

**The link between racial prejudice and  
racial policy attitudes: a meta-analytic  
study**

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## DECLARATION

I hereby declare that this research study is my original work and has not been submitted for any other degree. However, where use has been made of other people's work, this has been duly acknowledged in the text.

Signed Patience

Patience Matizamhuka

Date

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This is dedicated to my grandmother, Agnes Matizanhuka. I'll always miss you.

## ABSTRACT

This meta-analytic study analyses the relationship between racial prejudice and racial policy attitudes. Specifically, it examines the effects of race attitudes (i.e., symbolic racism, old-fashioned racism, racial affect and stereotypes) on attitudes towards racial policies such as affirmative action, busing and fair housing laws, among others. Furthermore, the effects of specific policy types (i.e., preferential treatment, compensatory programmes, desegregation and general legal policies) on racial policy attitudes were also examined. Finally, as a matter of interest, a racial attitude by racial policy type interaction was also analysed. 28 studies (N = 187 191, 216 effect sizes) were collected for analyses. Overall, results indicate that there is in fact a statistically significant correlation between race prejudice and racial policy attitudes. In terms of racial attitudes, all four dimensions of racial attitude types were significantly correlated with racial policy opinions, with symbolic racism presenting the strongest relationship. All four racial policy types were also significantly correlated with the four racial attitudes.

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## 1. INTRODUCTION

### 1.1 What is race prejudice?

As Durrheim (2003) pointed out, despite its existence over a long period, there does not seem to be a consensual definition of the concept *racism*. It appears authors define it in different ways to suit their purposes. According to Ellis (2001), race prejudice is a result of the beliefs by white people that they are superior to the “coloured race” economically, socially and politically. Sniderman and Piazza (1993) explain “by prejudice we mean precisely a consistent readiness to respond negatively to a member of a group by virtue of his or her membership in the group, with the proof of prejudice being thus the repetitiveness with which a person endorses negative characterization after negative characterization” (p. 89). In other words, the more frequently and consistently a person endorses negative characterizations of blacks, the more racially prejudiced that person is.

Sears and Kinder “define racism in terms of possessing negative affect towards blacks” (Wood, 1994, p. 676). Sniderman, Brody and Tetlock (1991, as cited in Wood, 1994) on the other hand define racism not merely or exclusively as a tendency by whites to view blacks negatively, but also and importantly a tendency to treat them differently based on group membership. Sniderman and Tetlock (1986b) also define racism as “a deep-seated, irrational insistence on the inferiority of blacks, and contempt and hostility toward them” (p. 186). Sears (1998) says racism can be narrowly defined “as a categorical hostility or antagonism toward African Americans because of their race” (p. 82). Racism is, therefore, according to



Sears, present when, everything else equal, whites still feel and act more negatively toward blacks than other groups or individuals from other groups.

## 1.2 Racial policy attitudes

Racial policies, also known as race-targeted policies, are policies/measures/programmes introduced or implemented by governments and institutions in order to eradicate past discrimination and inequalities, hence promoting equality. Examples of such policies are affirmative action, busing (for school integration), and fair housing laws (promoting residential integration), to name but a few.

A simple definition of the term 'attitude' from Wikipedia ([http://en.wikipedia.org/wiki/Attitude\\_\(psychology\)](http://en.wikipedia.org/wiki/Attitude_(psychology))) explains it as "positive or negative views of an "attitude object", i.e., a person, behaviour, or event". Schuman, Steeh, Bobo and Krysan (1997, p. 5) define an attitude as "something that social psychologists believe to underlie the responses expressed in actual surveys, rather than being the responses themselves, which are a form of verbal behaviour". Wikipedia further explained that an individual could also simultaneously possess a positive and negative attitude toward a target (see also Durrheim & Dixon, 2004).

Although it is not clear-cut how attitudes develop, it seems like most attitudes in individuals are a result of social learning from the environment. Being in possession of an attitude does not necessarily translate into behaviour based on it (Wicker, 1969). In that sense, racial policy attitudes are understood as people's views, positive or negative, towards race-targeted policies, regardless of whether or not the attitudes are acted on. Or to put it in Krysan's

(2000) words, “racial policy attitudes are opinions about government policies that are concerned with African Americans and other minorities” (p. 137). It can also be defined in terms of the support or opposition to racial policies (Krysan, 2000).

### **1.3 The link between race prejudice and racial policy attitudes**

Recent research (see for example Schuman *et al.*'s 1997 survey findings) shows that racism has decreased in the past half-century. Since the dismantling of the Jim Crow system in America in the 1960s and the introduction of basic political and civil rights for blacks, whites' racial attitudes have been shifting gradually to the current near unanimous support for general principles of equal treatment and non-discrimination (Tarman & Sears, 2005). However, even though there has been a decrease in negative racial attitudes and, therefore, a decrease in racism, the 'new attitudes' do not seem to have transferred into behaviour. On the one hand you have a majority of people agreeing that racial discrimination should indeed be eradicated, hence they support the principle of equality. On the other hand, an equally large majority oppose the practical measures implemented or put into place in order to bring about such equality. This has resulted in what researchers have named the 'principle-implementation gap'. This resulting worrying gap (between principle and policy) has left researchers wondering as to what the shift in opinions really means. As Durrheim (2003) put it, “is it simply the case that changing social norms have created stronger demands for whites to hide their racism; and have they merely become better at disguising their negative attitudes...? Or has there been a genuine shift in attitudes: have racist attitudes disappeared...?” (p. 241 – 242) To date, despite many research studies done in this field, there are still no clear or concrete answers to such questions. For the past few decades,

researchers have been, and are still, debating heatedly among themselves as to what actually explains the principle-implementation gap.

In one camp, advocates of non-racial explanations argue that racism no longer plays a vital role in politics and public attitudes today, rather it is other factors such as beliefs about inequality, educational sophistication and political conservatism, among others, that motivate people's policy preferences (e.g., Sniderman & Tetlock, 1986a, 1986b). In the other, debate from advocates of racial explanations suggests that even though racism has decreased in the past half-century, it still is very much prevalent in today's society and it is the major force behind racial policy attitudes. In this camp, there is, however, a split between symbolic racism theorists and old-fashioned racism theorists (see Chapter 2 for details on these two forms of racism).

Those who argue for symbolic racism (e.g., Kinder & Sears, 1981; McConahay, 1982; McConahay & Hough, 1976; Sears & Allen, 1984; Sears & Henry, 2005) propose that racism has taken another form and changed from the blatant racism (old-fashioned racism) that existed before to a new form of racism that is more subtle and covert (symbolic racism). Therefore symbolic racism is said to be currently taking a dominant role in influencing racial policy attitudes. On the other hand, other researchers (such as Kravitz, 1995; Kuklinski, Sniderman, Knight, Piazza, Tetlock, Lawrence & Mellers, 1997; Sniderman and Tetlock, 1986a, 1986b;) argue that racism has not changed at all; rather symbolic racism is old-fashioned racism by another name.

The present research study, mainly focussing on the role played by race prejudice, aims to investigate whether or not – and to what extent – race prejudice is correlated with racial

policy attitudes. Another dimension of interest that was also looked at was whether or not racial attitudes were equally strong across different racial policy types. Given that a lot of studies have already been done in this field, a meta-analytic study was more appropriate since it allows for a more sophisticated quantitative, compared to the traditional qualitative, review of available data, and it clearly indicates the strength of association between variables (Lipsey & Wilson, 2001). Meta-analysis also allows for an integration of information from previous studies, and this integration is hoped to help add new and valuable information to the available literature in this field.

In the next chapter, I will present several lines of arguments from different researchers, supported by available literature, so as to give you a better understanding of the topic being dealt with.

## 2. LITERATURE REVIEW

### 2.1 Introduction

As noted in the last chapter, there has been an ongoing debate in recent studies as to whether or not racism still is a motive in political life. Previous research shows that there has been a decrease in racism in the past half century; suggesting that it is no longer a political problem. However, some authors (such as Kinder & Sears, 1981; McConahay, 1982) debate whether racism still exists and it is the main force behind racial policy attitudes. Yet others argue that racial policy attitudes are motivated by other factors such as beliefs about the continuing existence of racial discrimination, political conservatism, self- and group-interest (e.g., Bobo & Kluegel, 1993; Sniderman & Tetlock, 1986a, 1986b). Another line of argument of note (e.g., Kravitz & Klineberg, 2004; Tuch & Hughes, 1996) centres on the role played by the specific racial policies in question in influencing whites' attitudes toward them.

Hence, this chapter, in trying to shed light to the abovementioned debates, will review the studies that deal with the different explanations given for the role played by both racial and non-racial attitudes in influencing racial policy opinions. I will start by discussing the change in whites' racial attitudes, and then go on to discuss whites' opposition to racial policies despite the evidence of a decrease in racism (the principle-implementation gap) and the different explanations given for contemporary racial policy attitudes. Finally, I will conclude by stating what I aim to find in the present study.

## 2.2 The decrease in racial prejudice

Previous research suggests that racial prejudice has decreased since the Jim Crow system where blacks were severely discriminated against to the present where they enjoy equal rights with all other races. According to Sears (1998), the historical experience of African Americans (in USA) can be divided into six different historical periods. The first one being when blacks were forced into enslavement; followed by the second period where slavery was abolished in the 1860s after the Civil War in America and because of the protests against slavery. The third period is what is described as the Jim Crow system of racial supremacy where blacks suffered as a result of a lot of racial discrimination and white supremacy was declared.

The end of World War II marked the beginning of the fourth period, which showed “a surge of progress in U.S race relations” and provoked change. This resulted in the passing of the civil rights legislation in 1964 and 1965 that officially ended racial discrimination. The fifth period consisted of protests by black people demanding progress and equal treatment for blacks in all areas of life. The fifth period then marked the beginning of the present period (the sixth period) where courts ruled in favour of, for example, busing of school children in order to promote school desegregation (Sears, 1998).

Looking through these six historical periods, it can be argued that a change in attitudes has co-occurred with these historical changes. Previous research also supports this view. Take for example, attitudes towards the principle of school integration; in review of over 50 years of survey data, Schuman *et al.* (1997) found that there has been a great change in the public's attitudes where they have shifted immensely from an overwhelming support for the principle

of school segregation to an overwhelming acceptance of school integration. In the early 1940s, studies showed that whites were in great support of school *segregation*, whereas by 1985 more than nine out of ten white Americans showed that they were in favour of school *integration*. Identical responses were also shown in attitudes towards the principles of equal treatment in employment, public accommodations and in seating on public transportation (Schuman *et al.*, 1997).

The present (sixth) period in history suggests that blacks are now being seen and treated as equals. Consequently, one assumes a decrease in racial prejudice and therefore an increased support for race-targeted policies aimed to compensate for past discrimination, promote equality and create equality of opportunity. Nevertheless, Tuch and Hughes (1996, among others) point out that even though there seems to be a decline in racial prejudice, it has not completely disappeared and it might be one of the most important factors that influence racial policy preferences by whites (See also Sniderman & Carmines, 1997).

### **2.3 The emergence of the principle-implementation gap**

Schuman *et al.* (1997) argue that even though there has been a decrease in racism, there is no simple answer as to how white racial policy attitudes have changed over the past half century. They claim that the trends differ in terms of the kinds of questions asked. These trends, as illustrated by Schuman *et al.* (1997) show that there is a huge worrying gap in terms of what people say about the principles aimed at promoting equality and what they actually do when it comes to supporting these principles; hence the “principle-implementation gap”.



Take for instance, the school integration principle mentioned above, in North America, in the time period 1963 to 1986, studies showed that support for school integration rose by 30 percent, whereas support for implementation of the school integration principle (through busing) by the federal government dropped by 9 percent (1964 – 1986), instead of increasing as would be expected. Schuman *et al.* (1997) then concluded by saying that overall, though, it seems as if “fewer people endorse the implementation of a principle than endorse the principle itself...” (p.137, see also Durrheim & Dixon, 2005).

Another racial policy of interest that has raised a lot of concern and warrants mention is affirmative action. Affirmative action programmes, in America, were introduced as positive steps taken by the federal government to promote equality, instead of simply ending open discrimination and legal segregation. The first step was to try and eradicate what is known as ‘institutional racism’ where, for example, jobs were only reserved for white applicants or advertised in such a way that discouraged black applicants or in a way that only whites had access to the information. The second step was to try and improve black people’s lives by making funds available to them especially in areas that were more poverty stricken. The third and final step involved the preference given to blacks in employment and educational situations. This was seen “as a way of both making up for past discrimination and accelerating the move toward equality of outcomes” (Schuman *et al.*, 1997, p.101). However, whereas individuals support the principle of equality of outcomes on the one hand, support for specific affirmative action programmes put in place to achieve this goal is mixed at best and very low in some cases (especially when programmes are perceived as giving preference or special treatment to one group over another).



As Pettigrew (2004) pointed out, although things have improved greatly in the past few decades, there is still a long way to go before full equality can be achieved. There are a lot of discrepancies as evidenced in the racial outcomes in society today, e.g., in housing, employment, education, health, the justice system, economic status; the list is endless. According to Tarman & Sears (2005) blacks are still experiencing disadvantages in almost every domain of life. Sears (1998) also agrees with this viewpoint (see also Bobo, 1998) and says that historically, it is blacks who have always occupied the bottom rung of the economic ladder in jobs, income, educational level and housing, among other things, and this trend is persistent in society today. Before the Civil War in America, blacks lived in dilapidated slave quarters, were denied formal education and had no access to good jobs. At present, almost two centuries later, such trends are still prevalent, with blacks living in run-down and crime-ridden parts of the cities, receiving poor education and having access to low status jobs. Therefore, “they are more at risk than any other group in almost every aspect one can think of – for educational failure ... imprisonment ... racial discrimination, and police mistreatment” (Sears, 1998, p. 79).

Presently, in USA, jails are full, especially, with young black males (the black imprisonment rate is much higher than whites’ rate of imprisonment), politicians run election campaigns on racist platforms and more black citizens encounter voting problems than whites. On average, blacks hold lower status jobs, compared to whites, and they receive lower income. Unemployment is twice as high among the black population as it is among whites. Blacks are by far the most residentially segregated of all American minorities and black Americans comprise the larger portion of the homeless. Poverty is twice as high among blacks compared to whites and proportionately more businesses are white owned. Blacks consistently receive

poorer medical care than their white counterparts. Only 6% of African American marriages involve a white partner (Pettigrew, 2004).

In terms of education, racial segregation of public education is on the increase (instead of decreasing, as expected), with 70% of Black children attending predominantly-blacks schools and 37% attending schools with 90% or more black students. Pettigrew (2004) explains that this can be attributed to the fact that, although whites, are in support of school desegregation, for example, they still fail to support busing, which was implemented as a way of eradicating school segregation.

Overall, the above trends demonstrate that there is a problem that needs to be addressed, where on the one hand whites seem to be in support of the principles proposed so as to do away with discrimination; yet on the other hand, there is lack of support for actual programmes implemented to promote equality (hence the much debated principle-implementation gap, and, in turn, the continued disadvantages presently suffered by blacks). However, there is much controversy as to the origins of this “principle-implementation” gap. Although most researchers (e.g. Kinder & Sears, 1981; Kluegel & Smith, 1983; Schuman *et al.*, 1997) acknowledge that there has been a decrease in traditional prejudice; nevertheless, there is still some debate as to what influences the low levels of support. Researchers have advanced several explanations, both racial and non-racial, for the principle-implementation gap, and the next section deals with these arguments in detail.

## **2.4 Explanations of the principle-implementation gap**

Presently, there is a raging debate going on amongst researchers as to why the principle-implementation gap exists. Whilst some researchers agree that although racism has generally diminished, it is still influential in politics today; others argue that it is no longer the driving force behind racial policy attitudes, rather, other factors (non-racial or race-neutral) play a vital role in motivating current racial policy attitudes. Researchers have attempted to explain contemporary race-targeted policy attitudes through, for example, self-interest, continuing negative racial attitudes and beliefs about inequality, political conservatism, stereotypes about blacks, negative racial affect, symbolic racism and old-fashioned racism. In this section I will start by giving a brief discussion of the non-racial explanations and then go on to discuss arguments about the role of self-interest and specific racial policies involved. Finally, I will discuss, in more detail, the racial explanations (race attitudes), which are the main focus of this study.

### ***2.4.1 Non-racial explanations***

Advocates of non-racial explanations for racial policy attitudes maintain that there are other race-neutral factors besides racism, such as beliefs about racial inequality, political conservatism and educational sophistication, that account for whites' racial policy attitudes. Although they acknowledge that racism is still prevalent and may play a part to some extent, they argue that it does not play a central role anymore in motivating politics. In the following subsections I will briefly discuss three lines of arguments from this viewpoint.

#### 2.4.1.1 *Beliefs about inequality*

Beliefs about inequality are concerned with “how cross-sections of white Americans interpret continuing black-white differences in socio-economic levels” (Schuman *et al.*, 1997, p.100). In the past, traditional racists explained these differences as a result of biological differences, with whites as the superior race, and blacks as innately inferior. On the other hand, those whites that empathised with blacks recognised the need for racial equality in order to compensate for past discrimination. Recently though, there has been a shift in beliefs about innate differences and very few whites ever explain inequality in those terms anymore.

The main explanation being given now focuses on the lack of motivation in blacks themselves to improve their own situations – cultural differences (see Durrheim and Dixon, 2000). Schuman *et al.*'s (1997) findings indicate that overall, those whites who believe that discrimination is no longer a problem tend to oppose any attempts made by the government to improve blacks' socio-economic status; and the opposite is true for those who believe in the continuing racial inequality.

According to Bobo and Kluegel (1993), when whites perceive racial discrimination as no longer prevalent, they tend to oppose race-target policies intended to enhance blacks' opportunities. In their 1993 study, Bobo and Kluegel found that beliefs about racial discrimination are strongly correlated with race-targeted policies, giving credence to their argument. They then conclude that perceived discrimination may be “theory driven” in whites (used as a justification for group self-interest) and “experience driven” in blacks.

Jacobson (1985) found that when whites perceive blacks as still being discriminated against, they tend to have more positive attitudes towards affirmative action programmes. Tuch and Hughes (1996) found that whites who do not believe that blacks are at a disadvantage because of past discrimination are the ones who fail to support government sponsored intervention policies. The main reason for this failure of support is that they believe that the inequality is a result of black people's laziness and lack of ability. These findings led Tuch and Hughes (1996) to conclude that education programmes are needed to inform whites about the ongoing inconspicuous harm "of past and present discrimination" so they can understand the need for racial policies in order to remedy this and promote equality (see also Stoker, 1996).

Kluegel and Smith (1983) also point out that support or opposition towards racial policies may be dependent, to some extent, on how whites perceive blacks' opportunity. If blacks' opportunity is perceived as equal to whites', then racial policies are highly likely to be regarded as unnecessary, hence opposition. However, if blacks' opportunity is perceived as less than average (with blacks at a disadvantage in opportunity relative to whites), racial policies will be seen as necessary, and are supported as a result. They found that the general denial of unequal opportunity also serves as a strong predictor of opposition to affirmative action programmes. In other words, if whites believe that equal opportunity for blacks already exists or if they do not believe that blacks are particularly burdened by the legacy of past discrimination, they are highly likely to oppose government assistance programmes for blacks (see also Tuch & Hughes, 1996).

#### 2.4.1.2 *Political conservatism*

Sniderman and Carmines (1997) argue that whites' opposition to government assistance programmes for blacks can be explained by other factors such as political liberalism and conservatism. Although supporters of the principled conservatism theory acknowledge that racial prejudice may play a role, to some degree, in the opposition to racial policies, they deny that it plays the central role (Kravitz & Klineberg, 2004; Reyna, Henry, Korfmacher & Tucker, 2006; Sidanius, Pratto & Bobo, 1996; Sniderman & Piazza, 1993).

Kravitz and Klineberg (2004) suggest that the theory of conservatism is based on the assumption that many people oppose affirmative action, for example, primarily because it is contrary to conservative principles (such as hard work and self-reliance), not merely because they are prejudiced (see also Sidanius, Pratto & Bobo, 1996; Sniderman & Piazza, 1993). This line of argument also explains opposition to race-targeted policies as motivated by "a conservative ideology that has little tolerance for policies that distribute opportunity inequitably based on race or other group factors irrelevant to personal merit" (Reyna *et al.*, 2006, p. 4). Principled conservatism encourages a society that allows everyone to equally (and individually) compete for jobs and other opportunities without additional help from outside (from the government, for example). Hard work is supposed to be rewarded with desirable outcomes and conversely, those who put in little effort (or are lazy) should also earn very little. Accordingly, conservatives claim that any policies that favour one group over another disturb this ideal system and are, therefore, fundamentally unfair (Reyna *et al.*, 2006).

Not surprisingly, previous research shows that conservatives tend to oppose government programmes to help blacks regardless of how positively or negatively they feel towards



blacks (Sniderman & Carmines, 1997; Sniderman & Piazza, 1993; Sniderman & Tetlock, 1986a, 1986b). Liberals, on the other hand, generally support racial equality enhancement policies (Kravitz & Klineberg, 2004). These differences can be attributed to the fact that, whereas liberals tend to favour a more active government role in eliminating racial discrimination; conservatives argue that the government should prohibit racial discrimination, *but* avoid any stronger action to increase racial equality (Kravitz & Klineberg, 2004; Reyna *et al.*, 2006, Sears *et al.*, 1997; Sniderman & Piazza, 1993; Tuch & Hughes, 1996; Virtanen & Huddy, 1998). Conservatives are also more likely to attribute blacks' negative life outcomes to internal factors such as lack of effort, whereas liberals are more likely to attribute such outcomes to external factors such as discrimination and lack of opportunity (Kravitz & Klineberg, 2004; Reyna *et al.*, 2006; Virtanen & Huddy, 1998).

#### 2.4.1.3 *Education or cognitive sophistication*

In recent years, some debate has also arisen on the effects of education on race prejudice, which, in turn, influences racial policy attitudes. Education is supposed to be an important moderator for racial prejudice. Whilst a number of researchers argue that race prejudice has decreased over the years, they have also argued that this is particularly the case among educated whites (Lipset, 1960; McClosky & Zaller, 1984; Steinberg & Selznick, 1969, as cited in Federico & Sidanius, 2002). "More precisely, several researchers have argued that education may attenuate the relationship between racial hostility and opposition to affirmative action, as well as the relationship between racism and various race-neutral predispositions" (Federico & Sidanius, 2002, p.147). The logic here is that since highly educated individuals are more aware of and understand better abstract political concepts, their

racial policy attitudes should be less coloured by racial prejudice; whereas the opposite is true for the poorly educated individuals (Sniderman & Piazza, 1993).

However, some researchers have offered contrasting explanations; they have suggested that “education may simply allow individuals to better align their racial policy preferences...with a desire to protect the dominant positions of the in-group” (Federico & Sidanius, 2002, p.148). It is also argued that even though education is clearly connected to knowledge and awareness, it may not in itself be a clear indication of a real understanding of politics (ibid.).

Federico and Sidanius (2002) found that racial policy attitudes and political ideology were more powerfully associated with ideologies of racial dominance and superiority among politically sophisticated (highly educated) white Americans than among politically unsophisticated (poorly educated) white Americans (see also Sears, van Laar, Carrillo & Kosterman, 1997). Moreover, political conservatism was found as strongly related to racism among sophisticates, although the reverse would be expected. In addition, affirmative action was negatively (instead of positively as would be expected) related to egalitarianism, and the magnitude of this relationship actually increased with political sophistication. Both poorly educated conservatives and poorly educated liberals tend to offer less support to race-targeted policies promoting equal opportunity (Federico & Sidanius, 2002).

In their study, Bobo & Zubrinsky (1996) found that the lower the level of education in white respondents, the higher the likelihood of opposing residential integration. Sidanius, Pratto and Bobo (1996) found that as educational sophistication increases, so does the relationship between classical racism (old-fashioned racism) and affirmative action opposition.



Tuch and Hughes (1996) found that respondents with higher education tend to support race-targeted policies (specifically, compensatory programmes) more than less well-educated respondents. However, education was reported to have a negative effect on support for affirmative action programmes perceived as offering preferential treatment.

#### ***2.4.2 Self- and group-interest***

In terms of self-interest as an explanation for the principle-implementation gap, two distinct lines of arguments have recently emerged. One line of arguments pertains to the role of individual or personal self-interest. Another underscores the importance of group or collective self-interest. Kravitz and Klineberg (2004) explain that individual self-interest is defined in terms of its short- to medium-term impact on an individual's own material well-being. Bobo and Kluegel (1993) say that self-interest (in individual terms) can be narrowly defined as "tangible losses or gains to an individual or his/her immediate family" (p. 445; see also Kinder, 1986; Kluegel & Smith, 1983). On a broader group level, collective self-interest refers to the impact of racial policies on the respondent's social group as a whole (Kravitz & Klineberg, 2004), or a group-based assessment of self-interest influenced by membership or identification with a certain group and a sense of shared fate (Bobo & Kluegel, 1993). Kluegel and Smith (1983) also explain self-interest in economic terms. According to this viewpoint, blacks and whites are constantly competing for jobs, promotion and other scarce economic resources, which may explain why whites tend to oppose policies that potentially pose a threat to their relatively privileged economic position (see also Tuch & Hughes, 1996).

Some scholars (such as Bobo, 1998; Bobo, Kluegel & Smith, 1997, as cited in Kravitz & Klineberg, 2004; Sniderman and Tetlock, 1986a) claim that self-interest is not purely race-

neutral. They argue that there is an underlying racial aspect to it and that an intercorrelation between self-interest and racism exists. According to Blumer's (1958, as cited in Kravitz & Klineberg, 2004) group position theory, when members of a racial group believe that they are entitled to their dominant position and they feel that their position is threatened by the claims of a subordinate group, they tend to develop racist ideologies so as to justify and maintain their privileged status (see also Bobo, 1999). Therefore, whites' desire to maintain their in-group interests and privileged position may influence opposition to race-targeted policies, even if racism is generally less prevalent than in the past (Bobo, 1999).

The self-interest theory suggests that whites are unlikely to support policies from which they do not benefit and that potentially impose costs on them, through, for example, taxation (Bobo & Kluegel, 1993). However, from previous research, it appears that collective self-interest is a much stronger predictor of racial policy attitudes than individual self-interest (Kinder, 1986; Kinder and Sears, 1981; Kluegel & Smith, 1983; Sears, 1988; Tuch & Hughes, 1996; Wood, 1994). Sniderman (as cited in Wood, 1994) reasons that this could be attributed to the fact that people tend to relate to politics, not as individuals, but as group members.

In their 1983 study, Kluegel and Smith examined the effects of economic self-interest, racial affect and stratification beliefs on the attitudes held by whites toward affirmative action programmes. Their findings showed that the strong determinants for current affirmative action attitudes are racial affect and stratification beliefs rather than economic self-interest. McConahay's (1982) findings also indicated that self-interest is not strongly correlated with either opposition or support for busing, whereas race attitudes were strong predictors of opposition to busing. However, Kravitz (1995) found that attitudes toward affirmative action

were more strongly associated with self-interest than racism, contrary to previous findings (i.e. Jacobson, 1985; Kinder & Sears, 1981; Kluegel & Smith, 1983; McConahay, 1982).

### ***2.4.3 Specific programmes involved***

Researchers (e.g. Bobo, 1983; Bobo & Kluegel, 1993; Durrheim, 2003; Federico & Sidanius, 2002; Kluegel & Smith, 1983; Sears *et al.*, 1997; Sears & Henry, 2003) generally agree with the previously mentioned opinion that even though nearly all whites are in favour of the principle of equal opportunity in terms of jobs and education, for example, support for programmes (or racial policies) implemented in order to ensure this equality of opportunity have not received strong support. Racial policies (also known as race-targeted policies) are those policies (such as affirmative action) that are targeted at remedying the effects of past racial discrimination so as to promote equality. The general argument is that race-targeted policies are more likely to be opposed than “universal-income-targeted policies” (policies that benefit everyone) (Bobo & Hutchings, 1996; Bobo & Kluegel, 1993; Tuch & Hughes, 1996). For the purposes of the present study, four categories of racial policies were identified, which will be discussed in this section:

- Compensatory programmes, which involve, for example, spending money on early education programmes in predominantly black areas or awarding college scholarships to black students (Krysan, 2000; Tuch & Hughes, 1996);
- Preferential treatment programmes, which involve, for example, racial quotas in college admissions, job hiring and promotion (Tuch & Hughes, 1996);
- General racial policies – fall in between the above two extremes (Kluegel & Smith, 1983). They include, for example, “government assistance to blacks” (Sears & Henry, 2003; Sears *et al.*, 1997), and sometimes, in some studies, they

are not clearly defined (as they have been recently criticised by Tuch & Hughes (1996), for example – see below) or are just lumped together, e.g., as “affirmative action programmes” or “equal opportunity policies”, which makes it difficult to properly categorise them; and

- Desegregation programmes, involve policies such as busing (for school integration) and fair housing laws (for residential integration).

Tuch and Hughes (1996) argued that previous research has failed to examine specific racial policies, focussing instead on general and usually vague questions about racial policies, with respondents often asked about unspecified “government intervention” to aid minorities. They explain further that if a survey question poses a concrete and specified government action to remedy a specific problem, it is highly likely to elicit a very different response than a survey question that is context free. In other words, whites’ support for racial policies is not monolithic; it can vary significantly depending on the specific policy in question (see also Bobo, 1998; Stoker, 1996).

Kravitz and Klineberg (2004), focussing on affirmative action programmes specifically, agree with Tuch and Hughes’s (1996) argument by saying that the descriptions given for affirmative action in research are usually very general, simplistic and potentially misleading. Respondents are often asked to evaluate their attitudes towards “affirmative action” without any descriptions or definitions given to explain what “affirmative action” is. Since individuals understand affirmative action in many different ways, it makes it very difficult to know what respondents actually believe they are evaluating in a study.

Previous research tends to focus on the distinction between preferential treatment and compensatory programmes. On the one hand, programmes that are perceived as promoting preferential treatment are reported as strongly opposed by approximately 90 percent of the whites. “On the other hand, programs to simply help blacks win jobs or gain access to higher education (*compensatory programmes*) have a much higher level of support – by roughly 70 percent of the white public” (Kluegel & Smith, 1983, pp. 797-8). In their survey, Schuman *et al.* (1997) also found that with regards to specific affirmative action programmes implemented, more support has been given for compensatory programmes with very little support for preferential treatment programmes (see also Tuch & Hughes, 1996). Those programmes that fall in between the two extremes (general racial policies) tend to receive intermediate levels of support (Kluegel & Smith, 1983).

Desegregation policies such as busing, whilst they are supported in principle, have received very low levels of support in practice (Bobo & Kluegel, 1993; McConahay 1982; Schuman *et al.*, 1997). In fact, as Pettigrew (2004) argued (see section 2.3 above for a full account), despite the busing policy implemented to promote school integration, school segregation is on the increase in American society. In McConahay’s 1982 study, racial attitudes were strong predictors of busing attitudes; the more racially prejudiced the more opposed (see also Giles, Gatlin & Cataldo, 1976). Even the white residents in Louisville (where the study was done) who did not have children affected were opposed to busing. McConahay then concluded that because it is no longer fashionable to express one’s negative feelings towards blacks openly, these feelings are then displaced onto busing, with busing taken as a symbol that represents what is perceived by whites as blacks’ unfair gains in status and economics, hence the opposition. In that sense, one can justify their opposition not as a result of racism, but as a result of their sense of justice being violated.

Residential desegregation has also received much support in principle, but residential segregation still persists, especially in metropolitan areas (Bobo & Zubrinsky 1996; Krysan, 2000; Massey & Denton, 1993). Pettigrew (2004) reported that African Americans are actually the most segregated group in America. Bobo and Zubrinsky (1996) argued that this could mainly be attributed to stereotypes that different racial groups hold about others (or out-groups). If whites, for example, believe that blacks are very noisy and have a tendency to disrupt neighbourhood peace, then they are highly unlikely to be supportive of policies that allow such individuals to move to their neighbourhoods.

Tuch and Hughes (1996) stated that compensatory programmes tend to receive more support than preferential treatment programmes, which are rejected by almost all whites. Lack of support for preferential treatment programmes, according to Tuch and Hughes (1996), could be attributed to whites' perception of such programmes as encouraging inequality where white people themselves are at a disadvantage (see also Bobo & Hutchings, 1996). To illustrate this point, take for example, a case where a white person is denied a promotion at work in favour of a less qualified black individual (Tuch & Hughes, 1996).

Tuch and Hughes (1996) pointed out that preferential treatment policies may be opposed because they are perceived as violating the principle of fairness. Other researchers (such as Krysan, 2000; Nosworthy, Lea & Lindsay, 1995; Sniderman & Carmines, 1997; Sniderman & Piazza, 1993) concur that whites' opposition to policies such as affirmative action is not a result of a dislike for blacks or a desire to maintain their group's privileged position; rather, it is a result of their sincere belief that such policies promote preferential treatment with a certain (targeted) group benefiting over another (or others). According to Kravitz (1995),



people are more likely to support racial policies that they consider to be fair than those they believe to be unfair. Whilst the eradication of discrimination may be perceived as fair, preferential treatment as a means to achieve the equality goal would be construed as most unfair.

Kravitz and Klineberg (2004) say that it is important that research investigate respondents' reactions to the specific affirmative action programmes in question, specifically, and racial policies in general. They claim that affirmative action programmes range from the elimination of discrimination (equal treatment), through to opportunity enhancement, to preferences (equal outcomes). Individuals, according to this line of argument, supposedly oppose racial policies only when they can rationally explain their actions in non-racial terms. In other words, since it is very difficult to justify opposition to weak affirmative action programmes such as equal treatment plans, even prejudiced individuals will express support for such policies. Alternatively, even non-prejudiced individuals are likely to oppose strong preferential treatment programmes, because such programmes seriously violate widely held justice norms. With regards to policies with intermediate strength (opportunity enhancement policies), prejudiced individuals are highly likely to oppose them, whereas non-prejudiced individuals are likely to support them since they primarily enhance a target group's opportunities without harming the non-target groups' (ibid.).

#### ***2.4.4 Racial Explanations***

Generally, racial explanations posit that there is ongoing prejudice, which explains opposition to race-targeted policies. New theories of racism, however, distinguish between modern (symbolic) and old-fashioned racism. The general consensus from both sides is that although

racism has decreased over the last few decades, it has not completely disappeared. The leading argument from symbolic racism theorists, however, is that although racism is still prevalent, it has taken another form.

McConahay stated, “old-fashioned racism involves the expression of coarse and blatant racist beliefs” (as cited in Durrheim 2003, p. 243). Such racist beliefs include beliefs of biological inferiority of blacks and open support for segregation and discrimination (ibid.). Modern racism, on the other hand, involves subtle, disguised and indirect expressions of racial prejudice. Symbolic and old-fashioned racism are therefore the main variables of interest in this study. Other important variables related to old-fashioned and symbolic racism that are going to be discussed in the following subsections are racial affect and stereotypes, since they are also racial explanations given for lack of support for race-targeted policies that will be examined in the present study.

#### 2.4.2.1 *Symbolic racism*

Sears and Kinder (1970/1971) initially introduced the concept of symbolic racism in an attempt to explain the findings of a survey conducted on Los Angeles mayoralty elections where a liberal black candidate (Tom Bradley) was running for mayor against a conservative white candidate (Sam Yorty) (as cited in Sears, 1988). According to Sears (1988), Thomas Pettigrew and colleagues developed and conducted the original survey trying to analyse whites’ reactions towards black mayoral candidates; thus, “the concept of symbolic racism was, therefore, originally generated inductively to describe the results from items that had been developed by other researchers for other purposes; the items were not generated deductively to measure a preexisting concept” (p. 56). However, the measurement of



symbolic racism has since evolved over the years, with other items added or changed so as to measure the concept more precisely (Sears, 1988; Tarman & Sears, 2005).

At this point in time, the symbolic racism theory and its measurement, according to Sears and Henry (2005) and Tarman and Sears (2005), encompasses four specific themes: Beliefs that:

- Blacks no longer face much prejudice or discrimination;
- Blacks' failure to progress results from their unwillingness to work hard enough;
- Blacks are demanding too much too fast; and
- Blacks have gotten more than they deserve.

Symbolic racism theorists (e.g. Kinder & Sears, 1981; McConahay, 1982; McConahay & Hough, 1976; Sears, 1998; Sears & Allen, 1984; Sears & Henry, 2005; Sears, Hensler & Speer, 1979) have set forth the chief argument that it is indeed symbolic racism that plays a central role in shaping people's attitudes towards racial policies. They suggest that racism has not completely disappeared; rather, it has only been transformed from its traditional form to a new form of racism that they have dubbed 'symbolic racism'. Symbolic racism, they claim, is much more common, and it is a significantly stronger predictor of attitudes towards racial policies and black political candidates today than traditional racism, racial stereotypes and anti-black affect (McConahay, 1982; Sears, 1998/1988; Sears *et al.*, 1997).

It is explained that symbolic racism measurements correlate more strongly with racial policy attitudes, compared to traditional racism measurement, because the items in the symbolic racism scales are less blatantly racist in content. In terms of racial affect, symbolic racism is argued to have a stronger effect since it is a combination of racial affect and traditional values, therefore that blend is expected to have a stronger correlation than racial affect alone.

Since stereotypes tend to be very negative and strongly associated with old-fashioned racism, according to symbolic racists, it makes sense that they would have less effect on racial policy attitudes than the new form of racism (McConahay, 1982; Sears, 1998/1988; Sears *et al.*, 1997).

This new form of racism “is based on moral feelings that blacks violate such traditional ... values as individualism, the work ethic, obedience and discipline” (Kinder & Sears, 1981, p.416 (see also Little, Murry & Wimbush, 1998; Sears & Henry, 2003; Sears *et al.*, 1997)). It is believed that this dislike of blacks is acquired in childhood and it endures through adulthood (Kinder & Sears, 1971, in Durrheim, 2003; Kinder & Sears, 1981; Sears, 1988; Sears & Henry, 2005; Sniderman & Tetlock, 1986a). McConahay and Hough (1976) also say that symbolic racism involves “the expression in terms of abstract ideological symbols and symbolic behaviours of the feeling that blacks are violating cherished values and making illegitimate demands on the racial status quo” (p.38). According to Sears (1998), symbolic racism involves “a blend of antagonism to blacks with attachment to traditional American values that have nothing to do with race (such as work ethic, traditional morality and respect for traditional authority)” (p. 83). Therefore, symbolic racism is alleged to be a combination of racial prejudice and traditional values. It is phrased in abstract and ideological terms, “reflecting the white person’s moral code and how society should be organised rather than having any direct bearing on the person’s private life” (Sears, 1998, p. 83). Symbolic racism is also directed towards blacks as a group rather than specific individuals.

Sears and Allen (1984) stated that symbolic racists tend to deny the continuing existence of discrimination against blacks. Whites resent race targeted policies because they view them as “reverse discrimination”, where blacks are favoured by getting special treatment through, for

example, racial quotas in jobs or education, getting excessive access to welfare and getting unfair economic gains. They are also antagonistic toward blacks because they believe that blacks are “pushing too hard” and “moving too fast” (McConahay, 1982; Sears & Allen, 1984; Sears & Henry, 2003; Sears *et al.*, 1997). It is argued that since it is no longer fashionable to express one’s racially prejudiced opinions in public, such attitudes (mentioned above) are more acceptable ways of expressing underlying prejudice simply because they rationalise opinions in race-neutral terms. In other words, many whites will discriminate against blacks if the situation allows them to attribute their racially tinged behaviour and beliefs to non-racial causes (Kravitz & Klineberg, 2004; McConahay, 1982; Reyna *et al.*, 2006).

Sears and Henry (2005) claim “the effects of symbolic racism are almost identical across a wide variety of racial policies” (p. 141). In other words, they dispute the proposition (made by Kravitz & Klineberg, 2004; Sniderman & Carmines, 1997; Tuch & Hughes, 1996; for example) that opposition to policies maybe a result of the perceived “fairness” of the specific racial policy in question. According to Sears and Henry (2005), currently no evidence exists to substantiate such a claim.

Sears and Allen (1984) report that symbolic racism has a much stronger influence than self-interest in opposition to busing. Kinder and Sears (1981) also found symbolic racism to be a strong determinant of opposition to busing and voting behaviours. They also observed that it is not only the parents of children threatened with busing who are against it, therefore precluding the self-interest theory.

In their study, Sears *et al.* (1997) found symbolic racism to be a strong predictor of whites' racial policy preferences. Jacobson (1985) found both the new and old-fashioned racism, as well as self-interest, to be significant correlates of affirmative action attitudes, with the new racism correlating stronger than others (which was consistent with McConahay's (1982) and Little, Murry & Wimbush's (1998) results).

As can be expected of such an elaborate claim, the new racism theory has been a subject of considerable debate among researchers on both theoretical and methodological grounds, and has stimulated a lot of research in the past couple of decades. It has been widely criticised by other scholars (e.g., Bobo, 1983; Jacobson, 1985; Kravitz, 1995; Sniderman & Tetlock, 1986a, 1986b; Virtanen & Huddy, 1998) on several grounds. Its critics question, for example, the conceptualisation of symbolic racism, the validity of its measurement scale(s) and its separateness from the old-fashioned racism.

Bobo and Kluegel (1993) and Kravitz (1995), for example, question the validity of classifying any items measuring attitudes toward racial policies (e.g., affirmative action attitudes or busing attitudes) as a measure of racism. In other words, they argue that the strong effects of symbolic racism on racial policy attitudes can be explained by the fact that the symbolic racism scale items are too close in content to the dependent variables (or policy preference measures) that they claim to predict (see also Sniderman & Tetlock, 1986a). Bobo and Kluegel (1993) criticise authors such as Kinder and Sears (1981) for using "anti-affirmative action attitudes and anti-economic assistance to blacks as direct indicators of racism" (p. 460). Kravitz (1995) concurs and says that in the end, it seems meaningless to say that opposition to affirmative action is a result of symbolic racism when you are actually using affirmative action attitudes items to indicate symbolic racism itself. Sniderman and

Tetlock (1986b) then accused Sears and colleagues of “leeching away” the meaning of racism and diminishing it “by making it merely a synonym for political attitudes with which one happens to disagree” (p. 186).

In response to the above critique, Tarman and Sears (2005) acknowledged that, indeed, in the past, a few of the items used to measure symbolic racism might have tapped a bit into racial policy preferences as pointed out by the symbolic racism critics. Nevertheless, they argued that these few items do not embody enough basis for the dismissal of the entire symbolic racism theory altogether. To illustrate their point, Tarman and Sears (2005) decided to purge the symbolic racism scale of the disputed items and re-test the effect of symbolic racism on racial policy attitudes. Their findings showed that even when the symbolic racism scale is purged of the few questionable items, it hardly changes and still remains strong and significantly correlated with racial policy attitudes (also see Sears & Henry, 2005).

The next subsection will discuss in more detail some of the criticisms and questions raised about symbolic racism in relation to old-fashioned racism.

#### 2.4.2.2 *Old-fashioned racism*

According to McConahay (1982) old-fashioned racism involves “the overt expression of negative feelings toward blacks in negative beliefs and open acts of discrimination and expression” (p. 705). Such racist beliefs include beliefs in biological inferiority of blacks and open support for segregation and discrimination (Durrheim, 2003). Old-fashioned racism is crude in nature, as opposed to the subtlety of symbolic racism.

Critics of the symbolic racism theory (e.g., Bobo, 1983; Jacobson, 1985; Sniderman & Tetlock, 1986a, 1986b) argue that the new form of racism (symbolic racism) may not be new at all, but the old form of racism by another name. As Sniderman and Tetlock (1986a) put it, “in so far as it is racism, far from being new, it is very old indeed” (p. 148). In that sense, they argue that opposition to race-targeted policies may still be influenced by old-fashioned racism rather than symbolic racism. According to Sniderman and Tetlock (1986a, 1986b), symbolic racism theorists have failed to distinguish convincingly between old-fashioned racism and symbolic racism.

Sniderman and Tetlock (1986a) further argue that the calculated correlations between measures of these two forms of racism (e.g. McConahay (1982) reported a correlation of .58; McClendon (1985) reported .65; Jacobson (1985) reported a .49 correlation), even though they seem to show that old-fashioned and symbolic racism are not “the same thing”, still give a “clear warning that the two have much in common and that, in consequence, it may be difficult to distinguish them empirically” (p.136, see also Sniderman & Tetlock, 1986b). Moreover, they claim, there is no clear distinction of the causes of both forms of racism: it seems as if what causes symbolic racism is the same as what causes old-fashioned racism. Therefore, how can we say these are two entirely different forms of racism? Jacobson (1985) adds that all symbolic racism theorists seem to have done is exclude a few items from the old-fashioned racism scale when constructing the symbolic racism scale, but are basically still measuring the same thing as old-fashioned racism.

Thus researchers such as Sniderman & Tetlock (1986a, 1986b) dispute the validity of the symbolic racism claim and argue that whites’ political opinions are still being influenced by old-fashioned racism. Supporters of the old-fashioned racism theory agree that, indeed,

racism has not completely disappeared but disagree with Sears and colleagues' proposition of a new form of racism. Rather, they argue, that it is old-fashioned racism, albeit supported by a minority of the white population, which still underlies whites' present-day racial policy attitudes.

#### 2.4.2.3 *Racial Affect*

According to Sears (1998, 1988), racial affect (sometimes called anti-black affect) underlies both old-fashioned and symbolic racism; both kinds of racism “share a common roots in antagonism toward blacks” (Sears, 1998, p. 83). Anti-black affect is apparently acquired in pre-adult life and “it maybe experienced subjectively as a fear, avoidance and a desire for distance, anger, distaste, disgust, contempt, apprehension, unease, or simple dislike” (Sears, 1988, p. 70). Racial affect is commonly measured by using the feeling thermometer (McConahay, 1982; Sidanius, Pratto & Bobo, 1996; Tuch & Hughes, 1996). The feeling thermometer is a scale that runs from 0 degrees, which represents extremely cold feelings, to 100 degrees, which represents extremely warm feelings, with 50 degrees representing neutral feelings (Bobo & Zubrinsky, 1996; McConahay, 1982).

Nosworthy, Lea and Lindsay (1995) however, argue that some people might oppose some programmes, not because of any negative attitudes toward the group that is benefiting, but because they view the procedure that is followed in the implementation as unfair. Therefore, their opposition is influenced merely by their sense of justice rather than racial affect. As a result, Nosworthy, Lea and Lindsay (1995) suggest that maybe we should examine racial affect and justice values separately. “This strategy might reveal the degree to which measures



of symbolic racism are tapping generic justice concerns, rather than a new form of racism” (Nosworthy, Lea & Lindsay, 1995, p. 316).

Following Nosworthy, Lea and Lindsay’s (1995) argument, racial affect is expected to be a weaker predictor of policy attitudes than symbolic racism (which includes the justice/values component).

#### 2.4.2.4 *Stereotypes*

People stereotype others by accepting and readily endorsing negative or positive characterisations of a certain group without a factual basis. “The more frequently and consistently a person endorses negative characterisations of blacks the more racially prejudiced that person is” (Sniderman & Piazza, 1993, p. 89). Such stereotypes include beliefs that blacks would be far better off if they worked harder (that is, they are lazy), blacks take advantage of welfare, they are violent, irresponsible, less intelligent than whites, unfriendly and they are born with less ability than whites (Bobo & Kluegel, 1983; Sniderman & Carmines, 1997; Sniderman & Piazza, 1993; Sears *et al.*, 1997; Tuch & Hughes, 1996). As whites’ dislike of blacks increases, so does their opposition to, for example, government programmes that help blacks get jobs (Sniderman & Carmines, 1997; Sniderman & Piazza, 1993).

Stereotypes, according to Jost & Banaji (1994), can be used to justify the subordinate status of certain groups in society, and inversely, the dominant status of others (as cited in Reyna *et al.*, 2006). Take for example, the stereotypes that blacks are lazy and less capable, they justify why blacks hold a low status and conversely, the stereotype that whites are very hardworking



helps to justify their dominant position. Therefore, whites can legitimise their opposition to race-targeted policies by saying that blacks do not deserve any government assistance because they do not put forth any effort to help themselves.

Prior research indicates that negative stereotypes toward an out-group have a major influence on resistance to residential integration (Bobo & Zubrinsky, 1996). In their study, Bobo and Zubrinsky examined the relationship between stereotypes (on the dimensions of intelligence, welfare dependency and difficulty to get along with socially) and racial residential integration, and found that opposition to residential integration tends to increase as stereotypes become more negative, especially among white respondents, though blacks, Hispanics and Asians seem to follow the same trend as well.

However, Sniderman and Piazza (1993) hold the view that sometimes those white people who hold the belief that blacks could be better off if they worked harder are not necessarily prejudiced. Indeed, they acknowledge some of the disadvantages suffered by blacks because of past discrimination, but they still believe that if blacks took some of the responsibility and work hard towards making their situation better, then they would be better off, or would be in better positions. In other words, they (whites) think that blacks should also make an effort in order to make things better for themselves. Sniderman and Piazza (1993) conclude by saying that “affirmative action is so intensely disliked that it has led some whites to dislike blacks – an ironic example of a policy meant to put the divide of race behind us in fact further widening it” (p. 109).

## 2.5 Conclusion

In conclusion, one might ask: Does racism have an effect on racial policy attitudes? Does it matter how racism is measured? Does racism effect differ on different racial policies? After going through the literature, it appears that even though racial prejudice has decreased, it has not completely disappeared. It seems to still be a major force behind the formation of racial policy attitudes. Sniderman and Piazza (1993) argued that the more whites dislike blacks the more likely they are to oppose racial policies. Previous research (e.g. Kluegel & Smith, 1983) has also shown that racially prejudiced whites are highly likely to oppose race-targeted policies; and despite criticisms against the conceptualisation and the measurement of symbolic racism, a growing body of evidence seems to suggest that it maybe the main driving force behind the resistance to race-targeted policies rather than old-fashioned racism.

As already noted above, there is an ongoing debate as to the validity of the scales used to measure symbolic racism, old-fashioned racism, racial affect and stereotypes, mainly because of the intercorrelations among these predictor variables. Some researchers, (e.g. Jacobson, 1985; Sniderman & Tetlock, 1986a, 1986b), argue that the scales used (e.g., to measure old-fashioned and symbolic racism) are basically the same measures with only a few items left out of one scale or added into the other, in an attempt to make a distinction between the two.

Yet McConahay, Sears and colleagues still maintain that these concepts are not the same at all; they maybe related to a certain extent, but are still different. Therefore according to this line of argument, there is sufficient justification for separating them into different measurement scales. McConahay (1982) maintains that the old-fashioned racism scale, racial affect measure and modern racism scale are conceptually distinct and therefore should be

treated as separate measures. Sears and Henry (2005) concur and say that old-fashioned racism and symbolic racism measures are two distinct scales and, thus, should be treated as such. In fact, according to David O. Sears (personal communication, October 19, 2005), “it is important to distinguish between different forms of prejudice, because symbolic racism has so much stronger effects than traditional or old-fashioned prejudice”.

In the present study, on a broader level, I am mainly concerned with finding out:

- Whether or not racial prejudice is actually correlated with people’s racial policy attitudes; and
- To what extent racial prejudice shapes up people’s racial policy attitudes.

If there is a decrease in racial prejudice and the shift in attitudes is genuine, as previous studies seem to suggest, then what is the force behind racial policy attitudes in the present day? What is influencing the much talked about “principle-implementation gap”? What are its origins? These are some of the questions most researchers are faced with today and are battling to get answers to. Despite much research done in this area so far, there does not seem to be a consensus among all researchers as to what causes this gap. Therefore, with this meta-analytic study, combining several research findings from previous studies, I hope to shed light to some of these concerns.

Here are the main questions I am attempting to answer with the present meta-analysis:

- Is racism a strong predictor of racial policy attitudes?
- Does symbolic racism hold the strongest influence on racial policy attitudes, compared to old-fashioned racism, racial affect and stereotypes?

- Overall, are all four predictor variables, i.e., old-fashioned and symbolic racism, racial affect and stereotypes strong predictors of racial policy attitudes?
- Are the effects of race attitudes equally strong across different racial policy types?
- Does racism have a stronger effect on preferential treatment policies compared to compensatory programmes, desegregation policies and general race-targeted policies?

### 3. METHODOLOGY

#### 3.1 What is meta-analysis?

Several authors have advanced various definitions of 'meta-analysis'. According to Glass (1976), meta-analysis refers to the "analysis of analyses". In other words, meta-analysis is "the statistical analysis of a large collection of analysis results from individual studies for the purpose of integrating the findings" (Glass, 1976, p. 3). Glass (1976) also states that meta-analysis provides a more thorough alternative to the traditional narrative discussions or attempts to make sense of the rapidly expanding research literature. Hunter and Schmidt (1982, p. 137, as cited in Tredoux, 2002, p. 404) defined meta-analysis as "...the quantitative accumulation and analysis of descriptive statistics across studies."

Lipsey and Wilson (2001) further explain that meta-analysis can be understood as a form of research that surveys research reports rather than people. The meta-analyst develops a coding form (survey protocol), gathers a sample or population of research reports and then goes on to "interview" each study by reading it carefully and coding the appropriate information about its characteristics and quantitative findings. The resulting data are then analysed.

Finally, according to Rosenthal (1995), "Meta-analytic reviews are quantitative summaries of research domains that describe the typical strength of the effect or phenomenon, its variability, its statistical significance and the nature of the moderator variables from which one can predict the relative strength of the effect of phenomenon" (p. 183).

### **3.2 When and how to use meta-analysis**

Meta-analysis only applies to empirical research studies and it only applies to studies using quantitative measures of variables and reporting descriptive or inferential statistics to summarise resulting data. In other words, only research studies that produce quantitative findings can be used to do a meta-analysis (Lipsey & Wilson, 2001; Tredoux, 2002).

When doing a meta-analysis, Lipsey and Wilson (2001; see also Rudner, Glass, Evarrt & Emery, 2002; Tredoux, 2002) stated that one should start by clearly defining their domain of interest. When a topic is clearly defined, it makes it easier to know what is important and what is not; hence, which studies are relevant for the meta-analysis and which ones are not. It is also important to give rationale for the inclusion or exclusion of studies from the meta-analysis. The meta-analyst should include only those studies closely related to his/her topic and those that have the data, or at least have most of the data needed for analysis. If there are missing data, then one should ensure that the inclusion of such a study (or studies) will not negatively impact on the final results (Lipsey & Wilson, 2001).

### **3.3 The use of effect sizes**

Since meta-analysis represents each study's findings in the form of effect sizes, it is important to define an effect size statistic that effectively captures/represents the quantitative findings of a set of research studies in a standardised form that allows for meaningful numerical comparison and analysis across studies (Lipsey & Wilson, 2001, p. 5).

Pearson's  $r$ , among others, is considered to be an appropriate effect size statistic for meta-analysis in its raw form since it is a standardised statistic (Hunter & Schmidt, 1990; Lipsey & Wilson, 2001; Tredoux, 2002). However, according to Lipsey and Wilson (2001), when using correlation ( $r$ ) as your meta-analysis effect size, there are problems in the sense that in its standardized form, the product-moment correlation coefficient has some very undesirable statistical properties, including a problematic standard error formulation. The standard error is used to determine the inverse variance weight needed for analysis. Thus, correlations, when used as effect sizes, are usually transformed using Fisher's  $Zr$ -transformation.

Hunter and Schmidt (1990) though, argue that it is not always necessary to transform the  $r$  statistic to Fisher  $Zr$ . Even though some authors argue that the averaged  $r$  gives a somewhat less accurate average (causes a negative bias), Hunter and Schmidt (1990) reported that the transformed  $z$  correlation actually produces an upward bias (because it gives larger weights to large correlations than to small ones). This bias is especially large if there is variation in the population correlations across studies. They then concluded: "meta-analysis is never made more accurate by using the Fisher  $z$  transformation (though in practice it usually doesn't make much difference in the final outcome of the meta-analysis)" (p. 102). Hence, in the end it is simply the individual meta-analyst's prerogative to choose whichever method they prefer. For the purposes of the present study, however, it was decided to calculate/analyse both transformed Fisher  $z$  correlations and untransformed  $r$  correlations for comparison purposes.

Sampling error is smaller for effect sizes estimated from large sample sizes than those estimated from small samples. To prevent effect sizes from small samples from carrying as much weight as effect sizes from large samples, each effect size must be weighted by its



corresponding sample size when calculating the mean and variance statistics across studies (Hunter & Schmidt, 1990; Lipsey & Wilson, 2001; Tredoux, 2002).

### **3.4 Advantages of meta-analysis**

There are a number of reasons why it is more advantageous to use meta-analysis rather than the traditional review methods. Firstly, one of the main reasons why it is so rewarding to use meta-analysis, according to Lipsey and Wilson (2001), is that the research summarising process is made explicit (by explaining each step taken from the beginning to the end) and systematic – which enables the reader to assess the author's assumptions, procedures, evidence and conclusions rather than take on faith that the conclusions are valid.

Secondly, key findings are represented in a way that is more differentiated and sophisticated than conventional review procedures that rely on qualitative summaries or “vote counting” on statistical significance. In other words, because the magnitude and direction of each relevant statistical relationship in a population of studies is encoded, meta-analysis is sensitive to findings of different strengths across studies (Glass, 1976; Lipsey & Wilson, 2001; Tredoux, 2002).

Thirdly, meta-analysis allows for the detailed examination of the differences between studies and associated differences in their findings that one cannot find in qualitative narrative summaries (Lipsey & Wilson, 2001; Rudner *et al.*, 2002). Finally, meta-analysis provides an organised way of handling information from a large number of study findings under review. In other words, with sophisticated software available today, it is possible to code a large amount of information from each study without fear of getting it all mixed up and becoming

too confused (Lipsey & Wilson, 2001; Rudner *et al.*, 2002). However, Lipsey and Wilson (2001) also point out that meta-analysis does not necessarily require a large number of studies. In some cases, it is possible to meta-analyse as few as two or three study findings (see also Rosenthal, 1995).

### 3.5 Disadvantages of using meta-analysis

As with any other method of analysis, meta-analysis is not without its own flaws and critics.

Some of the reasons why it is viewed unfavourably are because (Lipsey & Wilson, 2001):

- It requires too much time and effort.
- It requires expertise – to be able to do the proper selection and computation of appropriate effect sizes and the application of statistical analysis to them.
- Some studies have subtle and complex elements that might need qualitative summaries instead of meta-analysis. However, it is possible to do both on the same body of findings and then draw an overall conclusion from both.
- The file drawer problem – that is, the problem of a possible upward bias in meta-analysis findings as a result of using only published results for analysis. However, the meta-analyst can control for this by contacting the individual researchers known to work in the same field dealing with same topic to see if they have or know of other studies, both published and unpublished, that can be added to the database (which means the meta-analyst has to provide the researchers with a complete list of the studies they already have).
- A mixture of studies is included (the issue of apples and oranges – including studies of distinctly different topics or from different research designs in the same

meta-analysis) can result in summary statistics being less meaningful.

Nevertheless, this problem could be countered in two ways:

- < By keeping methodological criteria strict and accepting consequences in regard to the limitation thus imposed on the proportion of available relevant studies that may be included – could have little generality.
- < By carefully coding methodological characteristics that may influence the study findings and treating them as moderator variables.

### **3.6 Why meta-analysis was chosen for the present study**

Meta-analysis can be a very useful tool when dealing with topics that have a lot of empirical findings; it helps integrate findings. Researchers seldom attempt to replicate previous findings; they tend to pursue new studies with new methods or try to add on to whatever is the ‘current’ state of knowledge in their field. This can result in an overwhelming number of studies on the same topic with results often contradicting each other and no particular study similar to another one. A similar case is found in the topic chosen for the current study. Therefore, instead of going out to the field to try and find more evidence to support or dispute theories being put forward by current researchers, basically addition on to the confusion, a meta-analytic study was decided upon.

### **3.7 Sample**

A population of studies reporting the correlation between racial prejudice and racial policy attitudes *quantitatively* was collected. 28 studies were used to do this meta-analysis. From the Twenty-eight studies, 216 correlation effect sizes were initially yielded for analysis

(Appendix 1 contains a complete list of the studies used in this meta-analysis). Two of the 28 studies were published in the 1970s (specifically 1976 and 1978), 7 were published in the 1980s, 10 in the 1990s, 8 from 2000 to the present and one was an unpublished study (Reyna *et al.*, 2006). 3 of the studies (i.e. Sears & Allen, 1984; Sniderman & Carmines, 1997; Sniderman & Piazza, 1993) were published in textbooks and the other 24 were Journal articles. The sample sizes in each study ranged between  $n = 44$  and  $n = 2\,705$  subjects. The total (grand) sample size consisted of  $N = 187\,191$  participants, with a mean of  $N_M = 867$  and a median of  $N_{Md} = 698$ . Almost all the studies had white respondents. Correlation values ranged from  $-0.25$  to  $+0.62$ , with a raw (or unweighted) correlation mean of  $0.2149$ . Of the 216 correlations retrieved, 13 were negative and the other 203 were positive (with high correlations representing high opposition to racial policies).

A database with all the study information was kept in a Microsoft Excel file for easy access and management of data. A file with all the ordered articles that I was still waiting for was also kept in order to be able to keep track of what was still needed and what I already had. All relevant studies were coded for the following information:

- Name of author(s).
- Name of Journal published in.
- Year of publication.
- Racial attitude type:
  - < Symbolic racism – as explained in chapter 2.
  - < Old-fashioned racism – as explained in chapter 2.
  - < Racial affect – as explained in chapter 2.
  - < Stereotypes – as explained in chapter 2.

- Racial attitude – explanations, or the scale used to measure the racial attitude, for example:
  - < For symbolic racism, some authors used, e.g.,
    - The Symbolic Racism 2000 Scale which includes items such as: “It’s really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites”; “Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same”; and “Some say that black leaders have been trying to push too fast. Others feel that they haven’t pushed fast enough. What do you think?” (see Sears & Henry, 2005).
    - McConahay’s 1982 symbolic racism scale using items such as “Over the past few years the government and news media have shown more respect to blacks than they deserve”; “Over the past few years blacks have gotten more economically than they deserve”; and “Blacks are getting too demanding in their push for equal rights” (McConahay, 1982; Kinder, 1986).
    - Kinder and Sears’ 1971 symbolic racism scale containing items such as: “Could most Negroes who receive welfare get along without it, or do they really need help?”; “Negroes have gained more than entitled to recently”; and “Negroes shouldn’t push themselves where they’re not wanted” (Kinder, 1986).
  - < For old fashioned racism, scales used included items such as:
    - “On average, African-Americans/blacks, have worse jobs, income, and housing than whites because most African-Americans/blacks are

not as capable as whites”; “We would have fewer social problems if people of the same ethnic background lived and worked with people like themselves”; and “The black community would be better off if it formed its own social and political institutions such as schools, banks, and police force” (Reyna *et al.*, 2006).

- White people seem to get more of the good things in life because: “The differences are brought on by God; God made races different as part of his divine plan”; “Blacks come from a less able race and this explains why blacks are not as well off as whites in America” (Sidanius, Devereux & Pratto, 1991; Tarman & Sears, 2005).
- < For racial affect, the standard feeling thermometer was the most popular measurement used. Participants were asked to rate their feelings (toward blacks) on a scale ranging from 0 to 100, with high scores indicating more positive affect (e.g., Bobo, 1998; Reyna *et al.*, 2006; Sidanius, Devereux & Pratto, 1991). Only Durrheim (2003) used a different scale, which had two items asking white participants the following questions: “Have you ever felt sympathy for black/Indian/white people living here?”; and “Have you ever felt admiration for black/Indian/white people living here?”
- < For the stereotypes scale, expressions or stereotypical beliefs such as “blacks are lazy”, “blacks are more violent than whites”, “blacks are less intelligent than whites”, “blacks are hard to get along with” or “blacks are born with less in-born ability to learn”, were coded for analysis (see Sniderman & Carmines, 1997 and Sniderman & Piazza, 1993, for example).
- Racial policy – actual policies implemented by the government so as to eradicate racial discrimination and promote racial equality and equality of opportunity



(e.g., affirmative action, busing, fair housing laws, Reconstruction and Development Programmes, the Discrimination Act and the Employment Equity Act).

- Racial policy type, that is, the different categories in which racial policies fall:
  - < Preferential treatment policies – e.g., employment quotas (especially preferential hiring and promotion of blacks), college admission quotas, national sports team quotas and giving preferential contracts and tax breaks to black businesses.
  - < Compensatory programmes – e.g., policies that involve spending more money on schools in largely black neighbourhoods, awarding college scholarships to “deserving” black students and giving a job offer to a black individual instead of an equally qualified white individual.
  - < Desegregation policies – such as busing and fair housing laws – promoting racial integration.
  - < General legal policies – policies that are not clearly defined, for example, when the researcher simply asked participants how they feel toward affirmative action in general (e.g., Konrad & Spitz, 2003; Sears & Henry, 2003; Sidanius, Pratto & Bobo, 1996) or when participants are simply asked their opinion about policies promoting equality (which might include a whole range of programmes, for example, from as fair job treatment, to school integration) (e.g., Sears *et al.*, 1997).
- Number of items (for both racial attitude and racial policy measures).
- $r$  statistic.
- Sample size.



- Race of participants or some kind of description of the individual sample(s) used in each study.
- Where the study was done.

All the coded information was considered important when looking for moderator variables later at the analysis stage, which could explain variation. It is also important for the description of the study set retrieved.

### **3.8 Data collection**

There are a number of ways that can be used to locate research studies for a meta-analysis. According to Hunter and Schmidt (1990), one can do this by “examining indices to documents, searching existing bibliographies, and querying other scholars who might be familiar with appropriate studies” (p. 490). For the present research study purposes, the methods discussed below were used for data collection.

#### ***3.8.1 Literature search***

##### ***3.8.1.1 Sources***

Before starting searching for studies, a set of important keywords to be used to do the literature search was determined. Such keywords included the following phrases: racial policy opinion/attitudes, preferential treatment policies, race-targeted policies, compensatory racial policies, race attitudes, symbolic racism, old-fashioned racism, racial affect, racial

stereotypes, school or residential integration/segregation/desegregation, busing attitudes, affirmative action policies/programmes and affirmative action attitudes.

Several sources were used for literature search. Firstly, electronic databases were used. These include Ebscohost, PsychInfo (computerised bibliographic database), Social Sciences Citation Index (SSCI – CD-ROM), TELNET OPAC – the University library electronic catalogue and Google.

With Ebscohost and Google, sometimes it is possible to get a whole article, whereas at times it just gives you an abstract. Where there were whole articles (e.g. Durrheim, 2003; Federico & Sidanius, 2002; Kluegel & Smith, 1983), the meta-analyst skim read them first and looked at the reported statistics to determine whether or not they were potentially relevant to the study. With abstracts, they were read through to see if they were potentially relevant to the study. If so, they were ordered through the inter-library loan services offered at the University of KwaZulu-Natal (Pietermaritzburg) Library, that is, if the article was not in the library itself. Inter-library loan allows for search of the articles nationwide as well as the British Library.

PsychInfo only gives psychological abstracts. Therefore the abovementioned procedure for abstracts had to be followed. The Social Sciences Citation Index – also accessed from the University computer LAN (local area network) and libraries is most useful for finding the most recent material on a topic and identifying work in other disciplines (if there is a cross-citation) that may otherwise be missed. However, SSCI, just like PsychInfo, only gives abstracts; therefore, the meta-analyst had to follow the same procedure explained above

(under Ebscohost and Google). Using TELNET OPAC, I only managed to find a few articles that could be used for analysis.

Secondly, review articles (e.g. Krysan, 2000; Sniderman & Tetlock, 1986a, 1986b; Stoker, 1996) were important sources since they mentioned studies related to the topic that could be looked into. Thirdly, some of the relevant studies used for analysis also mentioned related studies that dealt with the same topic, hence making the literature search task somewhat easier.

Lastly, in order to counter the file drawer problem, several authors who have published papers in the same field were contacted by e-mail (refer to Appendix 2 for a full list of authors e-mailed and the letter send to them). E-mail addresses were sourced off the Internet and authors were provided with a full list of references of the 24 articles already on the database and asked if they knew of any other papers, both published and unpublished, that were not mentioned on the list. There was a 40% response rate from the 35 contacted authors, with some authors sending references of potentially relevant studies, other giving references to already discarded studies (those decided to be irrelevant for one reason or another) and other authors such as P. J. Henry, David Kravitz and David Sears sending full articles of published and unpublished (or still to be published) studies. Some authors (e.g. Michael Giles and Thomas Piazza, Colette van Laar) also reported that they did not have any or did not know of any other papers, published or unpublished, that could be relevant.

### 3.8.1.2. Criteria for inclusion and exclusion

Over 70 studies were located, but only 28 were selected for analysis. The 28 studies were included in the analysis mainly for the following reasons:

- The studies investigated a relationship between some measure of racial prejudice and racial policies, specifically dealing with the relationship between racial prejudice and racial policy attitudes.
- Studies that used quantitative methods of analysis, preferably with Pearson's  $r$  statistic reported or any other statistic that could be transformed to  $r$ .

Those studies that were excluded, they were excluded mainly on the following grounds:

- The way they were reported, analysed, content – without a direct link between racial prejudice and racial policy attitudes (e.g. some studies were concerned with the differences in attitudes towards racial policy opinion between men and women; personal experience with discrimination (not necessarily racial) and attitudes towards racial policies; attitudes towards racial policies in the workplace, but not directly concerned with the role played by racial prejudice in shaping those attitudes; political conservatism, individualism, self-interest, etc, on racial policies (non-racial explanations for opposition or support for racial policies)).
- Sometimes irrelevant:
  - < Not enough information available to allow for transformation to the  $r$  statistic, in cases where results were reported using a different statistic.
  - < Because they did not have any statistical information reported (especially review articles).

However, some of those studies that were not suitable for the database were actually very important for literature review (e.g. Bobo and Hutchings, 1996; Krysan, 2000; Sniderman and Tetlock, 1986a, 1986b; Stoker, 1996).

### **3.9 Ethical Issues**

In view of the fact that all the 28 studies used in the meta-analysis, published or not, were referenced (See Appendix 1 and also refer to the reference list for full references), no other major ethical issues were left to consider.

### **3.10 Data Analysis**

According to the Hunter-Schmidt (1990) model, there are seven steps to follow when conducting a meta-analysis. The first step is to collect the population of studies, which was done for the present study. Variables of interest mentioned in section 3.7 above were noted, and data for each was collected/coded from all the studies (i.e. the second step). The third step is to transform all statistics across studies to a common statistics, in this case, Pearson's  $r$ . However, since the studies collected for the present study were already reported as  $r$  statistics, which is usually the case with correlation studies, there was no need to do any transformations.

The fourth step is the calculation of the mean value and the variance of the statistic across studies. When calculating the mean and variance, each component statistic was weighted by sample size so as to give more weight to studies with bigger sample sizes, since statistic

estimates are more reliable when based on larger samples. In the present study, effect sizes were accordingly weighted with their corresponding sample sizes as suggested. The fifth step is correction for sampling error, which was done using equation number 6 under subsection 3.10.1.1. The sixth step is correction for measurement error and restriction of range, which was omitted in this case mainly because of lack of enough information from studies to allow for calculation of these statistics (see below for further discussion concerning these two artefacts).

Finally, according to Hunter and Schmidt (1990), if the corrected variance of the common statistic is significant, then we conclude that real differences exist between studies. At this point, the last step is implemented, which is the use of moderator variables to find potential sources of variation. In this study, after calculating the overall relevant statistics, effect sizes were further partitioned according to the racial attitude measures used (symbolic and old-fashioned racism, racial affect and stereotypes) and relevant statistics were calculated. The meta-analyst then decided to analyse the effect of the different racial policy types involved (i.e. preferential, compensatory desegregation and general policies). Finally, in order to make further comparisons a technique almost similar to a 4 (four levels of racial policies) x 4 (four levels of racial attitudes) analysis of variance was adopted and an analysis was made accordingly.

Not all researchers agree with Hunter and Schmidt, however, concerning the calculation of measurement error and range restriction. Moreover, there are problems associated with the correction of both artefacts. The problem with the calculation of measurement error mainly stems from the issue of data availability. Not all researchers report information on scale reliability (which is what the meta-analyst will need to calculate measurement error) or

unrestricted standard deviation (necessary for range restriction correction). According to Tredoux (2002), even when you do have the right information, the correction for measurement error can become quite complex. In the case of range restriction, there is rarely any data available to allow for this correction. Furthermore, range restriction is not a typical problem for social science research. Tredoux also pointed out that many authors dispute the validity of measurement and restriction of range corrections.

Whereas Hunter and Schmidt (1990) argue that there is no need to transform the raw correlation to Fisher  $z$  before doing the final analysis since the mean statistics (when using the Fisher  $z$  transformed correlation) tends to be biased upwards; Lipsey and Wilson (2001) disagree and say that the correlation effect size in its raw form is too restrictive or conservative and tends to yield mean effect sizes that are lower than they should be (and wider confidence intervals (Field, 2001)). Lipsey and Wilson also argue that the calculation of the standard error needed to calculate the inverse variance is problematic when using  $r$ ; hence the transformation to Fisher  $z$  correlation is essential. According to Lipsey and Wilson (2001; [http://mason.gmu.edu/~dwilsonb/downloads/analysis\\_overheads.ppt](http://mason.gmu.edu/~dwilsonb/downloads/analysis_overheads.ppt)) the standard error is a direct indicator of the precision of an effect size, i.e., the smaller the standard error, the more precise the effect size. Additionally, they claim that although weighting each effect size by the corresponding sample size (Hunter-Schmidt's approach) so as to give more weight to bigger effect sizes is important, it is the simple approach. Apparently the better approach involves the use of the inverse variance for weighting effect sizes ([http://mason.gmu.edu/~dwilsonb/downloads/analysis\\_overheads.ppt](http://mason.gmu.edu/~dwilsonb/downloads/analysis_overheads.ppt)). For the present meta-analysis, in order to make a compromise between the two, a decision was made to analyse both the untransformed correlation ( $r$ ) and the transformed Fisher  $z$  correlation ( $Zr$ ). That way, comparisons could be made and help add more validation to the meta-analytic study



itself and, importantly, to also test the validity of Hunter-Schmidt and Lipsey-Wilson arguments stated above.

The transformation from  $r$  to Fisher  $z$  was made using Microsoft Excel's build-in function. Lipsey and Wilson (2001) provided information on the relevant steps followed when doing data analysis using the transformed Fisher  $z$  correlation (see also [http://mason.gmu.edu/~dwilsonb/downloads/analysis\\_overheads.ppt](http://mason.gmu.edu/~dwilsonb/downloads/analysis_overheads.ppt)). Similar to the Hunter-Schmidt approach, a mean weighted effect size had to be calculated. Only here the procedure differs slightly since standard error was calculated first, then using the standard error the inverse variance was calculated, which was later used to calculate the weighted mean effect size and subsequent relevant statistics. After calculating the appropriate statistics, the results were transformed back to  $r$  for interpretation, as recommended. Data were partitioned using the same method used for the Hunter-Schmidt model (i.e. racial attitudes; racial policy type; and the racial attitude by racial policy type interaction).

Another important point of note is the argument surrounding the use of more than one statistic or effect size from the same study, i.e., non-independent samples. Those who argue against it say that this method violates the assumption of independence especially in two ways: in some cases the same subjects are counted repeatedly (thus, inflating  $N$ ) and in other cases each separate effect size loses its independence when more than one effect size comes from the same study. Thus, authors such as Hedges and Holkin (1985, as cited in Hedges, 1986) have suggested that meta-analysts should either choose, randomly, one estimate or take the median of reported effect sizes to represent a particular study. However, Lipsey and Wilson (2001,) point out that there is another alternative. Instead of just taking one effect size per study, it is also possible to take one effect size per subsample within a study. Cooper and

Lindsay (1997) also say that meta-analysts can decide to deal with the non-independence problem in a number of ways. A researcher may decide to treat each effect size independently, regardless of the number of effect sizes sourced from the same study – this approach assumes that the effect of the violation of independence is not too great. Another approach involves the use of the particular study in question as a unit of analysis – here a mean or median result is calculated and taken to represent that particular study. A third approach allows each study to “contribute as many effects as there are categories in the given analysis, but effects within the categories are averaged” (Cooper & Lindsay, 1997, p. 331).

For the purposes of the present study, in most cases, more than one effect size was sourced from the same study; hence the 216 correlation effect sizes yielded from only 28 studies. The reason for this was because although the same sample may have been tested on a single construct (e.g., race attitudes), more than one measure of the construct was used (i.e., symbolic racism, old-fashioned racism, racial affect and stereotypes). To illustrate this point, take for example, a study (e.g., Durrheim, 2003) that tested respondents on symbolic racism, old-fashioned racism and racial affect; it would be impractical to average the results from such an analysis during the data collection phase since it distorts important information (on the different levels of race attitudes) that is needed for analytic purposes later, and therefore, basically defeating the purpose of the present meta-analytic study.

Nevertheless, before doing the overall analysis, all effect sizes sourced from the same sample within a study were averaged so as to avoid the sample size inflation. Therefore, the number of effect sizes used to calculate the weighted mean across all studies was reduced to 75, with a total sample size of  $N = 49\ 677$  and an unweighted correlation mean of 0.2232. The number of correlations (75) remains higher than the number of studies (28) merely because some

studies, e.g., Sears and Henry (2003), Bobo (1983), Sears, van Laar, Carrillo and Kosterman (1997) Sniderman and Carmines (1997) and Sears and Allen (1984) used more than one sample in their studies. Therefore, after taking one effect size from each sample involved, sometimes that resulted in say three effect sizes being collected from a single study even after averaging.

When calculating the mean across the different race attitudes, racial policies, and interactions between these two variables, effect sizes were also averaged accordingly so as to avoid the non-independence of samples.

Prior to the actual final analysis, a diagnostic analysis was conducted. This preliminary exploration of data allowed the meta-analyst to look for outliers and correct data entry errors. In cases where there were outliers, the effect sizes were double-checked against the original study to make sure there were no mistakes made during data entry. A general descriptive analysis of the data was also carried out in order to gain an initial impression of the data (refer to Appendix 3). Scatters plot and histograms were generated for the data (see Appendix 3) using the raw correlations obtained from studies. Stem-and-leaf plots were also generated (see Appendix 3).

### ***3.10.1 Statistics calculated and some of the formulas used***

Due to lack of appropriate statistical packages (or at least none that the meta-analyst could find access to), all calculations were done using Microsoft Excel spreadsheets. Since data were already saved in Excel during the data collection phase, it made the task fairly easier since no transfers were required. Formulae were added in where appropriate and double-

checks were made to ensure accuracy. However, some of the graphs (see graphs in Appendix 3) were prepared using the Statistical Package for the Social Sciences (SPSS) programme. The statistics calculated and some of the formulas used for calculation are outlined below.

### 3.10.1.1 Hunter-Schmidt Model

1. The sample weighted mean correlation formula:

$$\bar{r} = \frac{\sum [N_i r_i]}{\sum N_i}$$

Where  $N_i$  is the number of subjects in the study, and  $r_i$  is the effect size for the individual study. The sample weighted mean correlation is defined by the following variance formula:

2. Observed variance:

$$s_r^2 = \frac{\sum [N_i (r_i - \bar{r})^2]}{\sum N_i}$$

3. Standard Deviation ( $s_r$ ) = Square root of  $s_r^2$

4. Total Sample Size (N) =  $\sum n_i$

5. Average N =  $N / K$

Where  $K$  is the number of studies in the analysis.

6. Estimated Sampling Error Variance ( $s_{er}^2$ ) =  $(1 - \bar{r}^2)^2 / (\text{Ave } N - 1)$

7. Estimated Population Variance ( $\sigma_p^2$ ) =  $s_r^2 - s_{er}^2 = s_r^2 - (1 - \bar{r}^2)^2 / (\text{Ave } N - 1)$
8. Estimated Population Standard Deviation ( $\sigma_p$ ) = Square root of  $\sigma_p^2$
9. 95% Confidence intervals (see Hunter & Schmidt, 1990).
10. A Chi-square test was used to test for systematic variation (which is useful in determining whether or not there is a moderator variable present).

$$\chi_{K-1}^2 = \frac{N}{(1 - \bar{r}^2)^2} S_r^2$$

Where **K** is the number of studies in the analysis. If the Chi-Square is not statistically significant, then no moderator variable is present. Statistically this is a very powerful test, and given a large enough *N*, it will reject the null hypothesis even if there is only trivial variation among studies. Alternatively Hunter and Schmidt (1990) give a rule of thumb, in which  $s_r^2$  and  $s_{er}^2$  are compared. If the error variance accounts for less than 75% of the uncorrected variance, then a moderator variable may be present.

### 3.10.1.2 Fisher z transformation

1. Transformation from *r* to Fisher z:

$$ES_{z_r} = .5 \ln \left[ \frac{1+r}{1-r} \right]$$

2. Standard Error:

$$SE_{z_r} = \frac{1}{\sqrt{n-3}}$$

### 3. Inverse Variance Weight:

$$w_{zr} = \frac{1}{SE_{zr}^2} = n - 3$$

### 4. Mean effect size:

$$\overline{ES} = \frac{\sum (w \times ES)}{\sum w}$$

### 5. Other statistics calculated include:

- Standard error of the mean.
- 95% Confidence intervals.
- Z test for the mean effect size.
- Homogeneity Q ( $Q_{calc}$ ), degrees of freedom (df) and the corresponding critical value ( $Q_{crit}$ ).

(Refer to [http://mason.gmu.edu/~dwilsonb/downloads/analysis\\_overheads.ppt](http://mason.gmu.edu/~dwilsonb/downloads/analysis_overheads.ppt) and Lipsey & Wilson (2001) for the actual formulas).

Finally, all statistics were then appropriately transformed back, from Fisher z to  $r$  (referred to in the next chapter as  $Zr$ ) using this formula:

$$r = \frac{e^{2ES_{zr}} - 1}{e^{2ES_{zr}} + 1}$$

## 4. RESULTS

I started off by analysing overall effect size statistics (for both  $r$  and Fisher  $Zr$ ) so as to gain an overall understanding of the data. Next, data were partitioned in accordance with the racial attitude scale used (i.e., racial affect, stereotypes, symbolic and old-fashioned racism) and analysed. After that, all data were grouped in terms of the racial policy type (i.e., preferential, compensatory, desegregation and legal (general) policies) and analysed. Finally, data were partitioned in a 4 (four levels of racial policy types) x 4 (four levels of racial attitude scales) manner, similar to analysis of variance (ANOVA), so as to make cross-comparisons.

### 4.1 Overall analysis

The first step was to make an overall analysis of all the data collected ( $K = 75$ ,  $N = 49\,677$ , i.e., after averaging multiple effect sizes from a single study) in order to gain a better understanding of the dataset and be able to make comparisons. Results were presented for both the untransformed  $r$  correlations and transformed Fisher  $Zr$  (with higher correlations indicating higher opposition to race-targeted policies).

Table 1 shows the results yielded after calculating statistics across all studies using the formulas recommended by Hunter and Schmidt (1990).

So as to give more weight to studies with bigger sample sizes, as recommended by Hunter and Schmidt (1990), individual correlations were weighted by their corresponding sample sizes. As indicated in Table 1, the weighted mean correlation was  $\bar{r} = 0.2263$  (versus the unweighted mean  $\bar{r} = 0.2232$ ) with a standard deviation of 0.1167 (versus the uncorrected



standard deviation of 0.1323). The variation from the overall correlations is not trivial in amount relative to the mean, and this suggests a need for a search for moderator variables.

**Table 1: Overall statistics – Untransformed  $r$**

Statistic		Untransformed $r$
Mean $r$		0.2263
Observed Variance		0.0136
Stand. Dev.		0.1167
Estimated Samp. Err. Var.		0.0014
Total N		49 677
K (number of statistics)		75
Ave N		662
Est. Pop. Var.		0.0123
Estimated Pop. Stand. Dev.		0.1107
95% Confidence Interval	Lower	0.1996
	Upper	0.2530
$\chi^2_{calc}$		712.0737
<sup>a</sup> $\chi^2_{crit}$		95.08
df		74
p (for $\chi^2$ )		0.00001

<sup>a</sup>alpha = 0.05

Although there is considerable controversy concerning the issue of assigning qualitative descriptions to effect sizes (e.g., a small change in attitudes and/or behaviour maybe of crucial importance in one context, but quite trivial in another), it is still useful to have some guide to interpretation. The rule of thumb suggested by Cohen (1988, as cited in Cooper and Lindsay, 1997) says that an  $r$  value of .1 should be considered as small, an  $r$  value of .3 is medium and  $r$  of .5 is large. Therefore, using Cohen's suggestions, the overall mean correlation of  $\bar{r} = 0.2263$  in this meta-analysis shows that there is a small to medium relationship between racial prejudice on racial policy attitudes.

The 95% confidence interval also shows that the mean obtained is statistically significant:

$$(\alpha = 0.05) = \bar{r} \pm 1.96 * s_r^2 = 0.2263 \pm 1.96 * 0.0136$$

$$= 0.1996 \text{ and } 0.2530$$

If the variation in the effect size were normally distributed, then 95% of the settings would have effect sizes in the range 0.1996 to 0.2530, with a width of 0.0534. Additionally, since 0 does not fall in between the lower and upper confidence intervals, we can therefore conclude there is a statistically significant relationship between racial prejudice and racial policy attitudes.

Next, an analysis was done using the Fisher  $Zr$  transformation (which shall be referred to as the fixed effects model henceforth) so as to make a comparison between the two methods of analysis. Table 2 below represents the results yielded from this analysis.

**Table 2: Overall analysis – Transformed Fisher  $Zr$**

Statistic		Fisher $z$	$Zr^a$
Mean		0.2345	0.2303
Stand. Err. Of mean		0.0045	0.0045
Z test for mean ES		52.1383	-
95% Confid. Interval	Upper	0.2433	0.2386
	Lower	0.2256	0.2219
$Q_{calc}$		833.9670	-
$Q_{crit}$		95.08	-
p (for Q)		0.00001	-

Note: alpha (for Q and confidence intervals) = 0.05; K, N, Average N and degrees of freedom remain the same as for the Hunter-Schmidt model.

<sup>a</sup>Results were transformed back to correlation  $r$  after analysis.

Results from the fixed effects model show a slightly higher mean correlation  $Zr = 0.2345$  (after back transformation) compared to the obtained mean of 0.2263 using the Hunter-Schmidt model. The Hunter-Schmidt method is often criticised by some authors for being

overly conservative, therefore yielding lower mean correlations than would be expected; and the reverse is true for Fisher  $Zr$  transformation. The 95% confidence interval, 0.2256 to 0.2433, shows that there is a statistically significant relationship between racial prejudice and opinions towards race-targeted policies since it does not include zero. The z test for the mean effect size supports this result,  $z = 52.1383$  far exceeds 1.96, and, thus, significant at alpha level 0.05.

The chi-square test was also statistically significant for both methods indicating that there maybe moderator variables present (third factors that influence the relationship of interest), requiring further investigation. Thus, the set of studies were broken into subsets using possible moderator variables and meta-analysis was then performed on each subset of studies. Large differences between subsets were taken as an indication that the variable was indeed a moderator variable.

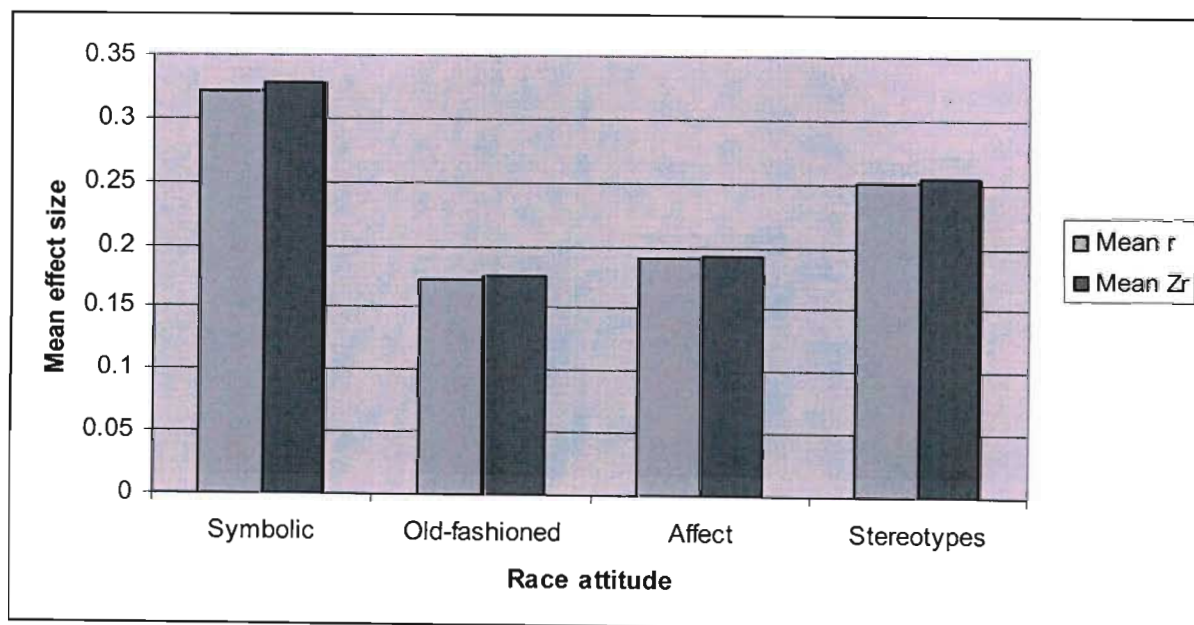
## **4.2 Racial attitudes**

Since I was interested in finding out whether or not and to what extent racial attitudes play a role in influencing racial policy attitudes, racial attitude scales were then identified as a possible source of variation that needed to be investigated further. All the effect size statistics that were initially collected ( $K = 216$ ,  $N = 187\ 191$ , i.e., before averaging) were partitioned into four different subsets (for both the transformed and untransformed effect sizes), in accordance with the corresponding racial prejudice measure; effect sizes from the same sample in a study were then averaged so as to avoid sample size inflation. The results indicated that the racial attitude scales used were indeed a valid moderator variable (see Tables 3 and 4). There is also a substantial difference in weighted means, showing a

difference between the subsets analysed. Refer to subsections 4.2.1 – 4.2.4 below for a more detailed discussion of the results.

**Table 3: Measures of race prejudice – Untransformed  $r$**

Statistic		Symbolic	Old-Fashioned	Racial Affect	Stereotypes
Mean $r$		<b>0.3218</b>	<b>0.1722</b>	<b>0.1914</b>	<b>0.2515</b>
Observed Variance		0.0153	0.0159	0.0145	0.0078
Stand. Dev.		0.1238	0.1259	0.1203	0.0883
Est. Samp. Err. Var.		0.0011	0.0013	0.0014	0.0012
Total N		29 511	32 231	10 168	8 505
K		39	44	15	12
Ave N		757	733	678	709
Est. Pop. Var.		0.0143	0.0146	0.0131	0.0066
Est. Pop. Stand. Dev.		0.1194	0.1207	0.1145	0.0810
95% Confidence Interval	Lower	0.2918	0.1410	0.1630	0.2362
	Upper	0.3518	0.2034	0.2199	0.2668
$\chi^2_{calc}$		503.6767	528.1336	153.0426	70.8184
$\chi^2_{crit}$		53.3835	59.30	23.6848	19.6752
df		38	43	14	11
p		0.00001	0.00001	0.00001	0.00001



**Figure 1: Race prejudice measures: weighted means**



Table 4: Measures of race prejudice – Transformed Fisher Zr

Attitude Measure	Statistic	Fisher z	Zr
Symbolic	Mean	0.3408	<b>0.3282</b>
	Stand. Err. Of mean	0.0058	0.0058
	Z test for mean ES	58.4343	-
	Upper 95% Con. Int.	0.3523	0.3384
	Lower 95% Con. Int.	0.3294	0.3180
	Q <sub>calc</sub>	611.9223	-
	Q <sub>crit</sub>	53.3835	-
	p	0.00001	-
Old-fashioned	Mean	0.1772	<b>0.1753</b>
	Stand. Err. Of mean	0.0056	0.0056
	Z test for mean ES	31.7397	-
	Upper 95% Con. Int.	0.1881	0.1859
	Lower 95% Con. Int.	0.1662	0.1647
	Q <sub>calc</sub>	611.6874	-
	Q <sub>crit</sub>	59.30	-
	p	0.00001	-
Racial Affect	Mean	0.1957	<b>0.1932</b>
	Stand. Err. Of mean	0.0099	0.0099
	Z test for mean ES	19.6851	-
	Upper 95% Con. Int.	0.2151	0.2119
	Lower 95% Con. Int.	0.1762	0.1744
	Q <sub>calc</sub>	152.9613	-
	Q <sub>crit</sub>	23.6848	-
	p	0.00001	-
Stereotypes	Mean	0.2602	<b>0.2545</b>
	Stand. Err. Of mean	0.0109	0.0109
	Z test for mean ES	23.9427	-
	Upper 95% Con. Int.	0.2815	0.2743
	Lower 95% Con. Int.	0.2389	0.2344
	Q <sub>calc</sub>	88.9246	-
	Q <sub>crit</sub>	19.6752	-
	p	0.00001	-

Note: the number of effect sizes, sample sizes and degrees of freedom remain the same as for the Hunter-Schmidt model.

### 4.2.1 Symbolic racism

K = 39 correlations (N = 29 511) were obtained for the symbolic racism measure and meta-analysed. As illustrated in Table 3 above the weighted mean correlation is highest when using the symbolic racism scale, compared to the other three racial attitude scales. The weighted mean correlation for the symbolic racism measure was  $\bar{r} = 0.3218$ , with a corrected population variance of  $\sigma_p^2 = 0.0143$  and a standard deviation of  $\sigma_p = 0.1194$  (see Table 3). The confidence intervals obtained, 0.2918 to 0.3518, show that the mean correlation was statistically significant at the 95% confidence level. The chi-square test results also came out significant ( $\chi^2 = 503.6767$ ,  $df = 38$ ,  $p = 0.00001$ ), suggesting that the variation in correlations from studies, using the symbolic racism scale, cannot all be attributed to sampling error; therefore further investigation is needed (to look for more moderators). See section 4.4.1 below for a further exploration of moderator variables.

Results from the fixed effects model, corroborate the trend observed in the overall analysis results, in the sense that statistics are still slightly higher when analysed using this method. Weighted means for the different racial attitude scales also correspond with what was found from the Hunter-Schmidt model, with the symbolic racism scale yielding the highest mean ( $Zr = 0.3282$ ), followed by the stereotypes scale ( $Zr = 0.2545$ ), then the racial affect scale mean ( $Zr = 0.1932$ ) and finally the old-fashioned racism scale mean ( $Zr = 0.1753$ ).

The confidence intervals, 0.3294 to 0.3523, indicate that there is a statistically significant relationship between symbolic racism and racial policy attitudes. The homogeneity test was also statistically significant ( $Q = 611.9223$ ,  $df = 38$ ,  $p = 0.00001$ ) revealing the possible presence of moderator variables within the symbolic racism scale (See section 4.4.1 below).

### 4.2.2 *Old-fashioned racism*

44 correlations ( $N = 32\,231$ ) were obtained from studies using the old-fashioned racism scale and were meta-analysed. Referring back to Table 3 above, the old-fashioned racism scale's weighted mean correlation  $\bar{r} = 0.1722$  ( $\sigma_p^2 = 0.0146$ ,  $\sigma_p = 0.1207$ ) is the lowest mean when compared to all the other racial attitude scales. The 95% confidence interval, 0.1410 to 0.2034, shows that the mean effect size obtained was statistically significant, since the interval does not include zero. Even though the variation may look a bit small within the old-fashioned racism subset, it was decided that it might be worth looking further into so as to see if there were any moderator variables present (see section 4.4.2 below). The chi-square test also confirmed this opinion since the results were statistically significant ( $\chi^2 = 528.1336$ ,  $df = 43$ ,  $p = 0.00001$ ), suggesting a possible presence of moderators.

Using the fixed effects model, the weighted mean  $Zr = 0.1753$  was lowest when using the old-fashioned racism scale. Since the confidence interval, 0.1647 to 0.1859, does not include zero, we reject the null hypothesis and conclude that a statistically significant correlation exists between old-fashioned racism and racial policy opinions. The statistically significant homogeneity test ( $Q = 611.6874$ ,  $df = 43$ ,  $p = 0.00001$ ) revealed a possible presence of moderators within the old-fashioned racism scale.

### 4.2.3 *Racial affect*

For the racial affect scale, 15 correlations ( $N = 10\,168$ ) were yielded for meta-analysis. The racial affect scale's weighted mean correlation of  $\bar{r} = 0.1914$ , with a corrected population variance of  $\sigma_p^2 = 0.0131$  and a standard deviation of  $\sigma_p = 0.1145$ , is the third highest when



comparing it to all the other racial prejudice measures (see Table 3). Since the confidence interval, 0.1630 to 0.2199, does not include 0, we therefore reject the null hypothesis and conclude that there is a statistically significant relationship between racial affect and racial policy attitudes. The chi-square test was also statistically significant ( $\chi^2 = 153.0426$ ,  $df = 14$ ,  $p = 0.00001$ ), suggesting a possible presence of moderators. Notably, almost all studies (except for Durrheim, 2003) that used the racial affect scale obtained the correlations using the 'Feeling Thermometer' that most researchers seem to favour when looking at this particular racism construct.

The fixed effects model yielded an effect size slightly higher, weighted mean  $Zr = 0.1932$ , which was the third highest (same as the mean from the Hunter-Schmidt model) on the racial attitude scale variable. The confidence interval, 0.1744 to 0.2119, did not include zero, indicating that there is a statistically significant relationship between racial affect and racial policy attitudes. The homogeneity test was also statistically significant ( $Q = 152.9613$ ,  $df = 34$ ,  $p = 0.00001$ ) signifying the possible presence of moderators within the old-fashioned racism scale (See section 4.4.3 below).

#### **4.2.4 Stereotypes**

From the relevant studies, 12 stereotype scale correlations were yielded for analyses, based on  $N = 8\ 505$  participants. The Hunter-Schmidt model stereotypes scale's weighted mean correlation of  $\bar{r} = 0.2515$ , was the second highest as compared to all the other racial attitudes scales (see Table 2). The corresponding corrected population variance was  $\sigma_p^2 = 0.0066$ , with corrected standard deviation of  $\sigma_p = 0.0810$ . The confidence interval, 0.2362 to 0.2668, does not include zero, therefore we reject the null hypothesis and conclude that there is a

statistically significant correlation between stereotypes and racial policy attitudes at the 95% confidence level. The chi-square test ( $\chi^2 = 70.8184$ ,  $df = 11$ ),  $p = 0.00001$ ) was also statistically significant showing that a moderator variable may be present.

Analogous to the Hunter-Schmidt model, the fixed effects model stereotypes scale's weighted mean of  $Zr = 0.2545$  was second highest on the racial attitude scales. The confidence interval, 0.2344 to 0.2743, does not include zero, therefore we reject the null hypothesis and conclude that the obtained weighted mean correlation is statistically significant. The homogeneity test was statistically significant ( $Q = 88.9246$ ,  $df = 11$ ,  $p = 0.00001$ ); thus, variation across effect sizes exceeds what would be expected based on sampling error. In other words, there maybe moderator variables present that can explain the additional variance. Refer to section 4.4.4 below.

### **4.3 Racial policy type**

Since previous research seems to suggest that people react differently to different racial policies depending on how they perceive them, further investigation into the effect of policy type as a moderator variable was deemed appropriate. All the original 216 correlation effect sizes were divided into four different subsets, according to their corresponding racial policy type (preferential, compensatory, desegregation and general legal policies) and then appropriately averaged to avoid sample size inflation. 24 correlations ( $N = 17\ 630$ ) were analysed for preferential treatment, 11 ( $N = 6\ 356$ ) for compensatory programmes, 29 ( $N = 23\ 981$ ) for desegregation and 29 ( $N = 18\ 990$ ) for general policies. Results are discussed in detail in subsections 4.3.1 – 4.3.4 below.

Table 5: Policy type – Untransformed  $r$ 

Statistic		Preferential	Compensatory	Desegregation	Legal
Mean $r$		<b>0.2132</b>	<b>0.2091</b>	<b>0.2204</b>	<b>0.2395</b>
Observed Variance		0.0153	0.0110	0.0045	0.0218
Stand. Dev.		0.1235	0.1049	0.0670	0.1475
Est. Samp. Err. Var.		0.0012	0.0016	0.0012	0.0014
Total N		17 630	6 356	23 981	18 990
K		24	11	29	29
Ave N		735	578	762	655
Est. Pop. Var.		0.0140	0.0094	0.0033	0.0204
Est. Pop. Stand. Dev.		0.1184	0.0971	0.0575	0.1429
95% Con. Interval	Lower	0.1832	0.1875	0.2116	0.1968
	Upper	0.2432	0.2307	0.2292	0.2820
$\chi^2_{calc}$		282.5836	73.1127	113.4242	439.1731
$\chi^2_{crit}$		35.1725	18.3070	41.3372	41.3372
df		23	10	28	28
p		0.00001	0.00001	0.00001	0.00001

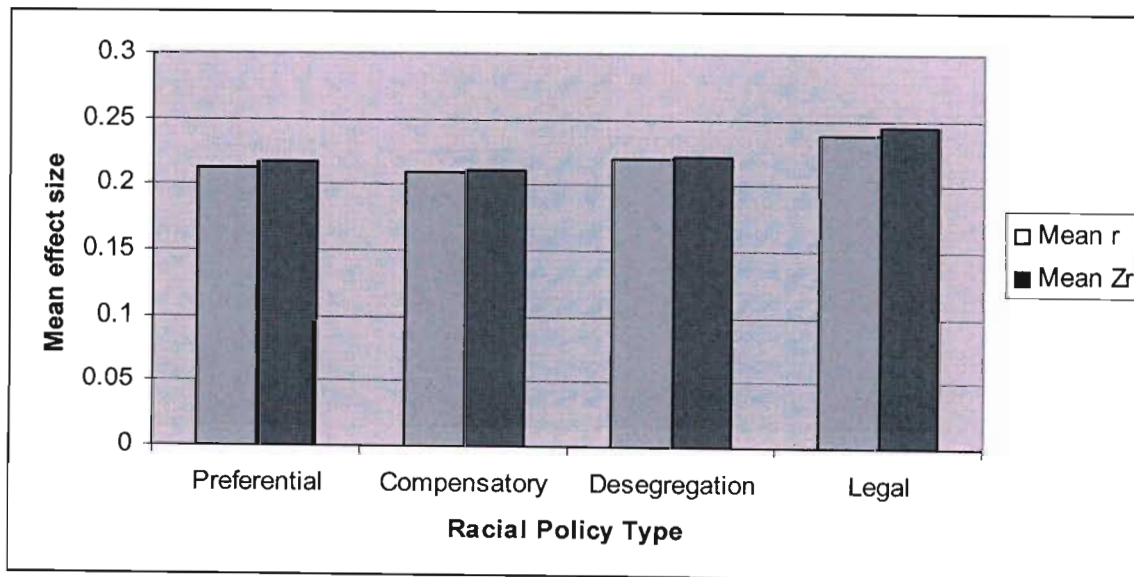


Figure 2: Racial policy type: Weighted mean effect sizes

Table 6: Policy type – Transformed Fisher Zr

Racial Policy Type	Statistic	Fisher z	Zr
Preferential	Mean	0.2216	<b>0.2180</b>
	Stand. Err. Of mean	0.0075	0.0075
	Z test for mean ES	29.3607	-
	Upper 95% Con. Int.	0.2364	0.2321
	Lower 95% Con. Int.	0.2068	0.2039
	Q <sub>calc</sub>	343.1553	-
	Q <sub>crit</sub>	35.1725	-
	p	0.00001	-
Compensatory	Mean	0.2142	<b>0.2109</b>
	Stand. Err. Of mean	0.0126	0.0126
	Z test for mean ES	17.0297	-
	Upper 95% Con. Int.	0.2388	0.2344
	Lower 95% Con. Int.	0.1895	0.1873
	Q <sub>calc</sub>	78.7956	-
	Q <sub>crit</sub>	18.3070	-
	p	0.00001	-
Desegregation	Mean	0.2252	<b>0.2215</b>
	Stand. Err. Of mean	0.0067	0.0067
	Z test for mean ES	33.4207	-
	Upper 95% Con. Int.	0.2384	0.2340
	Lower 95% Con. Int.	0.2120	0.2089
	Q <sub>calc</sub>	110.2122	-
	Q <sub>crit</sub>	41.3372	-
	p	0.00001	-
Legal	Mean	0.2508	<b>0.2456</b>
	Stand. Err. Of mean	0.0073	0.0073
	Z test for mean ES	34.4778	-
	Upper 95% Con. Int.	0.2650	0.2590
	Lower 95% Con. Int.	0.2365	0.2322
	Q <sub>calc</sub>	498.6874	-
	Q <sub>crit</sub>	41.3372	-
	p	0.00001	-

### 4.3.1 Preferential treatment policies

24 (N = 17 630) effect sizes from studies using preferential treatment policies were meta-analysed. From Table 5 above, it is clear that the weighted means are slightly different between the groups. Unexpectedly though, the weighted mean correlation  $\bar{r} = 0.2132$  for the preferential treatment policies was third highest (see Table 5). The corresponding population variance was  $\sigma_p^2 = 0.0140$ , with a standard deviation of  $\sigma_p = 0.1184$ . As illustrated by the confidence interval, 0.1832 to 0.2432, there is a statistically significant relationship between preferential treatment policies and racial policy attitudes at the 95% confidence level. The corresponding chi-square test ( $\chi^2 = 282.5836$ ,  $df = 23$ ,  $p = 0.00001$ ) indicated that a moderator variable maybe present.

Using the fixed effects model, preferential treatment policies still obtained the third highest mean of  $Zr = 0.2180$ . The confidence interval, 0.2068 to 0.2364, shows that there is a statistically significant relationship between preferential treatment programmes and racial policy opinions. The homogeneity test was statistically significant ( $Q = 343.1553$ ,  $df = 23$ ,  $p = 0.00001$ ) showing that there may be a moderator variable present.

### 4.3.2 Compensatory policies

11 (N = 6 356) correlations containing compensatory policies were obtained and meta-analysed. The weighted mean correlation  $\bar{r} = 0.2091$  for the compensatory programmes was the lowest, with a population variance of  $\sigma_p^2 = 0.0094$  and a standard deviation of  $\sigma_p = 0.0971$ . The confidence interval, 0.1875 to 0.2307, indicates the existence of a statistically significant relationship between compensatory policies and attitudes towards race-targeted



policies. The corresponding chi-square test ( $\chi^2 = 73.1127$ ,  $df = 10$ ,  $p = 0.00001$ ) was statistically significant, indicating that a moderator variable may be present.

Using the fixed effects model, compensatory programmes also obtained the lowest mean  $Zr = 0.2109$ . Since zero does not fall in the range between 0.1873 and 0.2344, we can reject the null hypothesis and conclude that there is a statistically significant relationship between compensatory policies and racial policy attitudes at the 95% confidence level. The homogeneity test was also statistically significant ( $Q = 78.7956$ ,  $df = 10$ ,  $p = 0.00001$ ) showing that there may be a moderator variable present.

### **4.3.3 Desegregation**

29 ( $N = 23\ 981$ ) effect sizes from studies that included desegregation policies were meta-analysed. The weighted mean correlation  $\bar{r} = 0.2204$  for desegregation policies was the second highest (see Table 5). The corresponding population variance was  $\sigma_p^2 = 0.0033$ , with a standard deviation of  $\sigma_p = 0.0575$ . As illustrated by the confidence interval, 0.2116 to 0.2292, there is a statistically significant relationship between desegregation policies and racial policy attitudes at the 95% confidence level. The corresponding chi-square test ( $\chi^2 = 113.4242$ ,  $df = 28$ ,  $p = 0.00001$ ) indicated that a moderator variable may be present.

Using the fixed effects model, desegregation policies also yielded the second highest mean  $Zr = 0.2215$ . The confidence interval, 0.2089 to 0.2340, shows that there is a statistically significant relationship between preferential treatment programmes and racial policy opinions. The homogeneity test was statistically significant ( $Q = 110.2122$ ,  $df = 28$ ,  $p = 0.00001$ ) showing that there may be a moderator variable present.

#### 4.3.4 General legal policies

29 (N = 18 990) correlation effect sizes were meta-analysed. General policies yielded the highest weighted mean correlation of  $\bar{r} = 0.2395$ , compared to the other three groups – which was unexpected, with a population variance of  $\sigma_p^2 = 0.0204$  and a standard deviation of  $\sigma_p = 0.1429$ ). The confidence interval test, 0.1968 to 0.2820, indicated that there is a statistically significant relationship between general legal policies and racial policy attitudes. The chi-square test ( $\chi^2 = 439.1731$ ,  $df = 28$ ,  $p = 0.00001$ ) was statistically significant showing that a moderator variable may be present.

Similar to the Hunter-Schmidt model, the fixed effects model general policies' weighted mean of  $Zr = 0.2456$  was the highest, compared to the other two racial policy types. The confidence interval, 0.2322 to 0.2590, does not include 0, showing that there is a statistically significant relationship between general legal policies and racial policy opinions. The homogeneity test came out statistically significant ( $Q = 498.6874$ ,  $df = 28$ ,  $p = 0.00001$ ). Thus, variation across effect sizes exceeds what would be expected based on sampling error, meaning that a moderator variable may be present that could explain the additional variance.

### 4.3 Racial attitudes by racial policy type

Finally, the racial prejudice by racial policy interaction was identified as another potential source of variation; hence meta-analysis was performed after the appropriate partitioning was done (see Table 7 and Figure 3 below for weighted mean correlations and their graphical representation).



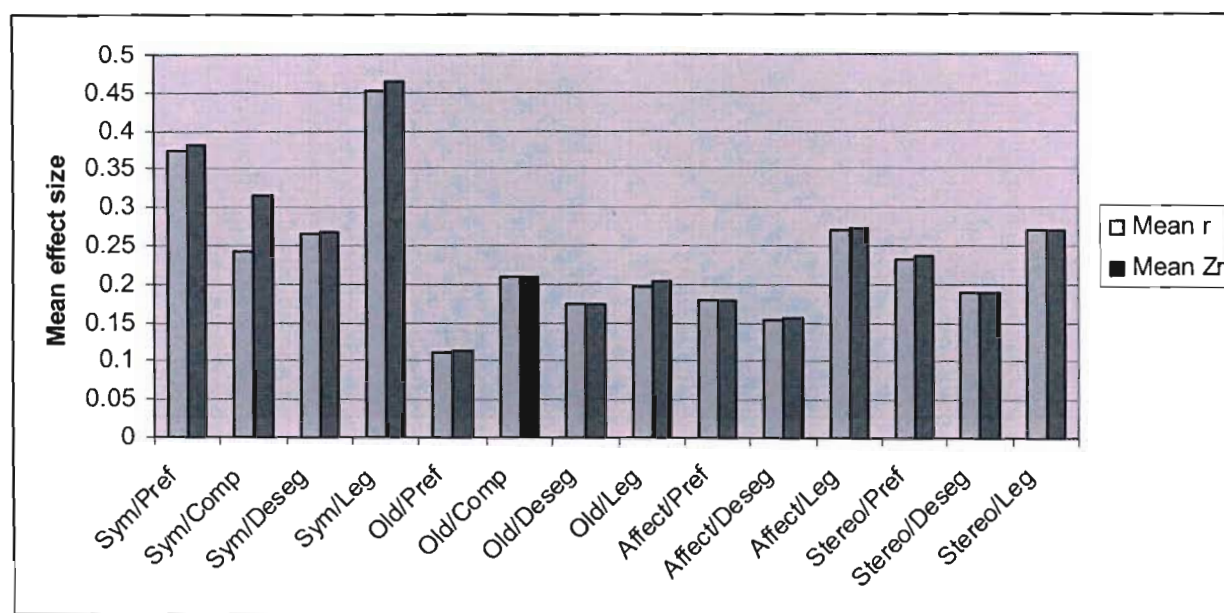


Figure 3: Racial attitudes by policy type

Legend:

- Sym – Symbolic Racism
- Old – Old-fashioned Racism
- Affect – Racial Affect
- Stereo – Stereotypes
- Pref – Preferential Treatment Programmes
- Comp – Compensatory Programmes
- Deseg – Desegregation
- Leg – Legal (General) Policies

Table 7: Racial attitudes by Racial policy type (weighted mean statistics)

Racial Attitude		Symbolic	Old-fashioned	Affect	Stereotypes
Policy type					
Preferential	<i>r</i>	0.3743 (16)	0.1115 (14)	0.1795 (5)	0.2334 (6)
	<i>Zr</i>	0.3819	0.1128	0.1800	0.2373
Compensatory	<i>r</i>	0.2418 (4)	0.2096 (9)	0.19 (1) <sup>a</sup>	- (0) <sup>b</sup>
	<i>Zr</i>	0.3167	0.2103	0.1923	-
Desegregation	<i>r</i>	0.2651 (19)	0.1732 (11)	0.1545 (6)	0.1884 (4)
	<i>Zr</i>	0.2673	0.1744	0.1560	0.1893
Legal	<i>r</i>	0.4523 (11)	0.1970 (23)	0.2702 (8)	0.2712 (4)
	<i>Zr</i>	0.4655	0.2035	0.2718	0.2713

Note: Figures in parenthesis are the corresponding number of correlations analysed (*k*) in each subset.

<sup>a</sup>Only one effect size yielded for analysis.

<sup>b</sup>No effect sizes yielded for the stereotypes by compensatory interaction.

#### 4.4.1 Symbolic racism by racial policy type

As illustrated in Table 7, the symbolic racism by policy type interaction (using the Hunter-Schmidt model) yielded the highest weighted mean correlations at almost all levels. The correlation mean  $\bar{r} = 0.4523$  for symbolic racism by general legal policies was the highest overall (compared to all the other scales), followed by symbolic racism by preferential treatment  $\bar{r} = 0.3743$ , then the symbolic racism by desegregation policies  $\bar{r} = 0.2651$  and finally symbolic racism by compensatory programmes  $\bar{r} = 0.2418$ . Refer to table 8 below for detailed analysis and Figure 3 above for a graphical representation. All the confidence interval tests (see Table 8) were statistically significant at all levels showing that the obtained mean correlations were significant at the 95% confidence level. The chi-square test was also statistically significant for all policy types (refer to Table 8 for relevant figures) suggesting the presence of moderator variables.

Just like the Hunter-Schmidt model's results, the fixed effects model showed that the symbolic racism by general legal policies interaction had the highest mean  $Zr = 0.4655$ . The second highest was the symbolic racism by preferential treatment interaction (mean  $Zr = 0.3819$ ), followed by the symbolic racism by compensatory programmes interaction (mean  $Zr = 0.3167$ ), and finally symbolic racism by desegregation policies, mean  $Zr = 0.2673$ . All the confidence interval tests (see Table 9) were statistically significant at the 95% confidence level showing the importance of the relationship between variables. Same as the Hunter-Schmidt chi-square and homogeneity tests were statistically significant for all subsets (see Table 9), meaning that variation across effect sizes could not be attributed to sampling error alone.

**Table 8: Symbolic racism x Policy type – Untransformed  $r$** 

Statistic	Sym by Pref.	Sym by Comp.	Sym by Deseg.	Sym by Legal	
$\bar{r}$	<b>0.3743</b>	<b>0.2418</b>	<b>0.2651</b>	<b>0.4523</b>	
$s_r^2$	0.0186	0.0067	0.0064	0.0111	
$s_r$	0.1365	0.0816	0.0798	0.1053	
$s_e^2$	0.0010	0.0014	0.0010	0.0009	
N	11 939	2 608	16 175	8 160	
K	16	4	19	11	
Average N	746	652	851	742	
$\sigma_p^2$	0.0176	0.0053	0.0054	0.0102	
$\sigma_p$	0.1328	0.0728	0.0732	0.1012	
95% Con. Int.	Lower	0.3378	0.1105	0.2526	0.4305
	Upper	0.4108	0.2549	0.2776	0.4741
$\chi^2_{calc}$	258.2458	18.5587	111.3451	113.8712	
$\chi^2_{crit}$	24.9958	7.8147	28.8693	19.6752	
df	15	3	18	11	
p	0.00001	0.00034	0.00001	0.00001	

#### 4.4.2 Old-fashioned racism by racial policy type

The old-fashioned racism by racial policy interaction produced some of the lowest weighted mean correlations, all interpreted as small under Cohen's (1988, as cited in Cooper and Lindsay, 1997) rule of thumb. The old-fashioned racism by compensatory programmes interaction was highest within the scale with a mean of  $\bar{r} = 0.2096$ , followed by old-fashioned racism by general legal policies ( $\bar{r} = 0.1970$ ), then old-fashioned racism by desegregation policies ( $\bar{r} = 0.1732$ ) and finally old-fashioned by preferential treatment, mean  $\bar{r} = 0.1115$ . However, all the confidence interval tests (see Table 10) were statistically significant at all levels showing that the obtained mean correlations were significant at the 95% confidence level. See Table 10 below for detailed results. The chi-square tests were also significant at all levels, indicating the possible presence of moderator variables.

Table 9: Symbolic racism x Policy type – Transformed Fisher Zr

Interaction	Statistic	Fisher z	Zr
Sym x Preferential	Mean	0.4023	<b>0.3819</b>
	Stand. Err. Of mean	0.0092	0.0092
	Z test for mean ES	43.8670	-
	Upper 95% Con. Int.	0.4203	0.3971
	Lower 95% Con. Int.	0.3843	0.3664
	Q <sub>calc</sub>	294.3531	-
	Q <sub>crit</sub>	24.9958	-
	p	0.00001	-
Sym x Compensatory	Mean	0.3280	<b>0.3167</b>
	Stand. Err. Of mean	0.0170	0.0170
	Z test for mean ES	19.3278	-
	Upper 95% Con. Int.	0.36128	0.3463
	Lower 95% Con. Int.	0.2947501	0.2865
	Q <sub>calc</sub>	84.8668	-
	Q <sub>crit</sub>	7.8147	-
	p	0.00001	-
Sym x Desegregation	Mean	0.2739	<b>0.2673</b>
	Stand. Err. Of mean	0.0079	0.0079
	Z test for mean ES	34.7786	-
	Upper 95% Con. Int.	0.2894	0.2816
	Lower 95% Con. Int.	0.2585	0.2529
	Q <sub>calc</sub>	131.4538	-
	Q <sub>crit</sub>	28.8693	-
	p	0.00001	-
Sym x Legal	Mean	0.5043	<b>0.4655</b>
	Stand. Err. Of mean	0.0111	0.0111
	Z test for mean ES	45.4630	-
	Upper 95% Con. Int.	0.5260	0.4824
	Lower 95% Con. Int.	0.4826	0.4483
	Q <sub>calc</sub>	143.6585	-
	Q <sub>crit</sub>	19.6752	-
	p	0.00001	-



**Table 10: Old-fashioned racism x Policy type – Untransformed  $r$** 

Statistic	Old by Pref.	Old by Comp	Old by Deseg.	Old by Legal
$\bar{r}$	<b>0.1115</b>	<b>0.2096</b>	<b>0.1732</b>	<b>0.1970</b>
$s_r^2$	0.0115	0.0168	0.0058	0.0245
$s_r$	0.1070	0.1296	0.0764	0.1564
$s_e^2$	0.0011	0.0018	0.0010	0.0013
N	12 105	4 585	10 783	16 206
K	14	9	11	23
Average N	865	509	980	704
$\sigma_p^2$	0.0103	0.0150	0.0049	0.0231
$\sigma_p$	0.1016	0.1225	0.0699	0.1522
95% Con. Int.	Lower	0.1092	0.1767	0.1618
	Upper	0.1340	0.2425	0.1846
$\chi^2_{calc}$	140.9600	80.5675	64.4756	413.0781
$\chi^2_{crit}$	22.3620	15.5073	18.3070	33.9245
df	13	8	10	22
p	0.00001	0.00001	0.00001	0.00001

Similar to the Hunter-Schmidt model, the fixed effects model also yielded some of the lowest effect sizes. The old-fashioned racism by compensatory programmes interaction had the highest mean  $Zr = 0.2103$ , followed by old-fashioned racism by general legal policies mean  $Zr = 0.2035$ , then old-fashioned racism by desegregation policies (mean  $Zr = 0.1744$ ) and finally old-fashioned racism by preferential treatment policies, mean  $Zr = 0.1128$ . However, despite the low mean effect sizes, all the confidence interval tests (see Table 11) were statistically significant at the 95% confidence level, indicative of a high significance of the relationship between variables. The homogeneity test was statistically significant for all subsets (see Table 11), meaning that variation across effect sizes could not be attributed to sampling error alone.

Table 11: Old-fashioned racism x Policy type – Transformed Fisher Zr

Interaction	Statistic	Fisher z	Zr
Old x Preferential	Mean	0.1133	<b>0.1128</b>
	Stand. Err. Of mean	0.0091	0.0091
	Z test for mean ES	12.4441	-
	Upper Con. Int.	0.1311	0.1304
	Lower Con. Int.	0.0955	0.0952
	Q <sub>calc</sub>	145.0002	-
	Q <sub>crit</sub>	22.3620	-
	p	0.00001	-
Old x Compensatory	Mean	0.2135	<b>0.2103</b>
	Stand. Err. Of mean	0.0148	0.0148
	Z test for mean ES	14.4142	-
	Upper Con. Int.	0.2425	0.2379
	Lower Con. Int.	0.1845	0.1824
	Q <sub>calc</sub>	89.1304	-
	Q <sub>crit</sub>	15.5073	-
	p	0.00001	-
Old x Desegregation	Mean	0.1762	<b>0.1744</b>
	Stand. Err. Of mean	0.0096	0.0096
	Z test for mean ES	18.2720	-
	Upper Con. Int.	0.1951	0.1927
	Lower Con. Int.	0.1573	0.1560
	Q <sub>calc</sub>	69.3857	-
	Q <sub>crit</sub>	18.3070	-
	p	0.00001	-
Old x Legal	Mean	0.2064	<b>0.2035</b>
	Stand. Err. Of mean	0.0079	0.0079
	Z test for mean ES	26.2213	-
	Upper Con. Int.	0.2218	0.2183
	Lower Con. Int.	0.1910	0.1887
	Q <sub>calc</sub>	481.8997	-
	Q <sub>crit</sub>	33.9245	-
	p	0.00001	-

#### 4.4.3 Racial affect by racial policy type

As can be seen in Table 12, the racial affect by general legal policies interaction produced a weighted mean correlation of  $\bar{r} = 0.2702$  (the highest within the scale), followed by racial affect by preferential treatment (mean  $\bar{r} = 0.1795$ ) and finally the racial affect by desegregation policies with a mean of  $\bar{r} = 0.1545$ . The racial affect by compensatory programmes interaction though yielded only one effect size ( $r = 0.19$ ) for analysis, which was not worth analysing. However, the confidence interval tests for all the analysed subsets (see Table 12) were statistically significant, showing that the obtained mean correlations were significant at the 95% confidence level. The homogeneity tests performed on each subset were also statistically significant, indicating the presence of moderator variables. Refer to Table 12 below for more detailed results.

**Table 12: Racial affect x Policy type – Untransformed  $r$**

Statistic	Affect by Pref.	Affect by Comp	Affect by Deseg.	Affect by Legal	
$\bar{r}$	<b>0.1795</b>	<b>0.19</b>	<b>0.1545</b>	<b>0.2702</b>	
$s_r^2$	0.0028	-	0.0206	0.0055	
$s_r$	0.0532	-	0.1437	0.0743	
$s_e^2$	0.0010	-	0.0011	0.0015	
N	4 571	134	4 996	4 558	
K	5	1	6	8	
Average N	914	134	833	570	
$\sigma_p^2$	0.0018	-	0.0195	0.0040	
$\sigma_p$	0.0424	-	0.1396	0.0633	
95% Con. Int.	Lower	0.1740	-	0.1141	0.2594
	Upper	0.1850	-	0.1949	0.2810
$\chi^2_{calc}$	13.2249	-	105.4343	27.0434	
$\chi^2_{crit}$	9.4877	-	11.0705	14.0671	
df	4	-	5	7	
p	0.01023	-	0.00001	0.00033	



Table 13: Racial affect x Policy type –Transformed Fisher Zr

Interaction	Statistic	Fisher z	Zr
Affect x Preferential	Mean	0.18202	<b>0.1800</b>
	Stand. Err. Of mean	0.0148	0.0148
	Z test for mean ES	12.2860	-
	Upper Con. Int.	0.2111	0.2080
	Lower Con. Int.	0.1530	0.1518
	Q <sub>calc</sub>	13.3195	-
	Q <sub>crit</sub>	9.4877	-
	p	0.00982	-
Affect x Compensatory	Mean	0.1923	<b>0.19</b>
	Stand. Err. Of mean	-	-
	Z test for mean ES	-	-
	Upper Con. Int.	-	-
	Lower Con. Int.	-	-
	Q <sub>calc</sub>	-	-
	Q <sub>crit</sub>	-	-
	p	-	-
Affect x Desegregation	Mean	0.1573	<b>0.1560</b>
	Stand. Err. Of mean	0.0142	0.0142
	Z test for mean ES	11.0964	-
	Upper Con. Int.	0.1851	0.1830
	Lower Con. Int.	0.1295	0.1288
	Q <sub>calc</sub>	105.5597	-
	Q <sub>crit</sub>	11.0705	-
	p	0.00001	-
Affect x Legal	Mean	0.2788	<b>0.2718</b>
	Stand. Err. Of mean	0.0149	0.01485
	Z test for mean ES	18.7740	0
	Upper Con. Int.	0.3079	0.2985
	Lower Con. Int.	0.24971	0.2446
	Q <sub>calc</sub>	26.9646	-
	Q <sub>crit</sub>	14.0671	-
	p	0.00034	-

Using the fixed effects model, the racial affect by general legal policies interaction produced a weighted mean correlation of  $Zr = 0.2718$  (the highest), the racial affect by preferential treatment interaction had the second highest mean of  $Zr = 0.1800$  and the racial affect by

desegregation policies the lowest mean of  $Zr = 0.1560$ . The confidence intervals for all subsets did not include 0, indicating that the mean correlations were statistically significant at the 95% confidence level. Since the racial affect by compensatory interaction obtained only one correlation, it was decided that it was not worth looking further into. Just like the Hunter-Schmidt model, the fixed effects model yielded statistically significant homogeneity tests for all the analysed subsets. Refer to Table 13 below for details

#### 4.4.4 Stereotypes by racial policy type

**Table 14: Stereotypes x Policy type – Untransformed  $r$**

Statistic		Stereo by Pref.	Stereo by Deseg.	Stereo by Legal
$\bar{r}$		<b>0.2334</b>	<b>0.1884</b>	<b>0.2712</b>
$s_r^2$		0.0108	0.0041	0.0400
$s_r$		0.1039	0.0637	0.1999
$s_e^2$		0.0008	0.0020	0.0008
N		6 452	1 869	4 342
K		6	4	4
Average N		1075	467	1085
$\sigma_p^2$		0.0100	0.0021	0.0392
$\sigma_p$		0.0998	0.0454	0.1979
95% Con. Int.	Lower	0.2122	0.1804	0.1928
	Upper	0.2546	0.1964	0.3496
$\chi^2_{calc}$		73.6962	7.9449	187.4682
$\chi^2_{crit}$		11.0705	7.8147	7.8147
df		5	3	3
p		0.00001	0.04716	0.00001

Using the Hunter-Schmidt model, the stereotypes by general legal policies interaction had the highest weighted mean correlation of  $\bar{r} = 0.2712$ , followed by the stereotypes by preferential treatment interaction with a mean of  $\bar{r} = 0.2334$  and lastly the stereotypes by desegregation policies had the lowest mean of  $\bar{r} = 0.1884$ . The confidence interval tests for all the subsets (see Table 14) were statistically significant, showing that the obtained mean correlations were

significant at the 95% confidence level. The chi-square tests for all the subsets also show statistically significant results, indicating the presence of moderator variables. However there were no effect sizes for analysis under the stereotypes by compensatory programmes interaction. See Table 14 above for a more detailed analysis.

**Table 15: Stereotypes x Policy type –Transformed Fisher  $Z_r$**

<b>Interaction</b>	<b>Statistic</b>	<b>Fisher z</b>	<b><math>Z_r</math></b>
Stereo x Preferential	Mean	0.2419	<b>0.2373</b>
	Stand. Err. of mean	0.0125	0.0125
	Z test for mean ES	19.4041	-
	Upper Con. Int.	0.2663	0.2602
	Lower Con. Int.	0.2175	0.2141
	$Q_{calc}$	93.7158	-
	$Q_{crit}$	11.0705	-
	p	0.00001	-
Stereo x Desegregation	Mean	0.1916	<b>0.1893</b>
	Stand. Err. of mean	0.0232	0.0232
	Z test for mean ES	8.2550	0
	Upper Con. Int.	0.237	0.2327
	Lower Con. Int.	0.1461	0.1450
	$Q_{calc}$	8.2396	-
	$Q_{crit}$	7.8147	-
	p	0.04131	
Stereo x Legal	Mean	0.2782	<b>0.2713</b>
	Stand. Err. of mean	0.0152	0.0152
	Z test for mean ES	18.3075	0
	Upper Con. Int.	0.3080	0.2986
	Lower Con. Int.	0.2484	0.2434
	$Q_{calc}$	1.3677	-
	$Q_{crit}$	7.8147	-
	p	0.71312	-

The fixed effects model yielded results almost similar to the Hunter-Schmidt model. The stereotypes by general policies interaction yielded the highest mean of  $Z_r = 0.2713$ , followed by the stereotypes by preferential treatment interaction (mean  $Z_r = 0.2373$ ) and finally

stereotypes by desegregation with the lowest mean of  $Zr = 0.1893$ . The confidence interval tests for all subsets (see Table 15) were statistically significant, indicating the presence of a significant relationship between the variables at the 95% confidence level. The homogeneity tests were significant for both methods (except for the fixed effects models' stereotypes by general legal policies interaction), showing that there are moderator variables present. See Table 15 below for more details.

In the next Chapter, these results will be discussed further.

## 5. DISCUSSION

### 5.1 Overall

Prior research has shown that although people support the eradication of racial inequality in principle, they fail to support practical steps implemented so as to achieve this particular goal (hence the previously discussed ‘principle-implementation gap’). Consequently, the question in most researchers’ minds is from where does this particular gap originate.

This meta-analytic study managed to answer one question very well, among others, that it is not a matter of whether or not racism still exists; rather we should be asking ourselves to what extent it influences racial policy attitudes. From the overall meta-analysis results ( $\bar{r} = 0.2263$ ,  $Zr = 0.2303$ ), it is clear that racial prejudice does indeed play a significant role in shaping people’s racial policy attitudes, confirming the racism theorists’ argument that racism still exists and it influences politics, public attitudes and behaviour. Also of note is the fact that these results were statistically significant at the 95% confidence level, validating the claim that racial prejudice influences people’s attitudes towards racial policies. Furthermore each form of racism plays its own part, to a certain extent, in influencing this relationship. All the subgroups analysed yielded positive correlations, clearly indicating that a relationship does exist between race prejudice and racial policy attitudes.

### 5.2 Racial attitudes

Whilst symbolic racism theorists argue that a new form of racism (symbolic racism) has emerged and that it is now the main force behind the racial policy attitudes, some researchers



are convinced that it is the traditional form of prejudice (old-fashioned racism) that is still influencing people's racial policy attitudes and yet again, others argue that there are non-racial explanations for people's attitudes (e.g., political conservatism). In this meta-analysis, both analyses methods, the Hunter-Schmidt and fixed effects models, yielded stronger (compared to other race attitudes) positive correlations between symbolic racism and racial policy attitudes, confirming symbolic racism theorists' (e.g. Kinder, McConahay and Sears) argument that symbolic racism holds more influence than any other racial attitude. Using Cohen's rule of thumb for interpretation, the mean effect sizes ( $r = 0.3218$ ,  $Zr = 0.3282$ ) were medium demonstrating an important role played by this form of racism.

These results could be explained along the line of the symbolic racism theorists' argument that the greater endorsement of symbolic racism by whites today can be attributed to its subtlety in nature, which makes it more acceptable in a world where blatant racism is frowned upon as unfashionable. Moreover, racism is now considered illegal, probably deterring racists from publicly showing their true feelings and beliefs. Therefore, those feelings and beliefs have now been displaced and projected into hatred or dislike for 'symbols' such as affirmative action programmes (e.g., racial quotas in sport or at work, among others) that are perceived as giving an unfair advantage to undeserving individuals. Another notable point is the argument that when whites believe racism no longer exists, which seems to be the contemporary belief, they tend to oppose race-targeted policies more, since they believe blacks are getting more than they deserve.

Whereas symbolic racism is subtle and disguised, old-fashioned racism tends to be more blatant and transparent, which basically accounts for its unpopularity in today's society, and hence the low correlations associated with it. This argument corresponds with the meta-

analysis results (old-fashioned racism scale mean  $r = 0.1722$ , mean  $Zr = 0.1753$ ). These effect sizes are very low in magnitude (although significant) compared to those that were obtained with the symbolic racism scale – almost half the effect size as symbolic racism, substantiating symbolic theorists' argument. For reasons previously noted, not many people would publicly show themselves today as racist, which could explain the low averages yielded using this scale.

Importantly, the obtained results (for both symbolic and old-fashioned racism) help to refute, beyond doubt – on an empirical basis – old-fashioned racism advocates' (e.g., Sniderman & Tetlock, 1986a, 1986b) argument that it is indeed old-fashioned racism that is still influencing racial policy attitudes today. The results show that although old-fashioned racism is still prevalent and plays some role in shaping racial policy attitudes, it no longer plays a prominent role like before, rather, it has taken a back seat and it is symbolic racism that now plays the dominant role in shaping racial policy attitudes.

Not surprisingly, the racial affect scale obtained significant results ( $r = 0.1914$ ,  $Zr = 0.1932$ ), which is in line with previous research findings (e.g., Bobo, 1983; Bobo & Zubrinsky, 1996; Durrheim, 2003; Sears and Henry, 2003; Sears *et al.*, 1997). Racial affect is associated with negative feelings towards the beneficiaries of racial policies, and subsequently, the actual opposition to particular racial policies. In other words, the more negative the feelings towards the beneficiary group, the higher the probability of opposition towards racial policies. Racial affect is also believed to underlie both symbolic and old-fashioned racism but can be measured separately, typically using the popular 'feeling thermometer' (see Chapter 2 for a more detailed explanation). The obtained results in the present study substantiate the



argument that anti-black sentiment still exists in society today and it plays a significant role in motivating whites' racial policy attitudes.

The stereotypes scale obtained substantial mean effect sizes ( $r = 0.2515$ ,  $Zr = 0.2545$ ), corroborating previous findings (see Bobo & Zubrinsky, 1996; Sears *et al.*, 1997; Jacobson, 1985, among others). Stereotypes are generally negative characterisations/beliefs about other groups (e.g., blacks are less intelligent than whites) without proper information to validate such beliefs. Stereotypes are believed to underlie, particularly, old-fashioned racism but can still be measured separately. The results from the meta-analysis are indicative of the continuing existence of racism, with whites still holding negative views towards blacks and their behaviour, which in turn influences their attitudes towards policies designed to help them. As Kluegel and Smith (1983) stated, if whites believe that blacks are less well off because they are too lazy to change their low status (for example), they are likely to view race-targeted policies as unnecessary, thus the opposition to such policies.

### **5.3 Racial policy type**

Previous research suggests that some racial policies are more strongly opposed than others depending on the actual policy type. For example, if people think one group is getting special treatment over another, they tend to oppose, but are more supportive when policies are viewed as helping a disadvantaged group without discriminating towards another. The available literature indicates that preferential treatment policies seem to have the highest level of opposition, with compensatory policies on the other extreme end and general legal policies receiving intermediate support.

According to Kravitz and Klineberg (2004), however, it makes sense that people, racist or not, tend to support general legal policies that promote equality, mainly because there is no justification for opposition. On the other extreme end, opposition is high for policies viewed as benefiting one group over another, whether or not the respondents are racist. However, it is when people oppose intermediate (or compensatory) programmes that can be attributed to racism. For example, if a white person opposes a government programme that promotes granting Higher Education scholarships to qualified or 'deserving' Black persons, that opposition can be attributed to racism since there is no reasonable justification for such an attitude.

In the present study, the preferential treatment policies mean effect sizes obtained using both the Hunter-Schmidt and fixed effects model ( $r = 0.2132$ ,  $Zr = 0.2180$ ) were statistically significant, representing a strong correlation between this variable and racism. Following Kravitz and Klineberg's (2004) argument, it makes sense that preferential treatment is significantly correlated with race attitudes. As said before, preferential treatment policies are often perceived as giving special treatment to one group, usually at the cost of another (e.g., hiring a black person instead of a more qualified white person so as to promote a racial equity or an employment equity programme). The results lend substance to the argument that sometimes it is not racism that leads people to oppose race-targeted policies; rather, it is a 'rebellion' against the unfairness of such policies that leads people to oppose them.

However, contrary to available literature, general legal policies obtained very strong correlations ( $r = 0.2395$ ,  $Zr = 0.2456$ ). Whereas this could be a genuine indication of the status of affairs, it could also be a result of the fact that a considerable number of effect sizes collected for analyses fell under general legal policies. This category is generally criticised

for its ambiguity or vagueness. Scholars (such as Kravitz and Klineberg, 2004; Tuch and Hughes, 1996) argue that researchers, when doing surveys, often fail to clearly define what they mean by ‘race-targeted policies’, or ‘equal opportunity policies’, or specifically ‘affirmative action’, for example. It is argued that because individuals understand affirmative action differently, how do we know for sure what is it that participants are actually evaluating when they are simply asked to give their opinions towards it? Affirmative action is one solution to one huge problem, racism; and to one person it may translate to preferential treatment given to blacks by the government, whereas to another it simply means “helping blacks help themselves” (e.g., by awarding them college scholarships). In another words, depending on the respondent, a racial policy may be understood in preferential or compensatory terms, influencing how one responses and this division is often obscured by unspecified racial policies or general questions.

Importantly, compensatory policies effect sizes were significant ( $r = 0.2091$ ,  $Zr = 0.2109$ ), suggesting the existence of a strong relationship between this policy type and racism. According to Kravitz and Klineberg (2004), it is prejudiced individuals who are highly likely to oppose opportunity enhancement policies (compensatory policies), and non-prejudiced individuals who are likely to support them since they primarily enhance a target group’s opportunities without harming the non-target groups’. Therefore, following this line of reasoning, one can conclude from the results that racism still is very much prevalent and plays a significant role in influencing racial policy attitudes.

Desegregation policies (mean  $r = 0.2204$ , mean  $Zr = 0.2215$ ) in the present study were categorised as policies that involved busing (for school desegregation) (McConahay’s 1982 study), and fair housing laws (for residential desegregation). McConahay (1982) argued that

whites do not oppose busing because they are protecting their own interests and their children's (as self-interest theorists would argue), rather opposition is predicted by racial attitudes (particularly symbolic racism). In terms of residential integration, Bobo & Zubrinsky's 1996 study found that opposition is often influenced by negative beliefs or stereotypes that one group holds about another. For example, if whites believe that blacks are noisy and violent, they are highly unlikely to be receptive of the idea of having blacks in their neighbourhoods, hence opposition towards fair housing laws that promote integration.

#### **5.4 Racial attitudes by racial policy type**

As a matter of interest, further analyses were done exploring the relationship between racial prejudice and racial policy types, with the interaction considered a moderator variable. Overall, all obtained mean correlations were positive and significant indicating a strong effect of each level of race attitudes on each level racial policy types. Predictably, at all levels, the symbolic racism by racial policy type interaction produced some of the highest mean effect sizes (see Table 7), confirming earlier findings that symbolic racism plays a dominant role in influencing racial policy attitudes than any other form of racism. It is interesting to note though that the symbolic racism by racial policy type effects were not really identical as Sears and Henry (2005) suggested. Whereas, the correlation between general legal policies was fairly large, the others were small to medium.

The old-fashioned racism by racial policy interaction, on the other hand, produced some of the weakest correlations, which was in line with the argument that this form of racism is no longer plays a dominant role in influencing policy attitudes. Even combined with different racial policies, it still does not appear very strong. Therefore one may be compelled to agree

with Sears and colleagues that old-fashioned racism has essentially lost its power to motivate public opinions on political matters, among other things.

Finally, both the racial affect by racial policy type and stereotypes by racial policy interactions yielded significant results. This validates the argument that negative affect and stereotypical beliefs about other groups (often negative) play a significant part in influencing attitudes towards race-targeted policies. The more negative those feelings or beliefs are, the more likely it is that individuals oppose these policies.

## 6. CONCLUSION

To summarise, one very important factor that came out of this meta-analytic study is the fact that racial attitudes play a significant role in shaping people's attitudes towards race-targeted policies. This confirms the argument that although racism may have decreased (as research suggests), it has not completely disappeared; it is still very much prevalent and it is influencing public attitudes, politics and behaviour.

The fact that symbolic racism plays a dominant role also confirms symbolic racism theorists' argument that racism has now taken a new form and become more subtle and inconspicuous, where it was blatant and transparent before. In that vein, whites now express their racist sentiment in more "acceptable" ways, e.g., by arguing that race-targeted policies promote 'reverse discrimination' or arguing in terms of the 'deservingness' of the group beneficiaries. Such attitudes, according to symbolic racism theorists, allow them to express their underlying racial prejudice without actually appearing racist.

Nonetheless, one should keep in mind that there may also be other possible non-racial explanations, to a certain extent, influencing attitudes towards racial policies. Looking at the role played by the specific types of racial policies people were responding to when surveys were being done, it shows that these policies also play an important role in influencing people's decisions on whether or not to support them. Therefore, from the meta-analyst's point of view both these factors (racial and non-racial explanations) should be considered as possible answers to the famous 'principle-implementation gap'.

Interestingly, it was apparent that there is substance in the argument that the Fisher z correlation transformation has a tendency to be biased upwards, and conversely, the

untransformed correlation is more conservative and yields averages that are lower than would be expected. From the tables in the Results chapter, it is clear that almost (if not all) averages obtained after analysing data using the Fisher  $Zr$  were higher than those obtained using the untransformed correlation ( $r$ ). Importantly though, while the figures were different in magnitude, they were similar in direction. Therefore at the end of the day, it did not really make a difference which model (Hunter-Schmidt or fixed effects) was used for analyses, which was also in line with what Hunter and Schmidt said that in practice it does not really matter whether you use the untransformed  $r$  or the transformed  $Zr$ .

## 6.1 Limitations

In view of the fact that only one unpublished study was used for analysis, this could have resulted in correlations being biased upwards. In addition to contacting authors for both published and unpublished papers, a variety of sources were used (including Journals, textbooks, CD-ROMS, study reference lists and the Internet) so as to ensure that as many relevant studies as possible were included. In the end, the same references kept on ‘coming up’ when using different sources, suggesting a certain degree of sampling redundancy. Nonetheless, even though an effort was made to collect as many relevant articles as possible and to control for the file drawer problem, it is important to keep in mind that there are no guarantees that there were not any other relevant studies that were omitted in this review.

It is also important to point out the fact that the present meta-analysis did not take into account many other factors (e.g., political conservatism, individualism, self and group interest), some of which may decrease the unique explanatory value of race attitudes. This also precludes the possibility of making comparisons with race-neutral factors so as to find



out if racism, particularly symbolic racism is now playing the central role in shaping racial policy attitudes as claimed by Sears and colleagues, or if other factors now influence policy attitudes (as claimed by Sniderman and colleagues).

Due to lack of enough information, e.g., reliability of scales data and standard deviations, to correct/control for all artefactual error (especially measurement error and range restriction), there is a possibility that results may have been affected. However, the meta-analyst has no knowledge of the extent to which this problem might have affected the final outcome.

Finally, since the meta-analyst had to manually add-in the relevant formulas used to analyse data, there is potential for calculation error. However, an effort was made to double-check all formulas and calculations. Where figures did not seem to fit or make sense, a step-by-step recalculation was done in order to ensure that that particular figure was not a result of any error made on the part of the meta-analyst.

## **6.2 Recommendations**

Following the argument put forward by Sniderman and Tetlock (1986a, 1986b), among others, further meta-analysis studies are needed to look at the validity and reliability of the scales used to measure prejudice. It is also recommended that intercorrelations among the measures of prejudice (e.g., the symbolic racism and old-fashioned racism scales) be investigated further to see if there are real distinctions between or among them.

Finally, another meta-analytic study including other factors such as political conservatism, self- and group-interest, and beliefs about inequality, to name a few, is needed to determine

how race attitudes would perform against them. It would also serve to answer some of the questions being currently debated on by researchers, for example, the dominance of symbolic racism in motivating racial policy attitudes.

To conclude, the present meta-analysis shows that racism is still an issue that needs attention, and needs to be dealt with. Even in countries like the United States of America where principles of racial integration, equity and equality of opportunity were introduced over half a century ago, racism is still a problem. Looking at it from a more local context, although in South Africa racial actions and racially discriminatory laws were outlawed more recently and the extent of the continuing existence of racism is unknown for sure, the trends will probably follow the same pattern as in America. Therefore, the measures put into practice currently (e.g. Affirmative Action and Employment Equity programmes) probably need to be monitored closely for progress and more still needs to be done to control for the problem.

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**Appendix 1: Studies included in the meta-analysis (with the original 216 effect sizes)**

Author (s)	Year	Racial policy type	Measure of racial prejudice	Statistic r	Sample Size
Kluegel, J. R. & Smith, E. R.	1983	Compensatory	Symbolic	0.31	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.26	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.22	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.18	1596
Kluegel, J. R. & Smith, E. R.		Compensatory	Symbolic	0.09	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.06	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.06	1596
Kluegel, J. R. & Smith, E. R.		Preferential	Symbolic	0.07	1596
Federico, M. F. & Sidanius, J.	2002	Compensatory	Old-fashioned	-0.25	209
Federico, M. F. & Sidanius, J.		Compensatory	Old-fashioned	0.27	222
Federico, M. F. & Sidanius, J.		Compensatory	Old-fashioned	0.17	318
Federico, M. F. & Sidanius, J.		Compensatory	Old-fashioned	0.29	538
Durrheim, K.	2003	Preferential	Old-fashioned	0.43	134
Durrheim, K.		Preferential	Symbolic	0.32	134
Durrheim, K.		Preferential	Affect	0.14	134
Durrheim, K.		Legal	Old-fashioned	0.48	134
Durrheim, K.		Legal	Symbolic	0.112	134
Durrheim, K.		Legal	Affect	0.21	134
Durrheim, K.		Compensatory	Old-fashioned	0.45	134
Durrheim, K.		Compensatory	Symbolic	0.24	134
Durrheim, K.		Compensatory	Affect	0.19	134
Konrad, A. M. & Spitz, J.	2003	Legal	Old-fashioned	0.55	405
Konrad, A. M. & Spitz, J.		Legal	Old-fashioned	0.54	405
Mcconahay, J. B.	1982	Desegregation	Symbolic	0.51	879
Mcconahay, J. B.		Desegregation	Old-fashioned	0.36	879
Mcconahay, J. B.		Desegregation	Affect	-0.15	879
Arriola, K. R. J. & Cole, E. R.	2001	Compensatory	Symbolic	0.11	175
Arriola, K. R. J. & Cole, E. R.		Preferential	Symbolic	-0.06	175
Arriola, K. R. J. & Cole, E. R.		Legal	Symbolic	0.19	175
Nosworthy, G. J., Lea, J. A. & Lindsay, R. C. L.	1995	Preferential	Symbolic	0.36	47
Nosworthy, G. J., Lea, J. A. & Lindsay, R. C. L.		Preferential	Symbolic	0.26	46
Nosworthy, G. J., Lea, J. A. & Lindsay, R. C. L.		Preferential	Symbolic	0.13	44
Tuch, S. A. & Hughes, M.	1996	Legal	Old-fashioned	0.221	392
Tuch, S. A. & Hughes, M.		Legal	Old-fashioned	0.352	374
Tuch, S. A. & Hughes, M.		Preferential	Old-fashioned	0.038	606
Tuch, S. A. & Hughes, M.		Legal	Old-fashioned	0.206	625
James, E.H., Brief, A. P., Dietz, J. & Cohen, R. R.	2001	Preferential	Symbolic	0.27	600
Bobo, L. & Zubrinsky, C. L.	1996	Desegregation	Affect	0.25	625
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.16	625



Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.19	625
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.25	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.17	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.28	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.26	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.3	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.27	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.32	284
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.36	284
Bobo, L. & Zubrinsky, C. L.		Desegregation	Affect	0.18	284
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.12	625
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.17	625
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.08	625
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.31	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.19	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.35	483
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.29	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.11	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.21	477
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.25	284
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.08	284
Bobo, L. & Zubrinsky, C. L.		Desegregation	Stereotypes	0.11	284
Sears, D. O. & Henry, P. J.	2003	Preferential	Symbolic	0.58	267
Sears, D. O. & Henry, P. J.		Legal	Symbolic	0.42	267
Sears, D. O. & Henry, P. J.		Preferential	Old-fashioned	-0.1	267
Sears, D. O. & Henry, P. J.		Legal	Old-fashioned	0.04	267
Sears, D. O. & Henry, P. J.		Legal	Symbolic	0.35	223
Sears, D. O. & Henry, P. J.		Preferential	Symbolic	0.34	223
Sears, D. O. & Henry, P. J.		Legal	Symbolic	0.29	223
Sears, D. O. & Henry, P. J.		Legal	Affect	0.04	223
Sears, D. O. & Henry, P. J.		Preferential	Affect	0.01	223
Sears, D. O. & Henry, P. J.		Legal	Affect	-0.01	223
Sears, D. O. & Henry, P. J.		Legal	Affect	0.27	284
Sears, D. O. & Henry, P. J.		Legal	Affect	0.32	284
Sears, D. O. & Henry, P. J.		Legal	Affect	0.03	284
Sears, D. O. & Henry, P. J.		Legal	Affect	0.07	284
Bobo, L.	1983	Desegregation	Symbolic	0.263	2705
Bobo, L.		Desegregation	Symbolic	0.215	2705
Bobo, L.		Desegregation	Old-fashioned	0.116	2705
Bobo, L.		Desegregation	Old-fashioned	0.18	2705
Bobo, L.		Desegregation	Old-fashioned	0.127	2705
Bobo, L.		Desegregation	Old-fashioned	0.165	2705
Bobo, L.		Desegregation	Old-fashioned	0.142	2705
Bobo, L.		Desegregation	Symbolic	0.168	2705
Bobo, L.		Desegregation	Symbolic	0.269	2248
Bobo, L.		Desegregation	Affect	0.22	2248



Bobo, L.		Desegregation	Old-fashioned	0.184	2248
Bobo, L.		Desegregation	Old-fashioned	0.094	2248
Bobo, L.		Desegregation	Affect	0.181	2248
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.	1997	Legal	Symbolic	0.57	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Affect	0.28	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Old-fashioned	0.21	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Symbolic	0.49	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Affect	0.28	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Stereotypes	0.25	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Symbolic	0.54	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Affect	0.33	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Old-fashioned	0.12	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Symbolic	0.54	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Affect	0.31	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Stereotypes	0.29	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Symbolic	0.47	2364
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Stereotypes	0.27	2364
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Legal	Old-fashioned	0.35	2364
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Symbolic	0.43	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Affect	0.2	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Old-fashioned	-0.04	1806
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Symbolic	0.45	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Affect	0.21	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Stereotypes	0.17	1794
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Symbolic	0.44	2364
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Stereotypes	0.18	2364
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Old-fashioned	0.15	2364

Kosterman, R.					
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Symbolic	0.42	262
Sears, D. O., van Laar, C, Carrillo, M. & Kosterman, R.		Preferential	Stereotypes	0.22	262
Sidanius, J., Pratto, F. & Bobo, L.	1996	Legal	Old-fashioned	0.27	386
Sidanius, J., Pratto, F. & Bobo, L.		Legal	Old-fashioned	0.0	678
Sidanius, J., Pratto, F. & Bobo, L.		Legal	Old-fashioned	0.14	812
Sidanius, J., Pratto, F. & Bobo, L.		Legal	Old-fashioned	-0.07	919
Sidanius, J., Pratto, F. & Bobo, L.		Legal	Old-fashioned	0.28	926
Sidanius, J., Pratto, F. & Bobo, L.		Legal	Old-fashioned	0.62	511
Sidanius, J., Pratto, F. & Bobo, L.		Preferential	Affect	0.1	614
Sidanius, J., Pratto, F. & Bobo, L.		Preferential	Old-fashioned	0.19	614
Sniderman, P. M. & Carmines, E. G.	1997	Legal	Old-fashioned	0.2	1118
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.16	1118
Sniderman, P. M. & Carmines, E. G.		Preferential	Old-fashioned	0.16	1118
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.12	1118
Sniderman, P. M. & Carmines, E. G.		Preferential	Old-fashioned	0.05	1118
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.22	755
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.18	755
Sniderman, P. M. & Carmines, E. G.		Preferential	Old-fashioned	0.17	1472
Sniderman, P. M. & Carmines, E. G.		Compensatory	Old-fashioned	0.22	1472
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.28	1472
Sniderman, P. M. & Carmines, E. G.		Preferential	Old-fashioned	0.12	1472
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.15	1472
Sniderman, P. M. & Carmines, E. G.		Legal	Old-fashioned	0.11	1472
Sniderman, P. M. & Piazza, T	1993	Preferential	Symbolic	0.24	703
Sniderman, P. M. & Piazza, T		Preferential	Symbolic	0.23	703
Sniderman, P. M. & Piazza, T		Preferential	Old-fashioned	0.2	703
Sniderman, P. M. & Piazza, T		Preferential	Old-fashioned	0.15	703
Sniderman, P. M. & Piazza, T		Preferential	Old-fashioned	0.1	703
Sniderman, P. M. & Piazza, T		Preferential	Old-fashioned	0.04	703
Sniderman, P. M. & Piazza, T		Compensatory	Symbolic	0.39	703
Sniderman, P. M. & Piazza, T		Compensatory	Symbolic	0.35	703
Sniderman, P. M. & Piazza, T		Compensatory	Old-fashioned	0.26	703
Sniderman, P. M. & Piazza, T		Compensatory	Old-fashioned	0.14	703
Sniderman, P. M. & Piazza, T		Compensatory	Old-fashioned	0.12	703
Sniderman, P. M. & Piazza, T		Compensatory	Old-fashioned	0.09	703
Sniderman, P. M. & Piazza, T		Desegregation	Symbolic	0.14	722
Sniderman, P. M. & Piazza, T		Desegregation	Symbolic	0.18	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.22	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.18	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.14	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.11	722
Sniderman, P. M. & Piazza, T		Desegregation	Symbolic	0.11	722
Sniderman, P. M. & Piazza, T		Desegregation	Symbolic	0.18	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.2	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.06	722



Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.07	722
Sniderman, P. M. & Piazza, T		Desegregation	Old-fashioned	0.08	722
Sniderman, P. M. & Piazza, T		Legal	Symbolic	0.33	698
Sniderman, P. M. & Piazza, T		Legal	Symbolic	0.3	698
Sniderman, P. M. & Piazza, T		Legal	Old-fashioned	0.25	698
Sniderman, P. M. & Piazza, T		Legal	Old-fashioned	0.1	698
Sniderman, P. M. & Piazza, T		Legal	Old-fashioned	0.11	698
Sniderman, P. M. & Piazza, T		Legal	Old-fashioned	0.08	698
Jacobson, C. K.	1985	Preferential	Symbolic	0.38	1140
Jacobson, C. K.		Preferential	Old-fashioned	0.28	1140
Jacobson, C. K.		Preferential	Stereotypes	0.3	1140
Little, B. L., Murry, W. D. & Wimbush, J. C.	1998	Preferential	Symbolic	0.61	738
Kravitz, D. A	1995	Legal	Symbolic	0.31	175
McClendon, M. J.	1985	Desegregation	Old-fashioned	0.03	161
McClendon, M. J.		Desegregation	Old-fashioned	0.03	161
McClendon, M. J.		Desegregation	Symbolic	0.23	161
McClendon, M. J.		Desegregation	Symbolic	0.24	161
Giles, M. W., Gatlin, D. S. & Cataldo, E. F.	1976	Desegregation	Old-fashioned	0.085	845
Giles, M. W., Gatlin, D. S. & Cataldo, E. F.		Desegregation	Old-fashioned	0.182	161
Giles, M. W., Gatlin, D. S. & Cataldo, E. F.		Desegregation	Old-fashioned	0.208	289
Giles, M. W., Gatlin, D. S. & Cataldo, E. F.		Desegregation	Old-fashioned	-0.015	214
Giles, M. W., Gatlin, D. S. & Cataldo, E. F.		Desegregation	Old-fashioned	0.189	450
Kinder, D. R. & Sears, D. O	1981	Desegregation	Symbolic	0.33	198
Kinder, D. R. & Sears, D. O		Desegregation	Symbolic	0.39	239
Sears, D. O. & Allen, H. M, Jr.	1984	Desegregation	Symbolic	0.26	817
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.26	723
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.27	768
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.23	1045
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.27	1325
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.15	1116
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.34	643
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.3	638
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.36	639
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.31	512
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.24	506
Sears, D. O. & Allen, H. M, Jr.		Desegregation	Symbolic	0.18	291
Gilens, M.	1995	Legal	Symbolic	0.29	391
Gilens, M.		Legal	Old-fashioned	-0.06	391
Gatlin, D. S., Giles, M. W. and Cataldo, E. F.	1978	Desegregation	Old-fashioned	-0.096	2109
Gatlin, D. S., Giles, M. W. and Cataldo, E. F.		Desegregation	Old-fashioned	0.57	2109
Henry, P. J., Reyna, C. & Weiner, B.	2004	Legal	Symbolic	0.26	133
Henry, P. J., Reyna, C. & Weiner, B.		Legal	Affect	0.15	133
Reyna, C., Henry, P. J. & Tucker, A.	2006	Preferential	Old-fashioned	0.258	500
Reyna, C., Henry, P. J. & Tucker, A.		Preferential	Stereotypes	0.551	500
Reyna, C., Henry, P. J. & Tucker, A.		Preferential	Old-fashioned	-0.027	392

Reyna, C., Henry, P. J. & Tucker, A.		Preferential	Stereotypes	0.255	392
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Old-fashioned	0.142	134
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Stereotypes	0.344	134
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Affect	0.345	134
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Old-fashioned	-0.092	50
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Stereotypes	0.172	50
Reyna, C., Henry, P. J. & Tucker, A.		Legal	Affect	0.096	50
Kravitz, D. A. & Klineberg, S. L.	2004	Legal	Old-fashioned	-0.07	154
Kravitz, D. A. & Klineberg, S. L.		Compensatory	Old-fashioned	0.55	154
Kravitz, D. A. & Klineberg, S. L.		Preferential	Old-fashioned	0.19	154
Kravitz, D. A. & Klineberg, S. L.		Legal	Old-fashioned	0.03	835
Kravitz, D. A. & Klineberg, S. L.		Compensatory	Old-fashioned	0.2	835
Kravitz, D. A. & Klineberg, S. L.		Preferential	Old-fashioned	0.03	835
Kravitz, D. A. & Klineberg, S. L.		Preferential	Old-fashioned	0.0	835

Note: This table does not include all the variables coded during the data collection phase.

**Appendix 2: Authors contacted and letter send to authors****Appendix 2.1: Letter send to authors**

Dear (Authors's name)

I am doing a meta-analytic study of the relationship between measures of racial prejudice (symbolic racism, old-fashioned racism, stereotypes and racial affect) and measures of racial policy attitudes (e.g., affirmative action, compensatory policies, etc). On the basis of data base searches I have identified  $n = 24$  articles that have at least one measure of each construct (See the attached list of articles). In an effort to counter the file drawer problem, I am contacting all authors that have published in the field – including yourself – requesting help to update my reference list. Do you know of any research by yourself or others, published or unpublished that has investigated the relationship between racial prejudice and racial policy opinion? Please forward the references or (preferably) a word/PDF file of the research report. I would really appreciate any help you can give.

Many thanks

Patience Matizamhuka

**Appendix 2.2: List of authors contacted**

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### Appendix 3: Descriptive statistics, scatter plot, histogram and stem-and-leaf plots

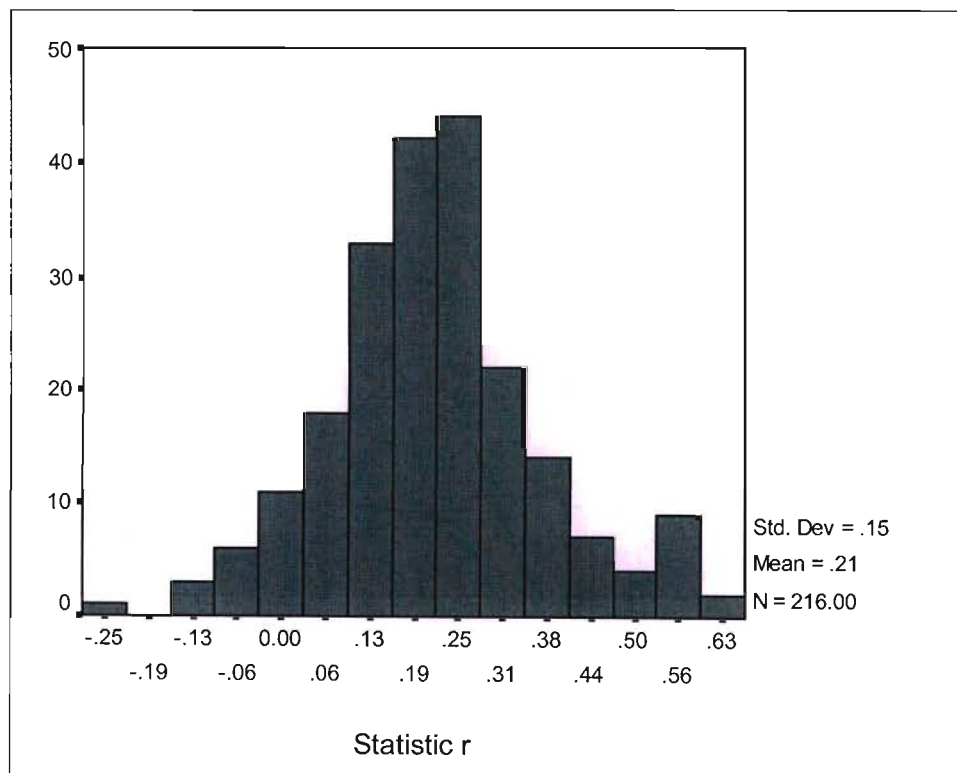
#### Descriptive Statistics (for the raw (unweighted and unaveraged) correlations)

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Statistic r	216	-.25	.62	46.41	.2149	.14950	.022
Sample size	216	44.00	2705.00	187191.00	866.6250	718.99915	516959.780

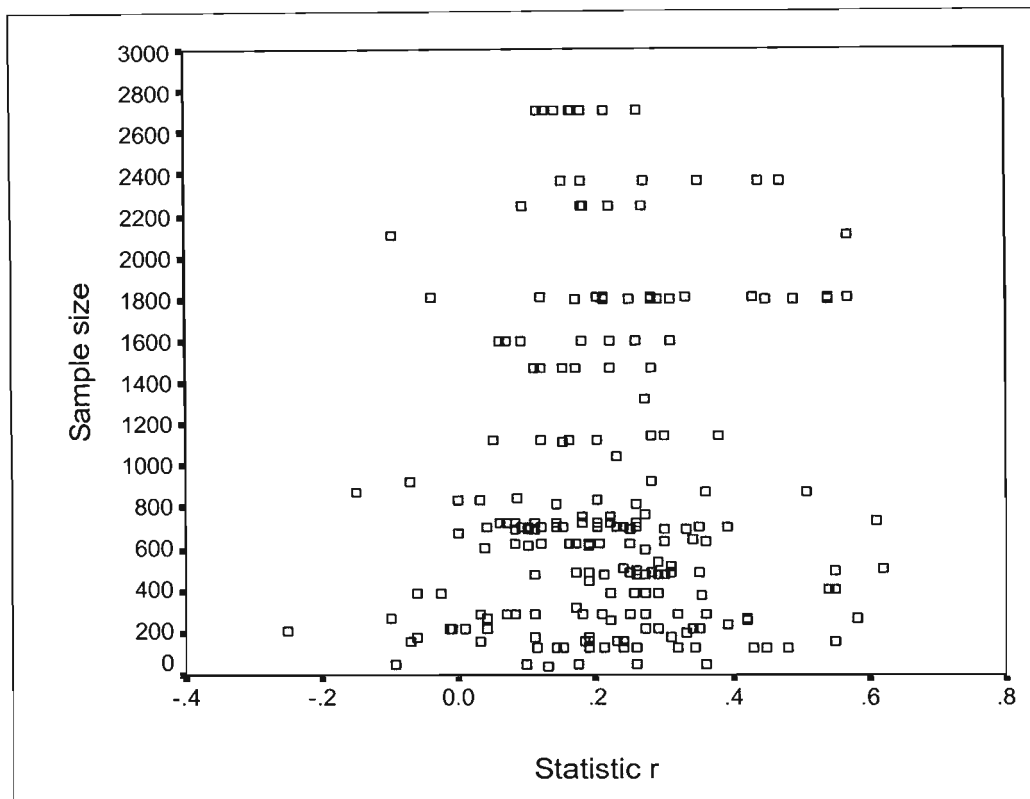
#### Descriptive Statistics (for the raw (unweighted and averaged) correlations)

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Statistic r	75	-.25	.62	16.74	.2232	.13232	.018
Sample size	75	44.00	2705.00	49677.00	662.3600	567.18765	321701.828

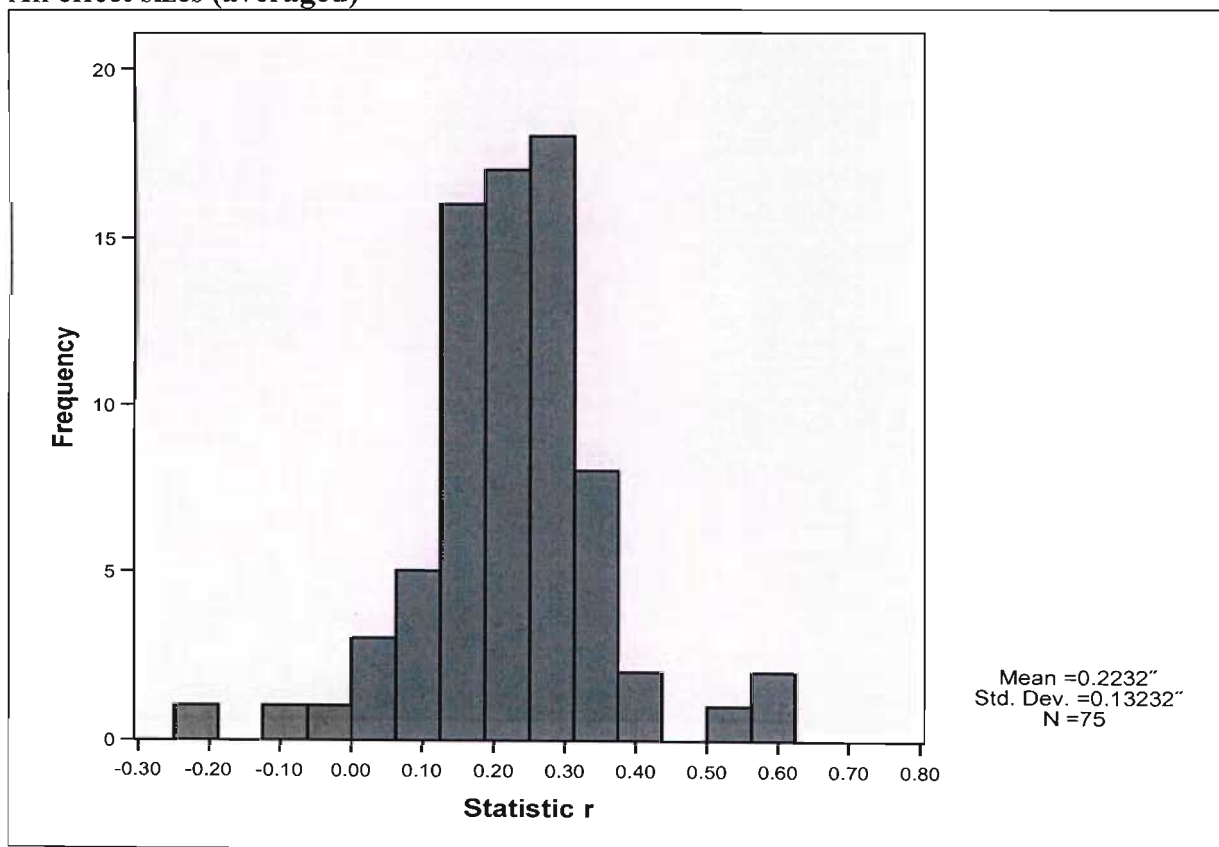
#### All effect sizes (unaveraged)



**Effect size by sample size (anaveraged)**



**All effect sizes (averaged)**



**Effect size by sample size (averaged)**