

Group narratives in the Context of Dramatic Social Change in South Africa

Roxane de la Sablonnière¹

Emilie Auger¹

Donald M. Taylor²

Jonathan Crush³

David McDonald³

1 Université de Montréal, Montréal, Québec, Canada

2 McGill University, Montréal, Québec, Canada

3 Queen's University, Kingston, Ontario, Canada

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*Requests for reprints should be addressed to Roxane de la Sablonnière, Département de psychologie, Université de Montréal, C. P. 6128, succursale. Centre-Ville, Montreal, Quebec, H3C 3J7, Canada, (Email: roxane.de.la.sablonniere@umontreal.ca) Tel.: 1-514-343-6732, Fax: 1-514-343-2285

Abstract

Dramatic social change involves profound transformations that affect the entire history of a group. Such is the reality for race relations in South Africa. Previous research found that most people offered a group narrative that paralleled historical events (de la Sablonnière, Taylor, Perozzo, & Sadykova, 2009). However, a significant subset of respondents composed narratives where the status of their group remained stable despite dramatic social change (Westerhof & Keyes, 2006). The first goal of our research was to assess whether both the historically expected and surprisingly “stable” group narratives arise consistently among South Africans ($N = 2,989$). The second goal was to identify the factors that might account for this dichotomy in narratives building on both traditional and recent advances in relative deprivation theory (Davies, 1962; de la Sablonnière et al., 2009) as well as on social identity theory (Tajfel, 1978). We hypothesized that higher levels of ingroup identification would be associated with the historically expected group narrative. Results support this hypothesis. The third goal was to examine the association of each group narrative with psychological well-being and intergroup attitudes. Results indicate that each group narrative is indeed associated with a different level of intergroup attitudes and psychological well-being.

Keywords : Dramatic Social Change, Group Narrative, Relative Deprivation, Well-being

Group Narratives in the Context of Dramatic Social Change in South Africa

Everyday, millions of people confront the challenge of adjusting to dramatic social change. Social change, as defined here, involves “profound societal transformations that produce a complete rupture in the equilibrium of social structures because their adaptive capacities are surpassed” (p. 325, de la Sablonnière, Taylor, Perozzo, & Sadykova, 2009; see also Parsons, 1964; Rocher, 1992). Changes of this magnitude affect the course of history for a group (Rocher, 1992). As a result, a group’s narrative will often revolve around a series of dramatic social changes that come to define its history (Bougie, Usborne, de la Sablonnière, & Taylor, in press). The 2011 earthquakes and tsunami in Japan, the protracted Israeli-Palestinian conflict, the war in Darfur, and the fall of apartheid in South Africa are prime examples.

The goal of the present research is to understand how people cope in terms of their well-being and intergroup attitudes when confronted with dramatic social change. To achieve this goal, we employed a historical perspective in the context of South Africa with the two main groups in South Africa: *Africans* (Black) and *white South Africans*. Since the introduction of the segregationist policies of apartheid in 1948, South Africa has been shaken by a series of dramatic social changes. For many decades, the South African Government systematically segregated South Africans by discriminating against all groups but the Whites. Clearly, apartheid policies negatively impacted *Africans* (e.g., black South Africans)¹. As a result of increasing international condemnations and internal revolts, apartheid was eventually abolished in 1991. Following this historical turning point, the first multiracial election was held in April 1994 and resulted in the inauguration of Nelson Mandela as South Africa’s first African president. While *Africans* sought

¹ The South African population is comprised of 4 major ethnic groups: African, White, Coloured and Asian/Indian. These labels are the usual label used for official categorization in South Africa and are commonly used among South Africans themselves (Statistics South Africa, 2011). The present study focused mainly on *Africans* and *Whites*.

justice, the *white South Africans* had to face threats to the economic and political power they had enjoyed for several decades.

Since the fall of apartheid, a major challenge for South Africa is building a united nation. Many efforts have been made to unify South Africans, and the adoption of “The rainbow over South Africa” as a symbol of unity (Møller, Dickow, & Harris, 1999) is an example of these efforts. However, despite efforts at reconciliation, there remain 47% of *Whites* who believe that a united South Africa will never be realized (Johnson, 1997; see also Gibson, 2004; Møller et al., 1999). Beyond illustrating the challenge of achieving a genuine unification of South Africa, this statistic also reflects the fundamental struggle that has characterized intergroup relations in South Africa. The present study focuses on the perceptions of the main historical events over the last 60 years from the perspective of both *Africans* and *white South Africans*.

In times of dramatic social change, group members need to re-evaluate the position of their group to reestablish an anchor point in order to evaluate their drastically-changed social environment (de la Sablonnière, Taylor, et al., 2009; Moghaddam, 2002). To do this, they may examine their group’s position at each important historical point that contributes to their collective history (Bougie et al., in press). For instance, after the dismantlement of the Soviet Union, citizens of newly formed independent countries surely needed to evaluate whether their national condition had become better or worsened (de la Sablonnière, Taylor, et al., 2009). It would be logical to expect that the perception of a group’s position would approximate the actual social changes, positive or negative, experienced by the group. For instance, we might anticipate that for Jewish people, the expected narrative would be one where the overall group’s condition was relatively satisfying before the holocaust, but then took a dramatic turn for the worse during the period of the holocaust.

Historical representations of past event are not, however, always unanimous among members of a group. Indeed, past research has revealed that ethnic sub-group plays an important role in shaping the perceptions of dramatic national events, (Liu, Wilson, McClure, & Higgins, 1999). For instance, in the context of South Africa, we could anticipate that *Africans* would consider condition in South Africa to be dissatisfying during the apartheid period, but that it dramatically improved after Nelson Mandela was elected president. Conversely, *white South Africans* might consider that conditions in South Africa's took a downturn after the fall of apartheid (Korf & Malan, 2002). This is based on a line of research on historical representations (Huang, Liu, & Chang, 2004; Liu et al., 1999), which clearly demonstrates that it is possible for citizen from the same country to perceive the same national events in dramatically different ways (Huang et al., 2004; Liu et al., 1999).

Previous research also suggests that, surprisingly, there are significant sub-groups of people who perceive their group's situation as remaining stable throughout history, despite dramatic social changes (de la Sablonnière, Taylor, et al., 2009; Westerhof & Keyes, 2006). Accordingly, some *Africans* may not consider the overall conditions in South Africa to have improved since the fall of apartheid. This would be consistent with the reality that the actual material conditions have not improved for many *Africans* since the end of apartheid (Møller, 1998). Likewise, some *white South Africans* may not judge the overall conditions in South Africa to have worsened, despite the threat that the cessation of apartheid policies represented to *White* privilege. Given that *Whites* have largely been the beneficiary of the liberalized economy in the post-apartheid period, it is possible that white South Africans perceive that their group condition has not changed dramatically. Moreover, this perception of stability despite objective dramatic social changes is consistent with observations from previous research where collective histories were elicited from citizens of countries where dramatic changes had occurred (de la Sablonnière,

Taylor, et al., 2009; Westerhof & Keyes, 2006). Many of their group narratives indicated that nothing much had changed from their experience.

These two diverging group narratives, “expected” and “stable” are in line with research in diverse fields of social psychology (de la Sablonnière, Taylor, et al., 2009; Huang et al., 2004; Liu et al., 1999). For instance, recent research in the field of relative deprivation (de la Sablonnière, Taylor, et al., 2009) has demonstrated that, in the aftermath of a series of dramatic political and social changes in Kyrgyzstan, the majority of group members produced the “expected” narrative of their group, but a sizeable subgroup reported that the situation has remained relatively “stable” over time. Similarly, research in the field of historical representations (Huang et al., 2004; Liu et al., 1999; see also Liu & Hilton, 2005) has shown that people from the same ingroup might have quite different perceptions of the past.

What needs to be addressed is *why* some group members produce different group narratives (Huang et al., 2004; Liu et al., 1999) such as the “expected” narrative of their group while others report a “stable” one (de la Sablonnière, Taylor, et al., 2009). Answering this question is fundamental because these types of historical representations may affect how people cope with dramatic social change in terms of psychological well-being (de la Sablonnière, Taylor, et al., 2009) and intergroup attitudes (e.g., Grofman & Muller, 1973; Gurr, 1970).

The present study has thus three goals. The first goal is to replicate and extend the results of previous studies demonstrating that people from the same ingroup tend to produce different group narratives (Huang et al., 2004; Liu et al., 1999). Specifically, while many will produce the “expected” group narrative, a not insignificant number will describe a “stable” group pattern. We will employ an innovative methodology, group-based trajectory modeling, to identify different group narrative patterns that might be held by members of the same group (see also de la Sablonnière, Taylor, et al., 2009). The second goal is to understand what might explain that

people from the same group perceive either the “expected” or the “stable” group narrative. We will argue that the level of ethnic group identification is associated with the type of group narrative that will be produced. The third goal is to examine the association of the different group narratives with psychological well-being and intergroup attitudes. To our knowledge, only one study has demonstrated that different types of group narratives are associated with different levels of collective well-being (de la Sablonnière, Taylor, et al., 2009). Thus, we will investigate the association of group narratives with collective well-being and also extend our analysis to personal well-being and intergroup attitudes.

The present research builds on both traditional and recent advances in the field of relative deprivation (Davies, 1962; de la Sablonnière, Taylor, et al., 2009; Grofman & Muller, 1973) as well as on social identity theory (Tajfel, 1978; Tajfel & Turner, 1979, 1986).

Expanding Relative Deprivation

Relative deprivation involves a threatening feeling brought about by the perception of a disparity in the form of a negative comparison (Crosby, 1976; Runciman, 1966; Walker & Pettigrew, 1984). Relative deprivation theory has two basic assumptions (Stouffer, Suchman, DeVinney, Star, & Williams, 1949). First, people assess the condition of their group based on subjective, as opposed to objective, targets of comparison. If the chosen target of comparison is not in their favor, then, a feeling of dissatisfaction will be felt. The second assumption is that the target of comparison is context-dependent. Supporting this assumption, recent research shows that targets of comparison in situations of dramatic social change are different from those used in less dramatic circumstances (de la Sablonnière, Tougas, & Perenlei, 2010).

Specifically, according to group-based relative deprivation theory, there are two main targets of comparison, social and temporal (Walker & Pettigrew, 1984). Social comparisons are used when people compare the situation of their own group with the situation of another group

(Festinger, 1954). Temporal comparisons are used when a group compares its present situation with its situation at another point in time (Albert, 1977). For example, to evaluate the position of their group, *white South Africans* could compare their current condition with the condition of their group before the fall of apartheid. A number of studies have demonstrated that temporal comparisons are especially relevant in the context of dramatic social change (Albert, 1977; Brown & Middendorf, 1996; de la Sablonnière & Tougas, 2008; de la Sablonnière, Tougas, & Lortie-Lussier, 2009). The destabilizing nature of dramatic social change (Albert & Sabini, 1974) plunges people into such turmoil that they are left without social cues that are normally useful for social comparison (de la Sablonnière, Hénault, & Huberdeau, 2009). Consequently, resorting to temporal anchor points for comparisons becomes particularly useful in allowing group members to evaluate their own group's condition in times of dramatic social change (Albert, 1977; Brown & Middendorf, 1996). Temporal group comparisons are therefore the focus of the present paper.

Most research on temporal relative deprivation has one feature in common: temporal relative deprivation is assessed by asking participants to compare their group's current situation with a *single point* of comparison in their past or in the future (e.g. Abeles, 1976; Appelgryn & Bornman, 1996; Dambrun, Taylor, McDonald, Crush, & Méot, 2006; de la Sablonnière, Tougas, et al., 2009; Guimond & Dambrun, 2002; McFarland & Alvaro, 2000; Taylor, Neter, & Wayment, 1995; Wilson & Ross, 2000, 2001; see also Walker & Mann, 1987). Specifically, researchers conducting studies on temporal relative deprivation choose the point of comparison arbitrarily, without taking into account of the particular historical context of the group. It is therefore possible that the point of comparison chosen by the researcher does not correspond to the reality of the participants' group history.

Recently, a reconceptualisation of relative deprivation theory has been proposed (de la Sablonnière, Taylor, et al., 2009). Instead of evaluating one temporal comparison point, it was argued that many comparison points are needed in order to evaluate the entire trajectory of relative deprivation perceived by a group through time. In the study conducted by de la Sablonnière, Taylor, et al. (2009), the trajectory of relative deprivation was examined in the context of Kyrgyzstan, a small Central Asian country that was part of the former Soviet Union. Results from that study showed that the majority of Kyrgyz (84%) perceived that their group went through a pattern of relative deprivation that was “expected” in that it paralleled the historical events faced by Kyrgyz over time. This trajectory was characterized by improvements, followed by deterioration, again followed by anticipated improvement in the future. However, despite the dramatic social changes that impacted Kyrgyzstan, an important subgroup of participants (16%) reported a pattern of temporal relative deprivation that was “stable” over time.

These results, which showed that people from the same ingroup might perceive the events faced by their group in a different manner, is also supported by a well-established literature on historical representation (Huang et al., 2004; Liu et al., 1999). As Liu et al. (1999) note, “the telling of history can be viewed as a prototypical group activity, where different versions of history can be held among different segments of the population” (p.1022). Indeed, while the main events that constitute a group’s representation of history tend to be shared by all its members, their meaning is often contentious (Huang et al., 2004; Liu et al., 1999). For instance, New Zealanders identified the Treaty of Waitangi as the most important event in their history, but the perception of this event differed among sub-groups (Liu et al., 1999). This is echoed in the theoretical proposition of Moscovici (1988) who argued that historical representations can be shared differently among members of a group.

The *first goal* of the present study is to extend in the context of South Africa the finding that diverse historical representations are possible among members of the same ingroup. Although it seems clear from past research that people from the same ingroup might perceive different group's representation of history (de la Sablonnière, Taylor, et al., 2009; Liu et al., 1999; Liu & Hilton, 2005; Moscovici, 1988), what distinguishes these different historical representations remains obscure. In the present study, historical representations are evaluated through trajectory of relative deprivation and we propose that historical representation differ mainly in the level of relative deprivation perceived over time. Specifically, the social context of South Africa allows us to extend previous research by examining if there are different trajectories of relative deprivation regarding a common history among different ethnic groups. Concretely, for both *Africans* and *Whites*, we hypothesize that two main trajectories of relative deprivation will emerge for each group. First, we theorise that most group members, either *Africans* or *white South Africans*, will portray a trajectory of relative deprivation corresponding to the pattern of “expected” impact brought about by dramatic social changes. Second, we hypothesize that a sizeable sub-group will report a “stable”, no perceived change, group trajectory of relative deprivation across the same time span.

Our *second goal* is to identify the factors that might be associated with these two trajectories. Our theoretical reasoning builds on social identity theory (Tajfel, 1978; Tajfel & Turner, 1979, 1986). Tajfel, Turner and colleagues hypothesized that people must identify with their group before feeling relatively deprived. Elaborating on social identity theory, many authors suggest that a social identity forged on solid and strong beliefs about one's own group, which is defined as a high level of ingroup identification, increases sensitivity to unfavorable comparisons (Guimond & Dubé-Simard, 1983; Guimond & Tougas, 1994; Kawakami & Dion, 1995; Smith, Spears, & Oyen, 1994; Tougas & Veilleux, 1988), and have empirically tested this hypothesis

(Guimond & Dubé-Simard, 1983; Smith et al., 1994; Tajfel, 1978; Tougas & Veilleux, 1988, 1989, 1990; Veilleux, Tougas, & Rinfret, 1992). Surprisingly, results have been very inconsistent. Ingroup identification was sometimes positively associated with relative deprivation, as predicted (Kessler & Mummendey, 2002; Mummendey, Kessler, Klink, & Mielke, 1999; Tropp & Wright, 1999; Veilleux et al., 1992), and sometimes the link between identification and relative deprivation was not supported (Dambrun et al., 2006; Ethier & Deaux, 1994; Lalonde & Cameron, 1993; Tougas & Veilleux, 1988, 1990; Zagefka & Brown, 2005). To date, no compelling explanation for these inconsistent findings has been proposed.

We believe that the inconsistency arises from a misconceptualization of temporal relative deprivation (see also de la Sablonnière, Taylor, et al., 2009). Hitherto, research has failed to consider one of the basic assumptions of relative deprivation, that is: the social context in which the group comparison is made plays a pivotal role in the emergence of feelings of relative deprivation (Stouffer et al., 1949). Building on social identity theory (Tajfel & Turner, 1979, 1986), we argue that ingroup identification plays a central role in predicting which trajectory of relative deprivation group members will display. This idea is based on the proposition that ingroup identification acts as a predictor of feelings of relative deprivation (Abrams, 1990; de la Sablonnière & Tougas, 2008; Tajfel, 1978; Tougas & Beaton, 2002; Tropp & Wright, 1999), and is consistent with Tajfel's (1978) view that a strong ingroup identification is needed in order to perceive group disparities. Accordingly, we propose that the level of ingroup identification (high versus low) will be associated with trajectories of relative deprivation that describe either the "expected" group trajectory or the "stable" trajectory. As group members high in ingroup identification are more inclined to make group comparisons (Kawakami & Dion, 2005), they are more likely to be aware of the threats their group has faced over time, and as a result, also more likely to be aware of any change in relative deprivation experienced by their group during that

period. Accordingly, group members high in ingroup identification should present a trajectory of relative deprivation that would be “expected”. In contrast, group members low in ingroup identification will be less aware of group threats and consequently, perceive fewer changes in relative deprivation across time. We hypothesize that low identifiers will perceive a more “stable” trajectory of relative deprivation. Some indirect support already exists for this hypothesis. For example, an experimental study conducted by Sahdra and Ross (2007) indicates that high and low ingroup identifiers exhibit discrepancies in historical memories such as the recalling of incidents in which members of their ingroup perpetrated harms against members of an outgroup.

Applying our hypotheses to the specific context of South Africa, we posit that identifying with a specific ethnic group will be associated with how people’s perceived the dramatic social changes that have impacted South Africans’ general condition over time (see also Liu et al., 1999). Concretely, we hypothesize that *Africans* who identify highly with their group will report a South Africans’ trajectory of relative deprivation more directly linked with changes that had affected *Africans* over time. Indeed, we expect that they will be more likely to report that South Africans’ condition over time followed a “decreasing-expected” group trajectory where relative deprivation decreases as the timeframe moves from the apartheid period to the post-apartheid era. In contrast, we hypothesize that *white South Africans* high in ethnic group identification will present a more “increasing-expected” group trajectory. During the apartheid period, *white South Africans* held almost all the economic and political power in South Africa. Its fall is associated with a downturn in the economic and political power held by *white South Africans* (Korf & Malan, 2002).

The *third goal* of the present research is to examine the relationship between the two theorized trajectories of relative deprivation and psychological well-being and intergroup

attitudes. In previous studies, psychological well-being has been found to be associated with how people perceive changes in their life trajectory both at a personal level (Keyes, 2000; Keyes & Ryff, 2000) and at a collective level (Westerhof & Keyes, 2006). Past research, however, did not evaluate a trajectory comprised of multiple points of comparisons in time. For instance, participants were asked to determine if their current situation had improved, deteriorated, or stayed the same in relation to a *single point* of comparison in the past. Considering a single point of comparison might not be sufficient to account for the entire process by which people evaluate their situation.

For the present research, we apply an innovative method (i.e. group-based trajectory modeling) to assess how people perceive their group trajectories across *multiple points of comparison* in order to replicate past findings. Our first dependent variable is one that has been used frequently, collective well-being (Bougie et al., in press; de la Sablonnière, Tougas, et al., 2009; Tougas & Beaton, 2002; Walker, 1999 see also Branscombe, Schmitt, & Harvey, 1999; Jetten, Branscombe, Schmitt, & Spears, 2001). In addition, we chose to extend the scope of the differential trajectories to personal well-being and intergroup attitudes. Based on studies suggesting that the collective level can be generalized to personal psychological well-being, we expect that how people perceived their group trajectories might be associated with different levels of personal well-being (Taylor, 1997, 2002). This is consistent with past research having shown that feelings of relative deprivation at the collective level do affect personal well-being (Bougie, 2005; Walker, 1999; Zagefka & Brown, 2005). As well, a voluminous literature on collective relative deprivation has confirmed its link with intergroup attitudes and xenophobia (Castano, Yzerbyt, Paladino, & Sacchi, 2002; Dambrun et al., 2006; Guimond & Dambrun, 2002). Intergroup attitudes were thus also evaluated and is especially important given that South Africa is still characterized by racial discrimination and intergroup conflict. More than fifteen years after

the fall of the apartheid, South Africa is still challenged by important intergroup relations issues, such as xenophobic attacks against African immigrants (Crush & Pendleton, 2004; Danso & McDonald, 2001; McDonald & Jacobs, 2005; Neocosmos, 2006). Thus intergroup attitudes represent an important social issue.

In the particular context of South Africa, we predict that the “increasing-expected” group trajectory for *Whites* will be associated with less personal and collective well-being when compared to stable trajectories. Conversely, we hypothesize that the “decreasing-expected” group trajectory for *Africans* will be associated with a higher level of personal and collective well-being. In terms of intergroup attitudes, we predict that the perception of the expected group trajectory, either the “increasing-expected” group trajectory for *Whites* or the “decreasing-expected” group trajectory for *Africans* will be associated with a higher level of negative intergroup attitudes. This hypothesis is in line with past research on relative deprivation, which suggests that any change in relative deprivation, positive or negative, is associated with negative political attitudes (Grofman & Muller, 1973; see also Davies, 1962, 1969; Gurr, 1970).

Method

Participants

A total of 2,989 randomly-selected South Africans were surveyed between October 9 and November 10, 2006. Care was taken to ensure that the place of residence and the racial group of the respondents were representative of the national population in South Africa. In all, the representative sample comprised of 2,527 *Africans* and 462 *Whites*. The sample included 1,486 women and 1,503 men. The average age was 37.76 ($SD = 14.37$). Afrikaans and English were identified as the native languages of *white South Africans* in 56.5% and 39.8% of cases respectively. Amongst *Africans*, less than 1% reported Afrikaans to be their mother tongue. Overall, 31.8% of *Africans* spoke Zulu, 20.5 % spoke Xhosa, 10.2% spoke North Sotho, 10.9%

spoke South Sotho, and 10.2% spoke Tswana. A minority of *Africans* also identified the Tsonga, Venda, Swazi and Ndebele languages spoken as well.

Procedure

The field research was conducted by the Southern African Migration project (<http://www.queensu.ca/samp/>). Applying random selection methods at every stage of sampling ensured that the sample was a representative cross-section of all South African citizens above the age of 18 years. The data closely matched the socio demographic characteristics of the 2005 midyear population estimates provided by Statistics South Africa with respect to the population numbers per province, race, age groups, and gender. Also, in creating the representative sample, care was taken to ensure that the sample was weighted proportionately by the population of the suburb or the district in South Africa. Suburb and district were selected randomly. Specifically, once an enumerator area (i.e. a region of country that is to be visited by an enumerator during the census) was selected, maps were used by interviewers to randomly select a location to begin interviewing. Afterwards, interviewers were requested to walk in a randomly determined direction. A predetermined interval was used to determine what the interval between each household selected would be for conducting interviews.

To further ensure that no systematic bias affected the sampling procedure, respondents were also selected randomly to conduct the interview once a household was selected. Surveyors had to first list all household members over the age of 18 and use a pre-established random schedule to choose which member of the household would be interviewed. Up to three attempts were made to interview the selected person. Afterwards, the whole household was substituted: About 12% of the original houses that were first selected refused or could not participate in the study. However, after substituting these non-responding households, analyses were conducted to ensure that the sample accurately represented the population of South Africa.

Such nationwide surveying necessitated certain considerations in developing the survey instrument. The questionnaire was first translated from English into the other 5 official languages in South Africa (i.e. Afrikaans, Xhosa, Zulu, Tswana and Sesotho). Accordingly, interviewers that could speak those languages fluently had to be recruited to conduct the interview in the language used most frequently by the respondent. In addition, the survey instrument was designed in such a way that interviewers were required to follow a predetermined order of questions. Participants had to answer questions in a standard format. On average, an interview lasted one hour.

Questionnaire

For the present study, items that focused on perceptions of relative deprivation, ethnic identification, intergroup attitudes and psychological well-being were used. Participants were also asked to answer demographic questions including their age, gender, ethnicity, education level, and socioeconomic status level.

Temporal relative deprivation measures. Our measure of temporal relative deprivation modeled those of previous studies that used a temporal approach with many points of comparisons (Bougie et al., in press; de la Sablonnière, Taylor, et al., 2009). In the context of the present study, temporal relative deprivation was assessed at four main historical periods. These four historical periods were identified by South African scientists and experts in research on South Africa, and included : 1) the time of apartheid (1948-1991), 2) the immediate post-apartheid period (1991-2005), 3) the present time (2006), and 4) 5-years in the future.

Temporal relative deprivation was assessed at these four historical periods using a single item derived from previous scales (Guimond & Dambrun, 2002; Guimond & Dubé-Simard, 1983; Pettigrew & Meertens, 1995; Runciman, 1966). The specific wording of the item was adapted from Dambrun et al. (2006) as its items were concrete and user friendly, and therefore

comprehensible for a South African population that was unaccustomed to formal questionnaires. The four items for temporal relative deprivation focused on the overall economic conditions in South Africa at each historical period. Specifically, for each **historical** period (e.g. the apartheid period), participants were asked to indicate how satisfied they were with overall economic conditions in South Africa at the time. Responses, on an 11-point Likert-type scale, ranged from 0 (*very dissatisfied*) to 10 (*very satisfied*). Items were recoded so that higher scores indicate higher levels of relative deprivation. In creating the trajectories, the comparison of a participant's score from one historical period to the other indicates how their condition had become better, stayed the same or had worsened compared to their own condition at each point. The trajectories of temporal relative deprivation thus identify both the level of Temporal Relative Deprivation and how it was perceived to have changed over time.

Ethnic group identification measure. Given that we expected ethnic group to be associated with how people perceived their national history, ethnic group identification was assessed. For the present study, participants were asked to indicate on an 11-point Likert-type scale ranging from 0 (*strongly disagree*) to 10 (*strongly agree*) the extent to which they agreed with the following statements: "It is important for me to be a member of my ethnic group (i.e. African, White)". This single item was derived from previous scales (Ellemers, Van Knippenberg, De Vries, & Wilke, 1988). A higher score on this item indicates a higher level of ethnic identification.

Collective well-being measure. Since relative deprivation over time was examined, collective well-being was evaluated at the national level using a measure of group-based self-esteem (Jackson, 2002; Ellemers, Kortekaas, & Ouwerkerk, 1999). Our measure of group self-esteem modeled that of Ellemers and colleagues who conceptualized group self-esteem as "a positive or negative value connotation attached to his group membership" (p. 372, Ellemers et al.,

1999; see also Jackson, 2002). Group self-esteem was evaluated using a one-item scale.

Participants had to indicate on an 11-point Likert-type scale ranging from 0 (*strongly disagree*) to 10 (*strongly agree*), the extent to which they agreed with the following statement: "It makes me proud to be a South African". A higher score on this item indicates a higher level of group self-esteem.

Personal well-being measures. Personal well-being was evaluated with two measures: life satisfaction and personal hope ($r = .55, p < .001$). Life satisfaction was evaluated using 2 items from the Satisfaction with life Scale (Diener, Emmons, Larsen, & Griffin, 1985; $\alpha = .73$). Since participants were not accustomed to answering questionnaires, we selected the more relevant items. Specifically, participants were required to answer the following two questions: "I am satisfied with my life" and "So far I have got the important things in my life". Answers were recorded on an 11-point Likert-type scale ranging from 0 (*totally disagree*) to 10 (*strongly agree*). Correlation between items was adequate, $r = .56, p < .001$.

Personal hope was evaluated as a measure of personal well-being since it has been associated with personal self-esteem (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, et al., 1991). Participants were asked to rate on an 11-point Likert-type scale ranging from 0 (*strongly disagree*) to 10 (*strongly agree*) the extent to which they agree with the following questions: "I am energetically pursuing my goals", "Right now I see myself as being successful and "At this time, I am meeting the goal that I have set for myself." Internal consistency for this scale is .83.

Intergroup attitudes measure. Attitude towards African immigrants was assessed, as it is currently a paramount issue in South Africa. To assess attitude towards African immigrants, participants were asked to rate on an 11-point Likert-type scale the extent to which they felt unfavorable (0) or favorable (10) toward their own ingroup (i.e. *Africans* and *Whites*) and toward

five immigrant groups living in South Africa from: 1) neighboring countries, 2) countries in the rest of Africa, 3) countries in Europe and North America, 4) countries where people are living in South Africa illegally, and 5) other countries where refugees are escaping war and political oppression. Also, participants were asked to rate on an 11-point Likert-type scale the extent to which they had an unfavorable (0) or a favorable opinion (10) of people living in South Africa from the 10 following countries: Nigeria, Angola, Botswana, Democratic Republic of Congo, Ghana, Lesotho, Mozambique, Somalia, Swaziland and Zimbabwe.

Based on these different ratings, we created a composite score of intergroup attitudes. We modeled the method used in a previous study conducted in South Africa (Dambrun et al., 2006). Specifically, by subtracting a respondent's score to each item on attitudes towards immigrants from the ratings that the respondent gave to his or her own group, we obtained a measure of intergroup attitudes toward immigrants living in South Africa. For example, for *Africans*, we subtracted the ratings of their own group from all other items about immigrant groups for each participant. This method proved to be an adequate measure of intergroup attitudes in past research (see Castano et al., 2002; Dambrun et al., 2006; Guimond & Dambrun, 2002). In addition, the measure of intergroup attitudes has been standardized. Thus, means and standard deviation correspond to respectively 0 and 1.00

Principal Components factor analysis. To improve this method of assessing intergroup attitudes, we calculated the weight for each item on attitudes towards five immigrants groups (5 items) and towards immigrants from different Africans countries (10 items) in terms of their contribution to the concept of intergroup attitudes using a Principal Components factor analysis on all the items measuring attitudes toward immigrants. Analyses were performed separately for *Africans* and *white South Africans* because the weight of each question varied as a function of group. Following the principal component analysis, an intergroup attitudes scale was calculated

by weighting each item's scale with coefficients from the factor analysis. With this method, global scores of intergroup attitudes can range from -10 to 10, with a high score indicating positive intergroup attitudes.

Data analysis strategy

To test our first hypothesis suggesting that both an “expected” and a “stable” trajectory group will emerge for *Africans* and *Whites*, we statistically identified the trajectory of perceived relative deprivation. Trajectories of relative deprivation were generated using group-based trajectory modeling (Jones & Nagin, 2007; Jones, Nagin, & Roeder, 2001; Nagin, 1999, 2005). This statistical technique adopts a semiparametric group-based modeling approach to identify the trajectories that best describe data measured at multiple points. Technically, group-based trajectory modeling relies on finite mixtures of specified probability distributions to determine, by maximum likelihood, the parameter estimates that describe the model (Jones & Nagin, 2007; Nagin, 1999, 2005). By relying on a multinomial equation, group-based trajectory modeling creates different group trajectories that emerge from the data. This statistical approach is thus more flexible than hierarchical linear modeling (Raudenbush & Bryk, 2002) by allowing some heterogeneity in the population (Nagin, 1999; 2005). Specifically, group-based trajectory modeling identifies if there are distinct group tendencies underlying individuals trajectories. If every individual were following distinct trajectories, no group trajectory could then be estimated. In terms of our data, group-based trajectory modeling identified how many group trajectories (or clusters) arise from our retrospectively reported measures of relative deprivation for each historical period (Jones et al., 2001; Nagin, 1999). The program, used to perform group-based trajectory modeling, is a customized SAS-based procedure called PROC TRAJ (Jones et al., 2001) and the Bayesian Information criterion (BIC) was used as statistical criterion for model selection. The procedure used here follows the one explained by Nagin (2005).

Secondly, after having created the trajectories of collective relative deprivation, we were interested in predicting the probability of belonging to each trajectory. As stated in our second hypothesis, we proposed that a high level of ethnic identification would be associated with a higher probability of belonging to the “expected” group trajectory. Since probability of group membership to a specific trajectory is expected to follow a multinomial logit function (or a binary logit function if only two trajectories are estimated), multinomial logit models were estimated for linking ethnic identification to the distinct trajectories of relative deprivations (Roeder, Lynch & Nagin, 1999; Nagin, 2005). Specifically, after selecting the optimal model of trajectories using group-based trajectory analysis, ethnic group identification was included directly in the trajectory analysis as main effects to estimate multinomial logit models. We also controlled for the main effect of two important covariates: participant’s age and their socioeconomic status (SES). Age was included as a covariate to ensure that differences in group trajectory were not associated with the fact that older people might perceive different group trajectories because they experienced first-hand different historical periods than younger people. Secondly, participant’s socioeconomic status level was also included as a covariate. Given that socioeconomic status level is a more objective measure of inequalities between social classes, socioeconomic status could have an important impact on perception of relative deprivation across time. Thus it was important to control for this variable by including it as a covariate.

Thirdly, once the trajectories of relative deprivation were created, we are positioned to determine their association with both psychological well-being and intergroup attitudes. Specifically, as the posterior probabilities of belonging to a group are estimated for each respondent in the sample simultaneously with the creation of the model, it is then possible to assign respondents in the sample to the group trajectory with the highest posterior probability of belonging (Nagin, 2005). Thereafter, it is possible to perform a *Multivariate Analysis of Variance*

(MANOVA) with individual group membership to examine differences between group trajectories on our measures of collective well-being, personal well-being and intergroup attitudes.

Results

Preliminary analysis

Preliminary analyses revealed that the data followed a normal distribution. All measures fell within an acceptable kurtosis and skewness range and varied from -2.06 to 2.58 (Tabachnick & Fidell, 2007). Only the measure of collective well-being had a kurtosis higher than ideal (4.83) but it is still acceptable (Byrne, 1998; Kline, 1998). Considering that no correlations were higher than .90, problems of multicollinearity and singularity were ruled out (Tabachnick & Fidell, 2007). Participants with a score beyond + 3.29 and below - 3.29 standard deviations, as well as those who displaying a Mahalanobis distance greater than the exclusion criterion set at $p < .001$, were identified. From these analyses, 53 participants out of the initial sample of 2,989 were identified as outliers. Statistical analysis was conducted with and without these outliers. Since the results were the same in both cases, the entire initial sample of 2,989 participants was retained for presenting our results. For all continuous variables, missing data levels were less than 5 %. Missing values were replaced by simple imputation using the PROC MI procedure in SAS (Yuan, 2000). Means, standard deviations and correlations for all variables are shown in Table 1.

Insert Table 1 about here

Identify the Different Trajectories of Relative Deprivation

Our first goal was to determine whether two main trajectories of relative deprivation would emerge: a different “expected” trajectory and “stable” trajectory for *Africans* and *white*

South Africans. Group-based trajectory modeling (Jones & Nagin, 2007; Jones et al., 2001; Nagin, 1999, 2005) was conducted separately for *Africans* and *Whites*. In selecting the optimal model, one of the key issues for group-based trajectory modeling is to choose the best number and the shape of trajectories describing the data. Based on Nagin's recommendation (Nagin, 2005; see also Kass & Raftery, 1995), the Bayesian Information criterion (BIC) was used as the statistical criterion for model selection. Since all our variables were measured using Likert-type scales, we estimated trajectories and group memberships using the censored normal distribution (CNORM, Jones et al., 2001; Nagin, 1999, 2005).

Table 2 (for *Africans*) and 3 (for *white South Africans*) show the BIC for different models tested. The BIC closest to zero indicate the most proper model. As revealed by the BIC, the optimal model for *Africans* should included 4 trajectories. However, since the fourth trajectory included only 3.4% participants, a model with 3 trajectories was judged more appropriate (see Nagin, 2005). After having selected the optimal number of groups, the shape of the trajectories was then estimated. All trajectories follow a quadratic function (a parabola) even though two of them have a relatively small quadratic coefficient indicating a more flat trajectory. For *white South Africans*, the BIC suggests a three-group model. Given that in the three-group model, two stable trajectories were identical in all aspects with the exception that they slightly differ in the level of relative deprivation across time, the two-group model was considered more parsimonious. The shape of the trajectories was then estimated and as inferred by the BIC, one trajectory follows a quadratic function while the other follows a linear function.

Insert Table 2 and Table 3 about here

A key output of the model, called the posterior probabilities of group membership, is also an indicator of how well the model fit the data. For each individual, the model identifies the probability of belonging to each trajectory group given the observed answers. Thereafter, each individual is assigned to the trajectory with the largest posterior probability estimate. Having assigned each individual to a trajectory, we can then average the posterior probability estimates of the individuals in each group trajectory to evaluate how well the model classify each individual (see Nagin, 2005 for more details). For African respondents, the average probabilities for the assigned groups revealed a relatively low classification error since it varied between 82 and 85% (Nagin, 2005). For *White* South Africans, the average probabilities revealed an even lower classification error, since the average probabilities for the assigned groups varied between 90 and 98% (Nagin, 2005). In sums, results revealed that the model chosen adequately fit the observed data.

Concretely, as predicted, for both groups, the optimal model included 2 types of trajectories; 1) a pattern that followed the “expected” group trajectory, and 2) a pattern that followed a “stable” trajectory. For *Africans* respondents, two stable trajectories emerged in addition to the expected one. Figure 1 shows the estimated trajectories of relative deprivation perceived by *Africans* regarding the pattern of South Africa’s economic situation across historical periods. As predicted, a significant number of *Africans* reported the “decreasing-expected” group trajectory. *Africans* following the “decreasing-expected” group trajectory perceived that the economic condition of South Africa had greatly improved between the apartheid and the post-apartheid periods. They also perceived that their economic condition had improved somewhat from the post-apartheid period to the present, and that it would continue to improve at a very slow pace over the next 5 years. However, the majority of *Africans* respondents perceived a “stable” group trajectory. That is to say, the majority of *Africans* indicated that the economic

condition of South Africa stayed relatively the same from the apartheid period until the present, and that it will not really improve in the future. Specifically, two “stable” group trajectories emerged among *Africans* respondents. While one of the “stable” group trajectories is associated with the perception of a moderate level of relative deprivation over time, the other trajectory is associated with a higher level of relative deprivation (see Figure 1).

Insert Figure 1 about here

An inspection of Figure 2 reveals that, as predicted, two main trajectories of relative deprivation emerged for *Whites*: an “expected” and a “stable” trajectory. Specifically, *white South Africans* comprising the “increasing-expected” group trajectory perceived an increase in relative deprivation from the apartheid period to the present, which was especially sharp from the apartheid to post-apartheid periods, and less pronounced afterward. Furthermore, *white South Africans* in the “increasing-expected” group trajectory believe that the overall economic condition in South Africa will continue to deteriorate slowly over the next 5 years. The “stable” group trajectory reveals that the majority of *white South Africans* believe that the economic situation in South Africa has remained relatively unchanged across time.

Insert Figure 2 about here

Ingroup Identification Association with the Trajectories of Relative Deprivation

Our second goal was to examine the different relative deprivation trajectories by determining whether higher levels of ethnic identification are associated with the “expected” group trajectory (either the increasing-expected group trajectory for *Whites* or the decreasing-expected group

trajectory for *Africans*). Technically, we tested whether the level of ingroup identification predicts the probability of belonging to a group trajectory while controlling for the potential effect of participant's age and socioeconomic status. To do this, the procedure suggested by Nagin (2005) was followed. Specifically, ethnic identification and demographic variables were added as covariates, predicting the probability of group membership simultaneously with the estimation of the trajectory themselves. Analyses were conducted separately for *Africans* and *Whites*. Given that 3 trajectories were estimated for *Africans*, multinomial logit models were estimated for linking ethnic identification to the 3 distinct trajectories of relative deprivation (Roeder et al., 1999; Nagin, 2005). However, since a two-group model defined *Whites'* retrospectively reported measures of collective relative deprivation, a binary logit function was used for modeling group membership probability as a function of ethnic identification and demographic variables (Nagin, 2005).

Coefficient estimates, the z-score associated with each of them, and the odds ratio are presented in Table 4 for *Africans* and *Whites*. Results presented in this Table can be interpreted as separate binary logistic regression analyses that compare the "stable" trajectories with the expected one. That is, for both *Africans* and *white South Africans*, the trajectory of comparison is the "expected" group trajectory. Accordingly, coefficient estimates indicate whether ethnic group identification increases or decreases the probability that an individual will follow the "expected" group trajectory when controlling for the effect of participant's age and socioeconomic status level. A negative estimated coefficient indicates that ethnic identification reduces the probability of belonging to the "stable" group trajectory compared to the "expected" group trajectory. In other words, a negative estimated coefficient means that respondents who highly identify with their ethnic group are more likely to follow the "expected" group trajectory than the stable one.

Also, in order to assess the association of ethnic identification with the probability of membership in each group, the “odds ratio” was calculated (for more details see Nagin, 2005).

Results for ethnic identification indicate that it is a powerful predictor of the “expected” group trajectory for both *African* and *White* respondents even when controlling for socioeconomic status level and participant’s age. Specifically, for *Africans*, higher level of ethnic identification decreases the likelihood of following one of the “stable” group trajectory compared to the “decreasing-expected” group trajectory. *Africans* who identify less with their ethnic group are 3.78 times more likely to perceive the “high-stable” group trajectory and 3.16 times more likely to perceive the “stable” group trajectory compared to the “decreasing-expected” group trajectory (see odds ratio in Table 4). In sum, *Africans* with a high level of ethnic identification are more inclined to perceive the “decreasing-expected” group trajectory and this regardless of their socioeconomic status level and their age. Socioeconomic status level did emerge as a significant predictor of the “high-stable” group trajectory. Having a high socioeconomic status level increases the risk of perceiving the trajectory as high and stable by 2.36 times.

Insert Table 4 about here

Results for *Whites* follow the same pattern: higher identifiers are more likely to perceive the “increasing-expected” group trajectory for *Whites*. Specifically, *Whites* who score low on ethnic identification are 2.18 times more likely to perceive the “stable” group trajectory compared to the “increasing-expected” group trajectory. However, both socioeconomic status level and participant’s age were not a significant predictor of the trajectories for *white South Africans*.

The Trajectories of Relative Deprivation Association with Intergroup Attitudes and Psychological Well-being

The *third goal* was to examine the association of the different trajectories of relative deprivation with intergroup attitudes and psychological well-being. Specifically, we aimed at testing whether there is a difference in personal and collective well-being, as well as in intergroup attitudes, between the trajectory of relative deprivation estimated. MANOVAs were conducted to evaluate if the “expected” group trajectory is associated with significantly dissimilar levels of intergroup attitudes and psychological well-being among *Africans* and *Whites* in comparison with the “stable” trajectory. Two MANOVA were conducted: one for *Africans* and a second for *Whites* (see Table 3). MANOVAs revealed a main effect of trajectory group membership on both intergroup attitudes and psychological well-being for *Africans* (Wilk’s $\lambda = .94$, $F(4, 5046) = 42.53$, $p < .001$, $\eta^2 = .03$) as well as for *Whites* (Pillai’s Trace² = .18, $F(4, 454) = 25.58$, $p < .001$, $\eta^2 = .18$).

Regarding intergroup attitudes, results revealed a main effect of trajectory group membership on intergroup attitudes measures for *Africans*, $F(2, 2478) = 21.96$, $p < .001$, $\eta^2 = .02$. A posteriori Tukey test showed that, as expected, *Africans* who perceived the “decreasing-expected” group trajectory had more negative intergroup attitudes ($M = -0.17$, $SD = 0.93$) than those who followed the “stable” group trajectory ($M = -0.04$, $SD = 0.95$; $t(1631) = -2.73$, $p < .05$) or the “high-stable” group trajectory ($M = 0.17$, $SD = 1.08$; $t(1520) = -6.62$, $p < .001$). For *Whites*, results follow the same pattern, $F(1, 457) = 58.38$, $p < .001$, $\eta^2 = .12$. As predicted, *white South Africans* who perceived the “increasing-expected” group trajectory had more negative intergroup

² Here we report the Pillai’s criterion instead of the Wilks’ Lambda because, as suggested by Tabachnick and Fidell (2007), the homogeneity of variance-covariance matrices was not respected.

attitudes ($M = -0.90$, $SD = 0.99$) than those who follow the “stable” group trajectory ($M = 0.13$, $SD = 0.94$).

In terms of psychological well-being for *Africans*, further analysis revealed that there was a significant effect of group membership on group self-esteem, $F(2, 2478) = 77.86$, $p < .001$, $\eta^2 = .06$, life satisfaction, $F(2, 2478) = 71.68$, $p < .001$, $\eta^2 = .06$, and personal hope, $F(2, 2478) = 76.11$, $p < .001$, $\eta^2 = .06$. Since there are three trajectories of relative deprivation for *Africans*, a posteriori Tukey test was conducted to determine whether perceiving the “decreasing-expected” group trajectory is associated, as predicted, to a higher level of collective well-being comparing to those who perceived one of the “stable” group trajectories. Results indicate that *Africans* who perceived the “decreasing-expected” group trajectory had higher levels of group self-esteem ($M = 9.56$, $SD = 1.06$) than those who reported the “stable” group trajectory [$M = 9.00$, $SD = 1.48$; $t(1631) = 6.75$, $p < .001$] or the “high-stable” group trajectory [$M = 8.50$, $SD = 2.07$; $t(1520) = 12.47$, $p < .001$]. However, results showed that *Africans* who reported the “decreasing-expected” group trajectory only differ in terms of life satisfaction and personal hope from the “high-stable” group trajectory. For Whites, analysis revealed a significant effect of group membership on measures of psychological well-being. Specifically, being in the “increasing-expected” group trajectory was associated with a lower level of group self-esteem ($M = 7.10$, $SD = 2.88$) compared to the “stable” group trajectory [$M = 8.37$, $SD = 1.83$; $F(1, 460) = 20.55$, $p < .001$, $\eta^2 = .04$], as predicted. Similar results were found for personal hope and life satisfaction. However, effect sizes were quite smaller for life satisfaction and personal hope.

Insert Table 5 about here

Discussion

Dramatic social change is a relentless characteristic of modern geopolitics. While there are some changes that are relatively gradual, many countries are challenged by dramatic social change that completely disrupts their social structures. What we focused on in the present research was the fall of apartheid in South Africa, which was an important group-based change that impacted every South African.

Recent research in social psychology suggests that there is substantial variation in terms of how social change is perceived and experienced (Goodwin, 2009). What is the pattern of these differences, and how can we predict them? In addition, how do these differences relate to people's psychological well-being? The present study focused on these questions, leading to three major conclusions.

The first conclusion is that there are, indeed, systematic differences in how group members perceive social change. Specifically, we found that some group members follow a trajectory of relative deprivation corresponding to the pattern of expected impact brought about by social change. Other group members, however, report no change in relative deprivation despite dramatic social changes. The fall of Apartheid was such a dramatic geopolitical event that to all observers it seemed clear, at least on the surface, that *Whites* lost the privileged status they once enjoyed, and *Africans* were poised to realise their aspirations following decades of repression. Clearly, this perception is not shared by all *Africans* and *Whites*.

Why might some individuals report a stable group trajectory of relative deprivation even in the face of a change as dramatic and far-reaching as the fall of apartheid? Self-concept theory (Keyes, 2000; Keyes & Ryff, 2000) suggests that individuals are motivated to perceive stability in their environment in order to maximize their own well-being. Specifically, perceiving stability fulfills an important psychological need: a sense of self-consistency. Self-consistency allows an

individual to maintain a constant self-image over time and across situation (Lecky, 1945). This perception supports the belief that the world is consistent and controllable (Janoff-Bulman, 1992), and in this way, people can be more confident about their future (Foote, 1951; Swann, 1990). Accordingly, perceiving stability when challenged by dramatic social change might provide individual's with a sense of control over their own life.

The second conclusion we can derive from our results is that ethnic group identification plays a central role in predicting which trajectory of relative deprivation group members will endorse. Consistent with social identity theory (Tajfel, 1978; Tajfel & Turner, 1979, 1986), research has shown that high ingroup identifiers experience more relative deprivation (Ellemers & Bos, 1987; Kessler & Mummendey, 2002; Mummendey et al., 1999; Tropp & Wright, 1999; Veilleux et al., 1992). However, this link has not always been confirmed empirically (Ethier & Deaux, 1994; Lalonde & Cameron, 1993; Tougas & Veilleux, 1988, 1990; Zagefka & Brown, 2005) and no compelling explanation for these inconsistent findings has been proposed.

Results from the present study demonstrate that ingroup identification does not necessarily lead to a higher or lower relative deprivation level. Rather, high ingroup identification only predicts membership in the expected group trajectory of relative deprivation. High and low ingroup identifiers may reveal distinct group trajectories because they have been exposed (or expose themselves) to dissimilar information about their ingroup (e.g., Sahdra & Ross, 2007). For instance, because group members high in ingroup identification are more inclined to make group comparisons (Kawakami & Dion, 2005), it may make them more aware of changes and threats that their group faced over time and thus, perceive the expected trajectory for their group. This point of view is also shared by Vallone, Ross and Lepper (1985) who suggest that highly identified group members pay more attention to attacks directed at their group.

The third conclusion is that perceiving either an expected or a stable group trajectory is associated with dissimilar levels of intergroup attitudes and psychological well-being. Specifically, perceiving the “increasing-expected” group trajectory of relative deprivation for *Whites* is associated with less psychological well-being compared to the stable pattern. Conversely, perceiving the “decreasing-expected” group trajectory of relative deprivation for *Africans* is associated with more psychological well-being than perceiving a “stable” group trajectory. This finding for *Africans* contradicts previous research. For example, Westerhof and Keyes (2006) have demonstrated that the perception of one’s collective trajectory as having changed either for the better or for the worse, is associated with negative well-being. We demonstrate that for *Africans*, perceiving a “decreasing-expected” group trajectory is actually associated with more psychological well-being.

In terms of intergroup attitudes, results revealed that the perception of the expected group trajectory is negatively associated with intergroup attitudes for both *Africans* and *Whites*. That is, perceiving the expected group trajectory is associated with more negative intergroup attitudes than perceiving the stable group trajectory. This result confirms the thesis that people who perceive the expected group trajectory are more inclined to make group comparisons (Kawakami & Dion, 2005). As such, if they strongly identify with their own group in this comparison process, they are more likely to favor their own group to the detriment of other groups and thereby hold negative intergroup attitudes.

Conclusion

The present research provides new insights in terms of how South Africans perceive and respond to the legacy of apartheid and its dramatic fall. While many *Whites* do indeed perceive the loss of political power and status associated with the fall of Apartheid, many *Whites* report no perceived change over time. Similarly, while many *Africans* perceived an upward trajectory for

their group, many others did not. These results parallel what has been found in another country affected by dramatic social change: Kyrgyzstan.

These two important patterns offer compelling insights into why members of the same group do not all follow a single pattern of relative deprivation. Our results show that ingroup identification plays a pivotal role. Moreover, our results show that the different perceived patterns are associated with both intergroup attitudes and psychological well-being. Clearly, social psychology needs to develop methodologies that capture the entire history of a group so that the complexity of peoples responses to what appears to be a blatant geopolitical event can be appreciated.

References

- Abeles, R. P. (1976). Relative deprivation, rising expectations and Black militancy. *Journal of Social Issues, 32*, 119-137.
- Abrams, D. (1990). *Political identity: Relative deprivation, social identity and the case of Scottish nationalism* (Initiative Occasion No. 24). London: City University, Economic and Social Research Council.
- Albert, S. (1977). Temporal comparison theory. *Psychological Review, 84*, 485-503.
doi:[10.1037/0033-295X.84.6.485](https://doi.org/10.1037/0033-295X.84.6.485)
- Albert, S., & Sabini, J. (1974). Attributions about systems in slow vs. rapid change. *Personality and Social Psychology Bulletin, 1*, 91-93. doi:10.1177/014616727400100131
- Appelgryn, A. E. M., & Bornman, E. (1996). Relative deprivation in contemporary South Africa. *Journal of Social Psychology, 136*, 381-397.
- Bougie, E. (2005). *The cultural narrative of Francophone and Anglophone Quebecers and their perceptions of temporal relative deprivation: Links with esteem and well-being*. Unpublished doctoral dissertation, McGill University, Canada.
- Bougie, E., Osborne, E., de la Sablonnière, R., & Taylor D. M. (in press). The cultural narrative of Francophone and Anglophone Quebecers and their perceptions of temporal relative deprivation: Links with esteem and well-being. *British Journal of Social Psychology*.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. (1999). Perceiving pervasive discrimination among African Americans: Implication for group identification and well-being. *Journal of Personality and Social Psychology, 77*, 135-149.
- Brown, R., & Middendorf, J. (1996). The underestimated role of temporal comparison: A test of the life-span model. *The Journal of Social Psychology, 136*, 325-331.

- Byrne, B. (1998). *Structural Equation Modeling With Lisrel, Prelis, and Simplis: Basic Concepts, Applications, and Programming*. Lawrence Erlbaum Assoc Inc.
- Castano, E., Yzerbyt, V., Paladino, M.-P., & Sacchi, S. (2002). I belong, therefore, I exist: Ingroup identification, ingroup entitativity, and ingroup bias. *Personality and Social Psychology Bulletin*, 28, 135–143. doi:10.1177/0146167202282001
- Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological Review*, 83, 85-113. doi:[10.1037/0033-295X.83.2.85](https://doi.org/10.1037/0033-295X.83.2.85)
- Crush J., & Pendleton, W. (2004). Regionalizing Xenophobia?: Citizen Attitudes to Immigration and Refugee Policy in Southern Africa. *Southern African Migration Policy Series 30*. Cape Town: SAMP.
- Dambrun, M., Taylor, D. M., McDonald, D. A., Crush, J., & Méot, A. (2006). The relative deprivation- gratification continuum and the attitudes of South Africans towards immigrants: A test of the V-curve hypothesis. *Journal of Personality and Social Psychology*, 91, 1032-1044. doi:[10.1037/0022-3514.91.6.1032](https://doi.org/10.1037/0022-3514.91.6.1032)
- Danso, R., & McDonald, D. (2001). Writing Xenophobia: Immigration and the Print Media in Post Apartheid South Africa. *Africa Today*, 48(3), 115-138.
- Davies, J. C. (1962). Toward a theory of revolution. *American Sociological Review*, 27, 5-19. doi:[10.2307/2089714](https://doi.org/10.2307/2089714)
- Davies, J. C. (1969). The J curve of rising and declining satisfaction as a cause of some great revolutions and a contained rebellion. In H. D. Graham, & T. R. Gurr (Eds), *The history of violence in America: Historical and comparative perspectives* (pp. 690–730). New York: Praeger.

- de la Sablonnière, R., Hénault, A.-M., & Huberdeau, M.-E. (2009). *Comparaisons sociales et comparaisons temporelles: vers une approche séquentielle et fonction de la situation unique*. [Social and temporal comparisons: A sequential approach and the role of the unique situation]. *Cahiers Internationaux de Psychologie Sociale*, 83, 3-24.
- de la Sablonnière, R., Taylor, D. M., Perozzo, C., & Sadykova, N. (2009). Reconceptualizing relative deprivation in the context of dramatic social change: The challenge confronting the people of Kyrgyzstan. *European Journal of Social Psychology*, 39, 325-345. doi:10.1002/ejsp.519
- de la Sablonnière, R., & Tougas, F. (2008). Relative deprivation and social identity in times of dramatic social changes: The case of nurses. *Journal of Applied Social Psychology*, 38, 2293-2314. doi:10.1111/j.1559-1816.2008.00392.x
- de la Sablonnière, R., Tougas, F., & Lortie-Lussier, M. (2009). Dramatic social change in Russia and Mongolia: Connecting relative deprivation to social identity. *Journal of Cross-Cultural Psychology*, 40, 327-348. doi:10.1177/0022022108330986
- de la Sablonnière, R., Tougas, F., & Perenlei, O. (2010). Beyond social and temporal comparisons: the role of temporal inter-group comparisons in the context of dramatic social change in Mongolia. *Journal of Social Psychology*, 150, 98-115. doi:10.1080/00224540903365331
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Ellemers, N., & Bos, A. E. R. (1987). Social Identity, Relative Deprivation, and Coping With the Threat of Position Loss: A Field Study Among Native Shopkeepers in Amsterdam. *Journal of Applied Social Psychology*, 28(21), 1988-2006. doi:10.1111/j.1559-1816.1998.tb01357.x

- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorization, commitment to the group and group self-esteem as related distinct aspects of social identity. *European Journal of Social Psychology, 29*, 371-389.
- Ellemers, N., Van Knippenberg, A., De Vries, N., & Wilke, H. (1988). Social identification and permeability of group boundaries. *European Journal of Social Psychology, 18*, 497-513.
doi:[10.1002/ejsp.2420180604](https://doi.org/10.1002/ejsp.2420180604)
- Ethier, K. A., & Deaux, K. (1994). Negotiating Social Identity When Contexts Change: Maintaining Identification and Responding to Threat. *Journal of personality and social psychology, 67*(2), 243-251. doi:[10.1037/0022-3514.67.2.243](https://doi.org/10.1037/0022-3514.67.2.243)
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117- 140.
doi:10.1177/001872675400700202
- Foote, N. N. (1951). Identification as the Basis for a Theory of Motivation. *American Sociological Review, 16*(1), 14-21. doi:[10.2307/2087964](https://doi.org/10.2307/2087964)
- Gibson, J. L. (2004). Overcoming apartheid: Can truth reconcile a divided nation? *Politikon, 31*(2), 129-155. doi:10.1080/0258934042000280698
- Goodwin, R. (2009). *Changing Relations: Achieving Intimacy in a Time of Social Transition*. New York: Cambridge University Press.
- Grofman, B. N., & Muller, E. N. (1973). The strange case of relative gratification and potential for political violence: The V-curve hypothesis. *American Political Science Review, 67*, 514-539.
- Guimond, S., & Dambrun, M. (2002). When prosperity breeds intergroup hostility: The effects of relative deprivation and gratification on prejudice. *Personality and Social Psychology Bulletin, 28*, 900-912. doi:10.1177/014616720202800704

- Guimond, S., & Dubé-Simard, L. (1983). Relative deprivation theory and the Québec nationalist movement: The cognitive– emotion distinction and the personal– group deprivation issue. *Journal of Personality and Social Psychology*, *44*, 526–535. doi:[10.1037/0022-3514.44.3.526](https://doi.org/10.1037/0022-3514.44.3.526)
- Guimond, S., & Tougas, F. (1994). Sentiments d'injustice et action collective : la théorie de la privation relative. Dans R. Bourhis & J.-P. Leyens (Eds.), *Stéréotypes, discrimination et relations intergroupes* (p. 201-232). Paris : Margada.
- Gurr, T. R. (1970). *Why men rebel?* Princeton, NJ: Princeton University Press.
- Huang, L. L., Liu, J. H., & Chang, M. (2004). The double identity of Chinese Taiwanese: A dilemma of politics and identity rooted in history. *Asian Journal of Social Psychology*, *7*, 149-189. doi:10.1111/j.1467-839x.2004.00141.x
- Jackson, J. W. (2002). Intergroup attitudes as a function of different dimensions of group identification and perceived intergroup conflict. *Self and Identity*, *1*, 11-33.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Jetten, K., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin*, *27*, 1204-1213.
- Johnson, R. W. (1997). Parties, issues and political fragmentation. *Focus*, *7*, 1-7.
- Jones, B. L., & Nagin, D. S. (2007). Advances in group-based trajectory modeling and an SAS procedure for estimating them. *Sociological Methods and Research*, *35*, 542-571. doi:10.1177/0049124106292364

- Jones, B. L., Nagin, D. S., & Roeder, K. (2001). A SAS procedure based on mixture models for estimating developmental trajectories. *Sociological Methods and Research, 29*, 374-393. doi:10.1177/0049124101029003005
- Kass, R. E., & Raftery, A. E. (1995). Bayes Factors. *Journal of the American Statistical Association, 90*, 773-795.
- Kawakami, K., & Dion, K. L. (1995). Social identity and affect as determinants of collective action: Toward an integration of relative deprivation and social identity theories. *Theory and Psychology, 5*, 551-577. doi:10.1177/0959354395054005
- Kessler, T., & Mummendey, A. (2002). Sequential or Parallel Processes ? A Longitudinal Field Study Concerning Determinants of Identity-Management Strategies. *Journal of Personality and Social Psychology, 82*(1), 75-88. doi:[10.1037/0022-3514.82.1.75](https://doi.org/10.1037/0022-3514.82.1.75)
- Keyes, C. L. M. (2000). Subjective Change and Its Consequences for Emotional Well-Being. *Motivation and Emotion, 24*, 67-84. doi:10.1023/A:1005659114155
- Keyes, C. L. M., & Ryff, C. D. (2000). Subjective change and mental health: A self-concept theory. *Social Psychology Quarterly, 63*, 264-279. doi:[10.2307/2695873](https://doi.org/10.2307/2695873)
- Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling*. New York: Guilford Press.
- Korf, L., & Malan, J. (2002). Threat to Ethnic Identity: The Experience of White Afrikaans-Speaking Participants in Postapartheid South Africa. *The Journal of Social Psychology, 142*(2), 149-169. doi:10.1080/00224540209603892
- Lalonde, R. N., & Cameron, J. E. (1993). An Intergroup Perspective on Immigrant Acculturation with a Focus on Collective Strategies. *International Journal of Psychology, 28*(1), 57-74. doi:10.1080/00207599308246918
- Lecky, P. (1945). *Self-consistency: A theory of personality*. New York: Island Press.

- Liu J. H., & Hilton, D. J. (2005). How the past weights on the present: Social representations of history and their role in identity politics. *The British Journal of Social Psychology, 44*, 537-556. doi: 10.1348/014466605X27162
- Liu, J. H., Wilson, M. S., McClure, J., & Higgins, T. R. (1999). Social identity and the perception of history: Cultural representations of Aotearoa/New Zealand. *European Journal of Social Psychology, 29*, 1021-1047.
- McDonald, D. A., & Jacobs, S. (2005). (Re)writing xenophobia: Understanding press coverage of cross-border migration in Southern Africa. *Journal of Contemporary African Studies, 23*(3), 295-325. doi:10.1080/02589000500274050
- McFarland, C., & Alvaro, C. (2000). The impact of motivation on temporal comparisons: Coping with traumatic events by perceiving personal growth. *Journal of Personality and Social Psychology, 79*, 327-343. doi:[10.1037/0022-3514.79.3.327](https://doi.org/10.1037/0022-3514.79.3.327)
- Møller, V. (1998). Quality of life in South Africa: Post-apartheid trends. *Social Indicators Research, 43*(1-2), 27-68.
- Møller, V., Dichow, H., & Harris, M. (1999). South Africa's "Rainbow People", National Pride and Happiness. *Social Indicators Research, 47*(3), 245-280.
doi:10.1023/A:1006945108139
- Moghaddam, F. M. (2002). *The individual and society: A cultural integration*. New York: Worth Publishers.
- Moscovici, S. (1988). Notes towards a description of social representations. *European Journal of Social Psychology, 18*, 211-250. doi:10.1002/ejsp.2420180303
- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation

- theory. *Journal of Personality and Social Psychology*, 76, 229-245. doi:10.1037/0022-3514.76.2.229
- Nagin, D. S. (1999). Analyzing developmental trajectories: A semiparametric, group-based approach. *Psychological Methods*, 4, 139-157. doi:[10.1037/1082-989X.4.2.139](https://doi.org/10.1037/1082-989X.4.2.139)
- Nagin, D. S. (2005). *Group-based modeling of development*. Cambridge, MA: Harvard University Press.
- Neocosmos, M. (2006). *From "Foreign Natives" to "Native Foreigners": Explaining Xenophobia in Post-apartheid South Africa: Citizenship and Nationalism, Identity and Politics*. Dakar: CODESRIA Books.
- Parsons, T. (1964). *The social system*. London: Routledge & Kegan.
- Pettigrew, T. F., & Meertens, R. W. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology*, 25, 57–75. doi:10.1002/ejsp.2420250106
- Raudenbush, S., & Bryk, A. (2002). *Hierarchical Linear Models applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Rocher, G. (1992). *Introduction à la sociologie générale*. Ville LaSalle : Éditions Hurtubise HMH.
- Roeder, K., Lynch, K., & Nagin, D. S. (1999). Modeling uncertainty in latent class membership: A case study in criminology. *Journal of the American Statistical Association*, 94, 766-776.
- Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England*. Berkeley: University of California Press.
- Sahdra, B., & Ross, M. (2007). Group Identification and Historical Memory. *Personality and Social Psychology Bulletin*, 33(3), 384-395. doi:10.1177/0146167206296103

- Smith, H. J., Spears, R., & Oyen, M. (1994). "People like us;" The influence of personal deprivation and group membership salience on justice evaluation. *Journal of experimental social psychology*, 30, 277-299. doi:10.1006/jesp.1994.1013
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570-585.
- Statistics South Africa (2011). *South Africa's people*. Retrieved June 2, 2011:
<http://www.info.gov.za/aboutsa/people.htm>
- Stouffer, S. A., Suchman, E. A., DeVinney, L. C., Star, S. A., & Williams, R. M. Jr. (1949). *The American Soldier: Adjustment During Army Life*. Princeton, NJ: Princeton Univ. Press.
- Swann, W. B. Jr. (1990). To be adored or to be known? The interplay of self-enhancement and self-verification. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition* (Vol. 2, pp. 408–448). New York: Guilford.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn and Bacon.
- Tajfel, H. (1978). *Differentiation between social groups*. London: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In S. Worchel & W. Austin (Eds.), *The social psychology of intergroup relations* (pp. 33–48). Pacific Grove, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup conflict. In S. Worchel & W. G. Autin (Eds.) *The psychology of intergroup relations* (p. 7-24). Chicago, III.: Nelson-Hall.

- Taylor, D. M. (1997). The quest for collective identity: The plight of disadvantaged ethnic minorities. *Canadian Psychology*, 38, 174-190. doi: 10.1037/0708-5591.38.3.174
- Taylor, D. M. (2002). *The quest for identity*. Westport, CT: Praeger.
- Taylor, S. E., Neter, E., & Wayment, H. A. (1995). Self-evaluation processes. *Personality and Social Psychology Bulletin*, 21, 1278–1287. doi:[10.1177/01461672952112005](https://doi.org/10.1177/01461672952112005)
- Tougas, F., & Beaton, A. M. (2002). Personal and group relative deprivation: Connecting the “I” to the “we.” In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 119-135). Cambridge: Cambridge University Press.
- Tougas, F., & Veilleux, F. (1988). The influence of identification, collective relative deprivation, and procedure of implementation on women's response to affirmative action: A causal modeling approach. *Canadian Journal of Behavioural Science*, 20(1), 15-28. doi:[10.1037/h0079920](https://doi.org/10.1037/h0079920)
- Tougas, F. & Veilleux, F. (1989). Who likes affirmative action: Attitudinal processes among men and women. In F. A. Blanchard & F. J. Crosby (Eds.). *Affirmative Action in Perspective* (pp. 111-124). New York: Springer Verlag.
- Tougas, F., & Veilleux, F. (1990). The response of men to affirmative action strategies for women: The study of a predictive model. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 22, 424-432. doi: 10.1037/h0078946
- Tropp, L. R., & Wright, S. C. (1999). Ingroup identification and relative deprivation: an examination across multiple social comparisons. *European Journal of Social Psychology*, 29, 707-724.

- Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The Hostile Media Phenomenon: Biased Perception and Perceptions of Media Bias in Coverage of the Beirut Massacre. *Journal of Personality and Social Psychology*, 49, 577-585. doi:[10.1037/0022-3514.49.3.577](https://doi.org/10.1037/0022-3514.49.3.577)
- Veilleux, F., Tougas, F., & Rinfret, N. (1992). Des citoyens en colère: une question de privation et/ou d'identité sociale? [Angered citizens: A matter of deprivation and/or social identity?]. *Revue Canadienne des Sciences du Comportement*, 24, 59-70. doi:[10.1037/h0084836](https://doi.org/10.1037/h0084836)
- Walker, I. (1999). The effects of personal and group relative deprivation on personal and collective self-esteem. *Group Processes and Intergroup Relations*, 2(4), 365-380. doi:10.1177/1368430299024004
- Walker, I., & Mann, L. (1987). Unemployment, relative deprivation and social protest. *Personality and Social Psychology Bulletin*, 13, 275-283. doi:[10.1177/0146167287132012](https://doi.org/10.1177/0146167287132012)
- Walker, I., & Pettigrew, T. F. (1984). Relative deprivation theory: An overview and conceptual critique. *British Journal of Social Psychology*, 23, 301-310.
- Westerhof, G. J., & Keyes, C. L. M. (2006). After the fall of the Berlin wall: Perceptions and consequences of stability and change among middle-aged and older East and West Germans. *The Journal of Gerontology*, 61(5), 240-247.
- Wilson, A., & Ross, M. (2000). The frequency of temporal-self and social comparisons in people's personal appraisals. *Journal of Personality and Social Psychology*, 78, 928-942. doi:10.1037/0022-3514.78.5.928
- Wilson, A., & Ross, M. (2001). From chump to champ: People's appraisals of their earlier and present selves. *Journal of Personality and Social Psychology*, 80, 572-584. doi:[10.1037/0022-3514.80.4.572](https://doi.org/10.1037/0022-3514.80.4.572)

Yuan, Y. C. (2000). Multiple Imputation for Missing Data : Concepts and New Development. In *Proceedings of the Twenty-Fifth Annual SAS Users Group International Conference* (Paper no.267). Cary, NC: SAS Institute.

Zagefka, H., & Brown, R. (2005). Comparisons and perceived deprivation in ethnic minority settings. *Personality and Social Psychology Bulletin*, 31, 467-482. doi: 10.1177/0146167204271711