

Perceptions of Inevitability and the Motivated Rationalization of Social Inequality

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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## Abstract

It is suggested that people's perceptions that they are inevitably tied to the social systems within which they operate motivate them to justify these systems. Evidence is obtained across four experimental studies using a variety of different methods. All studies test the basic proposition that increasing inevitability – that is, making a system seem either more difficult to escape or more unlikely to change – increases motivated rationalization. Studies 1 and 2 demonstrate this basic phenomenon, using a known measure of system justification. Studies 3 and 4, in addition to conceptually replicating this phenomenon via different paradigms, provide support for a motivational (as opposed to purely cognitive-inferential) account, and mediational and moderational evidence for my proposed mechanism, respectively. The implications of these results – for the refinement of system justification theory – are discussed.

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## CHAPTER 1

### INTRODUCTION

A stranger given a window of observation into Western society could easily come to the conclusion that equality is not endorsed nearly to the extent indicated by explicit measures (e.g., Gaertner & Dovidio, 1986). The ever persistent gender pay gap and consistently lower employment rates among ethnic minorities compared to Caucasians are only two of a plethora of inequalities that exist in today's society. Even when controlling for factors that could account for such inequalities, such as education and time spent working, women still make less and ethnic minorities are still less likely to be employed by simple virtue of their gender and race. Tables 1 and 2 provide data from the 2001 Canadian census illustrating these realities.

Given that such stark inequalities do exist, why do people ignore, deny, or even actively defend them and the societal structures that maintain them? In other words, how is it that societies that explicitly endorse values of equality (e.g., Gaertner & Dovidio, 1986) are able to stand such instances of discrimination? System justification theory (SJT; Jost & Banaji, 1994) proposes one answer to this question. SJT argues that people are motivated to perceive their social systems as just and legitimate. This motivation is commonly referred to as the system *justification* motive, in recognition of the twin realities that systems are quite frequently *not* fair, and that people thereby find themselves forced to buy into an *illusion* of fairness. Indeed, there is a burgeoning set of empirical evidence in support of this proposition. Past research has demonstrated that people will go to great lengths to legitimize the status quo and the socio-political institutions under which they operate (e.g., Jost, 2001; Jost, Pelham, & Carvalho, 2002; Kay, Jimenez, &

Jost, 2002; Major, 1994; Major, Quinton, & McCoy, 2002; Wakslak, Jost, Tyler, & Chen, 2007; for reviews, see Jost, Banaji, & Nosek, 2004 or Kay, Jost, Mandisodza, Sherman, Petrocelli, & Johnson, 2007; cf. Major, Kaiser, O'Brien, & McCoy, 2007).

At the same time, however, it is evident that sometimes people do not justify the status quo. A perusal of any history textbook will confirm that, at least on occasion, oppressed minorities overthrow their governments, underpaid workers go on strike to press for more fair treatment, and generally that people's actions are sometimes motivated by explicit perceptions of *unfairness*. It may be surprising to note, then, that very little empirical system justification research has set out to investigate the boundary conditions of such phenomena. That is, relatively little is known about the social psychological and socio-cultural conditions that facilitate and limit the activation of this motivation. This gap in the empirical literature may have contributed to the erroneous conclusion that system justification effects are presumed to be ubiquitous and impossible to avoid.

I propose, therefore, that the general idea that people are motivated to justify the system would benefit from a clearer picture of when this motivation is most likely to arise; that is, an empirical refinement of system justification theory. To this end, in the present research I examine the possibility that people might be especially motivated to justify the systems under which they operate when they believe that these systems are inevitable – that is, when they believe that the system in question will continue indefinitely to exert its influence over them. To the extent people perceive their systems as inevitable, I reasoned, unfairness should be experienced as especially threatening, and, to defend against such threat, justification of these unfairnesses should ensue. In contrast,

when a system is perceived as evitable – perhaps because it is easily escapable or constantly changing – perceiving unfairness in the current version of the system should be less threatening to a given individual. Because of this, people who view their systems as evitable should be less motivated to justify them.

### *Rationalization in social psychology*

The social psychological literature offers some support for the proposition that systems to which people feel inevitably tied will be the most likely to be justified. Other theories of rationalization as a general phenomenon have emphasized the importance of the inevitability of the rationalized outcome, such as the inability of the rationalizer to escape it or the probability of the outcome occurring. Many people have suggested and demonstrated that human beings are avid rationalizers – most notably, cognitive dissonance theory (Festinger, 1957). Although explanations for when rationalization will and will not occur have called on a number of different factors, the one factor that seems to be applicable to all types of rationalization is the *inevitability* of the outcome – that is, the inability of the rationalizer to escape it. In dissonance studies, people rationalize their past, not future, decisions. Presumably this occurs because their past decisions can no longer be changed, and are therefore inevitable, whereas their future decisions are still under their control and therefore not inevitable (see Knox & Inkster, 1968; Regan & Kilduff, 1988). Research on anticipatory rationalizations (Kay, Jimenez, & Jost, 2002, McGuire, 1960, Pyszczynski, 1982) – in which the likelihood of an event occurring is predictive of the extent to which it is viewed as desirable – further supports this idea.

Delving into research in the area of interpersonal relations, an even closer parallel can be drawn to the predictions of the present research. Empirically supported models of

romantic relationships, including Rusbult's (1980) investment model and Thibault and Kelley's (1959) dependence model, suggest that the quality of available alternatives has a negative impact on commitment and interdependence in close relationships. Other researchers have illustrated the various consequences of commitment in romantic relationships, including benign appraisals of the partner's transgressions (Menziez-Toman & Lydon, 2005), positive illusions about the relationship (Martz, Verette, Arriaga, Slovik, Cox & Rusbult, 1998; Murray & Holmes, 1997; Murray, Holmes, & Griffin, 1996) and positive illusions about the partner, especially when the individual is facing a relationship threat (Gagné & Lydon, 2001).

The quality of available alternatives to one's current romantic relationship, I submit, is a form of inevitability: to the extent that viable alternatives are low, the current relationship is more likely to seem like the only viable option, and thus to feel like it will remain a part of one's life forever. From this perspective, the correspondence between the present theory and findings in the relationship literature is rather striking. The lower the quality of the alternatives that people perceive to their current relationships – in other words, the more their current relationships seem *inevitable* – the more committed they are, and therefore the more susceptible they become to positive illusions and biases about their relationship and their partner. Transferring this line of reasoning to the level of the system, I am predicting that as alternatives to the present system seem less feasible, people will be more motivated to justify the system, and therefore more subject to the biases induced by this motivation.

Finally, Social Identity Theory (SIT) also offers predictions that are consistent with my hypothesis. For instance, Turner and Brown (1978) found that low-status group

members accepted their inferior status unless they perceived cognitive alternatives to the current intergroup hierarchy – i.e., unless they perceived their low status as both illegitimate and *likely to change* (Turner & Brown, 1978). In other words, members of low-status groups did not fight to improve their status when they perceived that the intergroup hierarchy was inevitable.

It is important to note, however, that despite the overlap between the predictions offered here and previous theoretical approaches, the specific mechanism I propose to underlie system justification effects, and the range and types of empirical demonstrations I provide in the thesis, have never been previously offered. The General Discussion will expound in greater depth upon the empirical and theoretical similarities and differences between past research (in the context of SIT and elsewhere) and the data and theory I offer here.

### *Predictions and Overview of studies*

I predict, therefore, that when people believe that their current system is unlikely to be a lasting influence over their lives – that it is escapable or likely to change – they should be protected against the biases of the system justification motive. In contrast, when people believe that there is no alternative to their current system, that its current form of influence is likely to persist for an indefinite period, they should be much more vulnerable to these biases. To this end, in each of the studies presented, I manipulate inevitability and assess system justification, predicting each time that increased inevitability should be associated with increased justification.

Thus, the basic hypothesis tested in all the studies reported here is as follows: *increasing a system's inevitability will enhance the motivation to justify the system.* I used

a triangulating approach to isolate these two conceptual elements by operationalizing them in different ways across this set of studies. This allowed me to test the breadth of the notion of inevitability, shed light on the mechanism driving these effects, and do so across a wide range of dependent measures.

## CHAPTER 2

### FOUR STUDIES EXAMINING INEVITABILITY AND THE RATIONALIZATION OF SOCIAL INEQUALITY

#### Study 1: System change and helping the disadvantaged

My first study provided the simplest test of the general hypothesis, that *increasing a system's inevitability – that is, increasing the extent to which people feel they will be inevitably tied to a particular system – will enhance the motivation to justify that system.*

However, for the purposes of Study 1, I found it more intuitive to phrase it in the opposite direction: *decreasing a system's inevitability – that is, decreasing the extent to which people feel they will be inevitably tied to a particular system – will reduce the motivation to justify the system.* I manipulated inevitability in this study by changing participants' perceptions of the likelihood of system change. I predicted that people would be less likely to justify their system when system change was forecast (i.e., when inevitability was low), and more likely to justify their system when the forecast was no change (i.e., when inevitability is high). In addition, I manipulated not only the presence of change, but also its direction. The presence of *any* kind of change should serve as a signal that the system might not persist in its current form into the future (i.e., that it is not inevitable) which should reduce the threat associated with the perception of injustice perpetuated by the system's current instantiation. Therefore, I expect there to be no effect of the direction of change; the mere presence of change, regardless of direction, should lead to reduced system justification.

Following these manipulations, I assessed system justification by measuring participants' willingness to support redistributive social policies such as welfare

assistance and affirmative action (Wakslak et al., 2007). Support for these kinds of policies can be assumed to reflect the motivation to justify the system for two reasons. First, system justification involves increased support for the status quo in general; therefore, to the extent that such programs are framed as new initiatives, the motivation to justify the system should be associated with decreased support for them. Second, the nature of social redistributive programs is such that, by definition, they aim to redress inequalities that exist in society. Therefore, supporting these programs requires an admission that such inequalities exist and that they need to be rectified. When individuals are motivated to justify the system, either because of their personal tendencies or because of situational factors, they are less likely to want to make such an admission, and therefore less likely to support redistributive social policies.

I predicted, therefore, that compared to conditions of decreased inevitability, conditions of increased inevitability would lead to increased system justification, as expressed in this case by less support for social redistributive programs. In other words, the specific form for the general hypothesis for Study 1 was that *increasing the likelihood of a system changing, regardless of the direction, would lead people to demonstrate less justification of the current status quo*. In more concrete terms, this hypothesis was tested using a 2 (change vs. no change) by 2 (high equality end result vs. low equality end result) design, where support for social redistribute programs served as the dependent measure. I expected that change would lead to increased support for these programs, but that the end result (or the direction of the change) would have no effect.



## *Method*

*Participants.* Forty-three Canadian citizens (23 women and 20 men) were recruited from a public venue on campus. All participants completed the survey booklet on site and received a chocolate bar for participating.

*Procedure.* Participants volunteered themselves for a study on “Trends of Society.” The experimenter, who was blind to condition, handed them a booklet containing instructions and study materials, and sent them to a quiet area to complete materials on their own. First, participants were asked to read an article about Canada’s current and projected numbers of female business executives. Participants in all conditions read the predictions of a prestigious-sounding research group with regards to the proportion of women among top company executives. These predictions served as the manipulations of inevitability and of direction of change. Participants in the high inevitability conditions read that the number of female business executives would remain stable over the next 3 years; whereas participants in the low inevitability conditions read that the number of female business executives would change over the same time period. Furthermore the final outcome was manipulated so that it appeared that women would be either almost equitably (high equality end result) or only minimally (low equality end result) represented as business executives (whether or not this outcome was the result of a change).

Specifically, participants in the high inevitability conditions read the following passage. Where the conditions differed in terms of the equality of the end result, text for the high equality end result condition is in brackets.

A recent report released by the CIBC World Markets predicts that in 2010, women will make up 10.2% [32.2%] of the top company executives in this country. Some may find it

surprising to learn that this number represents a change of only 0.3 percentage points from data reported in the 2001 Canadian census – in other words, over the course of nine years, there will not have been much change in the number of women represented among top Canadian business executives. The charts below represent this state of affairs.

Participants in the low inevitability conditions read the following passage (where the conditions differed in terms of the equality of the end result, text for the high equality end result condition is in brackets):

A recent report released by the CIBC World Markets predicts that in 2010, women will make up 2.9% [32.1%] of the top company executives in this country. Some may find it surprising to learn that this number represents a whopping decrease of 7 percentage points [increase of 22.2 percentage points] from data reported in the 2001 Canadian census – in other words, over the course of nine years, there will have been a decrease leading to there being approximately one third [an increase leading to there being approximately three times] the number of women represented among top Canadian business executives. The charts below represent this state of affairs.

In all conditions, this paragraph was accompanied by a pie chart providing a visual depiction of this change or stability in female representation among top business executives. Once again, these were provided to emphasize differences between conditions in terms of the presence of change and the direction of its end result.

Next, participants were then presented with a measure of system justification developed by Wakslak et al. (2007) that assesses the extent to which participants supported the existence of six community service programs targeted towards various disadvantaged groups. Importantly, these programs were in no way related to the role of women in business, and did not target women specifically. The present hypothesis predicts that the content of the change is, in the same way as its direction, irrelevant. Change in any domain of a system should lead to the thought that change, in the abstract, is possible within it, and therefore to reduced justification in all domains of that system.

The programs described in the measure of system justification, then, were a tutoring program targeting children from disadvantaged backgrounds, a soup kitchen targeting the hungry, a job training program for the unemployed, a mentorship program for young people from disadvantaged backgrounds, a crisis hotline for people in distress, and an adopt-a-grandparent program for the elderly. Participants were asked to use, for each of these programs, a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) to rate their agreement with statements regarding their support for its creation, and the likelihood that they would vote for it to be funded by the government, volunteer for it, and donate money to it. Because participants' responses to the questions about their support for community service programs were highly intercorrelated, yielding a Cronbach's  $\alpha$  of .91, an average score was created to serve as the dependent variable. Finally, participants were compensated, thanked and fully debriefed.

### *Results*

*Pilot testing.* A separate sample of sixty-nine participants (31 women, 38 men) were asked to read the manipulations, and then use a 7-point scale to rate, without referring back to the manipulation text or figures, their agreement with two items designed to assess the effectiveness of the two manipulations. As predicted, participants exposed to the low inevitability manipulations were more likely to agree that "women's place in Canadian businesses is changing" ( $M = 5.74$ ,  $SD = 0.79$ ) compared to participants exposed to the high inevitability manipulations ( $M = 2.88$ ,  $SD = 1.63$ ),  $F(1, 65) = 86.1$ ,  $p < .001$ . In addition, participants exposed to the many women manipulations were more likely to agree that "in 2010, women will play a role almost as large as men in Canadian businesses" ( $M = 4.69$ ,  $SD = 1.23$ ) compared to participants exposed to the few

women manipulations ( $M = 2.69$ ,  $SD = 1.34$ ),  $F(1, 65) = 65.3$ ,  $p < .001$ . Including gender as a factor made no difference to either of these analyses; thus, both men and women were sensitive to the manipulations of change and of the equality of the end result.

*Primary analyses.* Recall that the main prediction for this study was that that increasing the likelihood of a system changing would lead participants to be more supportive of social redistributive policies. In particular, I expected that the mere presence of change would reduce system justification (i.e., support for the current status quo), and that the direction of change should be irrelevant. A system changing in any particular way should, I thought, lead people to view the system as less permanent or stagnant. This, in turn, should reduce the threat associated with the perception of any form of injustice perpetuated by the system in its current form.

This prediction was confirmed: participants in the high inevitability condition showed more support for social redistributive policies ( $M = 5.45$ ,  $SD = 0.78$ ) than participants in the low inevitability condition ( $M = 4.86$ ,  $SD = 0.86$ ),  $F(1, 39) = 5.24$ ,  $p < .03$ . Table 3 presents more specific information on the means. Furthermore, neither the equality of the end result nor the interaction between the two factors came close to producing significant effects, both  $F_s < 1$ ,  $ns$ . Including gender as a factor in the analysis led to no additional effects, all  $F_s < 1.68$ , all  $p_s > .20$ , and made no difference to the main effect of change,  $F(1, 35) = 5.08$ ,  $p = .03$ . Thus, all participants were less likely to be supportive of community service programs designed to redress societal inequality when they thought their system was inevitable – i.e., changing in an unrelated domain, *regardless* of the direction of this change.

## *Discussion*

This first study provided initial support for the idea that inevitability plays a key role in explaining people's motivation to justify their system. I used an indirect behavioural measure of system justification (Wakslak et al., 2007), and showed that when I increased people's sense that their system was inevitable, they were less willing to support, vote for funding for, volunteer for and donate money to various community service programs designed to redress the disadvantages suffered by certain target groups of people. Specifically, when participants were exposed to information suggesting that change was occurring in one particular domain governed by their system, they became more supportive of redistributive social programs designed to affect *unrelated* domains also governed by their system. This separation between the domain of change and the domain of justification is important, as it suggests that something about change itself, and not the specific content of change, is what matters. This idea is further bolstered by the observation that the direction of the change had no effect whatsoever, despite the fact that, as described in the pilot testing section above, participants likely did *notice* this direction.

Indeed, this observation reduces the plausibility of one of the more compelling alternative explanations for the effects of change. A change leading to more equality could have served simply as a signal to participants that their society was becoming more equal, and for that reason could have lead them to express more support of redistributive social policies as a form of anticipatory rationalization (Kay, Jimenez, & Jost, 2002). This would hardly be a novel finding. However, given such an explanation, one would expect to observe the opposite trend following the suggestion of change leading to *less* equality,

namely, that participants would express *less* support for social redistributive programs. The present results are more consistent with the inevitability interpretation, which is that the simple presence of change, any change, decreased participants' sense that their system in its current form would persist into the indefinite future, and thereby decreased their motivation to justify it.

Thus, this first attempt at testing the general hypothesis was successful. Admittedly, however, it could be argued the conceptualization of inevitability in terms of change is similar to SIT's concept of stability. Although I do not in any way mean to dispute the validity of previous approaches that have examined the effects of perceived system instability, I do hope to differentiate the present effects from these. Thus, although it is not clear that SIT would have made the same predictions confirmed in Study 1, I thought it best for subsequent studies to use a different operationalization of inevitability. Moreover, given how I described the construct of inevitability throughout the introduction – that is, the sense that one's system will continue to indefinitely exert its influence over one's life – more precise operationalizations of this construct likely exist. In Study 2, therefore, I sought to move to a manipulation that was more distinct from the concept of stability, and that was more precisely aligned with the construct I was trying to isolate.

## Study 2: System inescapability and helping the disadvantaged

In Study 2, I manipulated inevitability by changing participants' perceptions of how difficult it would be for them to leave their system. Specifically, I designed a simple manipulation where participants would read an excerpt, ostensibly taken from a Statistics Canada report, telling them that it was becoming either harder or easier to leave the country. This manipulation, I felt, was more obviously tied to the present conception of inevitability, and was less likely to overlap with the SIT construct of stability. I tried to empirically validate this intuition through a series of pilot tests, described in the results section below.

I then assessed system justification using the same measure used in Study 1. In addition, prior to participating in the study, participants filled out two individual-difference measures, assessing their Belief in a Just World (BJW) and their Protestant Work Ethic (PWE). I intended to use these measures as covariates in the analysis to strengthen the results, because (a) presumably such measures should be associated with participants' *a priori* support for social redistributive programs, and (b) previous system justification research has shown that individuals who score high on scales such as these tend to show weaker or no system justification effects<sup>1</sup> (e.g., Kay & Jost, 2003).

In sum then, Study 2 was a 2-cell design (high inevitability vs. low inevitability) where I assessed the same dependent measure as in the previous study, namely, participants support for social redistributive programs. I predicted that participants in the high inevitability condition, who were made to feel that it would be difficult for them to leave their country, would show increased system justification, i.e., decreased support for programs designed to redistribute opportunities to disadvantaged people.

## *Method*

*Participants.* Thirty-five Canadian citizens (15 men and 20 women; median age 21; 69% Caucasian) were recruited from undergraduate courses at the University of Waterloo. They volunteered to participate, and in exchange received either a candy bar or course credit.

*Procedure.* Participants were asked to volunteer for an online study about “global issues,” where they would be asked to give their opinions on various issues relevant to the global community. Approximately one week before the experimental session, participants were asked to complete scales designed to assess BJW and PWE, as well as to provide some demographic information. I used Lipkus’ (1991) seven-item Global BJW scale ( $\alpha = .88$ ), where participants rate items such as “I feel that people get what they deserve” and “I feel that people who meet with misfortune have brought it on themselves” on a scale ranging from 1 (*strong disagreement*) to 6 (*strong agreement*); and Quinn and Crocker’s (1999) 16-item PWE scale ( $\alpha = .86$ ), where participants rate items such as “if you want to be successful, all you have to do is work hard and improve yourself” and “people who fail at a job have usually not tried hard enough” on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The full scales are presented in Appendices A and B, respectively.

Upon beginning the experimental session, participants were randomly assigned by the study website to either the low inevitability condition or the high inevitability condition, and read a paragraph of information, framed as a recent research finding. This paragraph constituted the manipulation of inevitability. Specifically, participants read the



following passage. Where the conditions differed, text for the low inevitability condition is in brackets.

Since the 1950s, a group at Harvard University, in Cambridge, has been using current political and international trends to predict patterns of population movements. Recent reports by this group of experts have indicated that people who wish to move out of Canada will find it increasingly difficult [*easy*] to do so, in the coming years. Thus, even if the number of Canadians wishing to leave and settle elsewhere remains constant, we should expect a significant slow-down [*increase*] over the next few years in terms of those who actually are able to do so.

After answering a few filler questions designed to reinforce the stated purpose of the study, participants were then presented with the measure of system justification used in Study 1. Because participants' responses were highly intercorrelated, yielding a Cronbach's  $\alpha$  of .94, an average score was created to serve as the dependent variable. Finally, participants were compensated, thanked and fully debriefed.

### *Results*

*Pilot testing.* Separate samples of participants were exposed to the inevitability paragraphs, and asked to fill out various measures, to confirm the specificity of the manipulation. According to the present hypothesis, people should be more motivated to justify inevitable systems because they should see the current conditions of these systems as more likely to affect them in the future. In pre-testing, therefore, I sought to ensure this construct was affected by the manipulation. I also wanted to ensure the manipulations were not affecting other constructs that could drive the results but that I was not interested in here, such as mood or identification with Canada.

In one sample, participants were exposed to one of the two versions of the inevitability paragraph above, and then rated their sense that the Canadian system in its current form had control over their outcomes. They did so by rating their agreement with the two following statements on a scale ranging from 1 (*strong disagreement*) to 9

(*strong agreement*): “The current Canadian government exerts a great deal of control over my prospects for the future” and “The decisions made right now by the current Canadian government are likely to have at least some impact on my future.” As predicted, participants subjected to the high inevitability manipulation rated these items higher ( $M = 6.74, SE = 0.29$ ) than participants subjected to the low inevitability manipulation ( $M = 5.87, SE = 0.29$ ),  $F(1, 43) = 4.52, p < .04$ .

A second sample of participants was exposed to the same manipulation, and subsequently rated how difficult they thought it would be to leave Canada in the next 10 years, using a scale ranging from 1 (*extremely easy*) to 9 (*extremely difficult*). They also completed standard measures of mood (PANAS, Watson, Clark, & Tellegen, 1988) and of group identity (Cameron, 2004), and rated items related to positive perceptions of Canadian people (e.g., “In general, Canadians are competent people”). The full measures are presented in Appendices C, D and E, respectively.

Consistent with predictions, participants exposed to the high inevitability manipulation were indeed more likely to think it would be difficult for them to leave Canada in the next 10 years, ( $M = 5.56, SE = 0.49$ ) compared to participants subjected to the low inevitability manipulation ( $M = 4.14, SE = 0.49$ ),  $F(1, 45) = 3.97, p = .05$ . However, there was no sign that this perception was accompanied by increased Canadian identification ( $M_{high\ inevitability} = 5.11, SE_{high\ inevitability} = 0.15$ ;  $M_{low\ inevitability} = 4.97, SE_{low\ inevitability} = 0.16$ ),  $F(1, 45) < 1, ns$  or more positive perceptions of Canadian people, whether analyzed individually, nor as a composite score ( $M_{high\ inevitability} = 5.03, SE_{high\ inevitability} = .17$ ;  $M_{low\ inevitability} = 5.06, SE_{low\ inevitability} = .17$ ), all  $F_s < 1, ns$ , further ruling out the likelihood any effects obtained were driven primarily by social identity needs.

Finally, the manipulation had no discernable effect on positive ( $M_{high\ inevitability} = 2.65$ ,  $SE_{high\ inevitability} = 0.19$ ;  $M_{low\ inevitability} = 2.56$ ,  $SE_{low\ inevitability} = 0.19$ ) or negative ( $M_{high\ inevitability} = 1.62$ ,  $SE_{high\ inevitability} = 0.14$ ;  $M_{low\ inevitability} = 1.65$ ,  $SE_{low\ inevitability} = 0.14$ ) mood, both  $F_s < 1$ , *ns*. In other words, the manipulation showed effects that were specific to those variables which I expected to be affected, and had no influence on variables unrelated to the specific hypothesis tested here.

*Primary analyses.* Recall the main prediction, which was that participants in the high inevitability condition, compared to those in the low inevitability condition, would show increased system justification, as evidenced by decreased support for programs designed to redistribute opportunities to disadvantaged people. Means are presented in Table 4<sup>2</sup>.

As predicted, participants in the high inevitability condition were less likely to support various redistributive social programs ( $M = 5.35$ ,  $SE = 0.16$ ) than participants in the low inevitability condition ( $M = 6.00$ ,  $SE = 0.15$ )  $F(1, 31) = 8.40$ ,  $p < .01$ . Including gender as a factor in the analysis led to no additional effects, all  $F_s < 1.17$ , all  $p_s > .28$ , and left the main effect of change strong,  $F(1, 29) = 7.36$ ,  $p < .02$ . Thus, increasing inevitability by manipulating the difficulty of leaving the system also led people to be less likely to be supportive of community service programs designed to redress societal inequality.

### *Discussion*

Using a more precise manipulation of inevitability and the same dependent measure as Study 1, this second study provided additional support for the idea that inevitability plays a key role in explaining people's motivation to justify their system.

Importantly, pilot testing ruled out a number of potential alternative explanations. On the one hand, the manipulation had no discernable effect on people's identification with Canada, as indexed by Cameron's (2004) Canadian Identity scale, nor on their perceptions of Canadians, indicating that the effects on system justification are not likely reducible to purely social-identity-based processes. On the other hand, the manipulation *did* affect variables consistent with the theoretical position described here: participants' concrete sense that they would have difficulty leaving their country, and their more abstract sense that the system's current form would continue to exert influence over their lives.

It is possible, however, that the results of Studies 1 and 2 could be explained by a cognitive-inferential (i.e., non-motivational) account, one which I have not yet considered. One could reasonably argue, that is, that the evidence of increased justification observed thus far is not due to an increased motive to deny injustice, as I propose, but instead to a lay theory people may hold suggesting that more inevitable systems must be fairer systems. Thus, in Studies 1 and 2, participants told that things in Canada were not going to change, or that it would be difficult for them to leave Canada, could have *inferred* based on this information that Canada must be a fairer place than those not given this information. Study 3 was designed to rule out this inferential account.

### Study 3: System inescapability and gender inequality

When an incontrovertible difference is said to exist between the outcomes of two groups – for instance, when there is a discrepancy in financial outcomes – two different classes of explanations can be called on to explain it. On the one hand, genuine differences between the groups in terms of relevant attributes can be invoked – for instance, one might argue that one group is harder-working or more naturally talented than the other. Such explanations can be said to be system justifying, because they absolve the system of any suspicion of bias in the distribution of outcomes. On the other hand, discrimination and prejudice form another class of explanations that may be invoked to explain a difference in groups’ outcomes – this type of explanation can be said to be system blaming, as it directly attributes the differential outcomes to unfairness. Thus, to the extent that one is motivated to justify one’s system, one would prefer to appeal to system justifying explanations (i.e., genuine differences exist between the groups that legitimize their differential outcomes), rather than system blaming ones (i.e., the groups’ differential outcomes are due to systemic unfairness). I capitalized on this reasoning in the design of Study 3, by using endorsements of various explanations for inequality as the measure of system justification. Importantly, employing a different, but conceptually overlapping, dependent measure provides further evidence that inevitability affects people’s general level of system justification, and helps to rule out the possibility that the effects observed in Studies 1 and 2 were specific to some other component of people’s willingness to support social redistributive programs.

In Study 3, then, I used the same inevitability manipulation as used in Study 2, and then assessed people’s explanations for a social inequality. Specifically, I predicted

that *increasing people's perceptions of the difficulty associated with leaving a system would lead them to be more inclined to attribute a group difference to genuine differences between groups, and less inclined to attribute it to unfairness – that is, under conditions of increased inevitability, I again expect participants to increasingly rely upon system justifying explanations for social inequality.* To test this prediction, I led participants to believe that there was an important difference between the financial outcomes of Canadian men and women, and that this difference favoured men. I then measured their endorsement of both a system justifying explanation for this state of affairs as well as a system blaming one. Consistent with the results from Studies 1 and 2, I expected that participants in the high inevitability condition would endorse the system justifying explanation more strongly, and the system blaming one less strongly.

The main purpose of Study 3, however, was not to introduce a new dependent measure, although this will help demonstrate the breadth of the effects of inevitability. Its primary purpose was, in fact, to consider the inferential account of the findings outlined above, which would suggest that the effects were simply due to people's lay theory that inevitable systems tend to be more fair. In order to rule out this explanation, I expanded the procedure to include conditions where the system in question was not one which held sway over participants' lives; a technique that has been employed by other researchers to rule out non-motivational explanations of other related phenomena (e.g., Major et al., 2007). Specifically, half of the participants were exposed to the same high inevitability manipulation as used in Study 2, whereas the other half were exposed to the same manipulation, but framed in Germany instead of Canada. For the sake of simplicity, Study 3 did not include low inevitability conditions. In a subsequent task, an orthogonal

half of the participants were asked to explain a gender inequality said to exist within the *Canadian* system, whereas the remainder were asked to explain the same inequality said to exist within the *German* system.

The inferential explanation of the data presented thus far predicts that participants should be affected by information regarding a system's inevitability regardless of the particular relevance of the system to their own outcomes. In other words, this account should predict that when the German system is perceived as highly inevitable, German inequalities should be more strongly justified, even by Canadian participants who are unlikely to feel threatened by the presence of inequality within the German system.

In contrast, the hypothesis developed throughout this thesis would predict that the effects of inevitability manipulations should depend on people feeling that their own lives will continue to be affected by the system in question, and on them feeling that they themselves might suffer negative consequences as a result of the injustice in question. Thus, whereas participants made to believe that Canada is a highly inevitable system should be more inclined to justify the Canadian system, inducing in participants the belief that the German system is highly inevitable should have no discernible effect on the rationalization of inequalities within either system.

In short, although the inferential account should predict increased justification of the German system when Germany is said to be inevitable, the present hypothesis predicts no such difference. Study 3 uses this contrast to rule out the inferential account of the findings outlined in Studies 1 and 2. I used a mixed model design, with country of high inevitability (Canada vs. Germany) and country of gender discrepancy (Canada vs. Germany) as between-subjects factors, and explanation type (system justifying vs. system

blaming) as the within-subject factor. I predicted that (Canadian) participants led to perceive the Canadian system as highly inevitable will justify a Canadian inequality to a greater extent – that is, endorse the system justifying explanation for this inequality more strongly and the system blaming explanation less strongly. In contrast, I expected to see no inevitability-based differences in participants' justification of the German inequality.

### *Method*

*Participants.* Sixty-two Canadian citizens were recruited from undergraduate psychology courses at the University of Waterloo. The present hypothesis specifies that, because it operates by increasing one's personal vulnerability to the ill consequences of unfairness, inevitability should affect justification of only those inequalities which could lead to aversive consequences for oneself. Study 4 will provide a closer examination of this prediction, but for Study 3, given that the dependent measure referred to an inequality that put women at a disadvantage, I recruited female participants only. They volunteered to participate in exchange for course credit.

*Procedure.* Participants were asked to volunteer for an online study about "reasoning styles," where they would be asked to "reason about a number of situations drawn from the real world," by reading about a particular state of affairs and then explaining why they thought it might exist. After explaining an irrelevant "filler" state of affairs about the popularity of mid-sized cars, participants read about a second state of affairs, which was the high inevitability manipulation from Study 2, with a few minor adjustments. Specifically, half of the participants read the paragraph as if it referred to Germany, whereas the other half read it as if it referred to Canada – the study website randomly assigned participants to one condition or the other. Participants were then asked



to explain this state of high or low inevitability, which could incidentally have served to reinforce the manipulation because participants were made to come up with plausible reasons of their own for why this state might exist (see Eagly & Chaiken, 1993).

Participants then moved on to the final state of affairs, which was the description of the gender discrepancy. I directly manipulated participants' sense that they themselves might eventually be on the disadvantaged end of this discrepancy, by framing it as being the status quo in either Canada or Germany – condition was once again randomly determined by the study website. Specifically, participants read the following passage. Where the conditions differed, text for the German gender discrepancy condition is in brackets.

According to Statistics Canada [*a prominent German statistical analysis center*], male university graduates in this [*that*] country are more financially successful than their female counterparts. For instance, Canadian [*German*] female graduates are paying off their debt more slowly than their male counterparts. To illustrate, in Canada [*Germany*] 60% of males completely pay off their student debt within 2 years. In contrast, only 25% of women manage such a feat. In addition, these men's salaries upon entering their first job after graduating are a full 20% higher than women's starting salaries.

They then filled out the measure of system justification, which asked them to rate their agreement with both a genuine differences explanation for the relevant inequality (specifically, “genuine differences between men and women” – i.e., a system justifying explanation), and an unfairness explanation (specifically, “unfairness in Canadian society” – i.e., a system-blaming explanation) for the gender discrepancy. Participants rated the extent to which each explanation accounted for the discrepancy on a scale ranging from 1 (*not at all*) to 9 (*almost entirely*). Finally, participants also completed scales designed to assess BJW ( $\alpha = .76$ ) and PWE ( $\alpha = .80$ ), as in Study 2. Participants were then thanked and fully debriefed.

## Results

Table 5 summarizes participants' responses to both the system justifying and the system blaming explanations, in each condition<sup>3</sup>. Analyses revealed two significant effects among these responses. First of all, participants were more likely to endorse the “unfair” explanation than the “genuine differences” explanation,  $F(1, 56) = 3.15, p < .04$ <sup>4</sup>. This may reflect the fact that this sample of university students was likely more liberal than conservative, or the fact that the inequality was described in fairly categorical terms that may have been particularly difficult for participants to rationalize. However, as predicted, this main effect was qualified by a three-way interaction between country of high inevitability, country of gender discrepancy and explanation type,  $F(1,56) = 30.36, p = .01$ .

Follow-up analyses confirmed my prediction, which was that the manipulation of Canadian inevitability would increase participants' justification of a Canadian inequality, but that participants' justification of a German inequality would be unaffected by the manipulations. Indeed, analyzing participants' justification of a Canadian inequality, I found a country of high inevitability X explanation type interaction,  $F(1, 56) = 4.23, p < .05$ , that unfolded in the expected fashion. Compared to women led to believe that the German system was highly inevitable, women led to believe that the Canadian system was highly inevitable viewed the system justifying explanation marginally more favourably ( $M_{German\ inevitability} = 4.36, SE_{German\ inevitability} = 0.58, M_{Canadian\ inevitability} = 5.35, SE_{Canadian\ inevitability} = 0.53$ ),  $F(1, 56) = 2.81, p < .10$ , and the system blaming explanation less favourably ( $M_{German\ inevitability} = 6.75, SE_{German\ inevitability} = 0.44, M_{Canadian\ inevitability} = 5.50, SE_{Canadian\ inevitability} = 0.41$ ),  $F(1, 56) = 4.48, p < .04$ .

In contrast, participants' justification of a German inequality was unaffected by the inevitability manipulation: the country of inevitability X explanation type did not approach significance,  $F(1, 56) = 2.56, p > .11$ . Indeed, neither the system justifying explanation ( $M_{German\ inevitability} = 4.14, SE_{German\ inevitability} = 0.58, M_{Canadian\ inevitability} = 3.13, SE_{Canadian\ inevitability} = 0.53$ ), nor the system blaming explanation ( $M_{German\ inevitability} = 6.08, SE_{German\ inevitability} = 0.58, M_{Canadian\ inevitability} = 6.69, SE_{Canadian\ inevitability} = 0.53$ ) showed reliable differences based on country of inevitability, both  $F_s < 1.99$ , both  $p_s > .16$ . Thus, the data are consistent with a motivational account of the data, but not with an inferential one: an inferential process should have applied equally to participants' explanations of a German inequality. This pattern also reflects the importance of the self-relevance of the injustice being rationalized: a sense that their system was inevitable did not lead participants to justify *all* inequalities in the world, only those from which they themselves might eventually suffer.

Figure 1 presents a more graphic representation of these results. For ease of presentation, this figure presents the difference between participants' endorsements of the system justifying explanation and the system blaming explanation. Of particular note, of all groups of participants, the only ones who failed to show a significant preference for the system blaming explanation were women who (a) were evaluating a Canadian gender discrepancy and (b) thought that Canada was a highly inevitable system,  $F(1, 56) < 1, ns$ . Participants in all other conditions endorsed the system blaming explanation more strongly than the system justifying one, all  $F_s > 6.55$ , all  $p_s < .02$ .

## *Discussion*

Overall then, the prediction was borne out in this study, which provided converging evidence using a different measure of system justification. Increased inevitability of the Canadian system led, as expected, to increased justification of a Canadian inequality. In contrast, increased inevitability of the German system made no difference to justification of a German inequality. Once again, this occurred *despite* the fact that the discrepancy was described in identical terms for all participants. These data tip the scales away from a possible cognitive inferential account of findings from Studies 1 and 2, and bolster the credibility of the motivational account of these findings.

#### Study 4: System inescapability and gender inequality: A test of mechanism

With three studies in support of the general hypothesis, and one alternative explanation effectively ruled out, I designed a fourth and final study to more precisely investigate the presumed mechanism of the effect. Recall that in developing this hypothesis I reasoned that people would find unfairness threatening under conditions of inevitability because of the increased possibility that they themselves might be affected by it. Of course, the most direct way to test the relevance of threat would be if I could ask participants to rate how threatened they felt by various injustices that could or could not target them, under conditions of high or low inevitability. However, such a straightforward endeavour becomes more complicated when one considers that the very nature of threat makes it difficult to acknowledge, even to oneself, and that processes of threat-defence, in general, are presumed to operate below levels of conscious awareness (e.g., McGregor & Jordan, 2007).

Study 4 took an alternative route, then, and tested the proposed mechanism using both moderation and mediation (cf. Spencer, Zanna, & Fong, 2005). This involved a two-pronged approach. The first exploited the fact that my hypothesis was based on the idea that increased inevitability leads to increased justification because it heightens fears that a specific injustice *could negatively impact the self*. For this reason, to the extent that a given injustice could not possibly have a negative impact on a given individual, I would expect that the individual should never feel particularly threatened by the perception of it, regardless of the level of inevitability.

In Studies 1 and 2, the measure of system justification referred to injustices that were non-specific enough that they might conceivably affect everyone at some stage in

their lives, and were certainly not restricted to one gender; therefore, all participants, regardless of gender, increased their justification under conditions of increased inevitability. In Study 3, I observed female participants' justification of a gender inequality. As described in the methods section above, I chose to recruit only female participants because my hypothesis should predict that men's justification of the gender inequality should be unaffected by inevitability. Indeed, if inevitability operates, as I contend, by increasing an individual's vulnerability to the injustices present in the system, then I would expect it to affect justification of only those injustices to which that individual could possibly be vulnerable. Study 4 provided a more precise test of this idea, by using the same measure of system justification as in Study 3, but including both female and male participants. I predicted a moderational pattern, such that male participants' justification of the gender inequality would show no inevitability-based differences.

The second prong of my approach relied on statistical mediation. In order to ensure that the effect was being driven by participants' actual sense that their current system was likely to continue to exert its influence on them, I measured their sense of how difficult it would be for them to leave their country. I measured this sense in pilot testing described above and found, as expected, that inevitability increased it; however, because I did not measure outcome variables in these samples, I was unable to test for mediation. In Study 4, I was able to test the prediction that the effects of the manipulation on system justification would be driven directly by people's sense that they would continue to be subjected to the influence of their system.

Finally, Study 4 allowed me to rule out one alternative explanation to findings from Study 3. In Study 3, I suggested that the absence of any effect of the inevitability manipulation in the Germany condition demonstrated that the observed results in the Canadian condition were not simply due to a purely cognitive process in which people merely inferred that inescapable systems are, for some reason, more fair. However, it might be possible to argue that the data would still be consistent with the inferential account if it were the case that participants in Study 3 for some reason simply did not believe the inevitability manipulation when it referred to Germany rather than Canada. If this were the case, then they would have had no reason to make the inference that Germany was more fair, in the inevitable condition, and I would expect to see the pattern of results that was obtained. To the extent that male participants in Study 4 do show that they believe the manipulation (that is, to the extent that the manipulation does lead them to view Canada as less escapable), and still fail to show an effect on the justification of women's disadvantaged status, this alternative explanation can be dismissed.

Thus, similarly to Study 3, Study 4 employed a mixed model design with inevitability (high vs. low) and gender (male vs. female) as between-subjects factors, and explanation type (system justifying vs. system blaming) as the within-subject factor. I assessed the extent to which participants thought it would be difficult for them to leave their system, as well as their endorsement of a system justifying explanation and a system blaming explanation for a gender discrepancy in financial outcomes. I expected that women, but not men, would rationalize the inequality more strongly – that is, increase their endorsements of the system justifying explanation and decrease their endorsements of the system blaming explanation – in the high inevitability condition, compared to the

low inevitability condition. Further, I expected that this effect among women would be driven by perception of the difficulty associated with escaping their system.

### *Method*

*Participants.* Fifty-four Canadian citizens (28 women, 26 men) were recruited from a public venue on campus. All participants completed the survey booklet on site and received a chocolate bar for participating.

*Procedure.* Participants volunteered for a study on “the effectiveness of written communication.” The experimenter, who was blind to condition, handed them a booklet containing instructions and study materials, and sent them to a quiet area to complete materials on their own. They read one of the two paragraphs of information, determined by their assignment to either the low or high inevitability condition. These paragraphs constituted the manipulation of inevitability, and were essentially identical to those described in Study 2, albeit slightly longer: ostensibly produced by Statistics Canada, they depicted Canada as a country that is either very difficult or very easy to leave.

Participants then answered a series of reading comprehension questions, in which was embedded the potential mediator. Specifically, I asked participants to rate how hard they thought it would be for them to move out of Canada in the next 10 years, using a scale ranging from 1 (*very easy*) to 9 (*very difficult*). I predicted that these mobility ratings would mediate the expected effects on system justification.

Next, participants read another ostensible Statistics Canada article, which was designed to lead them to believe that men enjoyed better financial outcomes than women. This passage closely paralleled the one used in Study, although it too was slightly longer. The critical passages were as follows:



[...] **60% of males completely pay off their student debt within 2 years of graduating. In contrast, only 25% of women manage such a feat.** While it is likely that some of this difference is due to the fact that some women may choose to work less or not at all for maternity reasons, at least part of the difference could be due to gender discrepancies in post-graduation occupational success[...] **men's starting salaries are a full 20% higher than women's** starting salaries. In addition, while men's academic success is related to their income and success at finding a job during the first five years following graduation (with those who got better grades ending up with more and better-paying jobs), **women's academic achievements appear to be unrelated to their job-market success**, with superstar female graduates showing no advantage over mediocre female graduates [...]

The same two items as in Study 3 were used to assess participants' justification of the gender discrepancy, specifically, their endorsements of the same system blaming and system justifying explanations. Participants then returned to the experimenter's booth, were thanked, compensated and fully debriefed.

### *Results*

*Moderation by gender.* I predicted that women in the high inevitability condition would show more system justification, compared to women in the low inevitability condition, but that men would show no such difference. Specifically, I expected women to endorse the system justifying explanation more strongly, and the system blaming explanation less strongly, under conditions of increased inevitability. Table 6 presents participants' responses to the system justifying and system blaming explanations, across both conditions. Analysis of participants' endorsements first uncovered an overall effect of explanation type similar to that observed in Study 3,  $F(1, 49) = 8.96, p < .005$ , such that overall, participants preferred the system blaming explanation to the system justifying explanation<sup>5</sup>. However, this effect was qualified by a three-way interaction with gender,  $F(1, 49) = 5.74, p = .02$ . Follow-up analyses conducted for each gender revealed that men's system justification was not affected by the inevitability manipulation: the inevitability X explanation type interaction did not approach

significance,  $F(1, 49) < 1$ , *ns*. In contrast, the explanation type X condition interaction for women was robust,  $F(1, 49) = 8.37$ ,  $p < .006$ .

This interaction unfolded in the predicted direction: women in the high inevitability condition were more likely to justify the system, compared to women in the low inevitability condition. They were both more likely to endorse the system justifying explanation ( $M_{low\ inevitability} = 3.07$ ,  $SD_{low\ inevitability} = 2.30$ ,  $M_{high\ inevitability} = 5.23$ ,  $SD_{high\ inevitability} = 1.96$ ),  $F(1, 49) = 8.45$ ,  $p < .006$ , and marginally less likely to endorse the system blaming explanation ( $M_{low\ inevitability} = 6.43$ ,  $SD_{low\ inevitability} = 1.65$ ,  $M_{high\ inevitability} = 5.15$ ,  $SD_{high\ inevitability} = 2.03$ ),  $F(1, 49) = 2.95$ ,  $p < .10$ .

Importantly, further analyses showed that the differences between men and women in terms of the effect of inevitability on their justification of a gender inequality *cannot* be explained by differences between the genders in terms of the effectiveness of the manipulation. Both women ( $M_{low\ inevitability} = 2.43$ ,  $SD_{low\ inevitability} = 2.24$ ,  $M_{high\ inevitability} = 6.57$ ,  $SD_{high\ inevitability} = 1.74$ ,  $F(1, 26) = 29.8$ ,  $p < .001$ ) and men ( $M_{low\ inevitability} = 2.50$ ,  $SD_{low\ inevitability} = 1.51$ ,  $M_{high\ inevitability} = 5.07$ ,  $SD_{high\ inevitability} = 2.17$ ,  $F(1, 24) = 11.9$ ,  $p < .01$ ) thought it would be more difficult for them to leave the country in the high inevitability condition, compared to the low inevitability condition.

Figure 2 provides a visual representation of these results, again presenting the difference between endorsements of the system justifying and of the system blaming explanations. The pattern bears a striking resemblance to the pattern observed in Study 3: whereas in the high inevitability condition women endorsed the two explanations equally,  $F(1, 49) < 1$ , *ns*, women in the low inevitability condition were much more likely to endorse the system blaming explanation than the system justifying explanation,  $F(1, 49)$

= 16.61,  $p < .001$ . Men showed an intermediate pattern; however, women in the high inevitability condition were the only ones whose mean difference score was above 0, although not significantly so.

*Mediational analyses.* Recall that I also predicted that the effect of inevitability on women's explanations would be explained by their perceptions of how difficult it would be for them to leave their country. Given that the direct effect of inevitability was strongest on endorsements of the system justifying explanation, analyses were conducted using these endorsements as the dependent variable<sup>6</sup>. Two separate regressions showed an effect of the inevitability manipulation on women's perceptions that it would be difficult for them to leave Canada in the coming years,  $\beta = .73$ ,  $t(26) = 5.46$ ,  $p < .001$ , and on their endorsement of the system justifying explanation,  $\beta = .46$ ,  $t(26) = 2.61$ ,  $p < .02$ . These analyses indicated that following the high inevitability manipulation, compared to the low inevitability manipulation, women felt that it would be more difficult for them to leave Canada ( $M_s = 6.57$  and  $2.43$ ,  $SD_s = 1.74$  and  $2.26$ , respectively), and were more inclined to justify the inequality ( $M_s = 5.23$  and  $3.07$ ,  $SD_s = 1.96$  and  $2.30$ , respectively).

When condition and perceived difficulty of leaving Canada were entered simultaneously into the regression to predict women's system justification, the direct association between inevitability and women's endorsements of the system justifying explanation was reduced to nonsignificance,  $\beta = .29$ ,  $t(26) = 1.12$ ,  $p > .3$ , whereas the association between perceived difficulty of leaving Canada and women's system justification remained strong,  $\beta = .45$ ,  $t(26) = 2.53$ ,  $p < .02$ . The significance of this indirect path was confirmed by a Sobel test,  $Sobel = 2.30$ ,  $p < .03$  (see Figure 2).

In other words, the effect of the manipulation of inevitability on women's endorsement of a system justifying explanation was mediated by their perceptions of how difficult it would be for them to leave Canada in the coming years.

### *Discussion*

Thus, this fourth study corroborates the findings obtained in Studies 1 through 3. More importantly, however, Study 4 also provides further evidence that the effects of inevitability documented above occurred for the specific reasons hypothesized. Recall that I reasoned that people would find unfairness threatening under conditions of high inevitability because of the increased possibility that they themselves might be affected by it. In support of this reasoning, I found that when inevitability was low – i.e., when it was said to be easy to leave the country – women were more apt to blame their disadvantaged status on their country than to attribute it to legitimating reasons. However, under conditions of heightened inevitability, women were just as likely to endorse explanations that made their disadvantage legitimate as they were to blame it on unfairness.

The explanations provided by *men* for women's disadvantaged status, on the other hand, showed no such effect of inevitability. This is consistent with the idea that threat is a necessary component to the increased justification associated with perceptions of inevitability – men would have had no reason to feel threatened by a description of women's disadvantaged status, and therefore according to my reasoning should not have been particularly motivated to justify it under any circumstances. Importantly, a mediational analysis carried out on men's responses bolstered this interpretation. The manipulation *did* affect men's perceptions of how difficult it would be for them to leave

the country,  $\beta = .58$ ,  $t(25) = 3.45$ ,  $p < .01$ , as mentioned above; however, these perceptions were not associated with men's system justification,  $\beta = -.11$ ,  $t(25) < 1$ , *ns*.

Study 4 also supports the proposed mechanism through the mediational path that I found in the data: the effect of the manipulation on women's system justification was driven directly by their perceptions of how difficult it would be for them to leave the country. When considered in combination with the pilot testing described in Study 2, I can now be more confident that the manipulation used here not only specifically targets the sense of the system's continuing presence, leaving identity-related variables unaffected, but that it is this sense that is driving the effects on system justification.

## CHAPTER 3

### GENERAL DISCUSSION

Across four different studies I provided consistent evidence that the more people perceive their system as inevitable – either inescapable or unlikely to change – the more they are motivated to justify it. In Study 1, I manipulated inevitability by highlighting the occurrence or absence of change, and found that a system characterized by change resulted in more support for social redistributive policies (that is, less system justification). In Study 2, I replicated this finding using a more precise manipulation of inevitability, exploiting people’s perceptions of how difficult it would be for them to leave their country. In Study 3, I ruled out an alternative, cognitive inferential account of these findings, and provided converging evidence using a different measure of system justification. Finally, in Study 4, I elaborated on mechanism, by providing a mediational pathway consistent with my account, and by finding moderation of the effect: inevitability only increases rationalization of injustices from which one could potentially suffer. The fact that I observed this same pattern using two different manipulations and two different dependent variables attests to the breadth of inevitability effects on the motivation to justify the system.

#### *Implications for system justification theory*

I believe that the major contribution of this research to system justification theory is that it represents an important conceptual refinement of the more basic form of the theory’s main tenet: that people are motivated to see their systems as more fair and just than objective circumstances may warrant. Identifying the conditions that are most likely to elicit this motivation, as I have begun to do here, is an essential first step to

understanding the reasons underlying it. Achieving such a level of understanding of human motivations is an ultimate goal of much of social psychology. Indeed, although not stated precisely in these terms, my reasoning implies a belief that inevitability is in fact a *cause* of system justification. The idea that people's motivation to justify their systems arises from, on the one hand, the belief that these systems affect important outcomes for them, and on the other hand, are likely to continue to have these effects indefinitely, is one that I find logically sensible.

Another idea that has run through the present set of studies, without being stated as a specific prediction, relates to the importance of threat to the self in the motivation to justify the system. Across the present studies, emphasis was repeatedly placed on the threat associated with the perception of unfairness – I argued that the effects of inevitability operate by increasing the chance that unfairness in the system could eventually lead to undesirable consequences for the self. Bolstering this contention, twice I found a predicted pattern of moderation such that, although the manipulations I used were successful in increasing everyone's sense that the system's influence was likely to continue for quite some time, this only affected justification of injustices that could eventually target the self. Although I am not trying to make the case that the motivation to justify the system is completely reducible to self-interest, these findings do suggest that people's concern for their *own* fair treatment might play an important role.

Finally, one important question arising out of this research concerns the extent to which inevitability is a constant frame of mind in everyday life. The sheer quantity of experimental evidence accumulated in defence of system justification theory suggests that perceptions of inevitability, if it is to be considered a cause of system justification,

must be equally pervasive. Indeed, I suggest that people's typical, default assumption is one of inevitability. This assumption may vary in strength depending on the particular system in question, but certainly leaving a system as important as one's country is associated with many costs – social costs, the financial burden incurred by such a move, the difficulty that can be associated with finding new employment, the hassle of adjusting to the laws and customs of a new country, and many more. But even leaving seemingly lesser systems can be painful – it typically involves finding an alternative system, abandoning or at least weakening many social relationships, and disrupting daily routines. For most people in many types of systems, these costs probably appear too extreme to incur simply to escape a potential injustice, especially one that could instead be rationalized at no apparent cost. For many people, in fact, the costs are probably so great that the option to leave simply does not exist.

Furthermore, it is likely that people's personal experience would lead them to think that systemic change, if it ever occurs, is introduced at such an excruciatingly slow pace that it is not a viable hope to rely on in the face of injustice. Achieving significant and systemic change in an established system requires the support of most of the population, or at least of most of the people in high places. The kind of promotion that would be required to attain either of these levels of support would take more time, money and/or contacts than most people have at their disposal.

#### *Distinguishing inevitability from other constructs*

Two constructs arising from Social Identity Theory (SIT; Tajfel & Turner, 1979) deserve consideration here as they seem at least on the surface to have the potential to account for some of the present findings. It is important to note, however, that although



these approaches are complementary with mine in many ways (see Spears, Jetten, & Doojse, 2001), and the present findings may at a broad level provide novel support for certain aspects of the SIT framework, they are not redundant with it. First, SIT highlights the importance of group permeability (i.e., the potential for individuals to switch their membership from one group to another, or the inevitability of their membership to their current group) in determining the actions of low-status group members. In particular it is suggested that permeable group boundaries lead to a preference for individual mobility over collective action to better the status of the group (Ellemers, van Knippenberg, & Wilke, 1990), and that impermeable group boundaries lead to the deployment of psychological strategies to enhance the group's perceived value (e.g., Jackson, Sullivan, Harnish & Hodge, 1996).

This research is consistent with the notion that the impermeability of group boundaries, or the inevitability of people's membership to the group, could introduce a positive bias in their evaluation of this group. From this perspective, one might be tempted to reframe findings from Studies 2 through 4 as demonstrations that when people felt that their membership to the Canadian (or university) "group" was inevitable, they, driven by social identity needs, subsequently displayed a positive bias towards this group, specifically by psychologically enhancing its fairness.

I believe that this temptation should be resisted for at least three reasons. First, I failed to find any evidence that the inevitability manipulations affected identification with the system, which has been an important dependent measure and theoretical construct in much permeability research (e.g., Ellemers et al., 1990). The fact that this variable was not affected by the inevitability manipulation erodes the credibility of the argument that

the present effect was simply a permeability effect. Similarly, this manipulation also failed to affect perceptions of Canadians as a group and the initiatives of their fellow students. The fact that the inevitability manipulation made participants justify the fairness of their system, but not evaluate its constituents more positively in other ways, makes it unlikely that this manipulation simply induced a general positive bias towards the system, as would be expected under a permeability account. The manipulations *did*, on the other hand, have consistent effects on people's belief in the continuing influence of their system. One reason why SIT principles may not have been observable in the present studies is that, with the exception of Study 3, there was no salient outgroup to trigger Social Identity concerns with regards to the "ingroup" of the Canadian or university system. In fact, in Study 4, an alternative social group (gender) was made very salient, making it unlikely, in my view, that participants were preoccupied with the part of their social identity that was tied to the Canadian "group."

Second, the permeability account of the present data would more likely have made the opposite prediction for Study 2: impermeable group boundaries are typically associated with more collective action for the betterment of the group (Ellemers et al., 1990). In other words, when people cannot escape the Canadian "group," they should arguably have been *more* inclined to support policies designed to improve life in Canada, whereas I found the exact opposite.

Finally, the permeability account of the present data cannot, in my view, explain the importance of the threat associated with the perception of unfairness, at least not as it was manipulated in Study 4. If impermeable boundaries lead group members to have more positive perceptions of their group, then I would have expected all Canadians,

regardless of gender, to show more positive perceptions of the Canadian “group,” and make more system justifying attributions of the gender inequality, when inevitability was high. Instead, I saw only women make such attributions under conditions of high inevitability, whereas men’s perceptions of Canada were unaffected by the permeability of Canada’s boundaries.

There is, however, some notable overlap between my theoretical position and the related social identity concept of cognitive alternatives, illustrated by the findings of Turner and Brown (1978) described earlier. The general idea illustrated by these findings is that when members of low-status groups cannot perceive cognitive alternatives to the hierarchy of which their group is a part – i.e., when they perceive their system as inevitable – they will tend to accept their low status, and perhaps even justify it (Spears et al., 2001). Although I do not dispute that specific effect, there are still notable differences between past data and theory and what I have presented here. First, it is not clear, for example, that the original SIT formulation was meant to encompass effects such as those observed in Study 1, where the domain in which participants were led to believe the system was changing had nothing to do with the ways in which they subsequently displayed system justification. Second, and perhaps even more importantly, the notion of cognitive alternatives, although seemingly quite similar to the concept of inevitability, represents a fundamentally different way of thinking about these issues. Namely, SIT considers the legitimacy of the overarching system and the inevitability of the group hierarchy to be independent from one another; whereas from my perspective, the legitimacy of the system is, at least in part, a *function* of inevitability. These differences in theoretical orientation may explain why, in the 30 or so years since the birth of SIT,

there has never been a set of studies similar to the ones presented here, where perceptions of fairness and legitimacy represent the dependent variable and inevitability is operationalized as escapability.

Thus, although SIT can offer many insights into the kinds of questions explored in the research reported here, and certain aspects of the present findings may represent intriguing support for some tenets of SIT, the results and theory presented here, I believe, provide a novel contribution to the literature.

#### *Concluding remarks*

In summary, the research presented here presents a strong case that system justification is increased, and perhaps even partially caused, by the perceptions that the system is inevitable. This is an important finding because it suggests that system justification effects – which are often negative – could be erased or at least reduced by reminding people that the system is *not* inevitable, by minimizing the obstacles to leaving, or better still by providing them with accessible opportunities to change it.

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## Footnotes

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<sup>1</sup> Presumably this occurs because individual beliefs – either in a just world or in the protestant work ethic – can be system justifying in themselves, and thus remove the need for alternative methods of satisfying the system justification motive, i.e., the need to engage in whatever the researchers are measuring and calling “system justification”.

<sup>2</sup> Analyses were conducted controlling for BJW and PWE; and it is the adjusted means which are presented here. BJW ( $r = -.41, p < .02$ ) and PWE ( $r = -.51, p < .01$ ) were both negatively correlated with support for social redistributive programs. Neither BJW nor PWE interacted with the manipulation in predicting support for social redistributive policies.

<sup>3</sup> Analyses were again conducted controlling for BJW and PWE; and it is the adjusted means which are presented here. BJW ( $r = .32, p < .02$ ) and PWE ( $r = .26, p = .04$ ) were both positively correlated with endorsement of the system justifying explanation. Furthermore, neither BJW nor PWE was affected by the manipulation, nor did they interact with it in predicting endorsements of the two explanations.

<sup>4</sup> Participants’ ratings of the two explanations were negatively correlated,  $r = -.29, p < .03$ . However, this correlation was not so high as to make ratings of the two explanations completely redundant, and so they were considered separately in the analyses.

<sup>5</sup> Participants’ ratings of the two explanations were negatively correlated, though not significantly so,  $r = -.19, p = .18$ .

<sup>6</sup> Parallel analyses failed to show evidence of a mediated path on women’s endorsements of the unfairness explanation; however this is not surprising given that the direct effect on this measure was itself marginal.

## APPENDIX A

### Belief in a Just World scale

*Please circle the number that best corresponds to your agreement with each statement below:*

	strong disagreement			strong agreement		
1- I feel that people get what they are entitled to have	1	2	3	4	5	6
2- I feel that a person's efforts are noticed and rewarded	1	2	3	4	5	6
3- I feel that people earn the rewards and punishments they get	1	2	3	4	5	6
4- I feel that people who meet with misfortune have brought it on themselves	1	2	3	4	5	6
5- I feel that people get what they deserve	1	2	3	4	5	6
6- I feel that rewards and punishments are fairly given	1	2	3	4	5	6
7- I basically feel that the world is a fair place	1	2	3	4	5	6



## APPENDIX C

### Positive And Negative Affect Scale

*This scale consists of a number of words that describe different feelings and emotions. Read each item, and use the scale provided to indicate to what extent you feel that way **right now**, that is, at the present moment.*

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
1- Interested	1	2	3	4	5
2- Distressed	1	2	3	4	5
3- Excited	1	2	3	4	5
4- Upset	1	2	3	4	5
5- Strong	1	2	3	4	5
6- Guilty	1	2	3	4	5
7- Scared	1	2	3	4	5
8- Hostile	1	2	3	4	5
9- Enthusiastic	1	2	3	4	5
10- Proud	1	2	3	4	5
11- Irritable	1	2	3	4	5
12- Alert	1	2	3	4	5
13- Ashamed	1	2	3	4	5
14- Inspired	1	2	3	4	5
15- Nervous	1	2	3	4	5
16- Determined	1	2	3	4	5
17- Attentive	1	2	3	4	5
18- Jittery	1	2	3	4	5
19- Active	1	2	3	4	5
20- Afraid	1	2	3	4	5

## APPENDIX D

### Canadian Identity

*Please circle the number that best corresponds to your agreement with each statement below:*

	strongly disagree					strongly agree	
1- I often think about being Canadian.	1	2	3	4	5	6	7
2- Being Canadian has little to do with how I feel about myself in general.	1	2	3	4	5	6	7
3- Being Canadian is an important part of my self image.	1	2	3	4	5	6	7
4- The fact that I am Canadian rarely enters my mind.	1	2	3	4	5	6	7
5- In general I'm glad to be Canadian.	1	2	3	4	5	6	7
6- I often regret being Canadian.	1	2	3	4	5	6	7
7. Generally I feel good about myself when I think about being Canadian.	1	2	3	4	5	6	7
8- I don't feel good about being Canadian.	1	2	3	4	5	6	7
9- I have a lot in common with other Canadians.	1	2	3	4	5	6	7
10- I feel strong ties to other Canadians.	1	2	3	4	5	6	7
11- I find it difficult to form a bond with other Canadians.	1	2	3	4	5	6	7
12. I don't feel a strong sense of being connected to Canadians.	1	2	3	4	5	6	7





Table 1

*Average salaries of Canadian men and women*

	Women	Men	Men's % advantage
All Canadians	\$24,390	\$38,347	56%
Full-time university professors	\$63,746	\$79,993	25%
Young full-time university professors	\$40,816	\$48,339	17%

*All data are in Canadian dollars, from the 2001 Canadian census.*

*Data available at the following Statistics Canada website:*

*<http://www12.statcan.ca/english/census01/Products/standard/themes/DataProducts.cfm?S=1>*

Table 2

*Unemployment rates and percentage of group members with at least a University degree*

Ethnic group	Unemployment	University degrees	
White	7.4%	23%	
<b>Chinese</b>	<b>8.4%</b>	<b>46%</b>	*
<b>South Asian</b>	<b>9.6%</b>	<b>38%</b>	*
Black	11.5%	18%	
Filipino	5.6%	31%	
Latin American	10.5%	20%	
Southeast Asian	9.8%	20%	
<b>Arab</b>	<b>14.3%</b>	<b>48%</b>	*
<b>West Asian</b>	<b>13.5%</b>	<b>30%</b>	*
<b>Korean</b>	<b>8.7%</b>	<b>37%</b>	*
Japanese	6.1%	28%	

*Asterisks denote ethnic groups who have higher unemployment rates than White Canadians, despite having more university degrees*

*Data taken from the 2001 Canadian census, available at the following Statistics Canada website:*

<http://www12.statcan.ca/english/census01/Products/standard/themes/DataProducts.cfm?S=1>

Table 3

*Participants' willingness to support 6 community service programs in various ways (Study 1)*

Condition	High inevitability		Low inevitability		Difference	
	M	SD	M	SD		
<b>Tutoring</b>						
Support creation	6.09	0.87	6.38	0.80	-0.29	
Vote for government funding	5.90	1.11	6.00	0.95	-0.10	
Volunteer	4.32	1.91	5.29	1.45	-0.97	t
Donate money	4.55	1.79	4.76	1.76	-0.78	
<b>Tutoring overall</b>	<b>5.22</b>	<b>1.05</b>	<b>5.61</b>	<b>1.03</b>	<b>-0.39</b>	
<b>Soup kitchen</b>						
Support creation	6.18	0.85	6.25	0.79	-0.07	
Vote for government funding	5.91	1.23	5.80	1.28	0.09	
Volunteer	4.68	1.81	5.35	1.46	-0.67	
Donate money	4.59	1.68	4.85	1.53	-0.26	
<b>Soup kitchen overall</b>	<b>5.34</b>	<b>1.07</b>	<b>5.56</b>	<b>1.07</b>	<b>-0.22</b>	
<b>Job training</b>						
Support creation	5.95	0.84	6.00	1.14	-0.05	
Vote for government funding	5.14	1.39	5.19	1.57	-0.05	
Volunteer	3.90	2.04	4.76	1.64	-0.86	
Donate money	3.68	1.67	3.71	1.49	-0.03	
<b>Job training overall</b>	<b>4.67</b>	<b>1.06</b>	<b>4.92</b>	<b>1.13</b>	<b>-0.25</b>	
<b>Mentorship</b>						
Support creation	6.09	0.87	6.52	0.75	-0.43	t
Vote for government funding	5.22	1.15	5.47	1.60	-0.25	
Volunteer	4.31	1.93	5.81	1.25	-1.50	**
Donate money	3.45	1.41	4.90	1.58	-1.45	**
<b>Mentorship overall</b>	<b>4.77</b>	<b>0.99</b>	<b>5.68</b>	<b>0.94</b>	<b>-0.91</b>	**
<b>Crisis hotline</b>						
Support creation	6.00	1.02	6.38	0.26	-0.38	
Vote for government funding	5.18	1.50	5.90	0.34	-0.72	t
Volunteer	3.68	2.23	5.29	0.49	-1.61	*
Donate money	3.59	1.84	4.52	0.40	-0.93	
<b>Crisis hotline overall</b>	<b>4.61</b>	<b>1.28</b>	<b>5.52</b>	<b>1.09</b>	<b>-0.91</b>	*
<b>Adopt-a-grandparent</b>						
Support creation	5.64	1.21	6.43	0.81	-0.79	*
Vote for government funding	4.77	1.69	5.43	1.40	-0.66	
Volunteer	4.14	1.91	5.19	1.78	-1.05	t
Donate money	3.59	1.56	4.23	1.76	-0.64	
<b>Adopt-a-grandparent overall</b>	<b>4.53</b>	<b>1.06</b>	<b>5.32</b>	<b>1.15</b>	<b>-0.79</b>	*
<b>Support for creation overall</b>	<b>5.99</b>	<b>0.75</b>	<b>6.33</b>	<b>0.63</b>	<b>-0.34</b>	
<b>Vote for government funding overall</b>	<b>5.36</b>	<b>1.02</b>	<b>5.64</b>	<b>0.87</b>	<b>-0.28</b>	
<b>Volunteer overall</b>	<b>4.17</b>	<b>1.66</b>	<b>5.29</b>	<b>1.16</b>	<b>-1.12</b>	*
<b>Donate money overall</b>	<b>3.91</b>	<b>1.40</b>	<b>4.52</b>	<b>1.35</b>	<b>-0.61</b>	
<b>Overall support for all programs</b>	<b>4.86</b>	<b>0.86</b>	<b>5.45</b>	<b>0.78</b>	<b>-0.59</b>	*

t:  $p < .10$ \*:  $p < .05$ \*\*:  $p < .01$

Table 4

*Participants' willingness to support 6 community service programs in various ways, adjusted for BJW and PWE scores (Study 2)*

Condition	High inevitability		Low inevitability		Difference	
	M	SE	M	SE		
<b>Tutoring</b>						
Support creation	6.13	0.19	6.55	0.18	-0.42	
Vote for government funding	5.90	0.36	5.76	0.35	0.14	
Volunteer	3.99	0.40	5.51	0.39	-1.52	*
Donate money	4.23	0.39	5.01	0.38	-0.78	
<b>Tutoring overall</b>	<b>5.06</b>	<b>0.27</b>	<b>5.71</b>	<b>0.26</b>	<b>-0.65</b>	
<b>Soup kitchen</b>						
Support creation	6.06	0.18	6.61	0.18	-0.65	*
Vote for government funding	5.82	0.35	5.90	0.34	-0.08	
Volunteer	4.05	0.39	5.73	0.38	-1.68	**
Donate money	4.39	0.34	5.35	0.33	-0.96	<sup>t</sup>
<b>Soup kitchen overall</b>	<b>5.08</b>	<b>0.24</b>	<b>5.90</b>	<b>0.23</b>	<b>-0.82</b>	*
<b>Job training</b>						
Support creation	5.81	0.30	6.40	0.29	-0.59	
Vote for government funding	5.31	0.37	5.93	0.36	-0.62	
Volunteer	4.09	0.37	4.92	0.36	-0.83	
Donate money	3.87	0.38	4.18	0.36	-0.31	
<b>Job training overall</b>	<b>4.77</b>	<b>0.28</b>	<b>5.36</b>	<b>0.27</b>	<b>-0.59</b>	
<b>Mentorship</b>						
Support creation	5.95	0.15	6.83	0.14	-0.88	***
Vote for government funding	5.33	0.28	5.97	0.28	-0.64	
Volunteer	4.52	0.33	6.18	0.32	-1.66	**
Donate money	4.14	0.36	5.31	0.35	-1.17	*
<b>Mentorship overall</b>	<b>5.00</b>	<b>0.21</b>	<b>6.07</b>	<b>0.21</b>	<b>-1.07</b>	**
<b>Crisis hotline</b>						
Support creation	5.76	0.27	6.40	0.26	-0.64	
Vote for government funding	5.39	0.35	5.46	0.34	-0.07	
Volunteer	3.59	0.50	4.49	0.49	-0.90	
Donate money	3.87	0.42	4.40	0.40	-0.53	
<b>Crisis hotline overall</b>	<b>4.66</b>	<b>0.29</b>	<b>5.19</b>	<b>0.28</b>	<b>-0.53</b>	
<b>Adopt-a-grandparent</b>						
Support creation	5.79	0.21	6.31	0.20	-0.52	<sup>t</sup>
Vote for government funding	5.21	0.33	4.92	0.32	0.29	
Volunteer	4.13	0.42	5.99	0.41	-1.86	
Donate money	3.79	0.41	4.53	0.39	-0.74	
<b>Adopt-a-grandparent overall</b>	<b>4.73</b>	<b>0.26</b>	<b>5.19</b>	<b>0.25</b>	<b>-0.46</b>	
<b>Support for creation overall</b>	<b>5.92</b>	<b>0.16</b>	<b>6.52</b>	<b>0.15</b>	<b>-0.60</b>	*
<b>Vote for government funding overall</b>	<b>5.49</b>	<b>0.25</b>	<b>5.66</b>	<b>0.25</b>	<b>-0.17</b>	
<b>Volunteer overall</b>	<b>4.06</b>	<b>0.29</b>	<b>5.30</b>	<b>0.28</b>	<b>-1.24</b>	**
<b>Donate money overall</b>	<b>5.92</b>	<b>0.16</b>	<b>6.52</b>	<b>0.15</b>	<b>-0.60</b>	*
<b>Overall support for all programs</b>	<b>5.35</b>	<b>0.16</b>	<b>6.00</b>	<b>0.15</b>	<b>-0.65</b>	**

<sup>t</sup>:  $p < .10$

\*:  $p < .05$

\*\*:  $p < .01$

\*\*\*:  $p < .001$

Table 5

*Women's endorsements of system justifying and system blaming explanations for a gender discrepancy, adjusted for BJW and PWE scores (Study 3)*

Gender discrepancy in	Germany				Canada			
	Germany		Canada		Germany		Canada	
High inevitability in	M	SE	M	SE	M	SE	M	SE
System justifying explanation	4.15	0.56	3.13	0.50	4.36	0.58	5.35	0.53
System blaming explanation	6.08	0.43	6.69	0.38	6.75	0.44	5.50	0.41
Difference (i.e., system justification)	-1.97		-3.56		-2.39		-0.15	

Table 6

*Men's and women's endorsements of system justifying and system blaming explanations for the gender discrepancy (Study 4)*

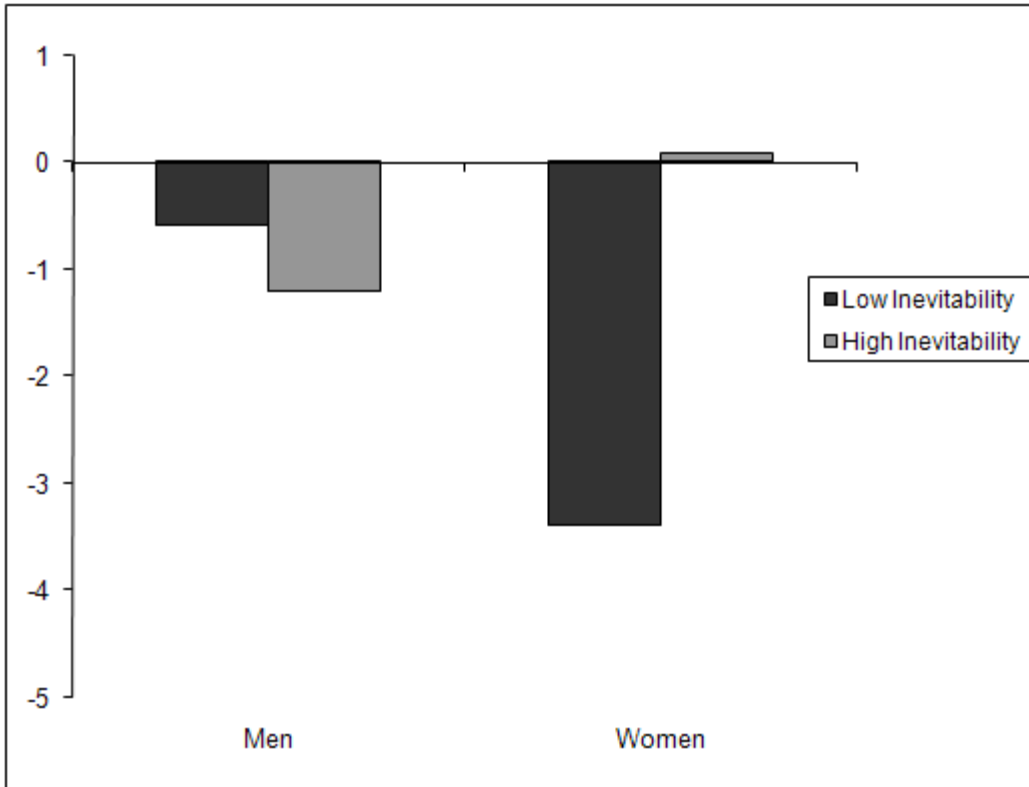
	Men				Women			
	low		high		low		high	
	M	SD	M	SD	M	SD	M	SD
Inevitability								
System justifying explanation	4.25	1.91	3.86	1.88	3.07	2.30	5.23	1.96
System blaming explanation	4.83	2.62	5.07	2.20	6.43	1.65	5.15	2.03
Difference (i.e., system justification)	-0.58		-1.21		-3.36		0.08	

Figure 1.



For ease of presentation, Figure 1 presents overall system justification in each condition, as calculated by the subtraction of participants' endorsement of the system blaming explanation from their endorsement of the system justifying explanation. Note, however, that the analysis was conducted as a repeated-measures ANOVA, using endorsements of each explanation separately.

Figure 2.



For ease of presentation, Figure 2 presents overall system justification in each condition, as calculated by the subtraction of participants' endorsement of the system blaming explanation from their endorsement of the system justifying explanation. Note, however, that the analysis was conducted as a repeated-measures ANOVA, using endorsements of each explanation separately.



Figure 3.

