

Beyond Social and Temporal Comparisons: The Role of Temporal Inter-Group Comparisons in the Context of Dramatic Social Change in Mongolia

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ABSTRACT. In this paper, we argue that the target of comparison should be taken into consideration when evaluating the associated outcomes of negative comparisons in the context of dramatic social change. To achieve this general goal, we considered five distinct targets of comparison: social (my group versus another group), temporal (my group across time), and temporal inter-group (my group versus another group across time). We hypothesised that in times of constant social change, two points of anchors (social and temporal) are simultaneously needed to evaluate one's position. A total of 236 high school and university students from Mongolia participated in the study. We used hierarchical regression analysis to test our hypotheses. As predicted, we found that temporal inter-group comparisons are better predictor of collective esteem than their social and temporal counterparts. Moreover, the link from past and future temporal inter-group comparisons to collective esteem was negative as hypothesized. Results are discussed in terms of theoretical implications.

Keywords: Social change, temporal comparisons, social comparisons, relative deprivation, temporal inter-group comparisons, collective esteem

This research was supported by a grant to the first author from the Civic Education Project (CEP). We thank Zarina Osmonalieva, Émilie Auger, Anne-Marie Hénault, and Marie-Elaine Huberdeau who helped at different stages of this research. We are also very grateful to the students of the National University of Mongolia who helped in collecting and entering the data.

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THE TERM *RELATIVE DEPRIVATION* was first used by Stouffer and his colleagues after observing that although military policemen had less promotion opportunities than men in the air corps, they were more satisfied with their chances of advancement than airmen (Stouffer, Suchman, DeVinney, Star, & Williams, 1949). To explain these unexpected results, Stouffer and his colleagues referred to the object of comparison of each group. It was contended that soldiers in the military police were more likely to compare their situation to their colleagues who had not been promoted, thus their relative satisfaction. Stouffer and his colleagues also postulated that the probabilities of unpromoted air corps men comparing themselves to promoted soldiers were higher, which, in their view, explained their negative feelings called *relative deprivation*. It was thus concluded that feelings of deprivation are subjective rather than objective, and that the choice of the comparison targets is context dependent.

The American Soldier study carried out by Stouffer and colleagues has opened an avenue of research that is still very active. Indeed, many researchers have contributed to the development of Relative Deprivation Theory (Crosby, 1976; Runciman, 1966, 1968; Walker & Pettigrew, 1984). For example, researchers have identified two components of relative deprivation: The *cognitive* component refers to the comparison itself and the *affective* to ensuing feelings (Crosby, 1976; Runciman, 1966, 1968). As such, relative deprivation was defined as a feeling of dissatisfaction emerging following invidious comparisons (Crosby, 1976). Moreover, researchers have made the distinction between egoistical (which has been called personal) and fraternal (named collective) relative deprivation on the basis of the object of comparison: Whereas the first refers to self-comparisons, the latter is founded on group comparisons (Runciman, 1966, 1968). In the present paper, we focus on the cognitive component of collective relative deprivation.

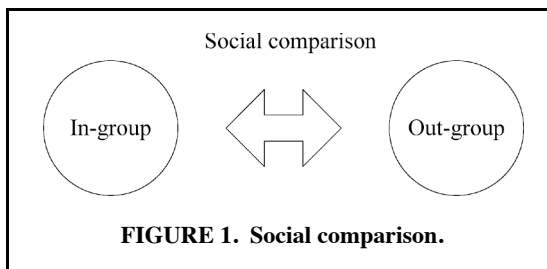
The general purpose of the present study is to further investigate the context-dependent postulate derived from The American Soldier Study by determining which target of comparison is most suitable for people in situations of dramatic social change. Societies change over time; it is a constant (Nolan & Lenski, 1998). However, the pace of change was accelerated in recent years by the technological revolution and momentous political events (Chirot & Merton, 1986; Fukuyama, 1999; Homer-Dixon, 2006; Nolan & Lenski, 1998; Ponsioen, 1969; Smith, 1973; Sztompka, 1998; Zuck, 1997). In fact, contemporary social changes are numerous, rapid, and extensive: They point to “profound societal transformations that produce a complete rupture in the equilibrium of social structures because their adaptive capacities are surpassed” (de la Sablonnière, Taylor, Perozzo, & Sadykova, 2009). For example, the configuration of the world has recently been altered by the dismantlement of the Soviet Union and the creation of the European Union. For citizens of many countries, life has taken a very different turn. What was believed to be immutable changed overnight. The transition from a communist regime to a democracy has and continues to have a

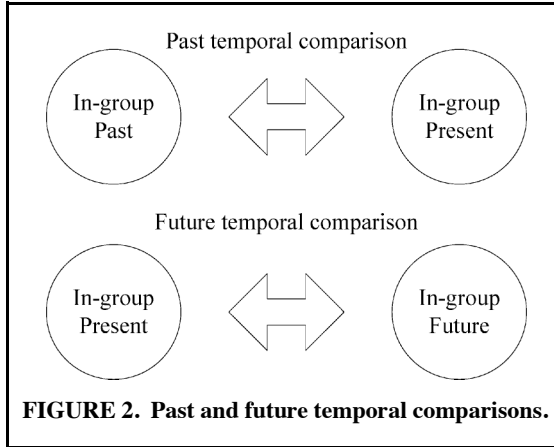
profound impact on the lives of citizens of former U.S.S.R. satellite countries. In this fast-track context of profound social change, it thus seems essential to evaluate the associated outcomes of different targets of comparison on collective well-being.

Comparisons can have negative outcomes (Crosby, 1976). For instance, Walker postulated that negative social comparisons are associated with decreased collective esteem (Walker, 1999). This hypothesis was evaluated by connecting relative deprivation based on social comparisons with collective esteem (Walker, 1999). Specifically, in studies focusing on dramatic social change, it was postulated and found that the link between relative deprivation and collective esteem was context-dependent (de la Sablonnière, Tougas, & Lortie-Lussier, 2009). On the basis of research showing that collective esteem is responsive to the status of the in-group, it was hypothesized and found that the link between social relative deprivation and collective esteem was negative in the case of a poorly viewed in-group. This hypothesis was confirmed among Russians: Their global reputation is low and deteriorating. In contrast, it was predicted that the relationship between social relative deprivation and collective esteem was positive if the present in-group reputation was favorable. This predicted positive link was found among adult Mongolians: Being in a situation favoring group enhancement allowed Mongolians to be collectively proud, even if they were dissatisfied with comparisons involving citizens of more advantaged countries.

In sum, studies have shown that the link between social relative deprivation and collective esteem is context dependent. The present study brings the investigation of this link a step further by determining whether *social comparisons* (Figure 1) are the most appropriate target of comparisons for people to evaluate group processes in situations of profound change. This question is particularly pertinent in view of research focusing on temporal comparisons (Figure 2).

Temporal Comparison Theory (Albert, 1977) states that temporal comparisons are very effective for people in situations of change (Albert 1977; Brown & Middendorf, 1996; Mummendey, Mielke, Wenzel, & Kanning, 1992). During periods of dramatic social change, temporal comparisons have proven to be useful tools in helping people re-evaluate their collective situation (de la Sablonnière & Tougas, 2008; de la Sablonnière, Tougas, et al., 2009). In addition, temporal comparisons provide a psychological anchor during destabilizing times





(Albert & Sabini, 1974). Previous studies have shown that temporal relative deprivation negatively affects collective esteem (de la Sablonnière, Taylor, et al., 2009; de la Sablonnière & Tougas, 2008; de la Sablonnière, Tougas, et al., 2009). Moreover, these studies revealed that the valence of this link was not affected by the actual reputation of the in-group. Whether the actual in-group reputation was favorable (nurses and Mongolians) or not (Russians), invidious temporal comparisons coupled with feelings of discontent resulted in a decline of collective esteem.

Because profound social changes propel individuals into uncharted territories, people more readily turn to temporal comparisons to estimate their group situation. Thus the argument that social change increases the relevance of temporal comparisons (de la Sablonnière & Tougas, 2008; de la Sablonnière, Hénault, & Huberdeau, 2009). Comparing the in-group's current situation with the past prevailing conditions helps people make sense of their new reality, thus the conclusion that *temporal comparisons* are more relevant than *social comparisons* in the context of social change.

Research on relative deprivation has mainly focused on social comparisons (Buunk & Janssen, 1992; de la Sablonnière, Tougas, et al., 2009; Johnson & Johnson, 2000; Smith & Ortiz, 2002; Petta & Walker, 1992; Tougas, Lagacé, de la Sablonnière, & Kocum, 2004; Walker, 1999; Zagefka & Brown, 2005). This is representative of the importance of such comparisons in everyday life. Indeed, social comparisons correspond to one of the most important fundamental needs of the human nature—i.e., to estimate one's relative value (Festinger, 1954; Tesser, 2003). It is through social comparisons that individuals can determine the in-group's position in the hierarchy. However, when the conditions of the in-group are altered on account of social change, temporal comparisons become a more important source of information than social comparisons to gauge the evolution of the in-group. The question that arises at this point is whether people rely

Sablonnière, 2002; de la Sablonnière, Tougas, et al., 2009), the comparative link from social, temporal, and temporal inter-group relative deprivation to collective esteem has never been systematically tested. In fact, the unique contribution of temporal inter-group comparison over and above social or temporal comparisons remains to be evaluated.

Hypotheses

The first hypothesis tested in the present study is guided by the following question: Are temporal inter-group comparisons sufficient to truly understand how people accommodate to continuous social change? It is postulated that temporal inter-group comparisons are better predictors of collective esteem than their social and temporal counterparts. The second hypothesis pertains to the valence of the link from temporal inter-group comparisons to collective esteem. It is postulated that this relationship is negative on account of studies showing that temporal comparisons affect collective esteem negatively.

METHOD

Participants

A total of 236 high school and university students from and living in the capital of Mongolia, Ulaanbaatar, completed the questionnaire. Participants were recruited in a high school located in the Khan-Uul district as well as in the National University of Mongolia, which is located in the Sukhbaatar district. Both districts are well known in Ulaanbaatar to be neither too poor nor too rich, thus representative of the Mongolian students. Recruitment of participants was done by trained research assistants. The questionnaires were handed out by a Mongolian researcher to the participants at the end of their class. The researcher would enter the room with several (but a varying number of) assistants, and distribute the questionnaires to a group of about 25–40 students. As the questionnaire was fairly long, some students would fill it out in the hallway and return it to the researcher when finished. The age of participants ranged from 17 to 21 years ($M = 17.94$, $SD = 1.07$). In total, 36% of the respondents were men and 64% were women.

Social Context of the Study

The present study was conducted in Mongolia, a former satellite state of the U.S.S.R. Mongolia has faced throughout its history a series of dramatic social changes. From a nomadic society to a soviet-like industrialized country, Mongolia became democratic after the dissolution of the Soviet Union in 1991. Mongolia's democratization in the early 1990s prompted dramatic social change at three levels.

First, in economic terms, Mongolia transitioned from a centrally planned economy with administrative links to the Soviet economy to a free market, where principles of demand/supply were allowed to operate freely. For the first time, people were allowed to launch private enterprises and acquire wealth. Foreign trade became far more diversified, opening the way for importation of goods and services from other East Asian countries (Bruun & Odgaard, 1996; Woo, Parker, & Sachs, 1997). For example, imports from South Korea increased from \$5,836,000 in 1991 to \$58,290,000 in 2001 (International Monetary Fund, 2008). Similarly, trade turnover with China increased from just under 47 million dollars in 1991 to over 350 million in 2001 (International Monetary Fund, 2008). Second, in social terms, Mongolia was exposed to the world. Whereas it had previously relied on its Soviet sponsor for international contacts, democratic Mongolia set out to find its own place within the globalizing world. For example, Mongolia joined the World Trade Organization in 1997 and seeks to expand its participation (The World Factbook, 2008). Third, in cultural terms, Mongolia was swamped by new fashions, tastes, trademarks, embracing South Korean soap operas, Japanese sumo, Hollywood, and missionaries from all over the world (Kaplonski, 2004; Rana, 1992; Shagdar 2007).

In sum, Mongolia was revolutionized in the early 1990s. These changes have especially intensified in the last 5 years due to Mongolia's political stability, economic performance, foreign relations, and the increasing momentum of globalization. Thus, today Mongolia, is autonomous, and boasts a new constitution and a democratically elected government, due in part to the economic reforms initiated in 1990 (Badarch, Batsukh, & Batmunkh, 2003; Boone, Tarvaa, Tsend, Tsendjav, & Unenburen, 1997; Fish, 1998; Jeffries, 2001; Nørgaard, 2000; Nyamsuren, 1999; Spoor, 2003). Despite these promising changes (Boone et al., 1997), the average Mongolian faces considerable day-to-day challenges. Economic insecurity is still very much a reality (Griffin, 2003), and the standard of living is low. For example, 36.1% of the population in 2004 was living under the poverty line (The World Factbook, 2008).

Mongolians surveyed for this study had not yet fully matured as adults at the time of their country's transition from communism to democracy. It could thus be said that they would not be as perceptive of changes as, for instance, the older generation. This is not so on account of the involvement of the young generation in the process of change. Mongolia's democratic revolution itself was led by the young people and by students. The younger Mongolians more eagerly embraced social and cultural changes and, indeed, on many levels, became vehicles of these changes. Moreover, recent data suggest that young Mongolians are as able as adults in assessing the effects of social change on their personal and collective situations (de la Sablonnière, French Bourgeois, Osborne, & Perenlei, 2009). In a series of focus groups conducted in 2003, it was found that young and older Mongolians have similar perceptions concerning social changes. These results are in line with previous research suggesting that it is entirely appropriate to use an historical

perspective with younger participants (Bougie et al., 2009; Létourneau & Moisan, 2004). For example, Létourneau and Moisan (2004) asked 400 high school Quebec students to reveal what they knew of the history of Quebec and found that students had a surprisingly coherent and structured vision of their group's history.

Questionnaire

The questionnaire was developed in English, and a back-to-back translation procedure (Brislin, 1970) was used to produce a Mongolian translation. A professional Mongolian translator created an initial Mongolian version. This version was revised by a Mongolian graduate student and a history professor. A focus group with 20 students enabled us to receive feedback on this revised version. Following the focus group, the final version of the questionnaire was created by a Mongolian translator.

Research has shown that there is an array of possible targets of comparison. In the present study, we focus on five different targets. The first, *social* comparisons, involve comparing the in-group, in this case Mongolians, to an out-group. The second and third targets of comparison are temporal, and pertain to the assessment of the situation of the in-group across time. More precisely, they refer to past and future temporal comparisons. In such cases, the present in-group situation is the point of departure of the comparison process involving the past and estimated future conditions. Finally, the fourth and the fifth targets of comparison relate to past and future temporal inter-group comparisons. In this case, individuals are asked to compare the in-group's conditions to those of an out-group across time. For example, Mongolians had to determine whether their conditions had deteriorated in recent years and compare their estimated decline with that of citizens of developed countries.

In sum, five predictor variables were assessed in the questionnaire; social comparisons, past and future temporal comparisons, and past and future temporal inter-group comparisons. The order of the predictor variables in the questionnaire was past temporal, future temporal, social, past temporal inter-group, and future temporal inter-group. Contrary to Westerners, Mongolians are not accustomed to answering questionnaires. For many, it was their first experience. Therefore, following the advice of 20 students and professors at the National University of Mongolia, we chose to present the questions in the same order for all participants. The decision was made, as it seemed easier for them to answer the temporal questions first, followed by the social, and finishing with the temporal inter-group questions.¹ Collective esteem was the dependent variable. Finally, two socio-demographic questions were included: gender and age.

Social Comparisons

Participants were asked to compare Mongolians to people living in developed countries in seven different domains. Specifically, participants were asked to

compare Mongolians to people in high developed countries in terms of (1) job security, (2) health system, (3) security, (4) education, (5) environment, (6) poverty, and (6) justice. Answers were recorded on a 5-point Likert-type scale, where 1 indicated *much better* and 5 *much worse*. The Cronbach Alpha was .76.

Past and Future Temporal Comparisons

Participants were asked to compare their group's past situation (5 years ago) and their group's expected future situation (5 years ahead) with the *present* in the same domains used for social comparisons. Answers were recorded on a 5-point Likert-type scale, where 1 indicated *much better* and 5 *much worse*. The Cronbach Alpha was .71 for past temporal comparisons and .81 for future.

Past and Future Temporal Inter-Group Comparisons

Participants were asked to compare their past situation (5 years ago) and their expected future situation (5 years ahead) to that of citizens of developed countries with the present, in the domains used for social comparisons. For example, we asked: "Compared to 5 years ago Mongolia now has less job security than high developed countries." Answers were recorded on a 5-point Likert-type scale, where 1 indicated *much better* and 5 *much worse*. The Cronbach Alpha was .81 for past temporal inter-group comparisons and .82 for future.

Collective Esteem

Collective esteem was evaluated using 5 items derived from previous scales (Ellemers, Kortekaas, & Ouwerkerk, 1999; Jackson, 2002; Luhtanen & Crocker, 1992): (1) I am glad I am Mongolian; (2) I am proud to be a Mongolian; (3) I feel that being Mongolian is not worthwhile (recoded); (4) I attach great value to be Mongolian; and (5) My image of Mongolian is negative (recoded). Participants were asked to indicate their answer on a 5-point Likert-type scale, ranging from 1 *completely disagree* to 5 *completely agree*. Internal consistency for this scale was .66.

RESULTS

Preliminary Analyses

Preliminary analyses revealed that the data were normally distributed. There was only one outlier that deviated by more than three standard deviations from the variable mean and displayed a Mahalanobis distance greater than the exclusion criterion set at $p < .001$ (Tabachnick & Fidell, 2001). Because results were similar with or without excluding that case, we retained the entire sample. Eight cases were removed from further analyses because of an inordinate number of

TABLE 1. Descriptive Analyses and Correlations (N = 228)

	1	2	3	4	5	6
1. Social comparison	---	.27**	.34**	.29**	.28**	-.09
2. Future temporal comparison		---	.28**	.55**	.09	-.13*
3. Past temporal comparison			---	.22**	.09	-.06
4. Future temporal inter-group comparison				---	.22**	-.25**
5. Past temporal inter-group comparison					---	-.20**
6. Collective esteem						---
Mean	3.46	2.94	3.48	2.95	3.13	3.75
Standard deviation	0.67	0.73	0.62	0.69	0.70	0.71

* $p < .05$, ** $p < .01$ (2-tailed).

missing values. Overall, data from 97% or 228 of our initial sample of 236 participants were retained for analyses. For the participants that had a low number of missing values (less than 3% per variable), missing values were replaced by their predicted values with a regression to the trend. We are confident that this procedure is appropriate, since the results we obtained in our regression analysis were the same when we used the alternative technique of multiple imputations.

Prior to testing our hypotheses, it was necessary to determine whether the five targets of comparison could be considered as predictors of collective well-being. Correlations were thus computed and are presented in Table 1. The correlations between these measures range from .09 to .55. These results point to the independence and distinctiveness of relative deprivation measures, as there are no signs of multicollinearity, and as the average of the correlations is relatively low ($M = 0.26$). According to multicollinearity diagnostic statistics, all predictors had acceptable variance inflation factors (<1.52).

Regression Analyses

Predictions were tested with one two-step hierarchical multiple regression analysis, where our five targets of comparison acted as predictor variables and collective esteem as a dependent variable. Our goal was to demonstrate that adding past and future temporal inter-group comparisons to the prediction of collective esteem explained more variance in collective esteem than social comparisons as well as past and future temporal comparisons.

In the first step, social comparisons as well as past and future temporal comparisons were entered. The second step of the analysis allowed us to test our hypothesis suggesting that collective esteem is better predicted by past and future

TABLE 2. Hierarchical Regression Analyses for Five Targets of Comparisons Predicting Collective Esteem (N = 228)

Relative deprivation	Standardized β	R^2
Step 1		.02
Social comparison	-.05	
Future temporal comparison	-.12 ^t	
Past temporal comparison	-.01	
Step 2		.09***
Social comparison	.02	
Future temporal comparison	-.01	
Past temporal comparison	-.01	
Future temporal inter-group comparison	-.21**	
Past temporal inter-group comparison	-.16*	

Note. For collective esteem, $R^2 = .02$ for Step 1 ($p = .196$); $\Delta R^2 = .06$ for Step 2 ($p < .001$).
^t $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (2-tailed).

temporal inter-group comparisons than by social or past and future temporal comparisons. This allowed us to evaluate the unique contribution of each target of comparison as a predictor of collective esteem and, therefore, to measure how much unique variance in collective esteem is explained by each of these measures. Table 2 displays the standardized (β) for all targets of comparison used to predict collective esteem. In addition, R values are reported. Because the results were the same when we controlled for gender and age in step one (step 1 became step 2 and step 2 became step 3), for simplicity, we report the results without controlling for age and gender.

Findings are congruent with predictions. First, step 1 of the hierarchical regression analysis showed that the link between social and past and future temporal comparisons and collective esteem was not significant. Second, as predicted, step 2 of the analysis showed that the two targets of temporal inter-group comparisons, past and future, were important predictors of collective esteem. Their contribution clearly overrides social or temporal comparisons. Finally, as anticipated (hypothesis 2), it was shown that the more temporal inter-group comparisons are high, the more collective esteem suffers. The results of this study clearly indicate that the prediction of collective esteem is improved by taking into consideration both past and future temporal inter-group comparisons.

DISCUSSION

The main goal of the present paper was to assess the impact of five targets of comparison on collective esteem in a situation of on-going social reconfigurations. In such circumstances, people need to evaluate the relative position of their

group. Because many options are possible, determining which targets of comparison are the most appropriate is important especially in this era of ever-occurring changes (e.g. Homer-Dixon, 2006). Hypotheses dealt with the following questions: Are past and future temporal inter-group comparisons better predictors of collective esteem than their social and past and future temporal counterparts, and is this link negative? This is a fundamental question on account of previous studies (Crosby, 1982; Duncan, 1975; Easterlin, 1974), concluding that the reason why disadvantaged people are not always less satisfied (or happy) than people belonging to privileged groups is their reliance on in-group comparisons to assess their conditions.

To answer these questions, we conducted a study in Mongolia. With the breakdown of the U.S.S.R., Mongolia has become more self-reliant and democratic. No longer being under the yoke of a dominant country is pride enhancing. However, parity with developed countries at the economic or educational levels for example is far from being attained. In fact, the future of Mongolia is rather grim.

It was contended and found that past and future temporal inter-group comparisons better account for variations of individuals' collective esteem than feelings based solely on temporal or social comparisons. These findings show that a combination of both social and temporal comparisons are necessary to evaluate the in-group's position in situations of constant dramatic social change. Temporal inter-group comparisons fulfill two fundamental needs: comparing one's group to another in order to assess the relative conditions of the group and comparing the relative situation of the group across time in order to reposition their group in a profoundly modified environment. Clearly, our results show that simultaneously taking into account two anchor points is more appropriate than considering only one. Moreover, our data show that recognizing that other groups have done better than the in-group over time is worse for collective esteem than acknowledging the deteriorating conditions of one's group or its inferior status. The perceived relative downturn of the in-group diminishes in-group pride.

In sum, findings show that it is the conjunction of temporal and social comparisons that best accounts for the collective esteem of individuals affected by profound reconfigurations of the social environment. This suggests that the *rapport* with time and other groups is essential to evaluate the associated outcomes of negative comparisons in times of fast-track changes. More importantly, it was shown that the collective esteem is negatively affected by the relative decline of the in-group over time.

Limitations

Although the present study was conducted among citizens of a country engaged in exhaustive social reforms, findings need to be interpreted with

caution for three main reasons. First, the correlational nature of the present study prevents us from concluding with certainty that temporal inter-group comparisons are the most important targets of comparison in the context of dramatic social change. Only an experimental study would allow such conclusion. Second, our evaluation of well being is based on only one measure: collective esteem. This was done since our participants were unaccustomed to completing formal questionnaires. It was thus important to reduce the length of the questionnaire given to Mongolian participants in order to facilitate their full understanding. In future studies, more than one measure of collective well-being could be included. Finally, it is important to note that the amount of variance explained by our model is relatively small. This limitation might be overcome by drawing from recent advancement in the field of relative deprivation (de la Sablonnière, Taylor, et al., 2009). Specifically, these researchers suggested that important historical events as targets of comparison need to be taken into consideration when evaluating temporal (or temporal inter-group) relative deprivation.

Implications and Future Research

This study has extended implications. First, hypotheses put forward in this study can be applied at the personal level. Turning points in personal lives can have serious repercussions on one's well being: Divorce, illness, retirement, and death of a significant other are examples of life-altering changes. Past research dealing with the associated outcomes of personal relative deprivation leads us to argue that our findings can be replicated at the personal level.

Second, the results of the present study can be directly linked to Tajfel's (1978) social identity theory and Turner's self-categorization theory (Turner, 1982; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Specifically, observed variations of collective esteem could be considered as measures of protection from threats to social identity in the context of dramatic social change. These variations could also affect the perception of the relationships between in-groups and out-groups over time. Similarly, the hypotheses tested in the present study could be extended to include other outcomes than collective esteem, as proposed by social identity theory. Indeed, relative deprivation has been associated with other outcomes such as collective actions. For instance, some researchers have examined the relation between relative deprivation and strategies such as social competition, individualism and social mobility (e. g. de la Sablonnière, Tougas, et al., 2009; Mummendey, Kessler, Klink, & Mielke, 1999). Our hypothesis could be tested not only in relation with collective well-being, but also in terms of strategies people adopt when adapting to dramatic social change. This is especially important in the context of social change, as the "brain drain," for instance, is one of the most important problems facing countries from the former Soviet Union (Simanovsky, Strepetova, & Naido, 1996).

The last extension of our hypotheses that we are proposing concerns the possible transfer of reactions to relative deprivation from the collective to the personal levels. When people are dealing with profound changes, it is not just their collective environment that is transformed but also their personal life. By the same token, it is expected that the collective well being has an impact on self-esteem. Declining collective pride is not experienced in a vacuum. It has an impact on one's self-esteem. Indeed, Taylor (1997, 2002) has proposed that collective identity can affect personal identity.

Concluding Remarks

As Westerners, we may be inclined to think that our countries have the necessary tools to deal with upcoming challenges. For example, the education system ensures a transfer of knowledge and critical skills to our children, the health system provides care for the sick, and the justice system protects our rights. Social psychological theories were developed in such environments. As such, they are tinged with certainties not paralleled in the rest of the world. Emergent and developing countries face challenges foreign to Westerners. This is why it is pivotal, in our view, to rethink current psychological theories in order to take into consideration the point of view of those who are not as fortunate. Perhaps some theories are adapted to different circumstances, perhaps not. One thing is certain, though, we need to know in order to have a better understanding of collective and personal reactions of those in situations of dramatic social change. This knowledge is particularly crucial if we want to help these nations. Not only is it our role as scientists and citizens of developed countries, it is our responsibility.

NOTE

1. We have conducted further analyses in order to determine whether the order of the variables had an impact on our results. First, we examined correlations. If an order effect were present, we would expect the correlations to be very strong ($> .50$) or multicollinear. Rather, we found that the correlations were small ($r_{temporal} = .28$ and $r_{temporal\ inter\ group} = .21$) and comparable to what we found in previous research ($r_{temporal} = .20$; de la Sablonnière, Taylor, et al., 2009). In fact, what we found in the present study is even smaller than in other research ($r_{temporal} = .71$; de la Sablonnière & Tougas, 2008). Second, to make sure that perhaps having past temporal inter-group and future temporal inter-group questions prior to the dependent variable could increase their relevance and/or reduce the effect of the earlier relative deprivation measures, we ran 5 additional regression analyses, one for each question composing our dependent variable. If a recency effect was operating, the temporal inter-group questions would systematically predict each of the 5 items included in the "collective esteem" scale. Instead, what we found was that for 2 out of the 5 questions of collective esteem, a different pattern emerged, suggesting that other variables than temporal inter-group acted as a predictor. For one question (I am glad I am Mongolian), it is only the past temporal comparison that predicted collective esteem ($p = .02$). It is interesting to note that the past temporal question was the first one

asked. Similarly, for another question (I feel that being Mongolian is not worthwhile - recoded), in addition to the past and future temporal inter-group, the past temporal marginally predicted collective esteem ($p = .14$). In sum, if an order effect would be present, taking each question separately would produce the identical pattern, such as temporal inter-group comparison would always predict collective esteem. Instead, we found that for 2 out of the 5 questions, past temporal can also predict collective esteem, and this despite the fact that these questions were not asked just before the dependent variable. Because that pattern is present, but not consistent, contrary to the temporal inter-group question which is consistent, we feel confident in ruling out an order effect.

AUTHOR NOTES

Roxane de la Sablonnière is a professor in psychology at Université de Montréal. Her research focuses on the challenges people confront when they face dramatic social change, such as in Mongolia, Russia, Kirghizstan, South Africa and Arctic Quebec (Nunavik). Having completed her PhD at the University of Ottawa, she taught for two years in Mongolia and Kyrgyzstan. She then began her postdoctoral studies at McGill University where she focused on cultural identity. Her most recent article in the *Journal of Cross-Cultural Psychology* is concerned with social change. Her theorizing involves reconceptualizing relative deprivation theory and understanding the processes associated with the integration of new cultural identities into the self-concept. **Francine Tougas** is a professor at the School of Psychology at the University of Ottawa, Canada. She has devoted her research to the antecedents and consequences of relative deprivation on the basis of sex, race, and age. Her recent work includes multidisciplinary research involving law and psychology. This research pertains to the impact of employment equity strategies on women and visible minorities. Current research also involves the investigation of the link between relative deprivation, psychological disengagement and self-esteem. She holds a BA degree from the Université du Québec à Montréal and a PhD in Psychology from the Université de Montréal. **Onon Perenlei** is a graduate of the University of Cambridge in Sociology (MPhil) and National University of Mongolia in political science (BA and MA). She studies socio-political aspects of post-communist transition in Mongolia. Her recent research has focused on the emergence of social movements and unrest in Mongolia in the wake of the July 2008 parliamentary elections.

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Received January 29, 2008

Accepted January 14, 2009