes. Finally, participants completed the SITS-F, a questionnaire measuring the degree to which each participant would trust the story character Jane. Completed consent forms and questionnaires were returned to the experimenter and filed separately.

Statistical Procedures

Hypothesis One: It is predicted that empathy, as measured by the IRI, will be related to interpersonal trust, through its influence on social stereotyping; Hypothesis Two: It is predicted that empathy, as measured by the IRI, will not be related to social stereotyping for those who receive the heterosexual version of the story; Hypothesis Three: It is predicted that fantasy (FS), personal distress (PD), perspective-taking (PT), and empathic concern (EC) will be related to social stereotyping for those who receive the lesbian story version. It is also predicted that FS will have the strongest relationship to social stereotyping; and Hypothesis Five: It is predicted that those who rate the target as masculine will be more likely to trust the target, regardless of the target's sex role; were assessed using a path analysis. The path analysis model depicting these relationships is found in Figure 1. This model was fit to the data using LISREL VII with maximum likelihood estimation (ML). The analysis of these models are based on the analysis used by Davis and Oathout (1992).

Hypothesis Four: It is predicted that participants who receive the heterosexual story version will rate themselves as more trusting toward the target than those who receive the lesbian version of the story; and Hypothesis Six: It is predicted that participants who receive the lesbian story version will rate the target as being more masculine than those who receive the heterosexual story version; were assessed using a t-test analysis

CHAPTER IV

RESULTS

Hypothesis One. It was predicted that empathy, as measured by the IRI, would be related to interpersonal trust, through its influence on social stereotyping. This hypothesis was supported. This model to data fit was evaluated using a goodness-of-fit (GFI) index. Osman, Francisco, Barrios, Aukes, Osman, and Markway (1993) suggest that three measures, goodness-of-fit index (GFI), adjusted-goodness-of-fit index (AGFI), and root mean square residual (RMSR) be used to adequately evaluate the path analysis models. Acknowledging all three of these statistics are important due to chi-square's sensitivity to sample size and numerous independent variables. The AGFI adjusts for the degrees of freedom in the model. Similar to how a multiple correlation squared increases as the number of predictors increases, the GFI will increase with the number of degrees of freedom in the model (Cole, 1987). Therefore, the AGFI is parallel to the process involved with the adjusted multiple correlation squared in multiple regression analysis. The standard values of these measures that represent a 'good fit' are GFI values greater than .90, AGFI values greater than .80, and RMSR values less than .10.

The model for the lesbian story version group produced a GFI of 0.99, an AGFI of 0.94, and a RMSR of 0.04 with 4 degrees of freedom. This indicates that the model fit the data very well. The model for the heterosexual story version group displayed a GFI of 0.98, an AGFI of 0.85, and a RMSR of 0.04 with 4 degrees of freedom. This indicates that the model fit the data set quite well.

Hypothesis Two. It was predicted that empathy, as measured by the IRI, would not be related to social stereotyping for those who receive the heterosexual version of the story. This

hypothesis was assessed using the path analysis model found in Figure 1. This hypothesis was confirmed at the $p < .05$ level. The results are displayed in Figure 2. The path analysis model at the first step displayed no significant paths between empathy and social stereotyping. The empathic concern-social stereotyping path had the lowest path coefficient at $\beta = 0.0001$, $t(4) = 0.01$ followed by the paths perspective-taking-social stereotyping ($\beta = -0.07$, $t(4) = -0.47$), personal distress-social stereotyping ($\beta = -0.20$, $t(4) = -1.42$), and fantasy-social stereotyping ($\beta = 0.25$, $t(4) = -1.73$) respectively. Though none of these four paths were found to be significant, it was notable that the fantasy-social stereotyping link was close to being significant.

Hypothesis Three. It was predicted that fantasy (FS), personal distress (PD), perspective-taking (PT), and empathic concern (EC) would be related to social stereotyping for those who receive the lesbian story version. It was also predicted that FS would have the strongest relationship to social stereotyping. The hypothesis that empathy will be related to social stereotyping for those who receive the lesbian story version was assessed using the path analysis model found in Figure 1. The results are displayed in Figure 3. The model displayed one out of the four paths predicted. The path fantasy-social stereotyping was significant, $\beta = -0.29$, $t(4) = -2.03$, at the $p < .05$ level. Contrary to expectations, the paths empathic concern-social stereotyping ($\beta = -0.02$, $t(4) = -0.14$), personal distress-social stereotyping ($\beta = 0.06$, $t(4) = 0.41$), and perspective-taking-social stereotyping ($\beta = -0.18$, $t(4) = -1.28$) were found not to be significant. The hypothesis that fantasy would have the strongest relationship to social stereotyping was supported.

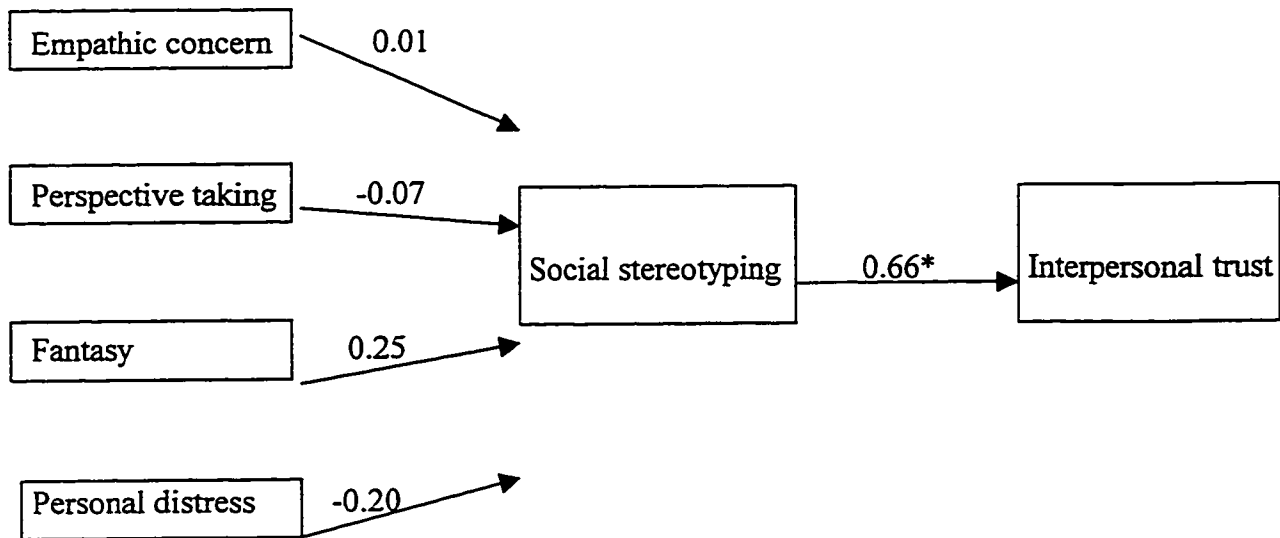
Hypothesis Four. It was predicted that participants who receive the heterosexual story version would rate themselves as more trusting toward the target than those who receive the

lesbian version of the story. This hypothesis was assessed using a t-test and it was not confirmed. Contrary to expectations, it was found that those who received the lesbian story version showed a greater trust toward the target than those who received the heterosexual story version. Participants who evaluated the lesbian target ($M = 73.91$, $SD = 22.78$, $N = 56$) scored significantly higher on the interpersonal trust scale, $t(105) = 3.04$, $p < .05$, than those who evaluated the heterosexual target ($M = 59.53$, $SD = 26.17$, $N = 51$).

Hypothesis Five. It was predicted that those who rate the target as masculine would be more likely to trust the target, regardless of the target's sex role. This hypothesis was assessed using a path analysis model. These results are displayed in Figures 2 and 3. This hypothesis was supported for both groups. For those who received the heterosexual female story the path social stereotyping-trust was significant and positive $r = 0.66$ and $t(4) = 5.90$ at $p < .05$. For those who received the lesbian story the path social stereotyping-trust was significant and positive $r = 0.29$ and $t(4) = 2.13$ at $p < .05$. Positive scores on the PAQ indicate a masculine social stereotype, therefore, the above results indicate that high PAQ scores (masculine social stereotype) were predictive of high interpersonal trust scores (greater likelihood of trusting the target). Conversely, low PAQ scores (feminine social stereotype) were predictive of low interpersonal trust scores (less likelihood of trusting the target).

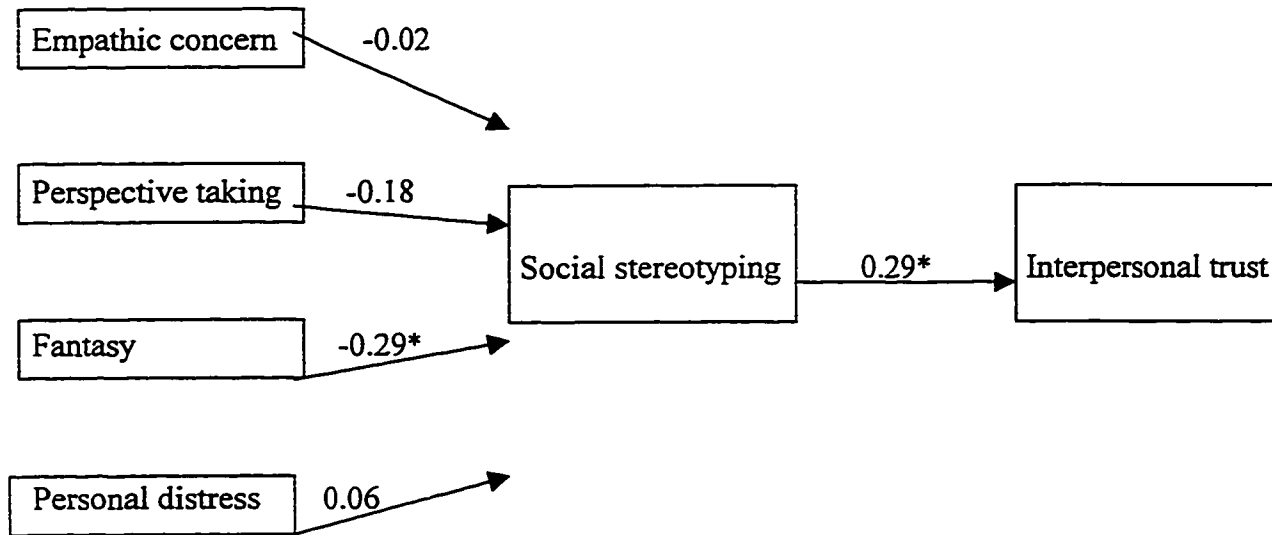
Hypothesis Six. It was predicted that participants who receive the lesbian story version would rate the target as being more masculine than those who receive the heterosexual story version. This hypothesis was assessed using a t-test to test the difference in means on the PAQ, and it was not confirmed. There was no significant difference, $t(105)$ two-tailed = -0.21, $p = .83$, between the means of the heterosexual story group ($M = 159.69$, $SD = 9.82$, $N = 51$) and the lesbian story group ($M = 159.30$, $SD = 8.69$, $N = 56$) on social stereotyping.

Figure 2. Path analysis model of the relationship between empathy, social stereotyping, and trust for those who received the heterosexual female story.



* $p < .05$

Figure 3. Path analysis model of the relationship between empathy, social stereotyping, and trust for those who received the lesbian story.



* $p < .05$

CHAPTER V

DISCUSSION

Dispositional Empathy, Social Stereotyping, and Trust: The Predicted Model

The present study investigated the relationship between dispositional empathy, social stereotyping, and trust. Specifically, it explored how the empathic process may be moderated by the anxiety caused by a fictional lesbian character. Based on previous findings of Davis and Oathout (1992), it was predicted that empathy would be related to interpersonal trust, through its influence on social stereotyping (refer to Figure 1). This model was hypothesized for both the lesbian story version and heterosexual story version groups. The results of the chi-square goodness-of-fit analysis for both groups provide support for this hypothesis. With the exception of the fantasy-social stereotyping path in the lesbian story version group, there were no significant paths from the empathy constructs to social stereotyping. Initially, this may seem to contradict the results of the goodness-of-fit analysis. However, these findings suggest that the empathy constructs, with the above noted exception, should not be considered as individual predictors in this model. Rather, the chi-square result suggests that the empathy constructs have an indirect effect when considered alongside the other predictors in the model.

The pattern for both groups suggests empathy contributes indirectly to interpersonal trust through its influence on social stereotyping. These results may have several implications. As noted earlier, Allport (1954) suggested that social stereotypes often serve as a basis for cognitive processes such as judging. The results of this study suggests support for Allport's position by illustrating a significant link between social stereotyping and interpersonal trust. However, the results also suggests that dispositional empathy may

contribute to the transmission of social stereotypes. The fit of the model suggests that the constructs of dispositional empathy may be globally associated with the social stereotyping process and the social behaviour of interpersonal trust. Only the fantasy measure had a direct effect on social stereotyping in the lesbian story version group. This suggests that the cognitive and affective tools used for the task of the present study may approximate those described by Davis (1980) as tendencies of reactivity. The relevance of the model's fit will be further discussed according to the presence and absence of paths between empathy measures and social stereotyping.

Dispositional Empathy and Social Stereotyping

As expected, empathy was not related to social stereotyping in the heterosexual story version group. No significant paths were found from the empathy measures to the social stereotyping measure. This means that neither high or low empathy scorers were likely to stereotype the character, Jane. As noted earlier, Trommsdorf and John (1992) and Eisenberg et al. (1991) found women to be more mutually understanding in social situations and have higher tendencies to empathize when compared to males. Furthermore, Davis et al. (1996) suggested that perceived similarity would help in dissolving the observed/observer difference in social interactions. It may be that regardless of high or low empathic dispositions participants were still able to perceive a general similarity with the character. Davis et al. suggests that this may result in the observer applying self traits to the observed. If this is the case, the participants in this study may have been reluctant to stereotype the character or perceive the character as having a number of both masculine and feminine stereotypes. Further research into this matter might apply the same theoretical model, but insert an additional Personal Attributes Questionnaire between the empathy measures and the original

Personal Attributes Questionnaire to measure a participant's self perception. This would illustrate Davis et al.'s and the present proposition more clearly. For example, participants might complete the Personal Attributes Questionnaire relative to how they view themselves according to the same criteria used to evaluate the story character. By comparing a participant's self evaluation to the evaluation of the other one might determine whether a perceived similarity exists and whether the similarity, or lack of, is related to the empathizing process. It is also important to note that though there were no significant paths for this group there was a high goodness-of-fit index measure. As stated above, this suggests that the empathic processes described by each of these constructs were not necessarily absent during a participant's completion of the experimental task. Rather, it suggests that the processes contributed indirectly.

It was also noted that, though not significant, the fantasy-social stereotyping path displayed a correlation that was relatively large. As mentioned previously, the nature of the task involves the participant reacting to a fictional character. Perhaps the scenario presented in the story offers a boundary condition for this particular empathy construct. The story does have a number of possible interpretations that may have affected the perception of the Jane character. For example, one might have interpreted the character Jane as a hero for sacrificing for her loved one. This perception may have caused a more positive reaction toward the character, possibly resulting in an absence of social stereotyping. Conversely, one might have interpreted Jane as betraying her loved one, therefore, causing a more negative emotional reaction, and possibly leading to social stereotyping. Those who have high or low tendencies for fantasy may indeed be influenced by either of these alternatives. Whether the path coefficient from fantasy to social stereotyping is characterized by theoretical or

statistical issues has yet to be determined. However, it seems plausible that another boundary condition may have been operating and unrecognized in this study. Future investigations might track the participant's interpretation of Jane's plight and see if this interpretation moderates the fantasy-social stereotyping relationship.

The prediction that each of the IRI constructs would be related to social stereotyping for those in the lesbian story version group was only partially supported. The only empathy construct significantly related to social stereotyping was the fantasy scale. The fantasy-social stereotyping relationship is consistent with findings that show a relationship between high fantasy scores and social anxiety (Davis, 1983b). The results of the present study suggest that participants who had tendencies to empathize with the fictional characters became socially anxious while empathizing with the character Jane. The lack of a direct relationship between fantasy and social stereotyping in the heterosexual story version further suggest that the cause of this anxiety may have been that Jane had a lesbian sexual orientation.

The significance of the fantasy-social stereotyping relationship seems to contradict the lack of relationship between personal distress and social stereotyping. As noted earlier, Davis (1983b) found personal distress to be strongly related to social anxiety. If the participants in the lesbian story version group indeed experienced homosexual anxiety it would seem logical that personal distress relates to social stereotyping, however, this was not the case. An explanation for this finding may lie in a particular assumption from which the hypothesis was based. The reader will note that Davis (1983b) found personal distress to be related to feelings of anxiety and discomfort in emotional social settings. The assumption in the present study was that social anxiety can be experienced through a symbolic fictional setting. Perhaps a fictional social setting does not create the same quality of social anxiety as

a 'real' social setting. High personal distress scorers may not feel threatened because Jane is a fictional character. Without experiencing this anxiety they would not become distressed enough to resort to socially stereotyping. Also contrary to expectations, perspective-taking and empathic concern were not related to social stereotyping. Again, this may result from the symbolic nature of the task. The function and influence of perspective-taking and empathic concern tendencies may differ from the symbolic to the physical realities. This line of reasoning remains speculative until further research examines these possibilities. A possible research direction might be to study empathic reactions to a context portrayed in the fictional realm against the same context in the physical realm.

The hypothesis that fantasy would have the strongest relationship among the empathy constructs was supported. Davis and Berstein (1983) found that the effect of an individual empathy construct on behaviour depended on the nature of the task. This study presented a task that was designed to involve the use of fantasy-related empathic tendencies. Taking into consideration the non-significant paths, it would seem that empathizing on a symbolic level is very specific and inclusive only to the tendencies measured by the fantasy scale.

Dispositional Empathy, Social Stereotyping, and Trust: Model Summary

In terms of empathy's relationship to social stereotyping and trust, this study offers a number of insights. Arguably the most provocative finding was the statistical fit of the purposed model. The nature of this statistical analysis affords a critical illustration of how the empathy constructs contribute both individually and collectively. The goodness-of-fit index measures suggest that though not all empathy constructs have significant paths to social stereotyping, they do belong in the model as indirect measures. This suggests that the translation of social stereotypes into social behaviour may be dependent on empathic

dispositions operating in conjunction. Another insight was the strength and presence of the fantasy construct over all others for the lesbian story version group. This finding supports that specific contexts may interact with specific empathic dispositions and inevitably influence the empathizing process as it leads to social behaviour.

Trust for the Lesbian vs. the Heterosexual Female Fictional Character

A significant difference between the lesbian story version and heterosexual story version groups on the interpersonal trust scale revealed that the lesbian story version group rated themselves more likely to trust the Jane character than the heterosexual story version group. This was interestingly contradictory to the prediction. Participants were more likely to trust the lesbian character than the heterosexual in this particular situation. Although these results contradict the hypothesis, they are not unequaled to the findings of Burgoon et al. (1991), Smith-Lovin and Robinson (1992), and Lindsey and Zakahi (1996). As suggested by these studies, the more positive perception of the lesbian character may have involved the participants preconceived expectations for the character and whether these expectations were affirmed in the scenario. If participants expected the lesbian Jane to exhibit more masculine traits and perceived her actions as such, it would followed that their expectations were met. In the story Jane could have been perceived as acting assertive. For example, she recognizes a problem (her loved one being on the other side of a river too dangerous to cross), assess her possible solutions (asks other characters for help getting across the river), and ultimately makes a sacrifice (sleeps with another character for payment to get her across) to solve the problem and reunite with her loved one. This interpretation cites Jane as acting assertive and applying problem-solving skills, traits that are stereotypically masculine. Perhaps this interpretation met with participant's expectations for the lesbian character and therefore, their

reaction was positive. This rationale can also be applied to the evaluation of the heterosexual character.

If the heterosexual character's behaviour was evaluated as suggested above, this may be seen or viewed as a deviation of expectations. Stereotypically, female traits are founded in communal and nurturing behaviours. In this respect, an alternative action for the heterosexual character may have been more in line with expectations; for example, the expectation might be to stay faithful to the loved one regardless of the cost. The assertive behaviours of the character when she was perceived as a heterosexual may have been perceived as a deviation from expectations. This deviation could have caused the lack of trust for the heterosexual when compared to the lesbian character. To clarify this issue one might use the Personal Attributes Questionnaire to measure a participant's perceptions of a 'typical' heterosexual female and lesbian before evaluating the Jane character. This would enable a contrast between what the participant stereotypically expects and how these expectations are met in the particular situation.

Social Stereotyping and Trust

As expected, those who rated the target as masculine were more likely to trust the target in both groups. This finding suggests that when the character was perceived as stereotypically male she was more likely to be trusted. Conversely, when the character was perceived as stereotypically female she was less likely to be trusted. This parallels previous findings (e.g., Ricciardelli & Williams, 1995) that women were perceived positively when acting stereotypically male. The results of this study suggest that interpersonal trust may depend more on agentic rather than communal characteristics. For example, there may be a greater likelihood of trust for someone perceived as 'never giving up easily' as opposed to

someone perceived as ‘very considerate.’ These results strongly support Asch’s (1946) contention that the evaluation of another can often be based entirely upon perceived traits. These results also hold that the positive or negative evaluation of another in an initial encounter is dependent on the specific social stereotype used in the evaluation and whether the target was perceived as acting in confirmation or deviation to the stereotype.

Granted, it is not concluded here that a female social stereotype is unrelated to trust. It is more likely that the female social stereotype was not congruent with what was expected in this particular situation. Due to the problem-solving nature of the character’s behaviour, it may be that socially stereotyped masculine traits were deemed most appropriate in resolving this particular scenario, whereas stereotypically female traits were incompatible. Perhaps if the story placed the Jane character in a more nurturing scenario the relationship between the stereotypes and trust would change. Future research might contrast the relationship between masculine/feminine stereotypes and trust for characters operating in agentic and communal scenarios.

Social Stereotyping of the Lesbian vs. the Heterosexual Female Fictional Character

It was predicted that participants who received the lesbian story version would rate the target as being more masculine than those who received the heterosexual story version. Results found no significant differences between the groups in rating the character’s social stereotype. This finding may be interpreted more clearly when considered with the two findings previously mentioned. An interesting pattern of results emerged in regards to the social stereotyping and trust. In sum, participants of the study were more likely to trust the lesbian character, did not perceive the lesbian character as more stereotypically masculine compared to the heterosexual character, and were more likely to trust the character (lesbian

or heterosexual) when they perceived them as stereotypically masculine. It seems curious that participants did not distinguish between the characters with social stereotypes yet did make a distinction in their likelihood of trusting the character. This seems especially curious considering that both characters were presented in identical scenarios, the only difference being their sexual orientation. This evidence strongly suggests that the characters were not evaluated equally even though each behaved in the same manner and under exactly the same circumstances. Specifically, the difference in the evaluation of this character was based on their sexual orientation alone. It is posited here that the participants had a preconceived expectation of the character based on her sexual orientation and that evaluation of the character was based on how the character's actions supported or did not support these expectations. The results suggest that the behaviours of the lesbian character may have been more congruent with what was expected of her specific sexual orientation. The finding that masculine traits were related to higher trust add support to this line of speculation.

It may hold that these expectations are not solely based on measures of positive masculine and feminine stereotypes. Perhaps measuring gender/sexual orientation social stereotypes as multidimensional, rather than bipolar, is more appropriate. The Personal Attributes Questionnaire is based solely on desirable aspects of masculinity and femininity. Gender stereotypes, however, do not include only desirable aspects of personality (Ricciardelli & Williams, 1995). Undesirable social stereotypes may be a more powerful distinguishing factor in certain scenarios. The results of this study might also suggest a translation of social stereotyping that is unique to the female gender. Females perception and evaluation of the lesbian sexual orientation has received little empirical attention; therefore

the results of this investigation afford some promising insights. Further investigation might provide a comparison of these processes with male participants.

Limitations

A factor that potentially influenced the results of the present study was sample size. It is recognized by Bryman and Cramer (1990) that a path analysis should have at least thirty participants included for each independent variable. This study included four independent variables, therefore, there is a suggested total of 120 participants for each model. Paths between the constructs may have been stronger or weaker if the group sizes were more appropriate. This is of special significance to the barely non-significant path found between fantasy and social stereotyping in the heterosexual-story-version group. The strength of the models presumptions would improve by allowing a larger sample size in future investigations.

The use of the Personal Attributes Questionnaire may have restricted the test of the model. As mentioned previously, the PAQ is a measure of positive masculine and feminine social stereotypes. Results of this study suggest that this measure may not include the dimensions necessary to accurately evaluate the empathic process. The hypotheses that the lesbian story version group would evaluate the character as more masculine and that they would be less likely to trust the character were not supported. Further research may explore additions to the PAQ, for example, by adding negative masculine/feminine stereotypes. Also, Taylor (1983) posited that defining the stereotypes of a homosexual in terms of masculine-feminine traits was highly salient for the general public. It may be that the definition of the stereotypical lesbian orientation is based on a context that is unique to the masculine-feminine context created in the current investigation.

Though the story was used to investigate reactivity and social stereotyping of a character acting within a context it may be that the interactions of the character with her environment had an effect on the results. For example, how each participant interpreted the story was not investigated. It was not known whether the participant deemed Jane's plight a success or failure, whether her actions were heroic or cold, or whether she made the appropriate decisions in resolving her dilemma. Future research might include a questionnaire that allows participants to evaluate the theme of the story and the character's actions directly and explore how these evaluations influence the empathic process.

Finally, as mentioned above, the present study involved only female participants. The objectives of the study was to attend specifically to the empathizing and stereotyping processes of females, a position relatively neglected in this area. Therefore, these results are not generalizable to a male population. To find if these results are unique to the female empathizing and stereotyping process, it would be important to replicate this study with male participants.

Summary of Implications for Future Research

This study tests a theoretical model of how the interaction among dispositional empathy, social stereotyping, and interpersonal trust can be understood. Future research might explore exactly why there were no significant paths from empathy to social stereotyping in the heterosexual female story version group. It was expected that this lack of relationship might exist due to research noting women's high degree of understanding in social situations (Trommsdorf & John, 1992; Eisenberg et al., 1991), and the effect of perceived similarity on observer/observed differences (Davis et al., 1996). Direct examination of these variables might further develop the theory of reactivity.

It was suggested that the interpretation of Jane's plight may have influenced the results of the study. Exploration into the various themes, morals, or other characters of the story may yield interesting insight into how interpretations of events interact with reactions to characters within those events. Also, incorporating preconceived stereotypes into this model may reveal whether the degree of congruence between expected and observed behaviour of the character affected social outcome.

Of special interest was the relevance of the fantasy empathy variable. Based on the findings of this study and previous research regarding the influence of the nature of the task (Davis, 1983b), it may be that a fictional social setting does not create the same quality of social anxiety as a 'real' social setting. Future research may test the model of empathic reactivity in fictional as opposed to 'real' social realms.

Summary and Conclusion

In general, this study was encouraged by two research questions. First, it was of interest to illustrate how the variables of dispositional empathy, social stereotyping, and trust were related. Based on previous research, the model found to represent this relationship suggests an empathic process where dispositional empathy is both an indirect and direct predictor of social stereotyping and trust. Second, it was of interest to explore if the model of reactivity was different when reacting to a heterosexual female as opposed to a lesbian fictional character. There was indeed a difference in models, with the tendency to empathize with fictional characters being directly related to social stereotyping for those who reacted to the lesbian fictional character. All other empathy constructs were found to be indirect predictors for both groups in the study. The specific influence that the character's sexual orientation had on the empathizing process remains unclear. Contrary to expectations,

participants were more likely to trust the lesbian character, however, there was no difference in how the groups stereotyped the character. This seemingly incongruent finding requires further research about how the empathic process interacts with social stereotyping and how this interaction inevitably leads to social outcome.

References

- Allport, G. W. (1954). The nature of prejudice. Boston: Beacon Press.
- Alumbaugh, M.J. (1986). Social support, coping and Auto Immune Deficiency Syndrome (AIDS): An exploratory study. Dissertation Abstracts International, 46,(8-B), 2793-2799.
- Archer, R.L., Diaz-Loving, R., Gollwitzer, P.M., Davis, M.H., and Fourshee, H.C. (1981). The role of dispositional empathy and social evaluation in the empathic mediation of helping. Journal of Personality and Social Psychology, 40, 786-796.
- Archer, R.L., Fourshee, H.C. and Davis, M.H. (1979). Emotional empathy in a courtroom simulation: A person-situation interaction. Journal of Applied Social Psychology, 9, 275-291.
- Asch, S. E. (1946). Forming impressions of personality. Journal of Abnormal and Social Psychology, 41, 258-290.
- Batson, C.D., Duncan, B., Ackerman, P., Buckley, T., and Birch, K. (1981). Is empathic emotion a source of altruistic motivation? Journal of Personality and Social Psychology, 43(2), 281-292.
- Bell, S.M. (1970). The development of the concept of the object as related to infant-mother attachment. Child Development, 41, 291-311.
- Bem, S.L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.
- Berstein, W.M., and Davis, M.H. (1982). Perspective taking, self-consciousness, and accuracy in person perception. Basic and Applied Social Psychology, 3, 1-19.

- Bryman, A., and Cramer, D. (1990). Quantitative data analysis for social scientists. Routledge: London England.
- Burd, B.J. (1983). Differential effects of status and sexual orientation upon evaluation of male and female professional ability. Unpublished master's thesis, California State University, Sacramento, CA.
- Burgoon, N., Birk, T.S., and Hall, J.R. (1991). Compliance and satisfaction with physician-patient communication: An expectancy theory interpretation of gender differences. Human Communication, 18(2), 177-208.
- Cantor, N., and Kihlstrom, J.F. (1981). Social intelligence and cognitive assessment of personality. In R.S. Wyer Jr. and Skroll T.K. (Eds), Social intelligence and cognitive assessments of personality. Advance in social cognition. NJ: Erlbaum Associates.
- Coke, J.S., Batson, C.D., and McDavis, K. (1978). Empathic mediation of helping: A two-stage model. Journal of Personality and Social Psychology, 52, 749-758.
- Cole, D.A. (1987). Utility of confirmatory factor analysis in test validation research. Journal of Consulting and Clinical Psychology, 55, (4), 584-594.
- Cook, E.P. (1985). Psychological Androgyny. New York: Pergamon Press.
- Costrich, E. (1975). When stereotypes hurt: Three studies of penalties for sex-role reversals. Journal of Experimental Social Psychology, 11(6), 520-530.
- Cuenot, R.G., and Fugita, S.S. (1982). Perceived homosexuality: Measuring heterosexual attitudinal and nonverbal reactions. Personality and Social Psychology Bulletin, 8, 100-106.

Curran, J.P., Little, L.M., and Gilbert, F.S. (1978). Reactivity of males differing heterosexual social anxiety to female approach and non-approach cue conditions. Behaviour Therapy, 9, 961.

Davis, M.H. (1980). A multidimensional approach to individual differences in empathy. JSAS Catalog of Selected Documents in Psychology, 10(4), 85.

Davis, M.H. (1983a). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. Journal of Personality, 51, 167-184.

Davis, M.H. (1983b). Empathic concern and the Muscular Dystrophy Telethon. Personality and Social Psychology Bulletin, 9, 223-229.

Davis, M.H., and Bernstein, W.H. (1983). Perspective-taking, self-consciousness, and accuracy in person perception. Basic and Applied Social Psychology, 3(1), 1-19.

Davis, M.H., Conklin, L., Smith, A., and Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. Journal of Personality and Social Psychology, 70(4), 713-726.

Davis, M. H., Franzoi, S. L., and Wellinger, P. (1985). Personality, social behaviour, and loneliness. Paper presented at the annual meeting of the American Psychological Association, Los Angeles.

Davis, M.H., and Kraus, L.A. (1990). Dispositional empathy in same-sex acquaintanceships. Paper presented at the annual meeting of the American Psychological Association, Boston.

Davis, M.H., and Oathout, H.A. (1987). Maintenance of satisfaction in romantic relationships: Empathy and relational competence. Journal of Personality and Social Psychology, 53, 397-410.

Davis, M.H., and Oathout, H.A. (1992). The effect of dispositional empathy on romantic relationship behaviours: Heterosexual anxiety as a moderating influence. Personality and Social Psychology Bulletin, 18, 76-83.

Deaux, K., and Major, B. (1987). Putting gender into context; An interactive model of gender-related behaviour. Psychological Review, 94, 369-389.

Dymond, R. F. (1949). A scale for the measurement of empathic ability. Journal of Consulting Psychology, 13, 127-133.

Eagly, A.H. (1987). Gender and aggressive behaviour: A meta-analytic review of the social psychological literature. Psychological Bulletin, 94, 100-131.

Eisenberg, N., and Fabes, R. A. (1990). Empathy: Conceptualization, assessment, and relation to prosocial behaviour. Motivation and Emotion, 14, 131-149.

Eisenberg, N., Fabes, R.A., Bustamante, D., Mathy, R. Miller, P., and Lindholm, E. (1987). Physiological indices of empathy. In N. Eisenberg and J. Strayer (Eds.), Empathy and its development. New York, NJ: Cambridge University Press.

Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., O'Boyle, C., and Suh, K. (1994). The relations of emotionality and regulation to dispositional and situational empathy-related responding. Journal of Personality and Social Psychology, 66(4), 776-797.

Eisenberg, N., Fabes, R. A., Schaller, M., Carlo, G., and Miller, P. (1991). The relationship of parental characteristics and practice to children's vicarious emotional responding. Child Development, 62(6), 1393-1408.

Erikson, E. (1950). Reflections on the dissent of contemporary youth. International Journal of Psychology, 51, 11-12.

Fischetti, M., Curran, J.P., Wesseberg, H.W. (1977). Sense of timing: A skill deficit in heterosexual-socially anxious males. Behaviour Modification, 1, 179-194.

Flavell, J.H., Botkin, P.T., Fry, C.L., Wright, J.W., and Jarvis, P.E. (1968). The development of role-taking and communication skills in children. New York: Wiley.

Gross, A.E., Green, S.K., Storck, J.T. and Vanyur, J.M. (1980). Disclosure of sexual orientation and impressions of male and female homosexuals. Personality and Social Psychology Bulletin, 6(2), 307-314.

Goodyear, R.K., Abadie, P.D., and Barquest, K.A. (1981). Ascription of negative traits based on sex role and sexual orientation. Psychological Reports, 49, 194.

Hamilton, D.L., and Trolie, T.K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J.F. Dovidio and S.L. Gaertner (Ed.). Cognitive processes in stereotyping and intergroup behaviour. Hillsdale, NJ: Erlbaum.

Hansson, R.O., Jones, W.H., and Carpenter, B.N. (1984). Relational competence and social support. Review of Personality and Social Psychology, 5, 265-284.

Herek, G. (1984). Beyond "homophobia": A social psychological perspective on attitudes toward lesbians and gay men. Journal of Homosexuality, 10, 1-21.

Herek, G. (1988). Heterosexual's attitudes toward lesbians and gay men: correlates and gender differences. Journal of Sex Research, 25, 451-477.

Hoffman, M.L. (1974). Altruistic-behaviour and the parent-child relationship. Journal of Personality and Social Psychology, 31, 397-443.

Hoffman, M.L. (1975). Developmental synthesis of affect and cognition and its implications for altruistic motivation. Developmental Psychology, 11, 607-622.

Hoffman, M.L. (1976). Empathy, role-taking, guilt, and development of altruistic motives. In T. Lickona (Ed.), Moral development and behaviour: Theory, research and social issues. New York: Holt, Rinehart and Winston.

Hoffman, M.L. (1977). Empathy, its development and prosocial motivations. In H.E. Howe (Ed.), Nebraska symposium on motivation (pp. 169-217). Lincoln: University of Nebraska Press.

Imamoglu, E.O. (1975). Children's awareness and usage of intention cues. Child Development, 46(1), 39-45.

Johnson-George, C., and Swap, W.C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. Journal of Personality and Social Psychology, 43, 1306-1317.

Kagan, J. (1964). Acquisition and significance of sex-typing and sex-role identity. In M.L. Hoffman and L.W. Hoffman (Eds.), Review of child development research. New York: Russell Sage Foundation.

Kelly, G. A. (1955). The psychology of personal constructs. New York: Norton.

Kite, M. (1984). Sex differences in attitudes toward homosexuals: A meta-analytic review. Journal of Homosexuality 10, 69-81.

Laner, M.R., and Laner, R.H. (1980). Sexual preferences or personal style? Why lesbians are disliked. Journal of Homosexuality, 5(4), 339-356.

Leing, K., Bond, M.H., Carment, D.W., Krishman, L., and Liebrand, W.B.G. (1990). Effects of cultural femininity on preference for methods of conflict processing: A cross cultural study. Journal of Experimental Social Psychology, 26, 373-388.

Lindsey, E., and Zakahi, R.W. (1996). Women who tell and men who ask: Perceptions of men and women departing from gender stereotypes during initial interaction. Sex Roles, 34(11), 767-783.

Litvack-Miller, W., and McDougall, D. (1991). The effect of peer influence and empathy on altruism among young adolescents. Paper presented at the Canadian Psychological Association Annual Convention, Calgary.

McCreary, D.R. (1994). The male role and avoiding femininity. Sex Roles, 31, 517-526.

Mehrabian, A., and Epstein, N. (1972). Affect expressions and children's imitative altruism. Journal of Personality, 40, 525-543.

Murphy, P.J. (1988). Sport and gender. In W.M. Leonard II (Ed.). A sociological perspective of sport (3rd ed.). New York: Macmillan Publishing Company.

Mussen, P.H. (1969). Early sex-role development. In D.A. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally.

Osman, A., Barrios, F.X., Aukes, D., Osman, J.R., and Markway, K. (1993). The Beck Anxiety Inventory: Psychometric properties in a community population. Journal of Psychopathology and Behavioural Assessment, 15, (4), 287-297.

Page, S., and Yee, M. (1985). Conception of male and female homosexual stereotypes among university undergraduates. Journal of Homosexuality, 12, 109-118.

Piaget, J. (1932). The moral judgement of the child. New York: Harcourt Brace Jovanovich.

Piaget, J. (1968). Piaget's point of view. International Journal of Psychology, 3(4), 281-299.

Piliavin, J.A., Rodin, J., and Piliavin, J.A. (1969). Good samaritanism: An underground phenomenon. Journal of Personality and Social Psychology, 13, 289-299.

Ricciardelli, L.A., and Williams, R. J. (1995). Desirable and undesirable gender traits in three behavioural domains. Sex Roles, 33(10), 637-653.

Simner, M.L. (1971). Newborn's response to the cry of another infant. Developmental Psychology, 5, 136-150.

Spence, J.T., Helmreich, R.L., and Stapp, J. (1974). The Personal Attributes Questionnaire: A measure of sex role stereotypes and masculinity and femininity. JSAS Catalog of Selected Documents in Psychology, 4, 43 (Ms. No. 617).

Stapel, D.A., Koomen, W., and van der Pligt, J. (1996). The referents of trait inferences: The impact of trait concepts versus actor-trait links on subsequent judgements. Journal of Personality and Social Psychology, 70(3), 437-450.

Stotland, E. (1969). Exploratory investigations of empathy. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 4). New York: Academic Press.

Stotland, E., Mathews, K.E., Sherman, S.E., Hansson, R.O. (1978). Empathy, fantasy and helping. Beverly Hills: Sage Publications.

Tajfel, H. (1970). Experiments in intergroup discrimination. Scientific American, 223, 96-102.

Tajfel, H. and Wilkes, A.L. (1963). Classification and quantitative judgement. British Journal of Social Psychology, 54, 101-114.

Taylor, A. (1983). Conceptions of masculinity and femininity as a basis for stereotypes of male and female homosexuals. Journal of Homosexuality, 9, 37-54.

Testa, R.J., Kinder, B.N., and Ironson, G. (1987). Heterosexual bias in the perception of loving relationships of gay males and lesbians. Journal of Sex Research, 23, 163-172.

Toi, M., and Batson, C.D. (1982). More evidence that empathy is a source of altruistic motivation. Journal of Personality and Social Psychology, 43, 281-292.

Trobst, K.K., Collins, R.L., and Embree, J.M. (1994). The role of emotion in social support provision: Gender, empathy and expressions of distress. Journal of Social and Personal Relationships, 11, 45-62.

Whitely, B. E. Jr. (1988). Sex differences in the heterosexual's attitudes toward homosexuals: It depends upon what you ask. Journal of Sex Research, 24, 287-291.

Appendix A

Consent for Research Participation

Consent for Research Participation

I, the undersigned, hereby give my consent to participate in research project entitled The effects of dispositional empathy on social outcome

I understand that such consent means that I will take part in filling out a questionnaire, reading a brief paragraph about a character in a personal dilemma, and then filling out two other questionnaires on my impressions of the character. I understand that the length of time required for my participation will be approximately 30 minutes.

I understand that participation in this study may be terminated at any time by my request or at the request of the investigator. Participation in this project and/or withdrawal from this project will not adversely affect me in any way.

I understand that this study will not involve any greater risks than those ordinarily occurring in daily life.

I understand that the responses will be obtained anonymously and kept in strictest confidence.

I understand that only group data will be reported in any published reports.

I understand that the researcher may terminate my involvement in the study at any time.

I understand that all questionnaires filled out by me will be shredded and discarded in the trash 6 months after completion of the study.

I have been given a copy of this consent form for my records. I understand that if I have any questions I can contact the researcher at 220-7565, his supervisor, Dr. Dan McDougall, at 220-5651, the Office of the Chair, Faculty of Education Joint Ethics Review Committee at 220-5626, or the Office of the Vice-President (Research) at 220-3381.

Date

Signature

Participant's Printed Name

Appendix B
Participant Briefing

Participant Briefing

“Hello, my name is Dan Larsen and I am a graduate student in the Department of Educational Psychology. I am conducting a research project on the effects of empathy on social outcome and I am looking for some volunteers for participation. Generally speaking, participation involves filling out a questionnaire about yourself, reading a story, and filling out two other questionnaires that have to do with your opinions about one of the story characters. The whole process will take approximately 20 minutes.”

“If you decide to participate please read the Participant Request Form and read and sign the Consent for Research Participation Form. They outline the project in a little more detail. I would like to stress a number points if you become a participant. First, if you participate you are free to withdraw at any time. Secondly, your name will not be paired with your survey to ensure anonymity. The study will report group results only. Finally, if you have any questions or concerns before, during, or any time after your participation, myself or my supervisor will be available at the phone numbers included on the Consent for Research Form. Thank you for your time.”

Appendix C

Participant Request Form

Participant Request Form

Dear prospective participant,

My name is Dan Larsen. I am a graduate student in the Department of Educational Psychology at the University of Calgary, conducting a research project under the supervision of Dr. Dan McDougall, as part of the requirements towards an M.Sc. degree. I am writing to provide information regarding my research project The effects of dispositional empathy on social outcome so that you can make an informed decision regarding your participation.

As part of the study you will be asked to fill out questionnaires, read a brief paragraph concerning a character in a personal dilemma, and give your impressions of this character. These procedures will take approximately 30 minutes. You should be aware that even if you give your permission you are free to withdraw at any time for any reason and without penalty. Also, the researcher can choose to terminate your involvement at any time.

Participation in this study will involve no greater risks than those ordinarily experienced in daily life.

Data will be gathered in such a way to ensure anonymity. You will not be required to identify yourself on any of the questionnaires. Your questionnaires will be pre-numbered to assist myself in keeping track of the data. Once collected, responses will be kept in strictest confidence. All questionnaires will be locked in a file cabinet in my office at the University where only myself and my supervisor have access. Only group results will be reported in any published studies. The raw data will be kept in a locked file cabinet and shredded 6 months after completion of the study.

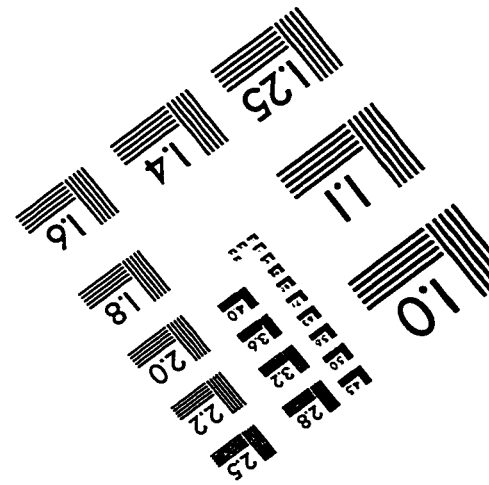
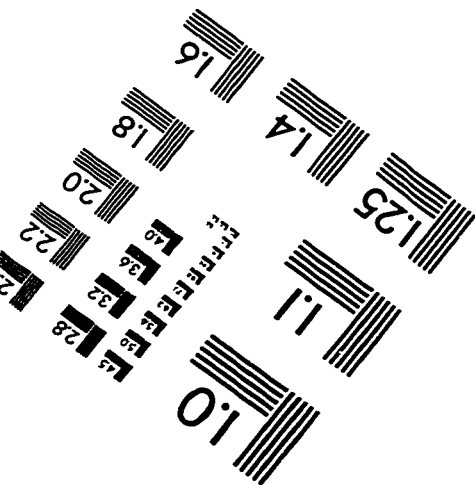
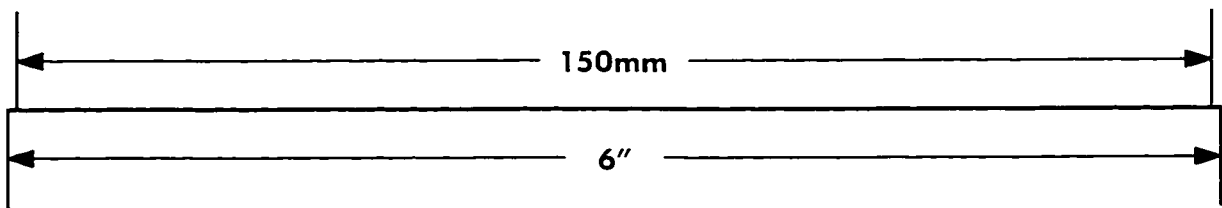
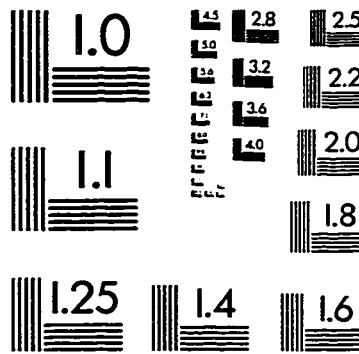
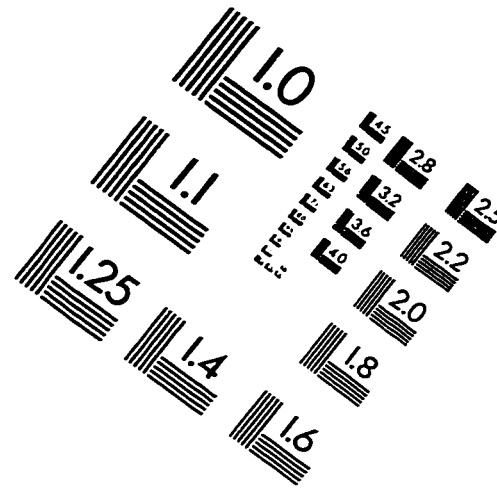
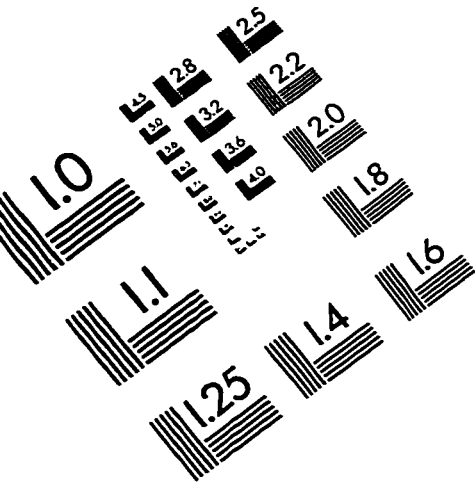
If you have any questions, please feel free to contact me at 220-7565, my supervisor, Dr. Dan McDougall, at 220-5651, the Office of the Vice-President (Research) at 220-3381, or the Faculty of Education Joint Ethics Review Committee, at 220-5626. Two copies of the consent form are provided. Please return one signed copy to me and retain the other copy for your records.

Thank you much for your cooperation.

Sincerely,

Dan Larsen

IMAGE EVALUATION TEST TARGET (QA-3)



APPLIED IMAGE, Inc.
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989

© 1993, Applied Image, Inc., All Rights Reserved