AN INVESTIGATION INTO THE CRITERION RELATED VALIDITY OF THE
PREJUDICED ATTITUDES TOWARDS ABORIGINALS SCALE

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Abstract

The topic of racism and prejudice is a very sensitive issue for many Canadians. This is primarily due to Canada's cherished image as a tolerant society leads even the most progressive people to adopt the belief that racism is comprised of only overt acts. However, what is not acknowledged by this old-fashioned view of prejudice is that the nature and expression of prejudice has evolved into a more covert form of prejudice known as modern prejudice (McConahay, 1986). This is particularly important because there is a well documented history of prejudice and discrimination of Aboriginal peoples in Canada, and without a proper understanding of the changing face of prejudice in Canada it is difficult to determine if there in fact has been a reduction in prejudiced attitudes towards Aboriginal peoples in Canada.

This study examines the criterion-related validity of the Prejudice Attitudes Towards Aboriginals Scale (PATAS) (Morrison, 2007) a 25 item (11 old-fashioned prejudice items and 14 modern prejudice items) newly developed measure of prejudicial attitudes towards Aboriginals developed using the theory of Modern Prejudice (McConahay, 1986). Four hundred and five undergraduate students completed a questionnaire including the PATAS, Right-wing Authoritarianism scale (RWA scale) (Altemeyer, 2007), Social Dominance Orientation scale (SDO5) (Pratto, Sidanius, Stallworth, and Malle, 1994), Motivation to Control Prejudice Reactions Scale (MCPRS) (Dunton and Fazio, 1997), and Form C of the Marlowe Crowne Social Desirability Scale (Renolds, 1982).

The results of this investigation revealed evidence attesting to the criterion-related validity of the PATAS. Participants who scored high on the PATAS also had high scores on the RWA scale, SDO5 scale, and tended to have a conservative political orientation. However, contrary to expectations, religious self schema was not found to be associated with PATAS scores. Practical applications and limitations of these findings are discussed as are possible directions for future research.
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Chapter 1: Background

Introduction

The topic of racism and prejudice is a very sensitive issue for many Canadians. The reason for this is because of Canada's cherished image as a tolerant society leads even the most progressive people to adopt the belief that racism is comprised of only overt acts carried out by nasty individuals against other individuals belonging to minority groups. However, what is not acknowledged by this old-fashioned view of prejudice is the nature and expression of prejudice has evolved into a more covert form of prejudice known as modern prejudice (McConahay, 1986). This is particularly important because without a proper understanding of the changing face of prejudice in Canada it is difficult to determine if there in fact has been a reduction in prejudiced attitudes towards Aboriginals, and because of the well documented history of prejudice and discrimination towards Aboriginal peoples in Canada.

Need for this Study

Canada’s demographic profile is currently changing and is expected to change even further in the coming years. This is especially true for the core working-age population (ages 20-64), because Canada has an aging population and a low birth rate (i.e., Canadians are not reproducing at a replacement rate) (2001 Census: Age and sex profile, 2001 retrieved from http://www12.statcan.ca/english/census01/Products/Analytic/companion/age/canada.cfm#working_age_population on March 22, 2007). This is evidenced by data from past censuses, which indicates visible minority populations are growing at a faster rate than the total population. For example, Stats Canada (2001) indicated that between 1996 and 2001, the total Canadian population increased 4% while the visible minority population rose 25% (Census Aboriginal population profile, 2001 retrieved from http://www.statcan.ca/bsolc/english/bsolc?catno=94F0043XIE on March 22, 2007). In addition to this, based on previous census data, it is also believed that the Aboriginal population will grow at a rate of 1.8% each year through to 2017; which is approximately 1.5 times faster than the general population (The Daily, 2005 retrieved from http://www.statcan.ca/Daily/English/050628/d050628d.htm on March 22, 2007). As such it is clear that in coming years Canada will become increasingly dependent on Aboriginal peoples to meet the demands of the labor market and its infrastructure.
Depending on Aboriginal peoples to meet the demands of the labor market and maintenance of Canada’s infrastructure is problematic because Aboriginal peoples face numerous societal barriers including, low levels of employment, reduced access to quality health care and housing, and poor educational outcomes (Census Aboriginal population profile, 2001). For example, the unemployment rate as indicated by the 2001 Canadian census for Aboriginals was 19.1% compared to that of 7.1% for non-Aboriginal persons (Census Aboriginal population profile, 2001 retrieved from http://www.statcan.ca/bsolc/english/bsolc?catno=94F0043XIE on March 22, 2007.). The rate of obtaining university degrees is low for Aboriginal peoples; with many Aboriginals possessing only a high school diploma. Moreover, the average yearly income for Aboriginal peoples is documented as being significantly lower than non Aboriginals with similar training and education (Census Aboriginal population profile, 2001). However, it should also be noted that the 2001 Canadian census Aboriginal population profile indicated despite these problems previously listed the treatment and social standing of Aboriginal peoples in Canada has generally improved when compare to previous census data collected.

In recognition of the different whole life outcomes and general treatment of Aboriginal peoples, Morrison (2007) developed the Prejudice Attitudes towards Aboriginals Scale (PATAS) (see Appendix A) using the theory of Modern Prejudice (McConahay, 1986). The theory of Modern Prejudice arose out of the attitude/behavior discrepancy found between opinion polls in the United States regarding attitudes towards African Americans following the Civil Rights Movement and the reactivity of existing measures of racial prejudice (McConahay, 1986). Modern Prejudice posits the reduction of prejudicial attitudes as measured by previous measures of racism is not the result of an overall reduction in prejudicial attitudes within society rather, it is the result of these measures becoming reactive in nature due to the expression of prejudice (i.e. discrimination) being socially undesirable. As a result of this, when filling out earlier measures of prejudice, people know the socially desirable responses to provide to avoid being labeled prejudiced. The reason for using the theory of Modern Prejudice to facilitate the development of the PATAS was for two reasons: (i) There has been a continued report in the reduction of reported prejudicial attitudes towards Aboriginals in Canadian opinion polls, the expression of prejudice is socially undesirable, and (ii) the theory of Modern Prejudice has been used successfully applied to other marginalized groups (See: Morrison, 2003; Pedersen, Griffiths, Contos, and Bishop, 2000; Swim, Akin, Hall, and Hunter, 1995).
Theoretical Framework of Modern Prejudice

According to McConahay (1986) the theory of Modern Prejudice suggest covert prejudice is the product of ambivalence experienced by some people towards a given marginalized group (like Aboriginals) that arise from the conflict between their anti-Aboriginal (for example) attitudes and their belief that racism is wrong. The result of this is the modern racist expresses their prejudicial attitudes by: (1) denying the continued existence of discrimination against marginalized groups; (2) rejecting the rights of marginalized groups to lobby for social change; and (3) believing the demands marginalized groups are making are unfair and that social institutions give marginalized groups unnecessary attention. The key issue for the modern racist is not whether marginalized groups should be equal; rather it is how to equally incorporate marginalized groups socially, legally and politically. Said differently, Modern Prejudice should be perceived as “the belief that racism no longer exists and that the cherished values are those associated with “equality” or “equality of opportunity” (e.g., affirmative action laws or policies) rather than values associated with “freedom of opportunity” (e.g., laws of policies prohibiting open discrimination)” (McConahay, 1986, p. 95).

In order to measure this new form of prejudice, the Modern Racism Scale (McConahay, 1986) was developed along with the theory of Modern Prejudice (McConahay, 1986). The Modern Racism scale is comprised of six items (e.g., “Blacks are getting too demanding in their push for equal rights”), with higher scores indicating higher levels of prejudice, and has been extensively used in research (Entman, 1990). Scores on the Modern Racism Scale have been found to positively correlate with political conservatism (Weigel and Howes, 1985), authoritarianism (Weigel and Howes, 1985), support for conventional religions beliefs (McConahay and Hough, 1976) and prejudice towards stigmatized groups. In addition, the theory of Modern Prejudice has also been applied to sexism (Swim, Akin, Hall, and Hunter, 1995), prejudice towards Aborigines in Australia (Pedersen, Griffiths, Contos, and Bishop, 2000), the development of the Modern Homonegativity Scale (Morrison, 2003), and more recently in the development of the PATAS in 2007 (Morrison, 2007).

A New Measure of Prejudice

The Prejudice Attitudes Towards Aboriginals Scale (PATAS) (Morrison, 2007) (see Appendix A) was developed to measure the discrepancy found between the expressed attitudes and behavior toward Aboriginal Canadians using the theory of Modern Prejudice (McConahay,
The initial scale items for the PATAS were generated using approximately 15 individuals (both Aboriginal and non-Aboriginal) who participated in either unstructured clinical interviews with aboriginal men and women, informal focus group with non-aboriginal university students, and reviews of the literature. Participants were asked to report both blatant and subtle sentiments that may be directed towards Aboriginal men and women. Following the collection of the information gathered from these sources the statements obtained were used to create 144 scale items believed to measure both old fashioned (i.e., overt prejudice) and modern (i.e., covert prejudiced) attitudes.

Following the development of the initial 144 scale items believed to measure both overt and covert prejudiced attitudes towards Aboriginals, a questionnaire containing all 144 prejudice attitudes towards Aboriginals items, two scales of Homonegativity (The Modern Homonegativity Scale—Gay version (Morrison and Morrison, 2007) and the Attitudes towards Gay Men Scale (Herek, 1988)) (for the purpose of demonstrating convergent validity with the PATAS), Form C of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982), and several demographic variables were then tested using a sample of 475 students registered at the University of Saskatchewan (Morrison, 2007). For the purpose of reducing the 144 scale items and to attest to the initial construct validity of this new measure of prejudice, the data gathered were then factor analyzed. The result of the factor analysis was two distinct but correlated scales with high levels of internal consistency; an old-fashioned scale (11 items) possessing an alpha of .91 and a modern scale (14 items) possessing an alpha of .93 with higher scores believed to denote greater levels of prejudice towards Aboriginals. In addition to this, some preliminary data regarding the criterion related validity of the PATAS was also obtained. Modern attitudes towards gay men were positively correlated with PATAS scores ($r = .28$ and $.50$, at $p < .001$). However, despite both scales having been found to possess a high degree of internal consistency and some preliminary convergent validity evidence, the PATAS can only be presumed to demonstrate some evidence of construct validity until more data has been collected.

**Purpose of this Study and Research Questions**

The purpose of this study is to examine the criterion related evidence pointing to the construct validity of the PATAS (Morrison, 2007). The following five research questions will be addressed: 1) *To what extent does the PATAS demonstrate convergent validity with the Right-wing Authoritarianism scale* (Altemeyer, 2007)? 2) *To what extent does the PATAS demonstrate...*
convergent validity with the Social Dominance Orientation Scale five (Pratto, Sidanius, Stallworth, and Malle, 1994)? 3) What is the nature of the relationship between PATAS scale scores and an increased concern about appearing prejudiced? 4) To what extent does the PATAS correlate with religious self-schema and political conservatism? and 5) To what extent does the PATAS demonstrate concurrent validity? The first and second research questions focused on the degree to which scores on the PATAS (Morrison, 2007) correlate with other measures that it should be theoretically similar to. As such the results obtained from these comparisons will then be used to report on the extent to which the PATAS demonstrates evidence of convergent validity with both the Right-wing Authoritarianism (RWA) scale (see Appendix B) and the Social Dominance Orientation scale five (SDO5) (see Appendix C). The RWA scale and the SDO5 scale were selected based on the significant amount of evidence indicating a strong connection between their scale scores and prejudice (see: Altemeyer 1982; Altemeyer, 1998; McFarland and Adelson, 1996 as cited by Altemeyer, 1998; and Sidnaius and Pratto, 1999). The third research question will examine the relationship between PATAS scores and the increased concern of appearing prejudiced as measured by the Motivation to Control Prejudice Reactions Scale (Dunton and Fazio, 1997) concern about appearing prejudiced subscale (see Appendix D) for evidence of discriminant validity. The fourth research question examines the relationship the PATAS has with religious self-schema and political conservatism; both of which have been positively correlated to the RWA scale (Altemeyer, 1981; Altemyer,1996; and Altemeyer, 2007) and the SDO5 (Pratto, Sidianus, Stallworth, and Malle 1994; Sidianius and Pratto, 1999). While, the fifth research question will examine the extent to which the PATAS is able to distinguish between individuals that hold low levels of prejudiced attitudes towards Aboriginals and individuals that hold high levels of prejudiced attitudes towards Aboriginals.

Significance of this Research

The investigation into the criterion related validity of the PATAS is significant within a Canadian context because of the forth coming shift in Canadian demographics due to stagnant population growth within ‘White Canada’ and the accelerated growth of its Aboriginal populations (The Daily, 2005 retrieved from http://www.statcan.ca/Daily/English/050628/d050628d.htm on March 22, 2007), the well documented history of prejudice towards Aboriginals in Canada, and due to the paucity of
research into the nature of prejudice in Canada. Moreover, this research is significant because the PATAS once validated could be used to evaluate the success of interventions designed to reduce prejudiced attitudes towards Aboriginal peoples.

Definitions of Terms

The following definitions are provided for the purpose of clarifying the meaning of a number of different psychological and psychometric terms used to examine prejudice and the validity of the Prejudice Attitudes towards Aboriginals (PATA) scale in this Graduate Thesis.  

*Aboriginal People*—Peoples recognized in the Canadian Constitution Act of 1982 in sections 25 and 35, respectively as Indians, Métis, and Inuit.  

*Validity*—an evaluative judgment of the degree to which theoretical rational and empirical evidence support the adequacy and appropriateness of interpretations and actions made on the basis of test scores or other methods of assessment (Messick, 1993). The unitary view of validity integrates considerations of content, criteria, and consequence in to a comprehensive conception of construct validity for empirically testing hypotheses about score meaning and use (Messick, 1995).  

*Construct Validity*—is an evaluative judgment that is made based on “the evidence and rationales supporting the trustworthiness of score interpretation in terms of explanatory concepts that account for both test performance and score relationships with other variables” (Messick, 1995, p 743). In determining the construct validity of a test or assessment evidence from both content and criterion relatedness are used. The goal in construct validation is to show that the test items are a sample the postulated attribute/construct measured by the test (Cronbach, & Meehl, 1955).  

*Content Validity*—is evaluated based on professional judgments regarding the relevance of the test content to the content of a particular behavioral domain of interest about the representativeness with which an item or task covers that domain (Messick, 1993). This approach makes the assumption that there is good detailed description of the content domain. For example, in checking the content validity of a new measure of prejudice one might conduct interviews with targets of prejudice and discrimination to lay out all the appropriate criteria that contribute to the theory of construct, as well as, a clear definition of the construct of interest. Following this, one would examine the criteria laid out and compare them to their theory of constructs’ operationalization to determine its content validity according to the theory of construct.
Criterion-Validity—the comparison of inferences based on the results of a test or assessment against a standard indicator of the target construct or trait (Sim, & Arnell, 1993)—usually expressed in terms of correlations or regressions, between the test scores and criterion scores (i.e., scores derived from measures that are criteria for a particular applied purpose) (Messick, 1993). It should also be understood that correlations between test scores and criterion measures can be also viewed as contributing to the joint construct validity of the predictor and the criterion (Messick, 1995).

Concurrent Validity—evidence that signifies the extent to which a measurement obtained estimates a group or individual’s present standing on the criterion (Messick, 1993). For example, a measure of prejudice should be able to distinguish between those individuals who possess relatively high levels of prejudicial attitudes and those individuals who possess relatively low levels of prejudicial attitudes based on group ethnic background.

Convergent Validity—evidence that signifies measure in question is related to other measures of the same construct and other variables that it should relate to on theoretical grounds (Messick, 1993). When examining a test for convergent evidence of construct validity the meaning of the score on the test is substantiates externally by assessing the degree to which the relationship with other measure are consistent with the attribute of interest (Messick, 1995). For example, to examine the convergent evidence pertaining to the construct validity of a new measure of prejudice one might gather participants’ scores on other similar measure(s) that purports to be valid predictors of prejudice. Convergent evidence is then determined based on whether or not there is a significant positive correlation between the new measure and the measure found that has been demonstrated to be valid.

Discriminant Validity—evidence signifying that a measure in not unduly related to exemplars of other distinct constructs (Messick, 1993). Said differently, a successful evaluation of discriminant evidence for a given test or assessment indicates that a test designed to measure a given concept is not highly correlated with (diverges) from other tests designed to measure theoretically different concepts and therefore discounts other plausible alternatives to the construct of interest (Messick, 1995).

Prejudice—a cognitive and attitudinal phenomenon that 1) occurs between groups; 2) involves an evaluation either positive or negative of a group; 3) is based on the real or imagined characteristics of the group” (Nelson, 2002, p 11)
Old-Fashioned Prejudice—Blatant negative stereotypes and open opposition to racial equality. 

Modern Prejudice—“The belief that racism no longer exists and that the cherished values are those associated with “equality” or “equality of opportunity” (e.g., affirmative action laws or policies) rather than values associated with “freedom of opportunity” (e.g., laws of policies prohibiting open discrimination)” (McConahay, 1986, 95)

Ambivalence—refers to an underlying emotional attitude in which the co-existing contradictory impulses (usually love and hate) derive from a common source and are thus held to be interdependent. Used in a psychoanalytic sense it is not usually expected that the person embodying 'ambivalence' would actually feel both of the two contradictory emotions one or other of the conflicting emotions is typically repressed.

Racial Ambivalence—the conflict created between an individuals belief in equality and fair play and the residual negative affect existing towards a given minority group population.
Chapter 2: Review of Related Literature

Overview

Empirical investigation into the topic of prejudice and discrimination is complex. It requires an understanding of stereotypes, their origins, and the process of stereotyping. As such, an understanding of how stereotypes are used and what personality types and group orientations correlate with prejudicial attitudes is also necessary. In addition to this the measurement and validation of instruments designed to measure prejudice since the civil rights movement and the feminist movement have become increasingly reactive due to social desirability. As such this chapter will review the measurement topic of validity and all relevant phenomena related to prejudice before introducing the theory of modern racism and its recent application to the measurement of individual differences in prejudiced attitudes towards Aboriginals in Canada.

First the underlying theoretical view of measurement validity to be used in this research will be presented. The purpose of presenting the theoretical view of validity to be used in this research is for two reasons: First, to provide the necessary background regarding the topic of measurement validity. The second reason for presenting the underlying theoretical view of validity to be used is to help make clear the difference and relationship between the various forms of validity (i.e., criterion, concurrent, convergent, and discriminant) and explain how they are all various forms of evidence which can be used to determine the construct validity under the Unitarian view of validity use in this research.

The topic of stereotypes—which can be considered the foundation for the development of prejudices—will be examined next. This will include a discussion on: the formation of stereotypes; an examination of how stereotypes can become illusory correlations which will highlight the fact that stereotypes in addition to being representative of agreed upon social categorizations are also used as mental representations that are influenced by group membership; and a discussion on how stereotypes are used. The third major section Prejudice and the Individual, will examine the psychological functioning of the individual as produced by socialization in the family and the effect of group orientation as they apply to the prejudgment of individuals based on stereotypical information. As such the personality types and attitudinal measures found to correlate with prejudicial attitudes and beliefs will also be discussed.

The fourth section—prejudice—will discuss the phenomena of prejudice and its measurement. This section will consist of two major subheadings: 1) Modern Prejudice
(McConahay (1986), and 2) Prejudiced Attitudes Towards Aboriginals. Under Modern Prejudice the theory of Modern Prejudice (McConahay, 1986) will be introduced and the research that led to its development will be presented. Next, the development of the Modern Racism scale (McConahay, 1986)—developed in concert with the theory of Modern Prejudice—and its validation will be presented. Following this, the individual difference measure—Motivation to Control Prejudiced Reaction Scale—will be introduced and its development and relationship with Modern Racism scale scores will be discussed. Finally, a brief discussion on how the theory of Modern Prejudice has been applied to other marginalized groups will follow.

The second major subheading—Prejudiced Attitudes Towards Aboriginals—will present the information pertaining to the development and initial testing of the PATAS (Morrison, 2007).

The fifth and final section will consist of a summary of the literature reviewed. This section will attempt to clarify the relationship between stereotypes, personality characteristics and prejudice for the reader. In addition to this a possible methodological framework for investigating the extent to which the PATAS demonstrates criterion related validity will also be introduced.

Validity

Traditional View of Validity

Validity in measurement is an evaluative judgment of the degree to which theoretical rational and empirical evidence support the adequacy and appropriateness of interpretations and actions made on the basis of test scores or other methods of assessment (Messick, 1993). Said differently, a measurement is considered to be valid when it both measures and performs the functions it is purported to measure. The traditional view of validity in measurement approaches has been broken into three distinct types: 1) content, 2) criterion, and 3) construct validity. From this traditional perspective of content validity referred to the perceived appropriateness of the content of measure and is a judgment made about the representativeness with which an item, task, or measure covers the domain of interest. A consequence of this is in the determination of content validity is not concerned with the response process or with the social consequences of a test (Messick, 1993).

Criterion-related validity is based on the degree of the empirical relationship between the test scores and criterion scores. The interest in criterion-related validity, in its purest form, is the correlations between test scores with scores produced by measures “that are critical for a
particular applied purpose in specific applied settings” (Messick, 1993, p. 17). Thus, criterion-related validity can be further subdivided into convergent validity and discriminant validity. The former subcategory examines whether test scores are positively associated with the scores obtained from a criterion measure and the latter looks for a divergent association between test scores and scores obtained on a criterion measure.

Construct validity, on the other hand, is determined through integrating any evidence that is relevant to the interpretation of meaning of test scores (Messick, 1993). It is important to understand that in construct validity the test score is not perceived as equated to the construct measured. Rather, the measure is viewed as an extension of the construct that includes a set of indicators extensible to the construct. From this perspective almost any form of test information is able to contribute to the understanding of construct validity. It should be understood that, with regard to construct validity, test information becomes stronger if it fits with the theoretical rational underlying the interpretation of the scores is explicitly evaluated. However, it is important to note construct validity subsumes both content validity and criterion-related validity, and that overreliance on either content or criterion-related validity to determine construct validity is not enough. The meaning of the measure must be examined to support test interpretation and to justify its use. Thus, one approach to construct validation is to demonstrate that the items within a measure are inter-related and therefore measure a single construct. This approach often uses inter-item correlation and factor analysis to reveal relationships among the items and the construct measured. Another approach in determining construct validity is to demonstrate that the test is exemplary of the behavior expected of the construct in question.

Validity as a unitary concept

Messick (1993, 1996) argued in recognition of the traditional conception of validity being fragmented and incomplete because it fails to take into account both evidence of the value implications of score meaning as a basis for action and the social consequences of score use and presented his unitary view of validity. From his Unitarian view of construct validity convergent empirical relationships between criterion measures that reflect commonality among indicators are interpreted to imply the operation of the construct (Messick, 1995). Whereas discriminant empirical relationships provide evidence that discounts the intrusion of alternative constructs that could present other plausible hypothesis. From this perspective construct validity determined by taking into account all empirical information about a test. Thus the Unitarian view of validity is
essentially concerned with evidence and rationales that support the trustworthiness of score interpretation and their ability to explain the concept that are account for test performance and its relationship with other variables of interest.

In addition to this, it should be understood that Messick’s (1993, 1995) unified conception of validity places a heavier emphasis on how a test is used. A consequence of this is when determining construct validity one should take into consideration the two major threats to construct validity; Fist construct underrepresentation (i.e., the measure or assessment tool is too narrow and does not include some important aspects of the construct) (Messick, 1995); Second Construct irrelevant variance (i.e., the assessment is too wide and contains a excess of reliable variance that is associated with other constructs distinct from the one of interest) (Messick, 1995).

Messick (1995) suggest that when examining an assessment for construct irrelevance it is important to acknowledge the two basic kinds: Construct irrelevant difficulty and construct irrelevant easiness. Where in construct irrelevant difficulty some aspect of the test or assessment that is extraneous to the construct of interest makes the task difficult and irrelevant which leads to construct scores that are invalid and low for those affected by the external construct. An example of this could be unnecessary reading comprehension requirements in a test (Messick, 1995). Construct irrelevant easiness, on the other hand, occurs when there are some extraneous clues included in items or task allows some individuals to respond correctly in a fashion irrelevant to the construct being assessed. However it should be noted that what constitutes as construct irrelevant variance is difficult to determine, especially when dealing with performance assessments and bust be carefully examined.

Finally it should also be understood that the Unitarian view of validity has shifted the interest towards both the intended and unintended social consequence of test use (Messick, 1995). Thus, the validation of inferences made about a test applies to any observation even if the observation makes reference to the theoretical construct of interest. This places emphasis on both the evidential and consequential basis for test use. Where evidential basis refers to the evidence that can be provided in support of score meaning and consequential basis refers to the consequences that contribute to an assessment of the value of inferences made from test scores. A consequence of this is construct validity is a starting point from which the whole of the evidential basis for test interpretation is made. This requires not only criterion related evidence of construct validity; while the examination of the consequential basis for test use requires an
examination of both the perceived and actual social consequences of applied testing. Additionally the examination of the consequential basis of test use also requires evidence of construct validity, consideration of the value implications of a test, and evidence of the relevance and utility of test scores.

In summary, it should be understood that Messick’s (1993, 1995) Unitarian view of validity accurately embodies the definition of validity presented in the Standards for Educational and Psychological Testing (APA, AERA, & NCME, 1985) as the appropriateness, meaningfulness, and usefulness of the inferences made from test scores. The process of validation should be viewed as a integrative process that encompasses a broader theory that collects both evidential and consequential basis of test use. From this complete view of validation the Unitarian conception begins with construct validity and adds an appraisal of the value implications of the theories used to develop a measure and the utility of scores in applied settings, as well as, an assessment of the potential and actual social consequences of test use.

Stereotypes

A stereotype is a fixed mental representation of a commonly held notion or image of a person or group, based on an oversimplification of some observed or imagined trait of behavior or appearance (Augoustinos and Walker, 1998). While many focus on the prejudicial and discriminatory consequences of stereotyping, stereotypes and the process of stereotyping should be recognized as being more benign in nature. The following is an overview of the origins of stereotypes.

The Origin of Stereotypes

The literature indicates that there are three explanations regarding the origins of stereotypes: 1) the socio-cultural perspective (Katz, and Braly, 1933; Gilbert, 1951; Karlins, Coffman, & Walters, 1969), 2) the ‘grain of truth’ theory (Allport, 1954; Brewer & Campbell, 1976), and 3) the belief stereotypes serve an ideological function to justify or criticize the status quo (Oakes et al., 1994).

From the socio-cultural perspective, stereotypes are seen as being derived from the culture in which an individual is raised and resides. This perspective suggests stereotypes are conveyed and reproduced in socio-cultural ways—through socialization in the family, school, and the various forms of media available. Said differently our stereotypes are learned cognitive schema passed down form our parents at the individual level, and then they are shaped by our
experiences at school and further influenced by the media at the societal level. The result of this is stereotypes are influenced by societal views which are passed down for generation to generation. The socio-cultural view of the origins of stereotypes has been heavily supported through a series of research spanning across 40 years. The persistence of stereotypes over an extended period of time was first demonstrated by Katz and Braly (1933) and then reproduced 20 and 40 years later by Gilbert (1951) and Karlins et al. (1969). Katz and Braly (1933) investigated ethnic and national stereotypes in Princeton University students and found that there was, at times, remarkable consensus in the selection adjectives representing various ethnicities and nationalities. For example, of those participants surveyed by Katz and Braly (1933), 78 per cent believed Germans to be ‘scientifically minded’; 68 per cent of participants believed Germans to be ‘industrious’; 84 per cent of participants believes African Americans to be ‘superstitious’; and 75 percent of the participants believed African Americans to be ‘lazy’. The follow-up studies conducted 20 and 40 years later, confirmed the stereotypes previously found by Katz and Braly (1933) and pointed to the stability in the endorsement of group stereotypes over time (Gilbert, 1951; Karlins et al., 1969). However, it should be noted, in the follow-up studies, despite the persistence of stereotypes over an extended period of time, results indicated there was a reduction in consensus for the most overtly negative stereotypes.

The second explanation for the origin of stereotypes is the ‘grain of truth’ or ‘kernel of truth’ theory (Allport, 1954; Brewer & Campbell, 1976). The ‘grain of truth’ posits that a group’s culturally distinctive behavior or socio economic status it holds provides the basis for certain stereotypical perceptions. As such, an ethnic group (X) that occupies a disadvantaged position in society has low levels of education and high levels of unemployment social status can lead group X to be stereotyped as ‘stupid’ and ‘lazy’. Following this line of thought it should also be possible to see how these types of stereotypes can be further exaggerated to become prejudices. Some evidence for the ‘grain of truth’ explanation of the origins of stereotypes has been obtained from an ethnographic investigation conducted by Brewer and Campbell (1976); who conducted a study of 30 tribal groups in Africa. After analyzing the data Brewer and Campbell found the Kikuyu tribe (reported to enjoy an economically advantaged social position) was consistently described as ‘intelligent’ and ‘progressive’, or ‘pushy’ and ‘proud’.

Other research using a variation of the ‘grain of truth’ theory suggests a group’s culturally distinctive behavior or socio economic status can also provide the basis for certain
stereotypical perceptions and stereotypes. This variation suggests stereotypes are derived from the prescribed roles of different groups and has been empirically supported by research into stereotypes of women (Eagley & Steffen, 1984). For example, Eagley and Steffen (1984) demonstrated the consensual stereotypes of women (i.e., ‘warm’, ‘caring’, ‘less active’, etc.) could be reversed if a woman was described as an employed person. Additionally, the belief stereotypes originate over time from different groups social roles has also been supported by Eagley and Wood in 1982 who demonstrated the common view of women as being more compliant than men originates from the perception of women typically occupying a subordinate status in employment settings.

The third explanation for the origins of stereotypes suggest stereotypes serve as an ideological function used to either justify or criticize the status quo (Oakes et al., 1994). This perspective of stereotypes and their origins posits stereotypes are rooted in the web of social relations and are not solely derived from the workings of our cognitive systems (Tajfel, 1981b). Consequently, in adopting this perspective of stereotypic origins, the view of a deprived minority group as ‘lazy’ or stupid’ is perceived as helping to rationalize the social system, while at the same time also serve to justify the privileged position of the majority (Divine and Sherman, 1992).

In summary, examining the literature regarding stereotypes and their origins, three explanations are provided for the origins of stereotypes. A socio-cultural perspective (Katz, & Braly, 1933; Gilbert, 1951; Karlins, Coffman, & Walters, 1969) that suggests stereotypes are developed from one’s own culture in which they are raised. The ‘grain of truth‘ theory (Allport, 1954; Brewer & Campbell, 1976) which suggests a group’s behavior or socio economic status provides the basis for certain stereotypical perceptions; and the third explanation which suggests stereotypes are used to either justify or criticize the status quo (Oakes et al., 1994). Examining these explanations it should be understood that one should not accept only one of these explanations as providing a complete explanation, rather all three explanations contributing to stereotype origins. It should also be understood that stereotypes act as mental classifications that are accessed when interacting with one’s own environment. A consequence of this is stereotypes exist for objects, social situations, and groups of people and are used by the individual to make sense of their environment. The next section will discuss how stereotypical categorizations can
lead to the formation of illusory correlations (i.e. the false association of between group membership and infrequent (often negative) behaviors).

Stereotypes as Illusory Correlations

Hamilton and Gifford (1976) were the first to discover that the psychological distinctiveness of infrequent events could create stereotypes using the work of Chapman (1967) which reported people overestimate the degree of association between infrequently paired words. Hamilton and Gifford (1967) presented participants with a number of sentences describing individuals as belonging to one of two groups (A or B) performing either desirable or undesirable behaviors. The stimuli presented to participants were manipulated such that there was always twice the number of people in group A than in group B (the minority group). Similarly, the ratio between desirable and undesirable behaviors for both group’s stimuli were also manipulated to have a ratio of approximately 2:1. Following the presentation of the various descriptor stimuli to the participant, Hamilton and Gifford (1967) asked participants to recall the frequency of different behaviors performed by each group and report this information. After the data was collected and analyzed, the results indicated that although subjects were fairly accurate in assigning desirable attributes, there was a tendency to ascribe the less frequent undesirable attributes to the minority group B. Hamilton and Gifford (1967) then confirmed illusory correlations with positive attributes in a subsequent experiment.

However, Shaller and Mass (1998) pointed out that in most real-life situations people are not detached observers; they often hold group membership in one of the groups in question. They hypothesized group affiliation would motivate people to be more cognizant of illusory correlation if the in group stereotypes were favorable and less susceptible to the phenomenon if the stereotypes were unfavorable. The data showed that the results supported this hypothesis (Shaller & Mass, 1998). The size of the perceived correlation was predictably increased or decreased by assigning participants to one of the two groups.

Other research indicates illusory correlations are not caused by distinctive stimuli; rather, they are the result of the subjects’ categorization activity. This was demonstrated by McGarty et al. (1993) who simply informed participants that there would either be twice as many statements about group A as about B, or that half the statements regarding a group would describe positive behaviors. Results showed that when participants were asked to prescribe some behavioral attribute to group ‘A’ or ‘B’ they evidenced an illusory correlation at least as large as those
obtained through the conventional recall paradigm found in the Hamilton and Gifford (1976) research. McGarty et al. (1993) suggested that group labels (‘A’ or ‘B’) are used to make sense of the stimuli, and because there are in fact a greater number of absolute positive statements associated with group ‘A’, the individual forms the tentative hypothesis ‘group A is good’. Thus, through the process of attempting to balance the meta-contrast ratio between group ‘A’ and ‘B’, an individuals’ attribution of statements group ‘A’ and ‘B’ becomes biased towards the difference between the two groups (see Turner et al., 1987). As such McGarty et al. (1993) concluded the formation of stereotypical association between groups and attributes was the result of attempting to impose order on the stimuli through categorization rather than being an automatic property of the stimuli. These findings have also been supported by Berndsen et al. (2001) who after conducting two studies, found each participant’s behavior indicated that an illusory correlation arose out of actively seeking intergroup differences and that those reinterpretations of stimuli and the perception of illusory correlation were mutually reinforcing. Therefore, it appears along with stereotypes representing agreed upon social categorizations stereotypes are also used as mental classifications that are influenced by group membership. The next section will discuss how the stereotypes are used by people in their daily lives.

The Use of Stereotypes

Whether a stereotype is prejudiced or not, “it is a cognitive association of a social category, group of people, or person with certain characteristics that is used as a frame of reference to base social interaction (Brown, 2002, p 90). Consequently when an individual that possesses a group stereotype, encountering an individuals from that group, they will attribute to that person the relevant stereotypical characteristics they have, and then on the basis of that perception there may be further consequences (Brown, 2002). For example, the person may be evaluated consistently with the stereotype and judged to be a less suitable tenant, employee, or business associate. However, upon encountering an individual there are many other pieces of information such as appearance, dress, and behavior that may not be consistent with the group stereotype. In recognition of this Locksley, Borgida, Brekke, and Hepburn (1980), posed the question: “How do we integrate these different pieces of information”? Reasoning if a participant’s sex stereotypes are activated, their judgments of the target should be affected by simply varying the targets’ sex. Locksley et al (1980) attempted to test their rational by conducting a study where they presented participants with a transcript of a telephone
conversation between two people. The conversation portrayed one individual as decidedly assertive and the other as lacking in confidence. The gender of the targets was also varied in this telephone conversation. To test their hypothesis Locksley et al. (1980) then asked participants to provide their impression of the target and predict their behavior in a number of hypothetical situations. The results from this investigation suggested altering the alleged gender of the target had no effect on the participants’ judgments and that the overriding factor in this experiment appeared to be their behavior depicted in the telephone conversation. Consequently in the assertive condition, the target was rated more masculine and in the passive condition the target was rated to be more feminine irrespective of their assigned gender. In light of these results Locksley, et al. (1980) conducted a subsequent experiment. In condition one, the only information that was available to participants was the target’s gender. Additional information not related to assertiveness was provided in condition two and in condition three the information provided did refer to target assertiveness. After collecting and analyzing the data, the results indicated participants in the third condition responded consistently with their first investigation. In conditions one and two, information regarding the targets’ gender did influence judgments in the direction of conventional stereotypes. Thus it was concluded in real life situation where individuating information is available, social stereotypes may not influence judgments as powerfully as believed (Locksley, et al., 1980). Others suggest the absences of stereotypical findings in Lockley et al. (1980) may be related to the judgmental contexts employed and possibly the measure used. For example, Nelson, Biernat, and Manis (1990) found people’s height estimates of men and women portrayed in photographs were reliably influenced by the sex of the person depicted. This effect was so powerful that even when researchers indicated to the participant the overall sex difference in height to be negligible and for participants to judge targets as even, stereotypical information accessed by the participants still influenced height ratings. Biernat, Manis, and Nelson (1991) also suggested that the absence of the stereotype effect reported by Locksley et al. (1980) could be the result of differential judgment standards employed for rating men and women. This was supported by their research results which demonstrated sex stereotypes for height could be eliminated by asking participants to estimate the height of the person portrayed in the portrait in reference to others of the same gender.

Other research suggests the absence of stereotypic effects in the Locksley et al (1980) study may be the result of pairing strong individuating information about the targets’
assertiveness with weaker information conveyed by gender. This critique was advocated by Kruger, and Rothbart (1988) who demonstrated that when the relative strength of individuating and group stereotypic information was changed, judgments varied accordingly. They found that estimates of a target person’s aggressiveness positively correlated to the descriptive content provided. Additionally Kruger and Rothbart (1988) also found that estimates of a target’s aggressiveness varied according to category labels provided to the participant such as male and female (this finding was found to be particularly true when individuating information weakly implied aggressiveness). Nevertheless, a number of other studies have demonstrated stereotypes affect judgments even when individual characteristics about the target being judged are available. For example, Grant and Holms (1981) after presenting participants with mini character sketches of persons implied to be somewhat like the Chinese stereotypes (i.e., scientific, and ambitious) or the Irish stereotype (i.e., happy go lucky, and talkative) found that simply altering the presumed nationality of the target (Chinese, Irish, or Somalian) would significantly influence the judgments made. Glick, Zion, and Nelson (1988) also found reliable sex stereotyping using a simulated personnel selection context with business managers. They found individual characteristics of applicants as described in a CV (Curriculum Vitae) influenced the likelihood of being short listed for sales manager job (for CV’s with masculine characteristics) or a dental receptionist (for CV’s with feminine characteristics). Darley and Gross (1983) also found social class stereotypes can also influence peoples judgments about a child’s academic performance.

Summary

In summary it should be understood that stereotypes act as tentative hypotheses, through which we seek out further confirming information and without that information, we hesitate to apply them firmly (Darley & Gross, 1983). However, it should also be acknowledged that instead of attempting to falsify these tentative hypotheses individuals adopt a confirmation bias such that they seek out information to confirm their existing stereotypes (Snyder, 1981; Stangor & Ford, 1992). Taking this into consideration it becomes apparent that in addition to stereotypes being socially agreed upon cognitive schema that can be influenced by group affiliation, people when interacting in society are biased by these categories. Thus, it should be understood that people respond to others in accordance with their existing stereotypes, and seek to confirm their social categorizations. The next section will discuss the formation and use of stereotypes that contribute to the negative pre-judgment of individual or groups (i.e., prejudice) in the individual.
Prejudice and the Individual

At present, the origins of prejudice have been conceptualized as being derived in the psychological make up and functioning of an individual as produced by socialization in the family, which then influences the individuals’ formation and use of stereotypes (Brown, 2002). Perhaps the best known attempt to link prejudice to a personality was conducted by Adorno et al. in 1950 in the development and testing that led to the creation of the Fascism scale.

The Authoritarian Personality and the Fascism Scale (Adorno et al., 1950)

The theory of the “Authoritarian Personality” attempted to account for individual differences in the receptiveness to prejudicial ideas rather than to explain the origins of prejudice at a societal level (Adorno, et al., 1950). Adorno et al. (1950), suggested personality development involves the constant repression and redirection of instinctive drives through existence of social constraints. Furthermore, Adorno et al. (1950) believed that the most powerful agents involved in personality development are the parents. From this Freudian perspective; it was hypothesized, the problem with the prejudiced individual is they have been raised in a family environment overly concerned with ‘good behavior’ and conformity to conventional moral codes, especially those pertaining to sexual behavior. In addition to this Adorno, et al. (1950) suggested parents (particularity the fathers) who socialize their children to have authoritarian personalities use disciplinary measures that are excessively harsh. Consequently, children reared in these types of environments displace their aggression/frustration away from their parents on to a suitable target (such as those perceived to be weaker or inferior to ones self) due to the anxiety experienced regarding the perceived consequences of overtly displaying aggression towards their parents. Adorno et al. (1950) also proposed that the ‘Authoritarian Personality’ type was not limited to simply social attitudes, but also an individuals’ cognitive style. Thus, it was theorized that a consequence of parental disciplinary zeal and strict conventional morality would lead to the development of simplistic ways of thinking marked by the consistent use of very clearly defined categories and intolerance of any grey area between them. The result of which, according to Adorno et al. (1950), was the development of a person who is over differential in their categorizations and anxious towards authority figures.

To substantiate their theory of the “Authoritarian Personality”, Adorno et al. (1950) carried out a massive research project that combined both large scale psychometric testing and
individual clinical interviews. The purpose of this project was to develop an objective measure of the various forms of overt prejudice. This aim was not realized however, and the new measure evolved into a personality inventory believed to tap the central aspects that underlie the authoritarian personality known as the Fascism-scale (F-scale) (Adorno et al., 1950). The F-scale consisted of 30 items designed to reflect various aspects of the hypothesized make-up of the authoritarian personality. For example, there were items pertaining to authoritarians’ submission to authority, aggression towards deviant groups, and the projection of impulses (particularly those sexual in nature).

Once developed, the construct validity of the instrument was examined by Adorno et al. (1950) using clinical interviews of participants having both high and low F-scale scores. The results of these interviews supported the theory of the ‘Authoritarian Personality’. Individuals with a high score tended to idealize their parents, while at the same time recalling their childhood as a time of obedience and harsh punishment for even the slightest disobedience (Adorno et al, 1950). In addition to this, participants’ F-scale (Adorno et al, 1950) scores corresponded with their interview responses. High scoring individuals were very moralistic, openly condemnatory of both deviants and social inferiors, exhibited well defined categorical stereotypes, and were overtly prejudiced. Individuals having low scores were found to have had a more balanced childhood and hold more complex and flexible social stereotypes. Adorno et al. (1950) also found a significant correlation between F-scale scores and their earlier measure of ethnocentrism.

Other research has found reliable correlations between the F-scale and measures of xenophobia tapping hostility towards several ethnic groups (Campbell and McCandless, 1951), anti- African American prejudice (Pettigrew et al., 1958), and attitudes towards stigmatized or deviant subgroups (Cohen and Streuning, 1962). Despite the numerous studies linking authoritarianism and prejudice there are a number of methodological and theoretical flaws. At the methodological level, the majority of the criticisms focused on the design and validation of the F-scale (Brown, 1965; Hyman and Sheatskey, 1954). Of these there are three of particular relevance: 1) an unrepresentative sample was used to develop and refine items (Hyman and Sheatskey, 1954); 2) F-scale items were written so that agreement indicates an authoritarian response; and 3) the validation of the F-scale using clinical interviews was flawed.

The first criticism of the F-scale (Adorno et al, 1950) was unrepresentative samples were used to develop and refine items since the samples used to test the F-scale were drawn from
predominantly middle-class organizations (Hyman and Sheatskey, 1954). This threatens the validity of the measure because the development and testing of a theory using an unrepresentative sample is not a sound theoretical base from which to develop a theory which could then be generalized to the whole population as the samples may have biased the results. Second, all items on the F-scale were written so that agreement indicates an authoritarian response. The difficulty with this, Brown (1965) suggests, is there is no way of distinguishing an authoritarian response from the tendency to agree with authoritative sounding statements. The third criticism of the F-scale was that the validation which used clinical interviews was flawed, because interviewers knew the scores of the respondents in advance and that this knowledge may have contributed the interviewer unconsciously biased the participants’ responses (Brown, 2002). In addition to this, the F-scale was also criticized as only being able to provide a limited measure of authoritarianism (right wing not left-wing authoritarianism).

In response to the criticisms that the F-scale (Adorno et al., 1950) only measured right-wing authoritarianism, Rokeach (1956) hypothesized that apparently very different kinds of prejudice—although sharing a common cognitive structure—can coexist as they are isolated, thus allowing contradictory opinions to be tolerated. In addition to hypothesizing prejudicial systems are resistant to change when presented with new information Rokeach (1956) also believed prejudice would be characterized through the use of an appeal to authority to justify their position. To substantiate this view Rokeach (1956) developed two scales, the Opinionation Scale and the Dogmatism Scale to investigate his theory of the closed mind (i.e., dogmatic personality), which is contradictory to the non-prejudiced person who is open minded. The Opinionation Scale consisted of a series of extreme social attitude items worded in both the left- and right-wing directions of authoritarianism; whereas, the Dogmatism scale was intended to measure general authoritarianism. The results of the field test for these scales indicated both scales to be reliable; however, Rokeach had mixed success when attempting to determine the validity of the Dogmatism scale. It should also be noted that further investigations into these two scales proved to be unfruitful.

Right-Wing Authoritarianism

The concept of Right-Wing Authoritarianism (RWA) was developed out of the research conducted by Adorno et al. (1950) into the authoritarian personality and subsequent development of the F-scale by Altemeyer in 1981. Altemeyer (1996) defines RWA as the correlation among
three beliefs; 1) submission, 2) aggression, and 3) conventionalism; all of which are based on the definitions of these beliefs as outlined by the seminal research by Adorno et al. (1950). Submission refers to adhering to perceived authority's "commands." Where the term "perceived" indicates not all authoritarians agree on "who is" an authority figure. Aggression refers to a tendency to engage in harmful behavior toward others, most often on to those perceived as "non-authorities" or social deviants. Conventionalism refers to an endorsement of traditional beliefs (e.g., traditional religious, gender role, and/or political beliefs).

Altemeyer (1981) developed the RWA scale (see Appendix B) to measure this cluster of beliefs over the course of eight studies, the first of which was conducted in the winter of 1971. This study involved over a thousand who responded to 87 authoritarian items. The first 29 of the 87 items used consisted of either the original or balanced F-scale. The remainders of the 87 items included 18 statements from the D scale, 22 items from the Lee and Warr (1969) balanced F-scale, six items from the Traditional Family Ideology (TIF) (Levinson and Huffman, 1955), and 12 items developed by Altemeyer himself (As cited by Altemeyer, 1981). After calculating the intercorrelations among for item responses, the results indicated the most tightly connected items were items one, eight, 12, 15, and 17 from the original F-scale, items 31, 50 and 67 from Lee and Warr (1969) balanced F-scale, and items 32 and 40 from the TIF (For a list of these items see: Altemeyer, 1981).

Following this, a second study was conducted in June of 1971 (Altemeyer, 1981). Altemeyer (1981) in this study administered a very similar 87-items survey to men drawn from the non-student population in Winnipeg. The Subjects for this study were recruited through newspaper advertisements that promised a five dollar payment for their participation. Fifty-three men were recruited with more blue-collar than white-collar professions being represented in the sample. The survey consisted of same items used in 1970, but were rearranged in such a way so items taken from each scale were spread systematically throughout the scale and the 12 items developed by Altemeyer were revisited. The results of the second study indicated greater average inter-item correlations among the 87-items \(r = .10\) than those found in non-student populations \(r = .07\). Moreover the examination of the 87 x 87 inter-correlation matrix again revealed one response cluster. The third study attempted to test the reliability and generalizability of this response cluster, as well as, to examine if con-trait (i.e., reverse scored) items could be written to covary with the response set found in the first two studies.
The third study contributing to the development of the RWA scale (Altemeyer, 1981) was conducted in September of 1971 (Altemeyer, 1981). In this study a 54-item questionnaire was administered to 526 introductory psychology students. The survey included all items found to be significant in the response clusters from the first and second study, although a few of these items were re-worded into con-trait items. Other items with weaker correlations to the central response cluster from the preceding studies were modified and included. A number of new con-trait items were also included. The response set was then examined as before. The result of this was the construction of a 20-item mock scale that consisted of ten pro-trait and ten con-trait items. For a list of the items included please see Right-Wing Authoritarianism by Altemeyer (1981).

The fourth study examining the response cluster believed to be attributed to RWA was conducted by Altemeyer (1981) in October of 1971 on a sample of 54 adult non student males from Winnipeg. Participants for this study were recruited through newspaper and radio advertisements. After the response set was obtained the results were again analyzed and it was found that the response sets were a stronger determinant of non student responses than student responses. The average correlation found among the 10 pro-trait items included in the mock scale developed in the third study was \( r = .34 \) for the non student sample (compared to \( r = .21 \) for the student sample in study three). The average correlation of the 10 con-trait items making up the 20-item mock scale in the third study was identical to the student population \( r = .15 \). Whereas, the mean pro-trait/con-trait correlations was \( r = .10 \) (compared to \( r = .12 \) in the student sample), which yielded a higher alpha coefficient of .80.

The fifth study that led to the development of the RWA scale took into consideration the findings from its preceding studies thus, the sentiments of submission, aggression, and conventionalism items that covaried were used (Altemeyer, 1981). These sentiments appeared in a number of different contexts, that is, submission was found not only to be owed to parents, but also, husbands and the government. Aggression was found to be directed at rebellious youth, homosexuals, sex criminals, welfare recipients and others considered to be social deviants and conventionalism was connected to normal societal expectations, an appearance of cleanliness, a belief in God, in addition to, the rejection of pornography, marijuana, and what was considered to be the wrong kinds of literature and film. In addition to this Altemeyer (1981) also took into account the obvious direction of wording effect found in his preceding investigations, and included a balanced number of pro-trait and con-trait items to control for response bias.
The fifth study, conducted in January of 1972, surveyed a sample of 500 introductory psychology students (Altemeyer, 1981). Participants were administered a 50-item questionnaire. After examining the response set Altemeyer (1981) found the intercorrelations among the central response cluster to be slightly higher than those found in the third study. Pro-trait average correlations were found to be .29, contrait average correlations were .20 and pro-trait/con-trait correlations were found to be .17. This yielded an alpha coefficient of .83.

In the sixth preliminary study, Altemeyer (1981) made an intensive effort to develop the ethnocentrism response cluster in the survey administered. As such an 85-items questionnaire that included 22-items designed to tap ethnocentric sentiments was administered to 559 students in October of 1972. Participants were surveyed in two testing sessions because two versions of the survey items were tested. The results of this investigation provided additional support for the covariation of submission, aggression, and conventionalism. However, no evidence was found supporting ethnocentrism. The response set was, again, analyzed in a correlation matrix and a 20-item mock scale was created based on the core response pattern (for a list of the 20-item mock scale formed as a result of the sixth study see Altemeyer, 1981).

Following this Altemeyer (1981) conducted a seventh study which contributed to the development of the RWA scale. Sixty-two items were administered to 457 introductory psychology students in January of 1973. Testing was carried out over two sessions held a week apart. Items administered were those which covaried in earlier studies and were systematically counterbalance. In addition to this some other items believed to be representative of authoritarian submission, aggression, and conventionalism was also tried, as well as, seven ethnocentric items. The results of this investigation replicated the preceding studies. A similar response cluster was found. However, a few new submission, aggression, and conventionalism items replaced some of the earlier statements. For a list of the twenty most interconnected items, their mean intercorrelations, and their alpha coefficient please see Altemeyer (1981).

The eighth study tested the initial version of the RWA scale (Altemeyer, 1981) in September of 1973. This study sampled 253 students who were asked to respond to 70 survey items (most of which were some variation of the items used in the preceding studies) over two testing periods held one week apart. The purpose of this investigation was to test different versions of sentiments for the best fit. Altemeyer (1981) also included seven ethnocentrism items found to have some tendency to covary with the central response cluster; five “life is a
jungle” (Maslow, 1943; as cited by Altemeyer, 1981), and several “will power” statements in the 70 items administered. All 70 items, as in the preceding studies, were systematically counterbalanced.

After the response set was collected the inter-item correlation matrix was analyzed as before (Altemeyer, 1981). Twelve of the most highly intercorrelated pro-tait items and 12 of the most highly intercorrelated con-tait items were selected from the results to form the RWA scale (Altemeyer, 1981). The mean intercorrelations obtained for the RWA scale (Altemeyer, 1981) were: $r = .33$ for pro-tait items, and $r = .22$ for con-tait items. In addition to this con-tait/pro-tait correlations were found to be $r = .18$, the mean interitem correlations among the 24 statements making up the RWA scale was found to be $r = .23$, and the alpha coefficient for the scale was found to be $\alpha = .88$.

Since its development in 1981 the RWA scale (Altemeyer, 1981) has undergone a number of revisions (Altemeyer, 1996). At present the RWA scale (2007) (see Appendix A) is a balanced 22-item attitudinal measure that asks subjects to rate their level of agreement (or disagreement) with statements such as "Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the ‘rotten apples’ who are ruining everything." All of which contains all three facets of RWA: "honor the ways of our forefathers" — conventionalism/traditional values "do what the authorities tell us to do" — authoritarian submission "get rid of the ‘rotten apples’ who are ruining everything" — authoritarian aggression.

In addition to this, Altemeyer (1996) has found right-wing authoritarianism—through the course of (approximately) twenty-five years of research—to be correlated with many submission, aggression, and conventionalism beliefs. For example, research indicates that submission beliefs held by RWA’ include the acceptance of illegal wire taps and searches, and lack of support for documents such as the Canadian charter of rights and freedoms. In general submission findings suggest that right-wing authoritarians support "governments' rights" over "individuals' rights." Researches into the aggressive nature of the RWA suggest the tendency to expression of aggression/hostility toward minorities (e.g., African Americans, Hispanics, and homosexuals), (sexual aggression toward) women, and perceived "radical" groups (e.g., communists, homosexuals, abortionists). Aggression has also been found to be more likely to occur if the target is perceived as sanctioned by authority figures. Whereas, research into conventionalism
suggests the right-wing authoritarian is fundamental in their approach to religion, conform to societal norms, and to support right-wing political parties. Additionally when comparing Republican to Democratic Party members/officials (e.g., House and Senate representatives), Republican Party members consistently score high on the Right-Wing Authoritarian scale this suggests there is a greater degree of authoritarianism among Republicans.

Other findings among right-wing authoritarians summarized by Altemeyer (1996) include: right-wing authoritarians tend to be less educated and less cognitively complex, are less likely to support environmental preservation, and tend to be opposed to abortion. In addition to this McFarland and Adelson (1996) (As cited by Altemeyer, 1998) and Altemeyer (1998) have found that scores on the RWA scale and the SDO scale taken together in a regression analysis accounted for over 50% of the variance when predicting prejudice among participants.

**Summary**

The concept of Right-wing authoritarianism (RWA) was developed out of the research conducted by Adorno et al. (1950) into the authoritarian personality and subsequent development of the F-scale by Altemeyer in 1981. Altemeyer (1996) defines RWA as the correlation among three beliefs; 1) submission, 2) aggression, and 3) conventionalism; all of which are based on the definitions of these beliefs as outlined by the seminal research by Adorno et al. (1950). To measure this concept Altemeyer (1981) developed the RWA scale to measure this cluster of beliefs over the course of eight studies. The RWA scale (Altemeyer, 2007) is a balanced 22-item attitudinal measure that asks subjects to rate their level of agreement (or disagreement) with statements—such as "Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the ‘rotten apples’ who are ruining everything”—on a seven point likert-type scale and has been found have an internal consistency of $\alpha = .88$.

Altemeyer (1996) through the course of (approximately) twenty-five years of research has found the RWA scale to be correlated with many submission, aggression, and conventionalism beliefs. For example, research indicates that submission beliefs held by RWA’ include the acceptance of illegal wire taps and searches, and lack of support for documents such as the Canadian charter of rights and freedoms. In general submission findings suggest that right-wing authoritarians support "governments' rights" over "individuals' rights." Researches into the aggressive nature of the RWA suggest the tendency to expression of aggression/hostility toward minorities (e.g., African Americans, Hispanics, and homosexuals), (sexual aggression...
toward) women, and perceived "radical" groups (e.g., communists, homosexuals, abortionists). Aggression has also been found to be more likely to occur if the target is perceived as sanctioned by authority figures. Whereas, research into conventionalism suggests the right-wing authoritarian is fundamental in their approach to religion, conform to societal norms, and to support right-wing political parties.

Other findings among right-wing authoritarians summarized by Altemeyer (1996) include: right-wing authoritarians tend to be less educated and less cognitively complex, are less likely to support environmental preservation, and tend to be opposed to abortion. In addition to this McFarland and Adelson (1996) (as cited by Altemeyer, 1998) and Altemeyer (1998) have found that scores on the RWA scale and the SDO scale taken together in a regression analysis accounted for over 50% of the variance when predicting prejudice.

The next section will examine how stereotypes are affected by the degree to which individuals’ desire and support group-based hierarchy and the dominance of ‘inferior’ groups by ‘superior’ groups (Pratto, Sidanius, Stallworth, and Malle, 1994; Sidanius and Pratto, 1993; Sidanius and Pratto, 1999). As such this section will discuss Social Dominance Orientation (Pratto, Sidanius, Stallworth, and Malle, 1994; Sidanius and Pratto, 1993; Sidanius and Pratto, 1999) and it’s supporting theory. However, before doing so the connection between stereotypes and RWA must be clarified.

It should be understood that the RWA scale (Altemeyer, 1981) was developed to measure authoritarianism. The development of an authoritarian personality is the result of being reared in a family environment overly concerned with ‘good behavior’ and conformity to conventional moral codes, especially those pertaining to sexual behavior (Adorno et al., 1950). Parents (particularly the fathers) of authoritarians are believed to employ disciplinary measures that are excessively harsh and consequently rear children that are socialized to displace their aggression away from authority figures on to a suitable target such as those perceived to be weaker or inferior to ones self due to anxiety experienced related to the perceived consequences of overtly displaying aggression towards them. In addition to this it has been found that a family environment such as this leads to the development of simplistic ways of thinking in the individual marked by the consistent use of very clearly defined categories and intolerance of any grey area between them. This means that the authoritarian due to very clearly defined categories and intolerance of any grey area between rely on their stereotypic information when interacting
and that their existing stereotypes are impervious to change because of their intolerance for any
grey area and the natural tendency to acknowledge information that support their stereotypes.

Social Dominance Orientation

Social Dominance Orientation (SDO) is defined as the degree to which individuals’
desire and support group-based hierarchy and the dominance of ‘inferior’ groups by ‘superior’
groups (Sidanius and Pratto, 1993; Sidanius and Pratto, 1999). It is an orientation that
encompasses a range of group biases, based on age, gender, race, ethnicity, nationality or
religion. SDO is one aspect of Social Dominance Theory (SDT) (Sidanius and Pratto, 1993;
Sidanius and Pratto, 1999), a theory that places individual SDO into a larger context which
serves to explain the maintenance and perpetuation of hierarchically-structured societies.
Consequently SDT is a theory that attempts to integrate a number of different levels of analysis
into one coherent framework. For example, SDT has been influenced evolutionary psychology
and by models within, personality psychology, social psychology, and sociology. As such SDT
should be considered an attempt to connect the study of individual personality and attitudes with
the domains of institutional behavior, and social structure.

SDT begins with the empirical observation that surplus-producing social systems have a
three-fold group-based hierarchy structure: i) age-based, ii) gender-based and iii) “arbitrary set-
based,” which can include race, class, caste, ethnicity, religious affiliation, etc (Sidanius and
Pratto, 1993; Sidanius and Pratto, 1999). For example, i) Age-based hierarchies gives more
power to adults and middle-age people than children and younger adults, and ii) gender-based
hierarchies grant more power to men than women, however it should also be understood that iii)
both age- and gender-based hierarchies are arbitrary-set hierarchies that are dependant upon the
societal influences. From this observation SDT then makes three primary assumptions: (1) while
age- and gender-based hierarchies will tend to exist within all social systems, arbitrary-set
systems of social hierarchy will invariably emerge within social systems producing sustainable
economic surpluses. (2) Most forms of group conflict and oppression (e.g., racism,
ethnocentrism, sexism, nationalism, classicism, and regionalism) can be regarded as different
manifestations of the same basic human predisposition to form group-based hierarchies. (3)
Human social systems are subject to the counterbalancing influences of hierarchy-enhancing
forces, producing and maintaining ever higher levels of group-based social inequality, and
hierarchy-attenuating forces, producing greater levels of group-based social equality.
SDO (Sidanius and Pratto, 1993; Sidanius and Pratto, 1999) should be understood as “a very general individual differences orientation expressing the value that people place on non-egalitarian and hierarchically structured relationships among social groups” (Sidanius and Pratto, 1999, p. 61). SDO scale (Sidanius and Pratto, 1999) scores “express general support for the dominance of certain socially constructed groups over other socially constructed groups, regardless of the manner in which these groups are defined” (Sidanius and Pratto, 1999, p. 61). As such, understanding the intensity and distribution of SDO within a society provides important information that speaks to the internal dynamics and hierarchical structure of the society in general.

Four factors contribute to SDO: i) group status, ii) gender, iii) socialization, and iv) temperament (Pratto, Sidanius, 1999). These factors, in turn, SDO affects the acceptance of influential “legitimating myths” (LMs). Whether hierarchy enhancing or hierarchy attenuating LMs are defined as values, attitudes, beliefs, causal attributions, and ideologies that provide moral and intellectual justification for social practices that either, increase, maintain, or decrease levels of social inequality among social groups. Hierarchy enhancing -LMs provide support for social policies that in turn sustain group-based social hierarchies through three mechanisms: i) individual discrimination (personal decision-making), ii) institutional discrimination (rules and procedures with biased outcomes, intentional or not) and iii) behavioral asymmetry (various ways that subordinate groups participate in their own subjugation).

SDO (Sidanius and Pratto, 1999) is measured using the SDO scale (Pratto, Sidanius, Stallworth, and Malle, 1994; Sidanius and Pratto, 1999) (see Appendix C). The SDO value scales were developed across 45 samples and 18,741 participants from 11 countries and nations, including the United States, Canada, Australia, New Zealand, Israel the West Bank and Gaza strip, China, Taiwan, Mexico, and Sweden to name a few. Some of the studies conducted in the development of the SDO value scales were probability samples, while other were samples of convenience. However, the use of samples of convenience was acceptable as Sidanius and Pratto (1999) indicate that since their goal when developing the SDO scales was to relate SDO to other measures within samples, and not to describe populations.

Sidanius and Pratto’s (1999) measure of SDO was developed and refined with the development of SDT. The earliest studies carried out by Sidanius and Pratto (1999) used a measure similar to the Rokeach’s 1979 concept and measure of a general value for or against
equality (as cited by Sidanius and Pratto, 1999). Since then, the anti-egalitarianism scales have
been refined to more pointedly assess one’s value towards group based dominance. The most
recent of these measures are the SDO5 (Pratto, Sidanius, Stallworth, and Malle, 1994) and the
SDO6 (Sidanius and Pratto, 1999). The SDO6 emphasizes orientations towards intergroup
relations and assesses orientations towards group dominance, while the SDO5 emphasizes
interpersonal relations and orientations towards equality. As such, because the purpose of the
proposed study outlined at the beginning of this chapter is to examine the construct validity of
the PATAS which is a measure of individual differences in prejudicial attitudes the SDO5 (Pratto,
Sidanius, Stallworth, and Malle, 1994; Sidanius and Pratto, 1999) will be used because of its
emphasis on interpersonal relations (see Appendix B).

The SDO5 (Pratto, Sidanius, Stallworth, and Malle, 1994) was developed by extensive
item selection and criterion testing. In developing the SDO5 scale Pratto, Sidanius, Stallworth,
and Malle (1994) tested 70 items—obtained from several archival that measured the proxies of
SDO using items from the National Election Study or the S6 Conservatism Scale (see: Sidanius,
and Ekehammar, 1976)—believed to be related to SDO or to the constructs that can be
considered linked to SDO such as nationalism and prestige-striving. To develop a simple
unidimensional scale that was balanced 14 items were selected for the 70 item questionnaire to
make the SDO5. As such the “item selected concerned the belief that some people are inherently
superior or inferior to others and approval of unequal group relationships” (Pratto, Sidanius,
Stallworth, and Malle, 1994, p. 745) (see Appendix C).

After developing the SDO5 scale, Pratto, Sidanius, Stallworth, and Malle conducted their
1994 studies to demonstrate individual variation in SDO exists and to demonstrate that the
construct behaves according to the theory. Specifically they intended to show that their measure
of SDO was internally reliable and demonstrated test-retest reliability, that SDO is related to the
attitudinal and social role variables outlined in SDT, to demonstrate the SDO5 scale is not
redundant with other attitudinal measures and personality variable, and to demonstrate SDO acts
as an orientation shaping new attitudes.

To test the reliability, validity and whether the SDO5 scale (Pratto, Sidanius, Stallworth,
and Malle, 1994) was redundant the following 11 hypotheses under the subheading predictive
validity were made: 1) because men and women the world over hold different hierarchical social
roles (with men typically in dominant roles), and due to the fact that men have been found to
typically hold more hierarchy enhancing attitudes like support for ethnic prejudice they will on average hold higher levels of SDO than women. 2) Because one of the major long standing kinds of ideology concerning relative group status in North America is ethnic prejudice, and because anti-Black racism is widely disseminated throughout the United States (U.S.) SDO should be positively correlated to anti-Black racism within U.S. samples. In addition to this Pratto Sidanius, Stallworth, and Malle (1994) believed that SDO would also correlate with anti-Arab racism because of the conflict in Iraq the U.S. was engaged in at that time. 3) SDO5 should demonstrate a significant positive correlated with other types of in group prejudice like nationalism, chauvinism, or patriotism. 4) Recognizing that within European and North American society there is an elitist ideology based on culture—where the elite class is perceived as being more cultured than middle class or working class people and thus more deserving of the finer things in life—cultural elitism should correlate with the SDO5 scale. 5) Since anti-female sexism can be perceived as a legitimizing myth within the contexts of SDT, the SDO5 scale should positively correlate to existing measures of sexism, as well as, “the extent to which people believe that women rather than men can be blamed for unwanted sexual advances such as rape and sexual harassment” (p. 743). 6) Because political-economic conservatism has been liked to support for capitalism rather than socialism (e.g. Eysenck, 1971, as cited by Pratto, Sidanius, Stallworth, and Malle, 1994), and given that capitalism suggests some people and business succeed while others that are less competitive fail—which can be perceived as legitimizing myth using SDT—economic conservatism should be positively correlated to the SDO5. 7) Since the ideology of noblesse oblige—the idea that those with more resources should share their resources with the less fortunate—is a hierarchy-attenuating ideology that exists within North American society it should be negatively correlated to the SDO5. 8) The hierarchy-enhancing ideologies of the Protestant work ethic and the belief in a just world that are based on notions of meritocracy should be positively correlated with the SDO5 scale. 9) Because individuals who are oriented towards social dominance will favor social practices that maintain or increase inequality among groups and oppose social practices that reduce group inequality it is believed that scores on the SDO5 will positively correlate to opposition for social welfare, civil rights, and environmental policies. In addition to this it was also believed that SDO5 scale scores would 10) positively correlate with support for the military and 11) punitive policies.
In addition to the hypotheses made falling under the subheading of predictive validity there were also a number of hypotheses made by Pratto, Sidanius, Stallworth, and Malle (1994) that were grouped under the subheading discriminant validity. Theses five hypotheses were: 1) SDO scale (Pratto, Sidanius, Stallworth, and Malle, 1994) scores would not correlate with the Calidornia Personality Inventory (CPI) Dominance scale or the Jackson Personality Research Form (JPRF) because the preference for unequal relationships among groups of people is conceptually distinct from the personality concept of interpersonal dominance which is linked to the extent people like to be in charge and efficacious. 2) Scores on the SDO scale should not be strongly correlated to authoritarianism scale scores obtained; despite, there being some theoretical similarity. Pratto, Sidanius, Stallworth, and Malle (1994) report the reason for this because SDO is significantly different from the theory of authoritarianism on three primary aspects: i) SDO is not conceptualized as a personality type or ego defense system; it is conceptualized a normal aspect of human inclination that people vary on; ii) SDO is not perceived as being the result of psychodynamic processes, rather personal history is not seen as contributing to SDO instead Pratto, Sidanius, Stallworth, and Malle (1994) suggest SDO is most likely influenced by temperament and socialization; and iii) while authoritarianism is viewed as primarily resulting from experiences with authority figures, SDO is regarded as the desire for some groups or categories of people to dominate others. 3) To demonstrate that scores on the SDO scale possess utility over and above current measures of political and economic conservatism it was hypothesized that SDO scale scores were correlated to social attitudes after controlling for conservatism. 4) Because, at the time of their investigation, SDO was an unstudied personality dimension it was believed that SDO scale scores would be found to be independent of other standard personality variable like self-esteem and the other five personality dimensions (i.e., Extraversion, Agreeableness, Openness, Neuroticism, and Conscientiousness (see Costa and MacRae, 1985; Johnm 1990, for reviews; as cited by Pratto, Sidanius, Stallworth, and Malle, 1994). In addition to this it was also hypothesized that 5) SDO scale scores should be negatively correlated to empathy, altruism, communality and tolerance scales. For a detailed list of scales used for the fifth hypothesis see Pratto, Sidanius, Stallworth, and Malle (1994).

To test the predictive and discriminant validity of the SDO scale (Pratto, Sidanius, Stallworth, and Malle, 1994) data were collected on 13 samples (For a detailed description for the samples and procedures used see Pratto, Sidanius, Stallworth, and Malle, 1994). Following
data collection, in order to confirm the unidimensionality of the 14 items used to create the SDO5 scale a principle–component analysis and a confirmatory factor analysis were performed in addition to an analysis of the internal reliability and repeated measures reliability. The results of these analyses supported the majority of the hypotheses made regarding the SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994) (for detailed information on the results of this study please see: Pratto, Sidanius, Stallworth, and Malle, 1994). The 14 item SDO5 scale was found to capture the bulk of the variance by the principal-components analysis. The confirmatory factor analysis using maximum-likelihood estimation demonstrated the 14 item SDO5 scale was driven by a single latent trait, with each item possessing a statistically significant relationship of $p<.0001$.

After completing an examination of the internal reliability and the test-retest reliability Pratto, Sidanius, Stallworth, and Malle, (1994) concluded the 14 item SDO5 scale possessed internal reliability across all samples (with and alpha coefficient averaging $\alpha=.83$). All items were found to correlate to the remainder of the scale after item analysis—with the average lowest item-total correlation across samples found to be $r=.31$. The average highest item-total correlation was found to be $r=.63$. Additionally, test-retest reliability indicated SDO5 scale scores demonstrated strong positive correlations between time one and time two ($r=.81, p<.01$) for their third sample (who were tested on the SDO5 scale twice within a three month interval) which was later confirmed using the sample 13.

On average the predictive validity hypothesis suggesting men would hold higher levels of SDO was confirmed. Subjects sex on average correlated with SDO ($r=.26$) (Pratto, Sidanius, Stallworth, and Malle, 1994). In terms of discriminant validity the average correlation between SDO and CPI Dominance was found to be $r=.03$ and the average correlation between SDO and JPRF Dominance was $r=-.03$ over five samples (Pratto, Sidanius, Stallworth, and Malle, 1994). SDO5 scale scores demonstrated conceptual distinctiveness from the five personality variables. SDO was negatively correlated to Extraversion ($r=-.03$) and demonstrated a weak relationship to Neuroticism ($r=.10$). Moreover, as expected Pratto, Sidanius, Stallworth, and Malle (1994) found SDO5 scale scores were shown to be negatively correlated with concern for others as representative of communality, altruism, and tolerance.

In addition to this Pratto, Sidanius, Stallworth, and Malle (1994) also found SDO5 scale scores to be consistently positively correlated with the belief in a number of hierarchy-
legitimizing myths. The strongest of which was its correlation to measures of anti-Black racism and nationalism. SDO$^5$ scores, as predicted, were also negatively correlates to hierarchy-attenuating ideologies. In addition to this, Pratto, Sidanius, Stallworth, and Malle (1994) found SDO$^5$ scale scores to consistently demonstrate positive correlations with sexism, equal opportunities, patriotism, cultural elitism, conservatism, and belief in a Just World. However, it should be noted that the only legitimizing myth that was not reliably correlated to SDO was the Protestant work ethic.

Lastly, Pratto, Sidanius, Stallworth, and Malle (1994) also found SDO$^5$ scale scores to be consistently positively correlated with scales used to assess opposition to social programs, racial policies, and support for military programs. SDO$^5$ scores were also positively correlated with opposition to gay and lesbian rights, environmental programs, as well as, support of U.S. chauvinism, law-and-order policies, and identification with Republican political party in the U.S. Moreover, SDO$^5$ were also found to be predictive of attitudes towards new political event (see: Pratto, Sidanius, Stallworth, and Malle, 1994).

Since its development the SDO$^5$ scale has also been positively correlated with measures of nationalism, patriotism, cultural elitism, a rejection to noblesse oblige, and anti-Black racism with values usually over $r = .50$ by Altemeyer in 1998. In addition to this McFarland and Adelson (1996) (as cited by Altemeyer, 1998) found that scores on the SDO scale and the RWA scale taken together in a regression analysis accounted for over 50% of the variance when predicting prejudice among participants, the results of which, has also been replicated by Altemeyer (1998). Therefore, it can be concluded that any investigation into the criterion related validity of a new measure of prejudice may want to use the SDO$^5$ scale for the purpose of demonstrating its convergent/predictive validity.

**Summary**

In summary SDO (Sidanius and Pratto, 1993; Sidanius and Pratto, 1999) should be understood as “a very general individual differences orientation expressing the value that people place on non-egalitarian and hierarchically structured relationships among social groups” (Sidanius and Pratto, 1999, p 61). It is an orientation that encompasses a range of group biases, based on age, gender, race, ethnicity, nationality and religion. SDO is one aspect of Social Dominance Theory (SDT) (see: Sidanius and Pratto, 1993; Sidanius and Pratto, 1999), a theory
that places individual SDO into a larger context which serves to explain the maintenance and perpetuation of hierarchically-structured societies.

The SDO5 (Pratto, Sidanius, Stallworth, and Malle, 1994) was developed to measure individual differences in SDO. In developing the SDO5 scale Pratto, Sidanius, Stallworth, and Malle (1994) tested 70 items—obtained from several archival that measured the proxies of SDO using items form the National Election Study or the S6 Conservatism scale (see: Sidanius and Ekehammar, 1976)—believed to be related to SDO or to the constructs that can be considered linked to SDO such as nationalism and prestige-striving.

After the SDO5 scale was developed, Pratto, Sidanius, Stallworth, and Malle (1994) conducted a number of studies for the purpose of demonstrating that individual variation in SDO exists and that the construct behaves according to the theory. Specifically they intended to show that their measure of SDO was internally reliable and demonstrated test-retest reliability, that SDO is related to the attitudinal and social role variables outlined in SDT, to demonstrate the SDO5 scale is not redundant with other attitudinal measures and personality variable, and to demonstrate SDO acts as an orientation shaping new attitudes. The results of this research produced the internally reliable ($\alpha = .83$) 14 item SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994). Moreover since its development the SDO5 scale has also been positively correlated with measures of nationalism, patriotism, cultural elitism, a rejection to noblesse oblige, and anti-Black racism with values usually over $r = .50$ by Altemeyer in 1998. In addition to this McFarland and Adelson (1996) (as cited by Altemeyer, 1998) found that scores on the SDO scale and the RWA scale taken together in a regression analysis accounted for over 50% of the variance when predicting prejudice among participants, the results of which have also been replicated by Altemeyer (1998).

The next section will examine the concept of prejudice; however before continuing some clarification regarding SDO and stereotypes is needed. Specifically because SDO represents the desire and support group-based hierarchy and the dominance of ‘inferior’ groups by ‘superior’ groups and that people who score high on the SDO5 utilize legitimizing-myths substantiate their beliefs it should be understood that the legitimizing-myths used are derived from stereotypic information regarding the subordinate group and dominant group. Thus, stereotype—whether they are prejudiced or not—because they are socially agreed upon mental representations of groups are the foundation which guide social interaction and are mitigated by the individuals’
socialization and the desire to support group-based hierarchy and the dominance of ‘inferior’
groups by ‘superior’ groups.

Prejudice

Despite the numerous definitions existing for prejudice, researchers generally agree that
“Prejudice: 1) occurs between groups; 2) involves an evaluation either positive or negative of a
group; 3) is based on the real or imagined characteristics of the group” (Nelson, 2002, p 11).
Prejudice can be judged to be synonymous with a number of other terms such as racism, sexism,
and homophobia (also known as homonegativity). In addition to this the phenomenon of
prejudice has been conceptually linked to stereotypes, stereotyping, illusory correlations, right-
wing authoritarianism, and the degree to which an individual is Social Dominance Oriented.
Although prejudice is a cognitive and attitudinal phenomenon it should also be understood that
prejudice can engage our emotions and manifest itself in behavior.

Modern Prejudice

The conception of modern prejudice and its various theoretical definitions, along with its
measurement arose out of a paradox in the research which indicated the pejorative stereotypes
that were common place over 50 years ago, were less prevalent following the Civil Rights
Movement (Dovidio and Fazio, 1992; Dovidio and Gartner, 1986; Gilbert, 1951; Karlins et al.,
1969; and Katz and Braly, 1933). While other research using the ‘bogus pipeline’ experimental
design (Sigall and Page, 1971), more covert measures of behavior (Crosby Bromley and Saxe.,
1980), spontaneous non-verbal behaviors (Hendricks and Bootzin, 1976), resistance to
affirmative action (Jacobson, 1985), and related biases (McConahay, 1983) suggest prejudice
remains a significant problem.

According to McConahay (1986) the theory of modern prejudice accounts for the
discrepancy between attitudes and behavior by suggesting prejudice has evolved into a more
covert form that is not assessed by old-fashioned measures of anti-African American attitudes
called modern racism. As such it is suggested the principle tenets endorsed by modern racists
are:

“(1) Discrimination is a thing of the past because blacks now have the freedom to
compete in the market place and to enjoy those things they can afford. (2) Blacks
are pushing too hard, too fast, and into places where they are not wanted. (3)
These tactics and demands are unfair. (4) Therefore, recent gains are underserved
and the prestige granting institutions of society are giving blacks more attention
and the concomitant status than they deserve” (McConahay, 1986, p. 92-93).”
In addition to this the modern racist does not to define their attitudes as racist, since for these individuals racism is consistent only with the tenets and practices of old-fashioned prejudice (i.e. beliefs about African American intelligence, ambition, honesty and other stereotypical characteristics in addition to support for segregation and open acts of discrimination).

The theory of modern prejudice (McConahay, 1986) suggests the demands made by majority groups and the introduction of policies introduced (such as compulsory busing in the United States), threaten traditional Western values based on meritocratic principles such as freedom of choice and equal opportunity and that this perceived violation of abstract principles is believed to be an important component of modern racism, especially when coupled with the socialized negative affect towards African Americans in the United States (McConahay, 1986). Therefore, as indicated by McConahay (1986), the theory of modern prejudice rests on ambivalence. It links the ambivalence created by the conflict between the negative affect towards African American and the belief in equality and fair play in such a way that the wording of the modern racism scale items permit the expression of their negative affect because giving the prejudiced response can be explained by racially neutral ideologies or non relevant race relevant attributes.

*The Modern Racism Scale*

In acknowledgement of this new form of prejudice McConahay (1986) developed the Modern Racism Scale from sets of observations of racially relevant behavior. The Modern Racism Scale is composed of seven modern prejudice items (see McConahay, 1986) that are characterized as having abstract moral overtones (e.g. “Over the past few years Blacks have gotten more than they deserve”) and items using code words for African American (like “the streets aren’t safe these days without a policeman around”), and has been significantly correlated with voting preferences in Los Angeles after controlling for political conservatism, and measures of anti- African American prejudice. In addition to this it can be concluded after examining the psychometric properties of the Modern Racism Scale that, although its scores correlate with old-fashioned racism scores, the Modern Racism scale scores are reliable and have been found to measure a conceptually distinct dimension of racial attitudes (McConahay 1982; McConahay, 1983; McConahay, 1984 as cited by McConahay, 1986).
Reactivity of the Modern Racism Scale

McConahay (1986), to confirm his earlier theorizing regarding the reactivity of the Modern Racism scale conducted three studies comparing the Modern racism scale to the Old Fashioned Racism scale (McConahay, 1986). In the first experiment McConahay, Hardee, & Batts, (1981) tested the hypothesis: when the scales were administered by a African American experimenter, subject would be motivated not to appear racist to avoid offending her and as such their score on the Old Fashioned Racism Scale would be adjusted accordingly while their Modern racism scale scores would be unaffected used a sample of Caucasian male undergraduate students. The results of this experiment supported the hypothesis; subjects scored significantly lower on the Old Fashioned Racism Scale for the African American experimenter than for the Caucasian experimenter. In addition it was also found that scores on the Modern Racism Scale were not significantly different in either experimental condition.

In the second experiment, McConahay (1986) also provided support for his earlier theorizing, that the Modern Racism Scale would be relatively non-reactive when compared to the Old Fashioned Racism Scale through a replication of his first experiment using a repeated measures experimental design and different experimenters. Whereas in the third experiment, McConahay in addition to collecting both Modern and old fashioned racism scores, a rating of the participants perceptions of scale item was also obtained to confirm the lack of a situational context being able to explain responses on the Modern Racism Scale. The results provided further support to the theory of modern racism; Modern Racism Scale items were seen as having lower perceived racism mean than the Old Fashioned Racism Scale items. Taking this information into consideration although, it can be concluded that the Modern Racism Scale is relatively non reactive when compared to the Old Fashioned Racism Scale, it should be understood the research presented up to this point only provided limited grounds to infer construct validity (McConahay and Hough, 1976; Weigel and Howes, 1985).

Validation of the Modern Racism Scale

To validate the Modern Racism Scale a fourth experiment was conducted. However it is important to note that the theory of modern racism suggest that the phenomena of modern racism arises out of the ambivalence experienced from residual negative affect towards minority groups and the pressure to respond in a socially desirable way (McConahay, 1986). The necessary conditions for the expression of the negative aspect of ambivalence by the ambivalent person are
in contexts where there is ambiguity regarding the appropriate behavior. It should also be understood that although different factors have been emphasized to elicit negative behaviors it is hypothesized that the contexts most likely to create negative behavior are:

“(1) Ideological ambiguity in which one or more racial values or political beliefs can be readily invoked to explain the negative behavior (e.g., a respondent tells an interviewer that he or she is voting against a black candidate because the candidate is too liberal) (2) Situational ambiguity in which one or more nonracial attributions are available to explain the behavior (e.g., a bystander intervention situation involving black victim under conditions where more that one person could go to her or his aid). (3) Situation making it necessary to derogate a person harmed by the subject. (4) Unstructured or normless situations in which there are no clear anchor points for evaluation or guides for appropriate behavior (Situations in not a particularly salient feature of the context.” (McConahay, 1986, p. 117)

On the which race is other hand, positive behavior is facilitated under conditions that maximize the likelihood of that negative behavior bringing about self or other generated attribution of racism.

The fourth experiment conducted by McConahay (1983) provided the strongest evidence as to the validity of the Modern Racism Scale (McConahay, 1986). Based on his previous research and theorizing, McConahay hypothesized that for the Modern Racism Scale to be a valid measure of prejudice high scoring individuals should evaluate African American candidate more negatively than low scoring individuals in negative contexts and more positive than low scores in positive contexts. To test this hypothesis a sample of Caucasian college student’s were first pretested in an undergraduate Introductory Psychology course using the Modern Racism Scale. Then later during the study term those participants found to have high and low scores were recruited to participate in a simulated hiring decision for the purpose of demonstrating the construct validity of the Modern Racism Scale.

To facilitate hiring discrimination in this experiment, a resume was created presenting a graduating student (with limited work experience, and grades slightly below average although not perceived as such) who was applying for a very ordinary job in the private sector. In addition to creating this resume to be used in the experimental conditions McConahay (1983) also manipulated the race of the candidate by attaching a picture two Caucasian and one African American recent graduate to three copies of the resume after taking care to ensure the pictures attached to each resume were of similar attractiveness.
To facilitate negative and positive behavior McConahay used 93 (47 male and 46 female) high and low scoring participants assigned to either a positive or negative condition where in the negative condition negative behavior was facilitated by reducing the salience of the confederates’ race by presenting the African American stimulus first followed by two other Caucasian candidates’. Whereas in the positive condition, positive behavior was facilitated by having participants first rate two resumes for Caucasian candidates followed by the rating of a African American candidate (the stimulus) last (McConahay, 1983).

After data were collected, McConahay (1983) examined the dependant variable (decision to hire), as conveyed on a seven point semantic differential scale for both high and low scoring individuals through the use of multiple regression to find a three way interaction indicating: when job candidates’ were Caucasian the decision to hire did not significantly differ from zero. While when the job candidate was African American in the negative condition the slope and correlation were found to be significantly negative. In addition to this it was also found that when modern racism hiring slopes were compared across contexts the results were found to be significantly different from one another. For example, higher Modern Racism Scale scorers expressed less willingness to hire an African American than a Caucasian candidate holding identical credentials in the negative contexts and a preference for the African American over the Caucasian candidate in positive contexts.

*Modern Prejudice and Motivation to Control Prejudiced Reactions*

The Motivation to Control Prejudiced Reactions Scale (MCPS) was developed by Dunton and Fazio (1997) for the purpose of measuring an individuals’ desire to control their prejudiced reactions. The MCPS possesses an alpha of .81 consists of two subscales: 1) Concern about Appearing Prejudiced and 2) Restraint to Avoid Dispute. The Concern About Appearing Prejudiced subscale measures individuals’ anxiety regarding the observation of prejudice in themselves or being perceived as prejudiced by others. The Restraint to Avoid Conflict subscale determines an individuals’ willingness to suppress prejudiced attitudes to avoid conflict.

MCPS (Dunton and Fazio, 1997) scale scores are purported to moderate between obtrusive measures of prejudice such as those relying on self-report data and unobtrusive measures of prejudice such as those involving priming of participants. Said differently, those individuals with low motivation to control prejudiced reactions scores on both obtrusive and unobtrusive measures should be relatively similar. Whereas, those individuals with high
motivation to control prejudiced reactions scores on obtrusive and unobtrusive measure should become dissimilar. More specifically, those individuals motivated to control their prejudiced reactions will do so on obtrusive measure of prejudice. Reactions to unobtrusive measure of prejudice, on the other hand, should remain constant because responses to these measures seldom involve conscious awareness making it more difficult to monitor one’s own behavior. However, it is important to understand that the motivation to control prejudiced responses should not be perceived as analogous to the concept of social desirability bias—the extent to which participants endorse behaviors that have low incidence of occurrence such as always telling the truth because they are socially acceptable. Rather, Dunton and Fazio (1997) suggest that the motivation to control prejudiced reactions is an individual difference variable similar to the need for social approval or that of religiosity.

Following the development and testing of the MCPRS Dunton and Fazio (1997) examined the extent to which the Concern about Appearing Prejudiced and the Restraint to Avoid Conflict subscales predicted scores on the Modern Racism Scale (McConahay, 1986); hypothesizing that as one’s motivation to control prejudiced reactions increases their scores on the Modern Racism scale should decrease. The results of this investigation indicated that the Concern about Appearing Prejudiced subscales significantly predicted scores on the Modern Racism Scale. As individuals’ Concern about Appearing Prejudiced increased, the lower their score were on the Modern Racism scale. Scores on the Restraint to Avoid Conflict, on the other hand, did not significantly predict scores on the Modern Racism Scale. Thus it appears as though one’s concern about appearing prejudice holds greater importance than is one’s willingness to exercise restraint for the propose of avoiding conflict. Nevertheless, Dunton and Fazio (1997) suggest the MCPRS allows researchers to examine what may be an important individual difference variable when examining modern prejudice.

Modern Prejudice and Other Marginalized Groups

Like many instruments found to be psychometrically sound, the Modern Racism Scale has been used extensively (Entman, 1990). Scores on the Modern Racism Scale have been found to positively correlate to political conservatism, authoritarianism (Weigel and Howes, 1985), endorsement of controversial religious beliefs, and prejudice towards stigmatized groups (McConahay and Hough, 1976). In addition to this the theory of modern racism and its scale have also been used to develop other measures of individual differences in prejudice. For
example, In addition to this the theory of modern racism has been applied to sexism (Swim, Akin, Hall, and Hunter, 1995), prejudice towards Aborigines in Australia (Pedersen, Griffiths, Contos, and Bishop, 2000), and the development of the Modern Homonegativity Scale (Morrison, 2003). More recently, however, Morrison (2007, 2007) utilized the theory of modern racism and the Modern Racism Scale to develop a new measure of prejudice for the purpose of determining individual differences in prejudice as they pertain to Aboriginals in Canada.

Prejudice Attitudes towards Aboriginals Scale (PATAS)

The Prejudice Attitudes towards Aboriginals Scale (PATAS) (Morrison, 2007) (see Appendix A) was developed to measure the discrepancy between the expressed attitudes and behavior toward Aboriginal Canadians. Scale items were generated using approximately 15 individuals (both Aboriginal and non-Aboriginal) who participated in either unstructured clinical interviews with aboriginal men and women or informal focus group with non-aboriginal university students, and from a review of the literature. Participants were asked to report both blatant and subtle sentiments that may be directed towards Aboriginal men and women. The information gathered from these sources yielded 144 scale items believed to measure both old fashioned or overt prejudice and modern or covert prejudiced attitudes. Following development of these scale items, a questionnaire containing all 144 prejudice attitudes towards Aboriginals (PATA) items along with, the Modern Homonegativity Scale (Morrison, 2003)—Gay version (Morrison, 2007), the Attitudes towards Gay Men Scale (Herek, 1988), Form C of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982), and several demographic variables were then tested using a sample of 475 students registered at the University of Saskatchewan (Morrison, 2007). To attest to the initial construct validity of the PATAS and for the purpose of reducing the number of items obtained PATAS items were initially eliminated if they were found to have inter-item correlations greater than $r = .6$ or for those items having an $r < .4$, bimodal response distributions, or don’t know responses.

Following the development of the preliminary version of the PATAS (Morrison, 2007) a two Principle Axis Factor Analyses were run (one for old-fashioned and one for modern prejudice items). The results from the Principle Axis factor analyses provided structural validity evidence for the construct measured by the PATAS. The results for the old-fashioned prejudice items indicated a one factor solution should be retained yielding a total of 14 items. However after calculating the alpha coefficient for the 14 old-fashioned items an additional three were
removed leaving 11 old-fashioned items. While, the results from the Principal Factor Analysis for the modern prejudice items indicated a one factor solution indicating 22 items should be retained. However, reliability testing for these items led to 8 additional items being removed leaving 14 items.

The result of the Principle Axis Factor Analysis and the reliability testing that were conducted on the preliminary version of the PATAS (Morrison, 2007) created two distinct but correlated scales that loaded as separate oblique factors found to have high levels of internal consistency; an i) old-fashioned scale (11 items) possessing an alpha of .91 and a ii) modern scale (14 items) possessing an alpha of .93 with higher scores believed to denoting greater levels of prejudice towards Aboriginals (Morrison, 2007). In addition significant positive correlations were found between both old fashioned and modern prejudice scale items and modern attitudes towards gay men scale scores ($r = .28$ and $50$, at $p < .001$); providing evidence of convergent validity to attest to the criterion related validity of PATAS scale items since modern attitudes towards gay men scale scores reflect a type of prejudice (Homonegativity).

An examination of endorsement rates showed that total scale scores for the old-fashioned measure of prejudice towards Aboriginals fell between 11 to 77; thus having a mid point of 44 (Morrison, 2007). Morrison (2007) report 66% of the sample scored below the midpoint; although it is noted there was still considerable endorsement of the following two items: “Most Aboriginal people need classes on how to be better parents (31% somewhat agree, agree, strongly agree), and “Most Aboriginal people are on welfare” (40% somewhat agree, agree, strongly agree). Whereas, total scale scores for the modern prejudice items were found to range between 14 and 98. Approximately, 62% percent of those surveyed scored above the midpoint of 48; thus indicating stronger support for the modern prejudice items. The results suggested 49% somewhat agreed, agreed, or strongly agreed with the third item on the modern scale “Aboriginal people should stop complaining about the way they are treated and simply get on with their lives” and that 65% of those samples somewhat agreed, agreed, or strongly agreed with the fifth item Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians.

Taking the results from the development of the PATAS into consideration it should be acknowledged that despite the PATAS being found to possess a high degree of internal consistency, and some preliminary evidence suggesting the measure demonstrates evidence of
construct validity; an exploration into whether or not the PATAS demonstrates criterion related evidence of construct validity has not been determined. This is problematic because until the construct validity of the PAS is examined further there is no way of knowing if the extent to which the PATAS as a measure is construct valid and in fact actually measures prejudiced attitudes towards Aboriginals. As such, before research into the distribution and effect of prejudice attitudes towards Aboriginals within a population can be conducted, further evidence the PATAS construct validity is required.

Summary

Empirical investigation into the topic of prejudice is complex. It requires an understanding of stereotypes, their origins, and the process of stereotyping. Stereotypes are mental representations of a person or group and their characteristics. There are three explanations provided for the origins of stereotypes. A socio-cultural perspective (Katz, and Braly, 1933; Gilbert, 1951; Karlins, Coffman, and Walters, 1969) that suggests stereotypes are developed from ones own culture in which they are raised. The ‘grain of truth’ theory (Allport, 1954; Brewer and Campbell, 1976) which suggests a group’s behavior or socio economic status provides the basis for certain stereotypical perceptions. The third explanation suggests stereotypes are used to either justify or criticize the status quo (Oakes et al., 1994). When attempting to understand stereotypes and their origins it should be understood that one should not simply accept one of these explanations as a complete, rather all three explanations presented should be viewed as contributing to stereotypes and their origins.

Stereotypes also originate from the psychological distinctiveness of infrequent events that can be influenced by group membership (Hamilton and Gifford 1976). For example, stereotypes created through the distinctiveness of infrequent events or behavior like a female being involved in a car accident can be falsely correlated to all females, to form the stereotype “all women are bad drivers”. Then, because stereotypes are mental categories and representations of groups through which to reference in social situations can lead to the prejudgment all group members fit the stereotype. In addition to this because stereotypes and their formation are susceptible to the psychological distinctiveness of events and behaviors, they can also be influenced by a combination of socialization, personality type (e.g., the authoritarian personality (Adorno et al., 1950), right-wing authoritarianism (Altemeyer, 1981; Altemeyer, 1996; Altemeyer, 2007) and group orientation (e.g., SDO (Sidnaius and Pratto, 1993; Sidnaius and Pratto, 1999).
It should be understood that the phenomenon of prejudice—the positive or negative evaluation of a target on the basis of real or imagined group characteristics occurring between groups (Nelson, 2002, p 11)—has been conceptually linked to stereotypes, stereotyping, illusory correlations, right-wing authoritarianism, and the degree to which an individual is Social Dominance Oriented (Adorno, et al, 1950; Allport, 1954; Altemeyer, 1981; Altemeyer, 1998; Brewer and Campbell, 1976; Gilbert, 1951; Hamilton and Gifford, 1976; Karlins, Coffman, and Walters, 1969; Katz and Braly, 1933; McFarland and Adelson, 1996 as cited by Altemeyer, 1998; Pratto, Sidanius, Stallworth, and Malle, 1994; Sidnaius and Pratto, 1999). Although, prejudice is a cognitive and attitudinal phenomenon it should also be understood that prejudice can engage our emotions and manifest itself in behavior to become discrimination (i.e. racism).

At present prejudice can be classified into two categories: Overt or “old-fashioned” prejudice, and covert or “modern prejudice”. The conception modern prejudice and its various theoretical definitions along with its measurement arose out of a paradox in the research indicating despite research demonstrating that the plainly pejorative stereotypes that were common place over 50 years ago were less prevalent (Dovidio and Fazio, 1992; Dovidio and Gartner, 1986; Gilbert, 1951; Karlins et al., 1969; and Katz and Braly, 1933). While other research using the ‘bogus pipeline’ experimental design (Sigall and Page, 1971), more covert measures of behavior (Crosby Bromley and Saxe., 1980), spontaneous non-verbal behaviors (Hendricks and Bootzin, 1976), resistance to affirmative action (Jacobson, 1985), and related biases (McConahay, 1983) suggest prejudice remains a significant problem.

The theory of Modern Prejudice (McConahay, 1986) and its scale, the Modern Racism scale (McConahay, 1986) was developed account for the discrepancy between attitudes and behavior by suggesting prejudice had evolved into a more covert form that is not assessed by old-fashioned measures of prejudice. According to McConahay (1986) the modern racist believes that: 1) discrimination is a thing of the past. 2) Minority groups are pushing too hard into places they are not wanted. 3) The demands minority groups are currently making are unfair. 4) Thus, the recent gains enjoyed by minority group members are undeserved, and societal institutions are providing them with unnecessary attention and status. The Modern Racism Scale is composed of six items (see McConahay, 1986) that are characterized as having abstract moral overtones (e.g. “Over the past few years Blacks have gotten more than they deserve”) and items using code words for African American (like “the streets aren’t safe these days without a
policeman around”), has been significantly correlated with voting preferences in Los Angeles after controlling for political conservatism, measures of anti-African American prejudice.

The Modern Racism Scale has been used extensively (Entman, 1990). Scores on the Modern Racism Scale have been found to positively correlate to: political conservatism, authoritarianism (Weigel and Howes, 1985), endorsement of controversial religious beliefs, and prejudice towards stigmatized groups (McConahay and Hough, 1976) and negatively correlated to individuals’ increased concern about appearing prejudiced (Dunton and Fazio, 1997). In addition to this, the theory of modern prejudice and the Modern Racism scale (McConahay, 1986) has also been used to develop other measures of individual differences in prejudice. For example, the theory of modern racism has been applied to sexism (Swim, Akin, Hall, and Hunter, 1995), prejudice towards Aborigines in Australia (Pedersen, Griffiths, Contos, and Bishop, 2000), and the development of the Modern Homonegativity Scale (Morrison, 2003). Recently Morrison (2007) utilized the theory of modern prejudice and the Modern Racism Scale to develop a new measure of prejudice for the purpose of determining individual differences in prejudice as they pertain to Aboriginals in Canada.

The Prejudice Attitudes Towards Aboriginals Scale (PATAS) (Morrison, 2007) was developed to measure the discrepancy found between the expressed attitudes and behavior toward Aboriginal Canadians. The PATAS (Morrison, 2007) consists of an 11 item old-fashioned scale possessing an alpha of .91 and a 14 item modern scale possessing an alpha of .93 with higher scores believed to denoting greater levels of prejudice towards Aboriginals (Morrison, 2007). In addition to this preliminary research using the PATAS has indicated that it scores have demonstrated significant positive correlations between both old fashioned and modern prejudice scale items and modern attitudes towards gay men ($r = .28$ and $.50$, at $p < .001$); attesting to the preliminary construct validation of the Aboriginal items since both scales measure prejudice.

Taking the results from the development of the PATAS into consideration it should be acknowledged that despite the PATAS being found to possess a high degree of internal consistency, and some preliminary evidence suggesting the measure demonstrates evidence of construct validity; an exploration into whether or not the PATAS demonstrates criterion related evidence of construct validity has not been determined. This is problematic because until the construct validity of the PAS is examined further there is no way of knowing if the extent to
which the PATAS as a measure is construct valid and in fact actually measures prejudiced attitudes towards Aboriginals. As such, before research into the distribution and effect of prejudice attitudes towards Aboriginals within a population can be conducted, further evidence the PATAS construct validity is required.
Chapter 3: Methodology

Introduction

This chapter will present the methodology to be used to examine the criterion related validity of the PATAS (Morrison, 2007) as outlined by the research questions in Chapter one: 1) To what extent does the PATAS demonstrate convergent validity with the Right-wing Authoritarianism scale (Altemeyer, 2007)? 2) To what extent does the PATAS demonstrate convergent validity with the Social Dominance Orientation Scale five (Pratto, Sidanius, Stallworth, and Malle, 1994)? 3) What is the nature of the relationship between PATAS scale scores and an increased concern about appearing prejudiced? 4) To what extent does the PATAS correlate with religious self-schema and political conservatism? and 5) To what extent does the PATAS demonstrate concurrent validity? As such this chapter will address five elements of the methodology: Participants, Instruments, Procedure, Analysis and Demographics. Under the subheading Participants a detailed description of the sample used in this research will be provided. Under Instruments the reader will find a detailed report on the PATAS (Morrison, 2007) the attitudinal scales used to demonstrate convergent validity, the Motivation to Control Prejudiced Reactions scale (MCPRS) (Dunton and Fazio, 1997) which will be used to determine an individuals concern about appearing prejudiced, and the Marlowe-Crowen Social Desirability Scale Form C (M-C Form C) (Reynolds, 1982) which will be used to control for socially desirable responding among participants. The subheading Demographics will list the demographic information requested of participants and the rational behind the selection of these variables. The subheading, Procedure, will report the procedures used for participant recruitment. Finally, under Analysis, will be a detailed description of how the data once obtained will be analyzed.

Participants

Participants were recruited from five undergraduate classrooms in the College of Arts and Science at the University of Saskatchewan. The instructors for each class were approached in order to gain permission to come to their classroom to recruit participants. Four hundred and seven undergraduate students were recruited for this study and surveyed in one testing session using a survey package for the purpose of determining the predictive validity and concurrent validity of the PATAS (Morrison, 2007). This represented a 100 percent response rate however upon reviewing the data collected it was revealed that only 398 students completed the survey
package which represented a one percent attrition rate. The recruitment of university students is based on two reasons. First, it is a sample of convenience. Second, due to the prevalence of overt forms of prejudice and history of discrimination of Aboriginals in Canada and because stereotypes have been shown to be persistent over time it is believed there is residual anti-Aboriginal affect in Canada and thus there should be some prejudice attitudes towards Aboriginals within the sample population (Katz, and Braly, 1933; Gilbert, 1951; Karlins, Coffman, & Walters, 1969). As a result it should be acknowledged that the generalizability of the result may be limited to only students attending undergraduate classes at the University of Saskatchewan in Canada and consequently the results of a similar study using a different sample may produce similar but different results.

**Instruments**

Participants were surveyed in one testing session using the following five measures: 1) PATAS (Morrison, 2007) (see Appendix A), 2) RWA scale (Altemeyer, 1996) (see Appendix B), 3) SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994) (see Appendix C), 4) MCPRS (Dunton and Fazio, 1997) (See Appendix D), and 4) the M-C Form C (Reynolds, 1982) (see Appendix E) to control for socially desirable responding. 

*The Prejudice Attitudes towards Aboriginals Scale (PATAS) (Morrison, 2007)*

The Prejudice Attitudes towards Aboriginals Scale (PATAS) (Morrison, 2007) is a 25-item scale that consists of two subscales—that factor analysis suggest load as two separate oblique factors—an old-fashioned scale (11 items) possessing an alpha of .91 and a modern scale (14 items) possessing an alpha of .93 with higher scores believed to denote greater levels of prejudice towards Aboriginals (Morrison, 2007).

In the present research, the 25-item PATAS (Morrison, 2007) was measured using a 5-point Likert-type scale (1 strongly disagree to 5 strongly agree). An examination of endorsement rates showed that total scale scores for the old-fashioned measure of prejudice towards Aboriginals fell between 11 and 77; thus having a mid point of 44 (Morrison, 2007). Morrison (2007) reported 66% of the sample scored below the mid point; although it is noted there was still considerable endorsement of the following two items: “Most Aboriginal people need classes on how to be better parents” (31% somewhat agree, agree, strongly agree), and “Most Aboriginal people are on welfare” (40% somewhat agree, agree, strongly agree). Whereas, total scale scores for the modern prejudice items were found to range between 14 and 98. Approximately, 62%
percent of those surveyed scored above the midpoint of 48; thus indicating stronger support for the modern prejudice items. The results suggested 49% somewhat agreed, agreed, or strongly agreed with the third item on the modern scale “Aboriginal people should stop complaining about the way they are treated and simply get on with their lives” and that 65% of those samples somewhat agreed, agreed, or strongly agreed with the fifth item Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians.

The Right-Wing Authoritarianism Scale (Altemeyer, 2007)

The Right-Wing Authoritarianism (RWA) scale (Altemeyer, 2007) is a balanced 22-item attitudinal measure that possesses an alpha of .88 that asks subjects to rate their level of agreement (or disagreement) with statements such as "Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the ‘rotten apples’ who are ruining everything." All of which contains all three facets of RWA: "honor the ways of our forefathers" — conventionalism/traditional values "do what the authorities tell us to do" — authoritarian submission "get rid of the ‘rotten apples’ who are ruining everything" — authoritarian aggression.

In the present research, the 22-item RWA scale (Altemeyer, 2007) measured the construct of RWA using a 9-point semantic differential scale ranging from -4 very strongly disagree to +4 very strongly agree with a midpoint of zero. When scoring the 22-item RWA scale the first two items are omitted as they serve only to familiarize individuals’ with the scoring system. Scores on the 22-item RWA scale can range from 20 to 180 with scores falling below the midpoint of 100 interpreted as not ascribing to RWA in absolute terms and scores above the midpoint interpreted as ascription to RWA (Altemyer, 2007).

The Social Dominance Orientation Scale (Sidnaius and Pratto, 1999)

The SDO5 (Pratto, Sidanius, Stallworth, and Malle, 1994) was developed by extensive item selection and criterion testing. In developing the SDO5 scale Pratto, Sidanius, Stallworth, and Malle (1994) tested 70 items believed to be related to SDO or to the constructs that can be considered linked to SDO such as nationalism and prestige-striving. the SDO5 is a 14 item balanced scale that has been found to possess alpha of .83.

In the present study, the 14-item SDO5 (Pratto, et al., 1994) scale was measured using a 7-point Likert-type scale (1 very strongly disagree; 7 very strongly agree). Scores on the 14-item SDO5 scale can range from 14 to 98 with higher scores denoting greater levels of Social
Dominance Orientation. Pratto, et al. (1994) provide evidence regarding the validity and reliability of the 14-item SDO\textsubscript{2} scale.

*Motivation to Control Prejudiced Reactions Scale (MCPRS) (Dunton and Fazio, 1997)*

The Motivation to Control Prejudiced Reactions Scale (MCPRS) (See Appendix D) was developed by Dunton and Fazio in 1997 for the purpose of measuring an individuals’ desire to control their prejudiced reactions. The MCPS consists of two subscales: 1) Concern about Appearing Prejudiced (9 items) and 2) Restraint to Avoid Dispute (8 items). The Concern About Appearing Prejudiced subscale measures individuals’ anxiety regarding the observation of prejudice in themselves or being perceived as prejudiced by others. The Restraint to Avoid Conflict subscale determines individuals’ willingness to suppress prejudiced attitudes to avoid conflict.

In the present research the 17-item MCPRS (Dunton and Fazio, 1997) was measured using a 5-point Likert-type scale (1 strongly disagree; 5 strongly agree). Scores on the MCPRS can range from 17 to 85 and have been found to possess an alpha of .81 with higher scores representing greater concern about appearing prejudiced and restraint to avoid dispute (8 items). It should be noted that Dunton and Fazio (1997) do not report the alpha coefficients for the concern about appearing prejudice or the restraint to avoid dispute subscales. Further evidence regarding the validity and reliability of the MCPRS are provided by Dunton and Fazio 1997 article.

*The Marlowe-Crowen Social Desirability Scale Form C (M-C Form C)(Reynolds, 1982)*

The Marlowe-Crowen Social desirability Scale Form C (M-C Form C) was developed by Reynolds in 1982 for the purpose of reducing the original number of items on the Marlowe-Crowen Social Desirability scale from 33-items to 13-items without compromising the reliability or validity of the test results. The M-C Form C (Reynolds, 1982) is a 13-item scale that uses a true and false response format. Score on the M-C Form C can range from 13 to 39 with a midpoint of 20 and have been found to possess an alpha of .76.

In the present investigation when calculating M-C Form C (Reynolds, 1982) scores, a score of 1 was assigned for the response “True” and a score of 2 was assigned for the response “False” for items 1, 2, 3, 4, 6, 8, 11, and 12. Items 5, 7, 9, 10, and 13 of the M-C Form C are reversed scored and no recorded response for any of the 13 items was assigned the score of 2. After examining the reliability and validity of the M-C Form C, Reynolds (1982) concluded the
13-item scale he developed was a viable alternative to the 33-item Marlowe-Crowne Social Desirability scale.

Demographics

Based on the previous research conducted on both the RWA scale (Altemeyer, 1981; Altemyer, 1996; and Altemeyer, 2007), the SDOs (Pratto, Sidanius, Stallworth, and Malle 1994; Sidanius and Pratto, 1999) scale, and Modern Prejudice (Weigel and Howes, 1985; McConahay and Hough, 1976)) the following three demographic questions are also included in the survey package administered to participants: An indication of participants 1) gender, 2) religious self-schema, and political orientation (see Appendix F). Participants were asked to disclose their gender simply by requesting them to circle their gender (Male; Female) in the demographics section of the survey package. Participants were asked to disclose their age in years according to the age categories provided. Participants were asked to disclose their ethnic origins by indicating whether they consider themselves to be Aboriginal, Asian, Arabic, Caucasian, Indian, Hispanic, or Other by placing a mark next to one of these classifications. Religious self-schema was measured through one item in which participants were asked whether they considered themselves to be: 1 very religious, 2 somewhat religious, 3 slightly religious, 5 not at all religious, or 5 don’t know. Research suggest that single measures of religious self-schema are valid and reliable (Gorsuch and McFarland, 1972). Participants were asked to disclose their political orientation using the following options: 1 very conservative, 2 conservative, 3 somewhat conservative, 4 somewhat liberal, 5 liberal, 6 very liberal, or 7 don’t know. Research suggests that single measures of political conservatism are valid and reliable (Gerbner, Gross, Morgan, and Signorelli, 1984; Wagstaff and Quirk, 1983).

Procedure

A participant recruitment letter was read aloud to each class which reported that the reason behind the study was to examine the perception regarding a number of current Canadian issues, and that their participation is not mandatory. Following this, the survey package comprised of an information sheet providing information to each participant regarding the nature of the research, a disclaimer indicating to each participant that by completing the survey package they consented to having their data used for research purposes, the RWA scale (Altemeyer, 1996), SDOs (Pratto, Sidanius, Stallworth, and Malle, 1994), PATAS (Morrison, 2007), the MCPRS (Dunton and Fazio, 1997) and the M-C Form C (Reynolds, 1982). After completing
both of the consent forms and the survey, each participant was then asked to return one consent form and the survey to the researcher. Upon returning all material each participant was debriefed using a letter informing participants of the purpose of the study.

Analysis

Once the complete data was collected all responses were transferred in to the Statistical Package for the Social Sciences (SPSS). Nominal and categorical demographic information collected were re-coded to enable data analysis. Data were then be examined for any missing data and scale items left blank will be assigned a median score. Next, all surveys collected were examined for and evidence of socially desirable responses and those demonstrating evidence of socially desirable responses—as indicated by the M-C Form C (Reynolds, 1982)—will be dropped. Following this, prior to statistical analysis, reliability estimates for all scales will be calculated.

Next correlation analysis was conducted for the purpose of examining the relationship between each participant’s survey data. This correlational analysis examined the extent to which scale scores on the PATAS converge with scale scores on the RWA scale (Altemeyer, 1996) and the SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994). Participants scores on the PATAS were then cross referenced with the data obtained from the development of the PATAS for the purpose of examining the convergent validity, as determined by the cut scores in Morrison unpublished study. The relationship between PATAS scores and an increased concern about appearing prejudiced as measured by the MCPRS (Dunton and Fazio, 1997) were then examined for evidence of divergent validity. Next, the relationship between the demographics recorded and the PATAS was examined. Finally, the concurrent validity of PATAS scores was examined by comparing response sets obtained from groups of individuals that should theoretically hold relatively low levels of prejudiced attitudes towards Aboriginals and individuals that should theoretically evidence high levels of prejudiced attitudes towards Aboriginals

Summary

This chapter outlined the methodology used for this investigation concerning the criterion related validity of the PATAS (Morrison, 2007). In the experimental phase 407 undergraduate students from the College of Arts and Science at the University of Saskatchewan were recruited and tested using the RWA scale (Altemeyer, 1996), SDO5 (Pratto, Sidanius, Stallworth, and
Malle, 1994), PATAS (Morrison, 2007), the MCPRS (Dunton and Fazio, 1997) and the M-C Form C (Reynolds, 1982). Once collected, the complete survey data set was examined for evidence of socially desirable responses and those demonstrating evidence of socially undesirable responses were dropped. Next reliability estimates will be calculated for all scale included in the survey package prior to statistical analysis.

Following this a correlation analysis for the purpose of examining: the extent to which scale scores on the PATAS converge with scale scores on the RWA scale (Altemeyer, 1996) and the SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994), the relationship between PATAS (Morrison, 2007) scores and MCPRS (Dunton and Fazio, 1997) for evidence of discriminant validity, the relationship PATAS scores and the demographics recorded, and the concurrent validity of PATAS scores. Finally, participants scores on the PATAS was then be cross referenced the item endorsement data obtained from the development of the PATAS.
Chapter 4: Results

Introduction

Chapter four will report the results of this quantitative investigation into the criterion related validity of the PATAS (Morrison, 2007) and demographic influences as they pertain to the five research questions outlined in chapter one.

The results will be presented in two sections. The first section Preliminary Analysis will discuss the data entry and cleaning process and provide the reader with description of the sample of participants from which the data was collected. The second section, Data Analysis, will present the results of the research in order of analysis. This section will be separated using six subheadings: 1) Descriptive Statistics, 2) PATAS Response Frequencies, 3) Independent Sample t-test, 4) Mann-Whitney Test, 5) Correlations, and 6) Multiple Regression Analysis.

Preliminary Analysis

Data Entry and Cleaning

Four hundred and five students were recruited and surveyed for the purpose of investigating the criterion related validity of the PATAS. All survey information collected was entered into SPSS by one researcher and then rechecked against the raw data at three different points to ensure all data was correctly entered. Following this, a frequency analysis was run for the purpose of identifying the percentage of missing data and to identify any variables out of scope in the data set. The results of this analysis indicated that only 0.95% of the surveys submitted were incomplete. At this time it was decided that due to their being very few participants who did not complete the survey package, that these participants would be dropped from the analysis. Next frequency analyses on each of the measures included in the survey package used (i.e., RWA, SDO5, PATAS, and MCPRS), and histogram charts and scatterplots were created for the purpose of examining the distribution of the data and to ensure the data collected were was normally distributed and linear. Bivariate scatterplots was examined to determine if the assumption of linearity was upheld for the data collected and to confirm that Pearson’s $r$ could be used to examine the relationship among variables (Tabachnick, and Fidell, 2007). This investigation indicated no evidence of nonlinearity or heteroscedasticity.

Normality, skewness and kurtosis values for all measures included in the survey package were inspected to determine if the data was normally distributed. The values ranged from -.61 to .46 for skewness and -0.69 and .48 for kurtosis. These values were found to fall within the
acceptable range of $<|2|$ to be considered to approximate a normal distribution. Next, skewedness and kurtosis values obtained from the demographic information were examined. The values ranged from -.92 to 4.2 for skewness and -1.4 and 21.3 for kurtosis. These values were not found to fall within the acceptable range (i.e., $<|2|$), thus the sample could not be considered to approximate a normal distribution. Further examination into evidence of a non-normal distribution indicated the age demographic values were elevated for skewedness (4.2) and kurtosis (21.3) as was the kurtosis value for categorical variable ethnicity (4.5). Indicating that both demographic variables in the data set were non-normally distributed and consequently limiting the generalizability of the inferences that can be made from the data regarding age and ethnicity. The skewness and kurtosis values for all remaining demographic variables collected were within the standard acceptable range indicating a normal distribution.

Following the data cleaning the individual scores obtained on the M-C Form C were examined for evidence of social desirable responding for the purpose of screening out any participant that may have responded in a socially desirable manner. No evidence of social desirability was found, therefore casewise deletion was not used as no participants sampled responded in a socially desirable manner.

Sample Descriptives

Table 1 reports the percent distribution for all demographic data collected on the final sample after data cleaning.

Table 1

<table>
<thead>
<tr>
<th>Sample Descriptives</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32.1%</td>
</tr>
<tr>
<td>Female</td>
<td>67.9%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>17 to 22</td>
<td>87%</td>
</tr>
<tr>
<td>23 to 28</td>
<td>10.1%</td>
</tr>
<tr>
<td>29 to 34</td>
<td>1.6%</td>
</tr>
<tr>
<td>35 to 40+</td>
<td>0.8%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Aboriginal</td>
<td>5.2%</td>
</tr>
</tbody>
</table>
Data Analysis

This section will report the results of the research in order of analysis separated using six subheadings: 1) Descriptive Statistics, 2) PATAS Response Frequencies, 3) Independent Sample t-test, 4) Mann-Whitney Test, 5) Correlations, and 6) Multiple Regression Analysis.

Descriptive statistics

Means, standard deviations and alpha coefficients for all measures in the survey package administered to participants are reported in Table 2.

Table 2
Descriptive Statistics and Alpha Coefficients for all Measures Included in the Survey Package Administered to Participants (n = 386)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWA scale</td>
<td>68.91</td>
<td>22.99</td>
<td>.86</td>
</tr>
<tr>
<td>SDO3 scale</td>
<td>26.35</td>
<td>10.74</td>
<td>.88</td>
</tr>
</tbody>
</table>
Table two indicates that the mean score obtained from the participants surveyed was not above the midpoint on the RWA scale. This was not surprising due to the fact that Altemeyer (1996) indicated that the average Canadian university student score on the RWA scale was 75 and because RWA is a non-normally distributed phenomenon. The RWA scale possessed high levels of internal consistency ($\alpha = .86$) indicating precision in the measure of the general construct.

The majority of participants in the sample were also found to score below the midpoint on the SDO5 scale. This too was expected as SDO has been found to be a non-normally distributed phenomenon (Sidnaius & Pratto, 1999). The SDO5 scale was also found to have high levels of internal consistency ($\alpha = .88$), which is consistent with the internal consistency values reported in previous research (Pratto, Sidanius, Stallworth, & Malle, 1994).

Overall the internal consistency of the PATAS was also found to be high ($\alpha = .87$), as was the alpha for the 11-item old fashioned prejudice subscale of the PATAS ($\alpha = .90$) and the 14-item modern prejudice subscale ($\alpha = .93$). Both the alpha coefficients for the 11-item old-fashioned prejudice and 14-item modern prejudice subscale of the PATAS are consistent with the levels reported by Morrison (2007). Table two indicates that participants tended to endorse old fashioned prejudice scale items less frequently than modern prejudice items as indicated by the recorded mean of 29.13 of the former is significantly less than the latter (54.51).

The internal consistency levels obtained for the MPCRS ($\alpha = .78$) and the Concern about Acting Prejudice subscale ($\alpha = .76$) were also found to be sufficient. The alpha value obtained for the Restraint to Avoid Dispute Subscale, on the other hand was found to be unacceptable ($\alpha$
= .58). However, it should be noted that Dunton and Fazio (1997) did not report internal consistency values for the Concern and Restraint subscales. They are, on the other hand, consistent with the results found in other research.

**PATAS response frequencies**

An examination of the endorsement rates of the 11-item old fashioned prejudice subscale of the PATAS showed that 95.3% of the sample scored below the midpoint of 44. It should be noted that this represents a significant reduction from Morrison (2007) where 66% of the sample scored below the midpoint of 44. Examining the endorsement rates in comparison to Morrison’s (2007) results indicated that although there was a reduction in the endorsement of the following two items: 1) item four “Most aboriginal people need classes on how to be better parents” (28.5% of the sample agreed, or strongly agreed which is a reduction from the previous 31%), and 2) item three “Most Aboriginal people are on welfare” (30.9% agreed, or strongly agreed which is a reduction from the previous 40%). There was still considerable endorsement for item nine: “Drug abuse is a key problem for Aboriginal people” (56.7% of the sample agreed, or strongly agreed).

Examination of the endorsement rates of the 14-item modern prejudice subscale of the PATAS indicated that 96.1% of the sample scored above the midpoint of 48; thus indicating stronger support for the modern prejudice items. Further examination of the endorsement rates for the modern prejudice subscale of the PATAS in comparison with Morrison’s (2007) indicated over 40% of the sample agreed, or strongly agreed with the following four items: 1) Item two “Aboriginal people still need to protest for equal rights” (41.7%), 2) item six “Many of the requests made by Aboriginal people to the Canadian government are excessive (40.9%), 3) item seven “Special places in academic programs should not be set aside for Aboriginal students” (49.2%), 4) item eight “Aboriginal people should be satisfied with what the government has given them” (47.9%). Over 50% of the sample agreed or strongly agreed with the following three items: 1) item one “Canada needs to stop apologizing for events that happened to Aboriginal people many years ago” (55.7%), 2) item three “Aboriginal people should stop complaining about the way they are treated and simply get on with their lives” (52.3%), and 3) item five “Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians” (53.1%). In addition to this over 70% of the sample was also found to agreed, or strongly agreed with the following two items: 1) item 10
“Aboriginal people should not have reserved placements in universities unless they are qualified” (70.2%), and 2) item 11 “Aboriginal people should pay taxes just like everyone else” (76.7%).

Independent Sample t-test

Before examining the correlation between the measures included in the survey package the mean scores obtained from the PATAS for Aboriginal respondents (N = 20) and Caucasian respondents (N = 320) were examined. The purpose of this analysis was to investigate whether or not the PATAS was able to determine if the PATAS could discern the difference between those individuals that should theoretically score low on the scale (i.e., Aboriginal) and those individuals who should score high on the scale (i.e., Caucasians). The result of this analysis indicated that equal variance between Aboriginal and Caucasian respondents could not be assumed in the data set and that an Independent t-test on the sample could not be run, as Leven’s test of equality of variance was not met. Thus, to examine the concurrent validity of the PATAS a non-parametric test was used.

Mann-Whitney Test

The Mann-Whitney was selected to examine PATAS for evidence of concurrent validity between Aboriginal and Caucasian participants. The Mann-Whitney is an alternative to the independent group t-test, when the assumption of normality or equality of variance is not met. This test, like many non-parametric tests, uses the ranks of the data rather than their raw values to calculate the statistic. However, it should be noted, that since the Mann-Whitney test does not make a distribution assumption, it is not as powerful as the t-test.

The results of the examination of PATAS scores for evidence of concurrent validity between Aboriginal and Caucasian participants indicated a significant difference between each ethnicity group’s scores on the PATAS as it was able to distinguish between groups that should hold relatively low and high scores on the PATAS. Aboriginal respondents (Mdn = 58) were found to obtain significantly lower scores on the PATAS than Caucasian respondents (Mdn = 76) at the level $p < .001$ ($U = 1576.5$, $z = -3.634$).

Correlations

Table 3 shows the correlations between the measure included in the survey package administered to participants and the demographic information collected.
Table 3

Correlations Between the Measures sued and the Demographic variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RWA scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. SDO5 scale</td>
<td>.208*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PATAS Old fashioned prejudice subscale</td>
<td>.364**</td>
<td>.451**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PATAS Modern prejudice subscale</td>
<td>.170**</td>
<td>.347**</td>
<td>.575**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. MCPRS</td>
<td>.090*</td>
<td>-.370**</td>
<td>.266**</td>
<td>-.281**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. MCPRS Concern about appearing prejudiced</td>
<td>.084</td>
<td>-.380**</td>
<td>.245**</td>
<td>-.270**</td>
<td>.886**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. MCPRS Restraint to avoid dispute</td>
<td>.071</td>
<td>-.232**</td>
<td>.195**</td>
<td>-.195**</td>
<td>.810**</td>
<td>.448**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Gender</td>
<td>-.099*</td>
<td>-.216**</td>
<td>.144**</td>
<td>-.050</td>
<td>.207**</td>
<td>.230**</td>
<td>.106*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>-.048</td>
<td>.020</td>
<td>-.095*</td>
<td>-.153**</td>
<td>.025</td>
<td>-.019</td>
<td>.074</td>
<td>.012*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Ethnicity</td>
<td>-.026</td>
<td>-.076</td>
<td>.033</td>
<td>.099</td>
<td>-.028</td>
<td>.015</td>
<td>-.006</td>
<td>-.026</td>
<td>-.006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Political Orientation</td>
<td>.344**</td>
<td>-.154**</td>
<td>.267**</td>
<td>-.110</td>
<td>.036</td>
<td>.004</td>
<td>.026</td>
<td>.171**</td>
<td>-.035</td>
<td>-.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Religious self schema</td>
<td>-.367**</td>
<td>.118*</td>
<td>-.046</td>
<td>-.042</td>
<td>.174**</td>
<td>-.108</td>
<td>.170**</td>
<td>-.094</td>
<td>.087*</td>
<td>-.007</td>
<td>.171**</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).
*. Correlation is significant at the 0.05 level (1-tailed).

Significant positive correlations at the level of $p < .01$ (1-tailed) were found between both the old-fashioned and modern prejudice subscales of the PATAS and TAS and total RWA scale (old fashioned, $r = .364$; modern, $r = .170$), and total SDO5 scale scores (old fashioned, $r = .451$; modern, $r = .347$). This indicated that those participants scoring high on both the RWA scale and the SDO5 scale also obtained high scores on the old-fashioned and modern prejudice subscales of the PATAS. It should also be noted that significant negative correlations at the level of $p < .01$ were also found between both the subscales of the PATAS and the MCPRS (old fashioned, $r = -.266$; modern, $r = -.281$) and its Concern about Acting Prejudice (old fashioned, $r = -.245$; modern, $r = -.270$) and Restraint to Avoid Dispute (old fashioned, $r = -.195$; modern, $r = -.195$) subscales. This negative correlation between the PATAS subscales and the MCPRS suggested those participants that possessed high level of motivation to control prejudice reactions and that participants who self-identified as having liberal political views had lower scores on the
PATAS. The significant correlations between the PATAS subscales and the RWA, SDO, and MCPRS scale scores provided some criterion related evidence to the validity.

Significant negative correlations at the level of $p < .01$ were also found between the PATAS subscales and political orientation (old fashioned, $r = -.267$) and gender (old fashioned, $r = -.144$). Further investigation into the negative correlation between the PATAS subscales and political orientation suggest that within the sampled population the more liberal a participant indicated they were the more likely they were to have a low score on both the old fashioned and modern prejudice subscales of the PATAS. While an examination of the negative correlation between gender and the old fashioned subscale of the PATAS indicated that males scored higher on the old-fashioned prejudice subscale than females. In addition to this a significant negative correlation between the modern prejudiced subscale of the PATAS was found at the level $p < .05$ for political orientation ($r = -.110$) and a significant positive correlation between the modern prejudice subscale of the PATAS was found at the level $p < .05$ and age ($r = .99$).

Exploratory Multiple Regression Analysis

For the purpose of exploring the nature of the relationship between PATAS scores and the variables found to significantly correlate with the PATAS, two multiple regression analysis was performed. The first multiple regression analysis performed used the PATAS old fashioned subscale scores as the dependant variable; while, the second used the PATAS modern prejudice subscale scores as the dependent variable and the previously reported significant correlations found for the data set were used as predictor variables. The predictor variables used were for each regression equation was comprised of those variables significantly correlated with the dependent variables. Specifically the predictor variables used when predicting The PATAS old fashioned prejudiced subscale scores were: total RWA scale scores, SDO, scale, total score obtained on the MCPRS and its subscales, gender, age, and political orientation. While the predictor variables use when predicting The PATAS modern prejudice subscale scores were: total RWA scores, SDO, scale, total score obtained on the MCPRS and its subscales, age, ethnicity, and political orientation. Standard regression was chosen because it uses the least squares estimator to predict the dependent variable. In this method, the sums of squared residuals between the regression plane and the observed values of the dependant variable are minimized to create a linear model.
Overall the significant results of the final standard regression models computed provides evidence that six of the seven predictor variables used to predict the PATAS old fashioned prejudice subscale scores were statistically related to the dependent variable \([F(5, 385) = 35.554, \ p < .000]\) (See Table 4)

**Table 4**

*Summary of Regression Analysis*

<table>
<thead>
<tr>
<th></th>
<th>Sums of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8954.133</td>
<td>5</td>
<td>1790.827</td>
<td>35.554</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>19140.512</td>
<td>380</td>
<td>50.370</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28094.645</td>
<td>385</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Political orientation, Age, MCPRS concern with acting prejudice subscale total, RWA total, SDO Total  
b. Dependent Variable: Old fashioned prejudice subscale total

Overall the significant results of the final standard regression models computed provides evidence that five of the seven predictor variables used to predict the PATAS modern prejudice subscale scores were statistically related to the dependent variable \([F(5, 385) = 18.608, \ p < .000]\) (See Table 5).

**Table 5**

*Summary of Regression Analysis*

<table>
<thead>
<tr>
<th></th>
<th>Sums of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>11372.052</td>
<td>5</td>
<td>2274.410</td>
<td>18.608</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>46446.425</td>
<td>380</td>
<td>122.227</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>57818.477</td>
<td>385</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Ethnicity, Age, MCPRS concern with acting prejudice total, RWA total, SDO total  
b. Dependent Variable: Modern prejudice subscale total

A summation of the Standard regression analysis is shown in Table 6. Table 6 includes the unstandardized regression coefficients (B) and standardized coefficients (\(B\)). In particular, B represents the change in the dependent (PATAS old fashioned prejudice subscale scores) variable associated with a one-unit change in a predictor variable, all other variables are held
constant while $B$ is the average amount the dependent variable increase when the predictor increases one standard deviation and other predictors are held constant (Tabachnick and Fidell, 2007, p. 133). Table 6 also includes the t-scores for each of the predictor variables.

Table 6

Summary of the Standard Regression Analysis for Predictor variables for Scores on the Old Fashioned Prejudice Subscale of the PATAS

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>26.798</td>
</tr>
<tr>
<td>RWA scale total</td>
<td>.097</td>
</tr>
<tr>
<td>SDO5 scale total</td>
<td>.259</td>
</tr>
<tr>
<td>MCPRS Concern Subscale</td>
<td>-.212</td>
</tr>
<tr>
<td>Age</td>
<td>-1.483</td>
</tr>
<tr>
<td>Political orientation</td>
<td>-.572</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Old fashioned prejudice subscale total

Table 7 provides a summation of the Standard regression analysis. Table 7 includes the unstandardized regression coefficients ($B$) and standardized coefficients ($\beta$). In particular, $B$ represents the change in the dependent (PATAS modern prejudice subscale scores) variable associated with a one-unit change in a predictor variable, all other variables are held constant while $B$ is the average amount the dependent variable increase when the predictor increases one standard deviation and other predictors are held constant (Tabachnick and Fidell, 2007, p. 133). Table 7 also includes the t-scores for each of the predictor variables.

Table 7

Summary of the Standard Regression Analysis for Predictor variables for Scores on the Old Fashioned Prejudice Subscale of the PATAS

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>43.081</td>
</tr>
<tr>
<td>RWA scale total</td>
<td>.067</td>
</tr>
<tr>
<td>SDO5 scale total</td>
<td>.301</td>
</tr>
<tr>
<td>MCPRS Concern Subscale</td>
<td>-.391</td>
</tr>
<tr>
<td>Age</td>
<td>-3.452</td>
</tr>
</tbody>
</table>
Also associated with multiple regression is the multiple correlation \( R^2 \)—the percent of the variance in the dependent variable explained by the predictors. The adjusted multiple correlation (Adjusted \( R^2 \)), on the other hand, refers to the percent of the variance explained by the regression equation by subtracting out the contribution of chance (Tabachnick and Fidell, 2007). Lastly, the correlation between the dependent variable and the best linear combination of the predictors is included \( R \) (Tabachnick and Fidell, 2007, p. 147). In this analysis the predictor variables combined accounted for approximately 31.9% \( (R^2 = .319; \text{Adjusted } R^2 = .310) \) of the variance when predicting PATAS old fashioned prejudice subscale scores of the PATAS. While the predictor variables combined accounted for approximately 19.7% \( (R^2 = .197; \text{Adjusted } R^2 = .186) \) of the variance when predicting PATAS modern prejudiced subscale scores.

Summary

A total of 405 students were recruited and surveyed for the purpose of investigating the criterion related validity of the PATAS (Morrison, 2007). After data entry and cleaning the final sample consisted of 386 first year students enrolled in the College of Arts and Science at the University of Saskatchewan. The results of the data analysis indicated that both the old-fashioned and modern prejudice subscales of the PATAS possessed a high degree of internal consistency. Some evidence pointing to the criterion related validity of the PATAS was found. PATAS scale scores were positively correlated to the RWA scale (Altemeyer, 2007), SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994), and political orientation. In addition to this PATAS scores were negatively correlated to the MCPRS (Dunton and Fazio, 1997). Chapter five will report the results obtained from the sample as they pertain to each of the five research questions used to investigate the criterion related validity of the PATAS (Morrison, 2007). Next the limitations and practical implications of the obtained results will be discussed; followed by recommendations for future research that will be suggested and some conclusions derived from the research results.
Chapter 5: Discussion

Introduction

The main purpose of the present study was to examine the criterion related validity of the Prejudiced Attitudes Towards Aboriginals Scale (PATAS) (Morrison, 2007) as outlined by the following five research questions: 1) to what extent does the PATAS demonstrate convergent validity with the Right-wing Authoritarianism scale (Altemeyer, 2007)? 2) To what extent does the PATAS demonstrate convergent validity with the Social Dominance Orientation Scale five (Pratto, Sidanius, Stallworth, and Malle, 1994)? 3) What is the nature of the relationship between PATAS scale scores and an increased concern about appearing prejudiced? 4) To what extend does the PATAS correlate with religious self-schema and political conservatism? And 5) to what extent does the PATAS demonstrate concurrent validity? As such this study examined the relationship between the RWA scale (Altemeyer, 2007), SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994), and the MCPRS (Dunton and Fazio, 1997) which have previously been found to be highly predictive of prejudiced attitudes. Also included in this analysis was the examination of the relationship among the following demographic variables: Age, Gender, Ethnicity, Religious Self-schema, and Political Orientation which have also been linked to prejudiced attitudes.

The results of the present study will be presented through the use of five sections: 1) Research Questions: General Discussion, 2) Practical Implications of the Findings, 3) Limitations, 4) Directions for Future Research, and 5) Conclusions. The first section discussed, Research Questions General Discussion, will discuss the results as they pertain to each of the five research question asked in this research. Practical Implication of the Findings will discuss the implications the results have outside of academia. Limitations will identify the limitations found in the present research. Directions for Future Research will identify possible follow-up studies to the present research. To close the discussion, conclusions derived from the research results will be made.

Research Questions: General Discussion

The results of this research both support Morrison’s (2007) research indicating higher scores on the PATAS denoting greater levels of prejudice towards Aboriginals and provide evidence suggesting the PATAS demonstrates some criterion related validity.
1) *To what extent does the PATAS demonstrate convergent validity with the Right-wing Authoritarianism scale?*

The PATAS and its subscales were found to positively correlate to the RWA scale at the level $I < .01$. The positive correlation between the RWA and the PATAS suggests that participants that obtained high scores on the RWA scale also had high scores on the PATAS which provides some evidence pointing to a convergence between the scores of both scales and suggests some degree of relatedness between the constructs measured by RWA and the construct measured by the PATAS.

2) *To what extent does the PATAS demonstrate convergent validity with the Social Dominance Orientation Scale five?*

Total SDO$_5$ scale scores were found to be significantly correlated to the PATAS and its subscales at the level $p < .01$. Participants scoring high on the SDO$_5$ scale also scored high on the PATAS, which signified the construct measured by the SDO$_5$ scale is related to the construct measured by the PATAS.

3) *What is the nature of the relationship between PATAS scale scores and an increased concern about appearing prejudiced?*

Participant’s increased concern about appearing prejudiced as measures by the MCPRS (Dunton and Fazio, 1997) and it’s Concern about Acting Prejudiced and Restraint to Avoid Dispute subscales were found to negatively correlate with the PATAS and its modern and old-fashioned subscales at the level of $p < .01$. The significant negative correlation between the MCPRS and the PATAS provides additional evidence indicating the PATAS demonstrates criterion related evidence of the PATAS construct validity. As the data indicates as participants scale scores on the MCPRS increased their PATAS scores decreased.

4) *To what extend does the PATAS correlate with religious self-schema and political conservatism?*

Political conservatism was found to be significantly correlated to the PATAS and its old-fashioned prejudice subscale at the level $p < .01$. In addition to this, political conservatism was also found to be significantly correlated to the PATAS modern prejudice subscale at the level $p < .05$ (1-tailed). However, it should be noted that participant’s religious self-schema was not found to be significantly correlated to the PATAS and its subscales. The significant correlations found between the participant’s political conservatism and the PATAS provides further criterion
related evidence that suggests the PATAS demonstrates construct validity. Previous research examining the relationship between political conservatism has found the constructs measured by the RWA scale, SDO5 scale and the Modern racism scale to be related to one’s political conservatism (See: Altemeyer (1996); Pratto, Sidanius, Stallworth, and Malle, (1994); and Weigel and Howes, 1985). Thus, the finding suggesting participants with a more conservative political orientation also tended to have high scores on the PATAS can also be interpreted as signifying relatedness between the construct measured by the PATAS and political conservatism.

5) To what extent does the PATAS demonstrate concurrent validity?

The results of the examination of PATAS scores for evidence of concurrent validity between Aboriginal and Caucasian participants indicated a significant difference between each ethnicity group’s scores on the PATAS. The PATAS was able to distinguish between people with non-prejudiced attitudes towards Aboriginals and people with prejudiced attitudes towards Aboriginals. This was evidenced by Aboriginal respondents being found to obtain significantly lower scores on the PATAS than Caucasian respondents. The finding that Aboriginal participants score lower on the PATAS than Caucasian participant provides further criterion related evidence suggesting the PATAS demonstrates construct validity. This is due to the fact that the PATAS is able to discern between groups that should theoretically have little to no prejudicial attitudes towards Aboriginals and those groups who theoretically should have higher levels of prejudicial attitudes towards Aboriginals. However, it would be beneficial to examine this research question in future research that sampled more than 20 Aboriginal participants.

Exploratory Multiple Regression Analysis

In addition to examining the five research an exploratory multiple regression analysis was also conducted to examine whether RWA scale, SDO5, and the MCPRS scores in addition to the demographic variables collected (Gender, Age, Political Orientation, and Religious self-schema) were able to predict total PATAS old fashioned prejudice and modern prejudice scores and if so to determine what percentage of the variance is accounted for in the prediction of PATAS scores by each model. The results of the exploratory Standard multiple regression for PATAS old fashioned prejudiced scores indicated that all variable except for MCPRS total scores and its subscale restraint to avoid dispute subscale, ethnicity, gender, and religious self schema significantly predicted for total PATAS scores. The final model accounted for approximately 31.9% ($R^2 = .319$; Adjusted $R^2 = .310$) the variance when predicting total PATAS old fashioned
prejudice subscale scores. While the results of the Standard multiple regression for PATAS modern prejudice subscale scores indicated total RWA and SDO\(_5\) scale scores significantly predicted PATAS modern prejudice subscale scores along with the MCPRS concern about appearing prejudiced subscale, age, and ethnicity. The final model accounted for approximately 19.7% (\(R^2 = .197\); Adjusted \(R^2 = .186\)) the variance when predicting total PATAS modern prejudice subscale scores. However, it should be noted that the findings that gender did not predict total PATAS old fashioned prejudice scores should be investigated further because the majority of participants sampled were females between the ages 17-22 and therefore is not representative of all age categories and gender. In addition to this further investigation is also warranted into whether gender and political orientation predict PATAS modern prejudice scores because these two demographic variables have previously been found to be connected to modern prejudicial attitudes (McConahay and Hough, 1976), RWA (Altemeyer, 1996), and SDO (Sidanius and Pratto, 1993; Sidanius and Pratto, 1999).

**Practical Implications of the Findings**

Until recent, the examination and measurement of prejudicial attitudes towards Aboriginal people has not been examined. The small body of research on the development of the PATAS (Morrison, 2007) along with the present research suggests there are residual prejudicial attitudes towards Aboriginal people found within the University of Saskatchewan undergraduate population and that PATAS appears demonstrate criterion related evidence suggesting it may be construct valid. Specifically it was found for PATAS old fashioned prejudice subscale scores that higher levels of prejudicial attitudes towards aboriginals show evidence of significant positive correlations with the RWA scale, and the SDO\(_5\). Old fashioned prejudicial attitudes towards Aboriginals were also found to be significantly correlated with greater levels of political conservatism and that an individual’s motivation to control prejudice reactions is predictive of total PATAS scores. Modern prejudicial attitudes towards Aboriginals, on the other hand, were found only to be significantly correlated with the RWA scale, the SDO\(_5\) scale, age and ethnicity. However, it should be noted due to previous research finding it is recommended future research examine the relationship between modern prejudicial attitudes towards Aboriginals and political orientation and religious self schema (McConahay and Hough, 1976).

In addition to this, examination of the response frequencies indicates that researchers must be aware of the issues that appear to be triggering modern prejudicial attitudes towards
Aboriginals. Examples of PATAS items that reflect these concerns include: “Many of the requests made by Aboriginal people to the Canadian government are excessive”, “Special places in academic programs should not be set aside for Aboriginal students”, “Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians”, “Aboriginal people should not have reserved placements in universities unless they are qualified”, and “Aboriginal people should pay taxes just like everyone else”.

These results could be used as support in identifying the extent of prejudicial attitudes in organizations and in the development of cultural sensitivity programs designed to reduce prejudicial attitudes. In addition to this information gleaned from the present research could also be used to develop public education initiatives aimed at creating awareness and sensitivity to Aboriginal issues among dominant group members within society. Finally, the information regarding the triggers of modern prejudice towards Aboriginals can be used by professionals involved in programming to reduce prejudicial attitudes so they are better able to offer support to individuals coping with conflicting ideas and feeling experienced while they acknowledge their own prejudices and evolve into more culturally sensitive people.

Limitations

The results of the present study have demonstrated support for the notion that the PATAS demonstrates evidence of criterion related validity. However, limitations of the present research have been identified that both caution the generalization of the findings and point to future research directions. Firstly it should be acknowledged that majority of research on prejudice has focused on that of race and sex in an American context and there has been little research into the nature of prejudice towards Aboriginals in Canada. As such this research is limited by the lack of additional reference material available. Secondly, the sample used for this research is not representative of the Canadian population as a whole; because undergraduate students from the college of Arts and Science were surveyed. Of the 386 student participants making up the sample 32.1% were male, and 67.9% were female. Thus, a sample with a more equal distribution of male and females may be beneficial in further examination in to the predictive value of gender has on PATAS scores and its criterion related evidence of construct validity. Moreover, because the sample consisted of first year university students ages 17-22, it should be understood that the results may not be generalizable to all years of academic study or to individuals who chose not to pursue a post-secondary education. Therefore, additional research
is required to determine if there is a relationship between age, educational background, and year of study and the criterion related validity of the PATAS.

Other potential limitations of this research center on the fact that the expression of prejudicial attitudes toward Aboriginals is socially undesirable within contemporary Canadian society and due to the dynamic nature of prejudice participants may have already been aware of the socially desirable response to some of the PATAS items. A consequence of this could have been that participants may become aware of the nature of the study, which may result in a response bias. Nevertheless, it should be understood that this limitation was controlled for by including Form C of the Marlowe-Crowne Social, Desirability Scale (Reynolds, 1982) (see Appendix E) which was designed to identify socially desirable responses; nor does it deter from the significance of this research.

Directions for Future Research

Future research into the PATAS should strive to replicate the present study while making the necessary adjustments to the research design for the purpose of addressing the limitations listed previously. First a larger, more equally distributed sample across age, gender and year of study is desirable. This will facilitate further examination into the relationship between various age groups rather than simply those participants ages 17-22 and will provide the opportunity to investigate the effect level of education has on prejudice attitude towards Aboriginals. Secondly, future research should also consider recruiting participants that chose not to pursue a post-secondary education and the effect educational field of study (e.g., commerce, engineering, agriculture, law...etc.) has on prejudice attitudes towards Aboriginals, which would enable results to be generalizable to a wider population. Also, because participants were recruited from first year courses and their knowledge and level of understanding in regards to Aboriginal issues were unknown, future research may want to investigate the effect of educational background and knowledge of Aboriginal issues has on total PATAS scores prior to entering post-secondary studies, as well as, the effect year of post-secondary studies has on total PATAS scores. In addition to this future research should examine the relationship between PATAS modern and old fashioned prejudice subscale score and political orientation and religious self schema as they have been associated with the theory of Modern Prejudice (McConahay and Hough, 1976). Finally, future research should investigate whether PATAS scores are predictive of behavior (i.e., the construct validity of the PATAS). This could be accomplished by first pre-
screening participants using the survey package used in this research in the first phase of research, and then recruit the top and bottom 10% of scorers on the PATAS to participate in a judgment analysis similar to the one used by McConahay in (1983) to validate the Modern Prejudice Scale (1986) (see: McConahay, 1983).

Conclusions

The results of the present research demonstrated criterion related evidence suggesting the PATAS demonstrates some construct validity. Evidence of convergent validity was found between total PATAS scores and total RWA scale and SDO5 scale scores. The PATAS demonstrated discriminant evidence of construct validity with the MCPRS. Concurrent evidence of construct validity was also found for PATAS scores (Aboriginal participants scores on the PATAS were found to be significantly lower than Caucasian participants). These results were further supported by significant correlations between total PATAS scores and political orientation (participants who self identified as having a conservative political orientation also tended to have high scores on the PATAS old fashioned prejudice subscale) and age (younger participants tended to have higher scores on the PATAS modern prejudice subscale than older participants). In addition to this gender was found to be significantly correlated to the modern prejudice subscale of the PATAS; such that male participants were statistically shown to obtain higher scores on the PATAS than females. However, it should be noted, the significant correlation between the PATAS and age evidenced in the present study highlights the need for additional research since 87% of the sample fell between the ages of 17-22. Additionally, the non-significant correlation between the PATAS old fashioned and modern prejudice subscales and participants religious self-schema, and the lack of a significant correlation between the PATAS modern prejudice subscale scores also calls for more research into the mediating factor religious self-schema and political orientation may have on prejudicial attitudes towards Aboriginals since previous research has linked this demographic variable to RWA (Altemyer, 1996) and the concept of Modern Racism (McConahay and Hough, 1976). Moreover, because the expression of prejudice in society is dynamic in nature, continued research into the nature and expression of prejudiced attitude towards Aboriginals and the PATAS construct validity is essential in order to fully understand both the pervasiveness of modern and old fashioned prejudicial attitudes towards Aboriginals and the changing face of prejudice within contemporary society.
Future Considerations

Future research considerations into the extent to which the PATAS score demonstrate validity should examine whether PATAS scores are predictive of behavior. The methodology used to accomplish this could be accomplished in two phases. The first phase could both serve as a replication of the present research and as a method to pre-screen participants. The second phase of this research would then recruit those participants who scored in the top 90th percentile and bottom 10 percentile on the PATAS old fashioned and modern prejudice subscales to participate in a judgment analysis procedure similar to the one used by McConahay in (1983) to validate the Modern Prejudice Scale (1986) (see: McConahay, 1983).
References


Appendix A

Prejudice Attitudes Towards Aboriginals Scale (Morrison, 2007)

After each statement please circle the number that best represents your opinion

1 = Strongly Disagree.
2 = Disagree.
3 = Don’t Know.
4 = Agree.
5 = Strongly Agree.

Old-fashioned Prejudice

1. Most Aboriginal people can not take care of their children.
   1 2 3 4 5

2. Most Aboriginal people sound intoxicated (drunk).
   1 2 3 4 5

3. Most Aboriginal people are on welfare.
   1 2 3 4 5

4. Most Aboriginal people need classes on how to be better parents.
   1 2 3 4 5

5. Aboriginal people have way too many children.
   1 2 3 4 5

6. Aboriginal people have no sense of time
   1 2 3 4 5

7. High standards of hygiene are not valued in Aboriginal culture.
   1 2 3 4 5

8. Diseases that affect Aboriginal people are simply due to the lifestyle they lead.
   1 2 3 4 5

9. Drug abuse is a key problem among Aboriginal people.
10. Poverty on reserves is a direct result of Aboriginal people abusing drugs.

11. Few Aboriginal people seem to take much pride in their personal appearance.

Modern Prejudice
1. Canada needs to stop apologizing for events that happened to Aboriginal people many years ago.

2. Aboriginal people still need to protest for equal rights.

3. Aboriginal people should stop complaining about the way they are treated and simply get on with their lives.

4. Aboriginal people should simply get over past generations experiences at residential schools.

5. Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians.

6. Many of the requests made by Aboriginal people to the Canadian government are excessive.

7. Special places in academic programs should not be set aside for Aboriginal students.

8. Aboriginal people should be satisfied with what the government has given them.
9. It is now unnecessary to honor treaties established with Aboriginal people.
   1 2 3 4 5

10. Aboriginal people should not have reserved placements in universities unless they are qualified.
    1 2 3 4 5

11. Aboriginal people should pay taxes just like everyone else.
    1 2 3 4 5

12. The government should support programs designed to place aboriginal people in positions of power.
    1 2 3 4 5

13. Non-Aboriginal people need to become sensitive to the needs of Aboriginal people.
    1 2 3 4 5

14. Government Agencies should make every effort to meet the needs of Aboriginal people.
    1 2 3 4 5

*Note.* Items 2, 12, 13, and 14 of the modern racism subscale indicate positive agreement and must be reverse score so that people who AGREE with the statement “Aboriginal people still need to protest for equal rights” are not placed in the same camp as those who AGREE with a racist item. Additionally, when administering this survey old-fashioned prejudice items and modern prejudice items are presented such that an old fashioned prejudice item is followed by a modern prejudice item and modern prejudice items are followed by old fashioned prejudice items etc.
Appendix B

Right-Wing Authoritarianism Scale (Altemeyer, 2007)

This survey is a part of an investigation of general public opinion concerning a variety of social issues. You will probably find that you agree with some of the statements, and disagree with others, to varying extents. After each statement please circle the number that best represents your opinion, according to the following scale:

Circle -4 if you very strongly disagree with the statement.
   -3 if you strongly disagree with the statement.
   -2 if you moderately disagree with the statement.
   -1 if you slightly disagree with the statement.
Circle +1 if you slightly agree with the statement.
   +2 if you moderately agree with the statement.
   +3 if you strongly agree with the statement.
   +4 if you very strongly agree with the statement.

If you feel exactly and precisely neutral about an item, circle “0”.

You may find that you sometimes have different reactions to different parts of a statement. For example, you might very strongly disagree (-4) with one idea in a statement, but slightly agree (+1) with another idea in the same item. When this happens, please combine your reactions, and write down how you feel “on balance” (i.e., a -3 in this case).

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.
   -4 -3 -2 -1 0 1 2 3 4

2. Women should have to promise to obey their husbands when they get married.
   -4 -3 -2 -1 0 1 2 3 4

3. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
   -4 -3 -2 -1 0 1 2 3 4

4. Gays and lesbians are just as healthy and moral as anybody else.*
   -4 -3 -2 -1 0 1 2 3 4
5. It is always better to trust the judgments of the proper authorities in government and religion than to listen to the noisy rabblerousers in out society who are trying to create doubt in people’s minds.

6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly. *

7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.

8. There is absolutely nothing wrong with nudist camps. *

9. Our country needs free thinkers who will have the courage to defy traditional ways, even if this upsets many people. *

10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.

11. Everyone should have their own life-style, religious beliefs, and sexual preferences, even if it makes them different from everyone else. *

12. The “old-fashioned ways” and “old-fashioned values” still show the best way to live.

13. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer. *
14. What our country really needs is a strong, determined leader who will crush evil, and take us back to the true path.
   -4 -3 -2 -1 0 1 2 3 4

15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”
   -4 -3 -2 -1 0 1 2 3 4

16. God’s laws about abortion, pornography, and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.
   -4 -3 -2 -1 0 1 2 3 4

17. There are many radical, immoral people in our country today who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.
   -4 -3 -2 -1 0 1 2 3 4

18. A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.
   -4 -3 -2 -1 0 1 2 3 4

19. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.
   -4 -3 -2 -1 0 1 2 3 4

20. There is no “ONE right way” to live life; everybody has to create their own way.
   -4 -3 -2 -1 0 1 2 3 4

21. Homosexuals and feminists should be praised for being brave enough to defy “traditional family values.”
   -4 -3 -2 -1 0 1 2 3 4

22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group’s traditional place in society.
   -4 -3 -2 -1 0 1 2 3 4

Note: Only items 3-22 are scored. Items 1 and 2 are “table-setters” to help familiarize the respondent with the subject matter and the -4 to +4 response format.
* indicates a con-trait item, for which the 1-9 scoring key is reversed.
Appendix C

The 14-Item Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth, and Malle 1994)

Which of the following objects or statements do you have positive or negative agreement towards? After each statement please circle the number that best represents your opinion.

1 = very strongly disagree.
2 = strongly disagree.
3 = slightly disagree.
4 = neither disagree nor agree.
5 = slightly agree.
6 = strongly agree.
7 = very strongly agree.

Remember often your first response is often the best response.

1. Some groups of people are simply not equals to others.
   
   1  2  3  4  5  6  7

2. Some people are just more worthy than others.
   
   1  2  3  4  5  6  7

3. This country would be better off if we cared less about how equal all people were.
   
   1  2  3  4  5  6  7

4. Some people are just more deserving than others.
   
   1  2  3  4  5  6  7

5. It is not a problem if some people have more of a chance in life than others.
   
   1  2  3  4  5  6  7

6. Some people are just inferior to others.
   
   1  2  3  4  5  6  7

7. To get ahead in life, it is sometimes necessary to step on others.
   
   1  2  3  4  5  6  7

8. Increased economic equality.*
   
   1  2  3  4  5  6  7

9. Increased social equality*
   
   1  2  3  4  5  6  7
10. Equality.*
   1  2  3  4  5  6  7

11. If people were treated more equally we would have fewer problems.*
   1  2  3  4  5  6  7

12. In an ideal world, all nations would be equal.*
   1  2  3  4  5  6  7

13. We should try to treat one another as equals as much as possible. (All humans should be
treated equally.)*
   1  2  3  4  5  6  7

14. It is important that we treat other countries as equals.*
   1  2  3  4  5  6  7

Note. * indicates a con-trait item, for which the scoring key is reversed.
Appendix D

Motivation to Control Prejudiced Reactions Scale (Dunton and Fazio, 1997)

1 = *Strongly Disagree.*
2 = *Disagree.*
3 = *Don’t Know.*
4 = *Agree.*
5 = *Strongly Agree.*

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<th>In today’s society it is important that one not be perceived as prejudiced in any manner.</th>
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1. In today’s society it is important that one not be perceived as prejudiced in any manner.
2. I always express my thoughts and feelings regardless of how controversial they might be.*
3. I get angry with myself when I have thoughts or feelings that might be considered prejudiced.
4. If I were participating in a class and a Black student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint.
5. Going through life worrying about whether you might offend someone is just more trouble than its worth. *
6. It’s important to me that other people not think I’m prejudiced
7. I feel it’s important to behave according to society’s standards.
8. I’m careful not to offend my friends, but I don’t worry about offending people I don’t know, or don’t like.*
9. I think it is important to speak one’s mind rather than to worry about offending someone. *
   1  2  3  4  5

10. It’s never acceptable to express one’s prejudices.
    1  2  3  4  5

11. I feel guilty when I have a negative thought or feeling about a Black person.
    1  2  3  4  5

12. When speaking to a Black person, it’s important to me that he/she not think I’m prejudiced.
    1  2  3  4  5

13. It bothers me a great deal when I think I’ve offended someone, so I’m always careful to consider other people’s feelings.
    1  2  3  4  5

14. If I have a prejudiced thought or feeling, I keep it to myself.
    1  2  3  4  5

15. I would never tell jokes that might offend others.
    1  2  3  4  5

16. I’m not afraid to tell others what I think, even when I know they disagree with me. *
    1  2  3  4  5

17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat. *
    1  2  3  4  5

Note: * indicates reversed scored items
Appendix E

Marlowe-Crowne Social Desirability Short Form C Scale (Reynolds, 1982)

After each statement, please circle “true” or “false”

1. It is sometimes hard for me to go on with my work if I am not encouraged.
   True  False

2. I sometimes feel resentful when I don’t get my way.
   True  False

3. On a few occasions, I have given up doing something because I thought too little of my ability.
   True  False

4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
   True  False

5. No matter who I’m talking too, I’m always a good listener.*
   True  False

6. There have been occasions when I took advantage of someone.
   True  False

7. I’m always willing to admit it when I make a mistake.*
   True  False

8. I sometimes try to get even rather than forgive and forget.
   True  False

9. I am always courteous, even when people are disagreeable.*
   True  False

10. I have never been irked when people expresses ideas very different from my own.*
    True  False

11. There have been times when I was quite jealous of the good fortune of others.
    True  False

12. I am sometimes irritated by people who ask favors of me.
    True  False
13. I have never deliberately said something that hurt someone’s feelings.*

   True   False

Note: * indicates reverse scored items.
Appendix F

Please Provide the following Demographic Information

1. Gender (1=male, 2=female) ______.
2. How old are you?
   17-22 years old  ______
   23-28 years old  ______
   29-34 years old  ______
   35-40 years old  ______
   41+ years old  ______
3. By my own definition, I would consider myself to be of which ethnic origin ancestral origins:
   Aboriginal  ______
   Arabic  ______
   Asian  ______
   Caucasian  ______
   Indian  ______
   Other  ______
4. By my own definition, I would consider myself to be:
   Very Conservative  ______
   Conservative  ______
   Somewhat Conservative  ______
   Somewhat Liberal  ______
   Liberal  ______
   Very Liberal  ______
   Don’t Know  ______
5. By my own definition, I would consider myself to be:
   Very Religious  ______
   Somewhat Religious  ______
   Slightly Religious  ______
   Not at all Religious  ______
   Don’t Know  ______
Appendix G

Application for Approval of Research Protocol
Behavioural Research Ethics Board (Beh-REB)

1. Name of Researcher(s)
Robert Nesdole, M.Ed. candidate, Department of Edpse., University of Saskatchewan.

1b. Anticipated start date of the research study (phase and the expected completion date of the study (phase)
The Anticipated start date of the research study is March 15th, 2008 and the expected completion date of the study is June 30th, 2008.

2. Title of Study
An investigation into the criterion-related validity of the Prejudiced Attitudes Towards Aboriginals Scale.

3. Abstract
The topic of racism and prejudice is a very sensitive issue for many Canadians. The reason for this is because Canada's cherished image as a tolerant society leads even the most progressive people to adopt the belief that racism is comprised of only overt acts by some nasty individuals against other individuals. However, what is not acknowledged by this old-fashioned view of prejudice is that the nature and expression of prejudice has evolved into a more covert form of prejudice known as modern prejudice (McConahay, 1986). This is particularly important because there is a well documented history of prejudice and discrimination of Aboriginal peoples in Canada, and without a proper understanding of the changing face of prejudice in Canada it is difficult to determine if there in fact been a reduction in prejudiced attitudes towards Aboriginal peoples in Canada.

This study is a quantitative investigation into the criterion-related validity of the PATAS (Morrison, 2007 unpublished data) a 25 item—11 old-fashioned prejudice items and 14 modern prejudice items—newly developed measure of prejudicial attitudes towards Aboriginals that was developed using the theory of Modern Prejudice (McConahay, 1986). The following research questions will be addressed: 1) to what extent does the PATAS demonstrate convergent validity with the Right-wing...
Authoritarianism scale (Altemeyer, 2007)? 2) To what extent does the PATAS demonstrate convergent validity with the Social Dominance Orientation Scale five (Pratto, Sidanius, Stallworth, and Malle, 1994)? 3) What is the nature of the relationship between PATAS scale scores and an increased concern about appearing prejudiced? 4) To what extend does the PATAS correlate with religious self-schema and political conservatism? And 5) to what extent does the PATAS demonstrate concurrent validity?

4. **Funding**

Funding provided for this research is provided by the student researcher.

5. **Expertise**

No special expertise is required of the researcher to conduct this research. Participants recruited will be of the age of consent and the attitudes of interest are those of Caucasians. In addition to this no interviews of participants will be conducted as a part of this research.

6. **Conflict of Interest**

There is no potential for a conflict of interest foreseen.

7. **Participants**

Between 150 (minimum sample) and 300 (maximum sample) participants will be recruited during class from the College of Arts and Science and/or Education using the following method: the student researcher will fist determine the core class requirements for obtaining an undergraduate degree in both colleges. Following this a list of all professors currently teaching a first year core class in both colleges and their office telephone number will be made. Next, the student researcher will “cold call” professors listed to request an appointment to discuss their research and request permission to recruit participants from their class during the last 30min of class to respond to anonymously to a survey package.

7a. **Recruitment Material**

Please see the attached recruitment text (see Appendix A) which will be read aloud to participants and the information sheet (see Appendix B) that will be attached to each survey package.
8. Consent

Participants will be notified using a disclaimer placed at the top of the information sheet (see Appendix B) informing each prospective participant that by completing the survey package they consent to having their responses used for research purposes.

9. Methods/Procedures

A participant recruitment letter (see Appendix A) will be read aloud to the entire class which will report the reason behind the study is to examine the perception regarding a number of current Canadian issues, and that their participation is not mandatory. Following this the survey package comprised of the: an information sheet (see: Appendix B), a disclaimer (see Appendix B), the RWA scale (Altemeyer, 1996) (see Appendix D), SDO5 (Pratto, Sidanius, Stallworth, and Malle, 1994) (see Appendix E), PATAS (Morrison, unpublished data) (see Appendix A), the MCPRS (Dunton and Fazio, 1997) (see Appendix F), the M-C Form C (Reynolds, 1982) (see Appendix G) and a demographics section. After completing the survey package each participant will return all material. The principal researcher will make time to speak with participants following each data collection and by appointment.

Once the complete data set has been collected all responses will be transferred into the Statistical Package for the Social Sciences (SPSS). Nominal and categorical demographic information collected will be re-coded to enable data analysis. Data will then be examined for any missing data and scale items left blank will be assigned a median score. Next, all surveys collected will be examined for and evidence of socially desirable responses and those demonstrating evidence of socially desirable responses—as indicated by the M-C Form C (Reynolds, 1982)—will be dropped. Following this, prior to statistical analysis, reliability estimates for all scales will be calculated.

Next correlation analysis will be conducted for the purpose of examining the relationship between each participant’s survey data. This correlational analysis will examine the extent to which scale scores on the PATAS converge with scale scores on the RWA scale (Altemeyer, 1996) and the SDO5 scale (Pratto, Sidanius, Stallworth, and Malle, 1994). Participants scores on the PATAS will then be cross referenced the data obtained from the development of the PATAS for the purpose of examining the concurrent validity, as determined by the cut scores in Morrison unpublished study. The
relationship between PATAS scores and an increased concern about appearing prejudiced as measured by the MCPRS (Dunton and Fazio, 1997) will then be examined for evidence of divergent validity. Next, the concurrent validity of PATAS scores will be examined by comparing response sets obtained from groups of individuals that should theoretically hold relatively low levels of prejudiced attitudes towards Aboriginals and individuals that should theoretically evidence high levels of prejudiced attitudes towards Aboriginals. Finally, in reporting the results of this investigation all demographic data collected will be used to separate the data into subgroups.

10. **Storage of Data**

    The original survey responses and any supporting documentation will be stored according to University regulations for a minimum of five years after the completion of the study by the student researchers’ supervisor Brian Noonan.

11. **Dissemination of Results**

    The data collected will be used as a part of the M.Ed. thesis requirement. Subsequently, the data may also be used in journal articles and/or conference presentations.

12. **Risk, Benefits, and Deception**

    This research involves a number of risks and benefits. The risk associated to the participants involves the possibility for some to perceive survey items as offensive and the fear of being labeled prejudice. To minimize the possibility of the survey items being perceived as offensive the recruitment text and information text provided to the participants clearly states because the survey is concerned with attitudes regarding Aboriginals and public opinion the participants should consider whether they want to participate as the topic is sensitive. Also, to minimize the risk to the participants no identifying information will appear on the survey and the confidentiality forms will be separated from the survey and placed in a ballot box by the participant before submitting the completed survey. Whereas the benefit of this research is the accumulation of additional evidence concerning the predictive validity of the Prejudice Towards Aboriginals Scale (PATAS), which is used to examine the extent to which modern prejudiced attitudes toward Aboriginals exist within the sample population. In addition this research is beneficial in that the results will help to validate the PATAS.
13. **Confidentiality**

To protect the confidentiality and anonymity of the participants no identifying information will appear on the survey. Thus, individual responses will remain confidential and the participant will remain anonymous throughout the entire process from data collection, data entry, and data analysis. Furthermore, data to be reported will be grouped and only aggregate results will be reported, thus making individual responses unidentifiable.

14. **Data/Transcript Release**

The anonymity of participants will not be compromised.

15. **Debriefing and Feedback**

Results of the study will be made available to the instructors of the classes participants were recruited from once the research is complete. In addition to this the principal researcher will also make time to speak with participants following each data collection and by appointment.

16. **Required Signatures**

*Student Researcher*

Robert Nesdole, M.Ed. candidate,
Department of Edpse,
University of Saskatchewan.

_________________________________________

*Research Supervisor*

Brian Noonan, Associate Professor,
Department of Edpse,
University of Saskatchewan.

_________________________________________

*Department Head*

David Mykota, Department Head
Special Education and Educational Psychology
University of Saskatchewan
17. **Required Contact Information**

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Appendix A

Recruitment Text

Hello, my name is Robert Nesdole, and I am a Masters candidate in the department of Special Education and Educational Psychology. I am collecting data for my M.Ed thesis, and am wondering if you would be willing to assist me by completing my questionnaire. In psychology, we often distribute questionnaires as a way of examining people’s attitudes towards specific topics and how these attitudes change over time.

My questionnaire is looking at individuals attitudes regarding people of Aboriginal ancestry. In addition, I will be asking you to complete some demographic question (e.g. age, gender, political orientation, etc.), as well as a comments section.

When we ask questions about minorities, we acknowledge that these topics are sensitive, and for some individuals, these questions may be extremely delicate. Some people might find some of the questions offensive. Therefore, I ask you consider whether you want to participate in the study.

The questionnaire takes approximately 20 - 30 minutes to complete. On the first page of the survey you will find information about the study and a disclaimer. Following the disclaimer you will find the survey package beginning in the second page.

I want to make it clear that you are under no obligation to participate and there is no penalty for not participating. Also if there is any survey item you do not want to answer, please leave it blank. If you do not want to participate, please feel free to read your notes, or complete any other work you may have. There will also be no penalty or negative effects associated with these actions.

If you decide to participate, your responses will not be individually identifiable, because no identifying information appears on the survey. Your individual responses will remain confidential and you will remain anonymous throughout the entire process from data collection, data entry, and data analysis. When you have finished the survey package please bring it to the front.

If you have any questions about the survey, please raise your hand. Take your time and remember this is not a test of any kind. Also, I am available afterward, if you would like to talk
with me about the survey. I can also be contacted individually at a later date, please note my contact information on the informed consent sheet. Results of the study will be made available upon request once the research is complete. I will begin handing out the questionnaires now.
Appendix B

Information Sheet

***Disclaimer***

In asking questions about minorities we acknowledge that it is a sensitive topic, and for some extremely delicate. Some people might find some of the questions offensive.

Therefore, it should be understood that by completing and submitting the survey package you consent to having your responses utilized for the purposes of this graduate research.

Thank you for volunteering to participate in the study! Between 150 (minimum sample) and 300 (maximum sample) participants will be recruited during class from the College of Arts and Science and/or Education. The primary purpose of this research is to assess individuals’ attitudes towards people of Aboriginal ancestry. We will also be looking at your opinions regarding social groups and some social opinions. In asking questions about minorities, we acknowledge that it is a sensitive topic, and for some extremely delicate. Some people might find some of the questions offensive. Therefore, it should be understood that by completing and submitting the survey package you consent to having your responses utilized for the purposes of this graduate research.

If you do not want to participate, please feel free to read your notes, or complete any other work you may have. There will be no penalty or negative effects associated with these actions. If you have decided to participate, please note that this is NOT a test. Therefore, please respond to the questions as honestly as possible. Your responses will remain confidential and your anonymity will be safeguarded as no identifying information will appear on the survey. Consequently you should understand that you will not be able to withdraw your responses once they have been submitted. In addition to this all demographic data collected will be used to separate the data into subgroups for the purpose of data analysis.

Please read each question carefully and should you have any questions please ask for assistance.

Thank you for your participation

Sincerely,
Robert Nesdole M.Ed. Candidate
Educational Psychology and Special Education Education/
College of Education, University of Saskatchewan,
28 Campus Dr., Saskatoon, SK. S7N 0X1
Email: rob.nes@usask.ca

Brian Noonan Ph. D. (Research Supervisor)
Educational Psychology and Special Education
Educational Administration
College of Education, University of Saskatchewan,
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Email: brian.noonan@usask.ca

This research project has research ethics approval from the Behavioural Research Ethics Board at the University of Saskatchewan. Should you have any questions or concerns please contact the Office of Research Ethics at 966-2084.
Appendix C

Prejudice Attitudes Towards Aboriginals Scale (Morrison, 2007)

After each statement please circle the number that best represents your opinion

1 = Strongly Disagree.
2 = Disagree.
3 = Don’t Know.
4 = Agree.
5 = Strongly Agree.

Old-fashioned Prejudice

1. Most Aboriginal people can not take care of their children.
   
   1  2  3  4  5

2. Most Aboriginal people sound intoxicated (drunk).
   
   1  2  3  4  5

3. Most Aboriginal people are on welfare.
   
   1  2  3  4  5

4. Most Aboriginal people need classes on how to be better parents.
   
   1  2  3  4  5

5. Aboriginal people have way too many children.
   
   1  2  3  4  5

6. Aboriginal people have no sense of time
   
   1  2  3  4  5

7. High standards of hygiene are not valued in Aboriginal culture.
   
   1  2  3  4  5

8. Diseases that affect Aboriginal people are simply due to the lifestyle they lead.
   
   1  2  3  4  5
9. Drug abuse is a key problem among Aboriginal people.

10. Poverty on reserves is a direct result of Aboriginal people abusing drugs.

11. Few Aboriginal people seem to take much pride in their personal appearance.

Modern Prejudice

1. Canada needs to stop apologizing for events that happened to Aboriginal people many years ago.

2. Aboriginal people still need to protest for equal rights.

3. Aboriginal people should stop complaining about the way they are treated and simply get on with their lives.

4. Aboriginal people should simply get over past generations experiences at residential schools.

5. Aboriginal Canadians seem to use their cultural traditions to secure special rights denied to non-Aboriginal Canadians.

6. Many of the requests made by Aboriginal people to the Canadian government are excessive.

7. Special places in academic programs should not be set aside for Aboriginal students.
8. Aboriginal people should be satisfied with what the government has given them.
     1  2  3  4  5
9. It is now unnecessary to honor treaties established with Aboriginal people.
     1  2  3  4  5
10. Aboriginal people should not have reserved placements in universities unless they are qualified.
     1  2  3  4  5
11. Aboriginal people should pay taxes just like everyone else.
     1  2  3  4  5
12. The government should support programs designed to place aboriginal people in positions of power.
     1  2  3  4  5
13. Non-Aboriginal people need to become sensitive to the needs of Aboriginal people.
     1  2  3  4  5
14. Government Agencies should make every effort to meet the needs of Aboriginals people.
     1  2  3  4  5

Note. Items 2, 12, 13, and 14 of the modern racism subscale indicate positive agreement and must be reverse score so that people who AGREE with the statement “Aboriginal people still need to protest for equal rights” are not placed in the same camp as those who AGREE with a racist item. Additionally, when administering this survey old-fashioned prejudice items and modern prejudice items are presented such that an old fashioned prejudice item is followed by a modern prejudice item and modern prejudice items are followed by old fashioned prejudice items etc.
Appendix D

Right-Wing Authoritarianism Scale (Altemeyer, 2007)

This survey is a part of an investigation of general public opinion concerning a variety of social issues. You will probably find that you agree with some of the statements, and disagree with others, to varying extents. After each statement please circle the number that best represents your opinion, according to the following scale:

Circle -4 if you very strongly disagree with the statement.

-3 if you strongly disagree with the statement.

-2 if you moderately disagree with the statement.

-1 if you slightly disagree with the statement.

Circle +1 if you slightly agree with the statement.

+2 if you moderately agree with the statement.

+3 if you strongly agree with the statement.

+4 if you very strongly agree with the statement.

If you feel exactly and precisely neutral about an item, circle “0”.

You may find that you sometimes have different reactions to different parts of a statement. For example, you might very strongly disagree (-4) with one idea in a statement, but slightly agree (+1) with another idea in the same item. When this happens, please combine your reactions, and write down how you feel “on balance” (i.e., a -3 in this case).

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.

   -4  -3  -2  -1  0  1  2  3  4

2. Women should have to promise to obey their husbands when they get married.

   -4  -3  -2  -1  0  1  2  3  4

3. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.

   -4  -3  -2  -1  0  1  2  3  4
4. Gays and lesbians are just as healthy and moral as anybody else.*

5. It is always better to trust the judgments of the proper authorities in government and religion than to listen to the noisy rabble rousers in out society who are trying to create doubt in people’s minds.

6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.*

7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.

8. There is absolutely nothing wrong with nudist camps.*

9. Our country needs free thinkers who will have the courage to defy traditional ways, even if this upsets many people.*

10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.

11. Everyone should have their own life-style, religious beliefs, and sexual preferences, even if it makes them different from everyone else.*

12. The “old-fashioned ways” and “old-fashioned values” still show the best way to live.
13. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer.*

14. What our country really needs is a strong, determined leader who will crush evil, and take us back to the true path.

15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”*

16. God’s laws about abortion, pornography, and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.

17. There are many radical, immoral people in our country today who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

18. A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.*

19. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.

20. There is no “ONE right way” to live life; everybody has to create their own way.*

21. Homosexuals and feminists should be praised for being brave enough to defy “traditional family values.”*
22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group’s traditional place in society.

-4  -3  -2  -1  0  1  2  3  4

Note: Only items 3-22 are scored. Items 1 and 2 are “table-setters” to help familiarize the respondent with the subject matter and the -4 to +4 response format. * indicates a con-trait item, for which the 1-9 scoring key is reversed.
Appendix E

The 14-Item Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth, and Malle 1994)

Which of the following objects or statements do you have positive or negative agreement towards? After each statement please circle the number that best represents your opinion.

1 = very strongly disagree.
2 = strongly disagree.
3 = slightly disagree.
4 = neither disagree nor agree.
5 = slightly agree.
6 = strongly agree.
7 = very strongly agree.

Remember often your first response is often the best response.

1. Some groups of people are simply not equals to others.
   1  2  3  4  5  6  7

2. Some people are just more worthy than others.
   1  2  3  4  5  6  7

3. This country would be better off if we cared less about how equal all people were.
   1  2  3  4  5  6  7

4. Some people are just more deserving than others.
   1  2  3  4  5  6  7

5. It is not a problem if some people have more of a chance in life than others.
   1  2  3  4  5  6  7

6. Some people are just inferior to others.
   1  2  3  4  5  6  7

7. To get ahead in life, it is sometimes necessary to step on others.
   1  2  3  4  5  6  7

8. Increased economic equality.*
   1  2  3  4  5  6  7
9. Increased social equality*
   1 2 3 4 5 6 7

10. Equality.*
    1 2 3 4 5 6 7

11. If people were treated more equally we would have fewer problems.*
    1 2 3 4 5 6 7

12. In an ideal world, all nations would be equal.*
    1 2 3 4 5 6 7

13. We should try to treat one another as equals as much as possible. (All humans should be treated equally.)*
    1 2 3 4 5 6 7

14. It is important that we treat other countries as equals.*
    1 2 3 4 5 6 7

*Note.* * indicates a con-trait item, for which the scoring key is reversed.
Appendix F

Motivation to Control Prejudiced Reactions Scale (Dunton and Fazio, 1997)

1 = Strongly Disagree.
2 = Disagree.
3 = Don’t Know.
4 = Agree.
5 = Strongly Agree.

1. In today’s society it is important that one not be perceived as prejudiced in any manner.

2. I always express my thoughts and feelings regardless of how controversial they might be.*

3. I get angry with myself when I have thoughts or feelings that might be considered prejudiced.

4. If I were participating in a class and a Black student expressed an opinion with which I disagreed, I would be hesitant to express my own viewpoint.

5. Going through life worrying about whether you might offend someone is just more trouble than its worth. *

6. It’s important to me that other people not think I’m prejudiced

7. I feel it’s important to behave according to society’s standards.

8. I’m careful not to offend my friends, but I don’t worry about offending people I don’t know, or don’t like.*
9. I think it is important to speak one’s mind rather than to worry about offending someone. *
   1  2  3  4  5

10. It’s never acceptable to express one’s prejudices.
    1  2  3  4  5

11. I feel guilty when I have a negative thought or feeling about a Black person.
    1  2  3  4  5

12. When speaking to a Black person, it’s important to me that he/she not think I’m prejudiced.
    1  2  3  4  5

13. It bothers me a great deal when I think I’ve offended someone, so I’m always careful to consider other people’s feelings.
    1  2  3  4  5

14. If I have a prejudiced thought or feeling, I keep it to myself.
    1  2  3  4  5

15. I would never tell jokes that might offend others.
    1  2  3  4  5

16. I’m not afraid to tell others what I think, even when I know they disagree with me.*
    1  2  3  4  5

17. If someone who made me uncomfortable sat next to me on a bus, I would not hesitate to move to another seat.*
    1  2  3  4  5

Note: * indicates reversed scored items
Appendix G

**Marlowe-Crowne Social Desirability Short Form C Scale (Reynolds, 1982)**

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide how it pertains to you.

Please respond either TRUE (T) or FALSE (F) to each item. Indicate your response by circling the appropriate letter next to the item. Be sure to answer all items.

1. It is sometimes hard for me to go on with my work if I am not encouraged.   True     False
2. I sometimes feel resentful when I don’t get my way.                                       True     False
3. On a few occasions, I have given up doing something because I thought too little of my ability. True     False
4. There have been times when I felt like rebelling against people in authority even though I knew they were right. True     False
5. No matter who I’m talking too, I’m always a good listener.*                          True     False
6. There have been occasions when I took advantage of someone.                     True     False
7. I’m always willing to admit it when I make a mistake.*                          True     False
8. I sometimes try to get even rather than forgive and forget.                          True     False
9. I am always courteous, even when people are disagreeable.*                        True     False
10. I have never been irked when people expresses ideas very different from my own.*                                True     False
11. There have been times when I was quite jealous of the good fortune of others. True     False
12. I am sometimes irritated by people who ask favors of me.                          True     False
13. I have never deliberately said something that hurt someone’s feelings.*          True     False

*Note:* * indicates reverse scored items.
Appendix H

Please Provide the following Demographic Information

1. Gender (1=male, 2=female) ____.

2. How old are you?
   17-22 years old ________
   23-28 years old ________
   29-34 years old ________
   35-40 years old ________
   41+ years old ________

3. By my own definition, I would consider myself to be of which ethnic origin ancestral origins:
   Aboriginal ________
   Arabic ________
   Asian ________
   Caucasian ________
   Indian ________
   Other ________

4. By my own definition, I would consider myself to be:
   Very Conservative ________
   Conservative ________
   Somewhat Conservative ________
   Somewhat Liberal ________
   Liberal ________
   Very Liberal ________
   Don’t Know ________

5. By my own definition, I would consider myself to be:
   Very Religious ________
   Somewhat Religious ________
   Slightly Religious ________
   Not at all Religious ________
   Don’t Know ________