

Regrets in the East and West: Role of intrapersonal versus interpersonal norms

Taekyun Hur,¹ Neal J. Roese² and Jae-Eun Namkoong¹

¹Department of Psychology, Korea University, Seoul, Korea and ²Department of Psychology, University of Illinois at Urbana-Champaign, USA

Regrets are stronger following atypical than following normal behaviour. No studies have tested this effect for both intrapersonal normality (consistency within a person) and interpersonal normality (consistency between people) simultaneously. The present research examined whether the impact of violating the two kinds of normality on regret varies across cultures, using a manipulation of mutability crossed with that of norm violation. Among Korean participants (but not Americans) the impacts of mutability on regret were stronger when the intrapersonal rather than the interpersonal norm was violated, which was interpreted in terms of the greater collectivist emphasis in Korea than in the USA.

Key words: counterfactual thinking, cross-cultural variation, mutability, normality, regret.

Introduction

After a decision is made, the evaluation of unchosen alternatives may influence satisfaction. Regret is a negative emotion accompanied by the thought that a choice should have been made differently to make things better. Many studies of regret have shown it to be a potent influence on evaluations of choice, subsequent choice and numerous other judgments (Inman, Dyer, & Jia, 1997; Connolly & Zeelenberg, 2002; Zeelenberg & Pieters, 2007). The cognitive process underlying the experience of regret is thought to be counterfactual thinking, which involves consideration of alternative courses of events that ‘might have been’ (Roese, 1997; Epstein & Roese, 2008).

Previous studies of regret and counterfactual thinking have demonstrated that normality, or norm violation, is a potent determinant (e.g. Kahneman & Tversky, 1982; Kahneman & Miller, 1986; Miller & McFarland, 1986; Macrae, Milne, & Griffiths, 1993; Turley, Sanna, & Reiter, 1995; Roese & Olson, 1996; Roese & Hur, 1997). That is, counterfactual thoughts are more available after an unusual or atypical behaviour than after a more normal or routine behaviour. Take a person caught in traffic as an example: if that person had chosen an atypical route rather than a more usual route, counterfactual thoughts are more likely (‘If I only I had stuck to my routine!’) and, as a result, so too is the experience of regret. The effect of normality on regret is a widely replicated effect (see Roese, 1997, for review).

Culture and normality

How do regrets differ across culture? Only a few studies have examined this question, and these have tended to suggest more similarity than difference. For example, Gilovich, Wang, Regan, and Nishina (2003) examined the extent to which people have regrets of inaction (what they ‘should’ have done) versus regrets of action (what they ‘should not’ have done). Previous research using American samples demonstrated that regrets of action predominate in the short term, but regrets of inaction predominate over long periods of time (Gilovich & Medvec, 1994, 1995; Zeelenberg, van der Pligt, & Manstead, 1998). Gilovich *et al.* (2003) found that this same pattern was evident in samples tested in China, Japan and Russia.

Further, Chen, Chiu, Roese, Tam, and Lau (2006) examined this same distinction across different domains of life (cf. Roese & Summerville, 2005) using samples in the USA and China. This research focused on counterfactual thinking rather than regret, thus framing the distinction slightly differently (additive counterfactuals correspond to regrets of inaction; subtractive counterfactuals correspond to regrets of action). These authors found that additive counterfactuals (or inaction regrets) were more common overall, but they also found a cross-cultural difference within specific life domains. In the life domains involving academic achievement and family interaction, subtractive counterfactuals were more common among Chinese than Americans. This cross-cultural difference was interpreted in terms of the stronger norms present in China than in the USA regarding adhering to familial obligations (Ho & Kang, 1984; Chiu, 1990; Ho & Chiu, 1994). Because of the cost of failing to live up to the family’s obligations, whether in schoolwork

Correspondence: Taekyun Hur, Department of Psychology, Korea University, Seongbuk-gu, Anam-dong 5, Seoul 136-701, Korea. Email: tkhur@korea.ac.kr

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or at home with family members, people in China were more attuned to avoiding mistakes, hence their regrets took the form of wishing that mistakes had not been made.

The overall universal pattern of regrets uncovered by Chen *et al.* (2006) is inconsistent with the more general observation of a difference in individualism versus collectivism between Western and Eastern nations. Much research has focused on how self-evaluations and self-construals vary in terms of independence, or focus on individual attributes and aspirations, versus interdependence, in which the individual is more concerned with relationships and social roles (Triandis, 1995; Oyserman, Coon, & Kemmelmeier, 2002; Chiu & Hong, 2006). This conception suggests that the effect of norm violation on regret might vary across cultures. That is, we may distinguish between intrapersonal norms, which centre on a person's behaviour and what that person typically does, and interpersonal norms, which centre on the consistency between a person's behaviour versus behaviours performed by others (i.e. social norms). This distinction maps onto the one drawn in Kelley's (1967) attribution theory, in which the covariational information that feeds into causal inference might take the form of variation within a person (consistency) or across people (consensus). Across the counterfactual literature, both types of norms have been assessed. The earliest studies tended to focus on intrapersonal norms, as in Kahneman and Tversky's (1982) classic study involving a car accident that took place along a route the driver usually versus rarely took (see also Miller & McFarland, 1986; Macrae, 1992; Turley *et al.*, 1995; Roese & Olson, 1996). But many other studies of counterfactual thinking have focused on the role of interpersonal norm violation (e.g. N'gbala & Branscombe, 1995; Roese & Hur, 1997; McCloy & Byrne, 2000; Segura & McCloy, 2003; Catellani, Alberici, & Milesi, 2004).

To date, however, no research has directly compared intrapersonal and interpersonal norm effects within the same study in order to determine which plays a greater role in the induction of regret. In the present research, we examined which of these two norms might triumph when placed in a state of conflict. That is, if an individual violates one type of norm so as to adhere to the other, will greater regret result when it is the intrapersonal or the interpersonal norm that is violated? We examined whether the answer to this question varied across cultures. The literature on counterfactual thinking, conducted primarily in the USA, apparently shows that significant effects of norm violation emerge regardless of whether the norm is intrapersonal or interpersonal in nature. We hypothesized, therefore, that in a US sample, a mutability effect will take place, being consistent with previous findings. In other words, the type of norm would not moderate the effect of mutability (manipulated via the salience of an alternative course of action that would have produced a better outcome; see

Branscombe, Owen, Garstka, & Coleman, 1996; Hur, 2004) on regret. However, based on past observations that people in collectivistic Eastern cultures are more sensitive to interpersonal than intrapersonal obligations, we hypothesized that to a sample of Korean participants, the violation of an interpersonal norm would be so regretful as to overshadow the impact of mutability. Thus, while mutability has impact on regret when the intrapersonal norm is violated, it will most likely disappear when the interpersonal norm is violated. This overpowering impact of interpersonal norm violation only among Korean (vs American) samples would be additional evidence for the well-established cross-cultural differences in individualism-collectivism.

US study

This experiment tested whether participants would be more concerned with violation of an intrapersonal versus an interpersonal norm. The experiment was rooted to a manipulation of mutability, in which an upward counterfactual (i.e. better alternative) was either salient or not salient. Specifically, participants read of a negative outcome involving getting stuck in a traffic jam. An alternative route that might have been taken was either similarly jammed (low mutability) or moving freely (high mutability). Thus, in the latter case, participants could more easily imagine how the negative outcome might have been avoided. As in previously published research, we expected regret to be more intense in the high (versus low) mutability condition (e.g. Branscombe *et al.*, 1996; Hur, 2004).

Crossed with the factor of mutability was the type of norm involved, either intrapersonal or interpersonal. The norm manipulation was structured in terms of a conflict, such that following one norm meant disregarding the other. Specifically, one condition involved violating an intrapersonal norm (what oneself usually does) while following an interpersonal norm (what one's friends usually do), whereas the other condition involved the reverse. In this way, we could test whether the effect of mutability on regret was moderated by whether the norm that was violated (or followed) was of an intrapersonal versus an interpersonal nature.

Method

Participants. Sixty-eight undergraduate students attending the University of Illinois participated for course credit.

Materials and procedure. Participants were told that the study aimed to investigate peoples' reactions to everyday life events. They were presented with a paragraph-length scenario and asked to imagine that they were themselves experiencing the sequence of events depicted in the scenario.

The scenario focused on a college-aged protagonist who was planning to travel with friends by air on a vacation. Caught in a traffic jam on the way to the airport, the protagonist misses the flight. Four versions of the scenarios were created, corresponding to the 2×2 manipulation of mutability versus type of norm, both as between-subject variables. The mutability manipulation centred on whether an alternative route to the airport might have permitted the protagonist to have reached the airport on time. That is, an alternative route to the airport was described as either similarly jammed (low mutability) or moving smoothly (high mutability). The manipulation of norm violation focused on how the choice of route to the airport was framed. In the intrapersonal norm violation condition, the protagonist selected the route that his friends usually took rather than the one he preferred. In the interpersonal norm violation condition, the protagonist selected his own preferred route rather than the one his friends preferred. This scenario appears in the Appendix.

After reading the scenario, participants rated how much regret the protagonist would feel using a nine-point scale.

Results

A 2 (mutability: low vs high) \times 2 (norm violation: intrapersonal vs interpersonal) ANOVA on regret ratings revealed a significant main effect of mutability, $F(1, 64) = 10.47$, $p < 0.01$, $\eta^2 = 0.14$. Participants in the high mutability condition felt more regret ($M = 8.06$) than those in the low mutability condition ($M = 6.85$). There was also a marginally significant main effect of the type of norm violated, $F(1, 64) = 3.30$, $p = 0.07$, $\eta^2 = 0.04$, such that participants gave somewhat higher regret ratings for the protagonist who violated an interpersonal norm ($M = 7.79$) than an intrapersonal norm ($M = 7.12$). Importantly, however, the effect of mutability on regret was not qualified by the type of norm violation (i.e. the interaction effect was not significant), $F(1, 64) = 1.40$, $p = 0.24$, $\eta^2 = 0.02$.

Korean study

Methods

Participants. One hundred undergraduate students attending Korea University participated for course credit.

Experimental materials and procedure. The experimental procedure was identical to that of the US study. The experimental materials were translated to Korean through a series of back-translation processes, with minor modifications of the scenarios (such as the name of the protagonist, the school, the regions and the airport).

Results

Regret ratings were analyzed using a 2 (mutability: low vs high) \times 2 (norm violation: intrapersonal vs interpersonal) ANOVA, which revealed a marginally significant main effect of outcome mutability, $F(1, 96) = 3.46$, $p = 0.07$, $\eta^2 = 0.03$. As in the US sample, participants in the high mutability condition felt more regret ($M = 7.39$) than those in the low mutability condition ($M = 6.70$). Also, the effect of normality was significant, $F(1, 96) = 4.09$, $p < 0.05$, $\eta^2 = 0.04$, such that participants gave higher regret ratings for the protagonist who violated an interpersonal norm ($M = 7.41$) than an intrapersonal norm ($M = 6.81$).

More important, the interaction was significant, revealing that the effect of mutability depended on the type of norm that was violated, $F(1, 96) = 4.80$, $p < 0.05$, $\eta^2 = 0.05$. Specifically, a planned contrast using a series of simple main effect analyses was conducted in order to examine the hypothesis that the interpersonal norm violation would be overwhelming so as to nullify the impacts of mutability that would influence regret only when the intrapersonal norm was violated. As predicted, it revealed that regret in 'the low-mutability and intrapersonal-norm-violation' condition ($M = 6.00$) was significantly lower than those of all the other three conditions (Fig. 1); the high-mutability and intrapersonal-norm-violation condition ($M = 7.48$; $F(1, 96) = 8.85$, $p < 0.01$, $\eta^2 = 0.08$), the low-mutability and interpersonal-norm-violation condition ($M = 7.48$; $F(1, 96) = 7.96$, $p < 0.01$, $\eta^2 = 0.08$), and the high-mutability and interpersonal-norm-violation condition ($M = 7.36$; $F(1, 96) = 7.37$, $p < 0.01$, $\eta^2 = 0.07$).

Discussion

The present research examined how the effect of norm violation on regret differs across cultures. Based on previ-

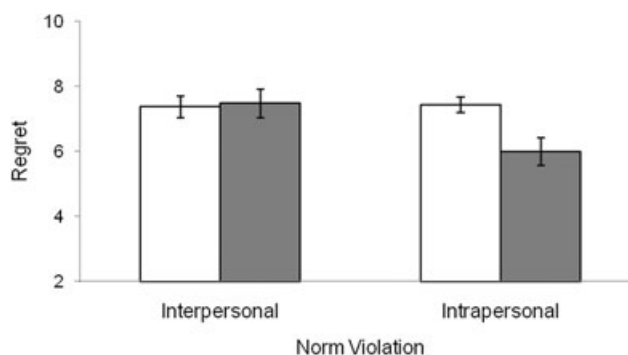


Figure 1 Predicted regret varying on norm violation and mutability (from the Korean Study). Higher numbers indicate stronger regret. Error bars represent standard errors. □, high mutability; ■, low mutability.

ous research, we expected and found that mutability (i.e. whether a salient alternative would have been better or the same as the current situation) would influence regret. This basic effect was evident among both US and Korean participants. Previous research has also examined the role of norm violation, demonstrating that regrets are stronger when the preceding behaviour or decision is atypical rather than normal. Past studies have examined both intrapersonal and interpersonal norms, but no previous research has examined both simultaneously. In pitting these two types of norm violation against each other, we examined whether effects on regret might vary as a function of culture. We suspected that participants in Eastern nations, such as Korea, might be more sensitive to violations of interpersonal than intrapersonal norms, in part due to a prevailing cultural emphasis on collectivism and interdependence rather than on individualism and independence.

In the US sample, we found that the type of norm violation did not play a significant role. Regardless of whether the norm that was violated was of an intrapersonal or interpersonal nature, the same effect of mutability on regret was evident. Thus, the US participants appeared to be equally sensitive to violations of norms based on personal standards of past behaviour versus those based on the actions of close others. By contrast, in the Korean sample, regret effects differed significantly as a function of the type of norm that was violated. When an interpersonal norm was violated in order to adhere to an intrapersonal norm, regret was high and the effect of mutability was not significant. That is, violating the interpersonal norm overshadowed the impact of mutability. However, the case in which an intrapersonal norm was violated in order to adhere to an interpersonal norm was the only one in which the mutability effect on regret was significant. Thus, the traditionally studied effect of mutability on regret was especially pronounced for Koreans only when an intrapersonal norm was violated.

Taken alongside previous studies of cultural differences in regret and counterfactual thinking (Gilovich *et al.*, 2003; Chen *et al.*, 2006), the present findings do indicate substantial similarity across cultures. On average, regrets are stronger for inaction than action and, in the present case, on average, regrets are stronger when the preceding events are mutable, regardless of whether the participants are from the East or the West. At the same time, the present research revealed one intriguing cultural difference in that the experience of regret for Koreans but not Americans differed as a function of whether the norm violation took place in an interpersonal versus an intrapersonal context. This finding is consistent with the cultural orientation of Korea with regard to collectivism. That is, people of collectivistic cultures value harmony and conformity to a greater extent than people in individualistic cultures (Triandis, 1995).

The effects of cultural factors on regret may share the basic logic of some previous studies on the role of the

decision-maker's orientation in the experience of regret. For example, Seta, McElroy and Seta (2001) showed that the consistency between the decision and the decision-maker's orientation (conceptualized as desirability of the decision) could mediate judgments of regret. An individual's orientation reflecting the society's cultural orientation (e.g. individualism vs collectivism) may thus play an important role in the experience of regret (D'Andrade, 1990). Additionally, what people perceive as mutable or immutable among antecedent events is bounded by 'availability' that could be shaped by culturally shared assumptions as well as natural laws (see Seelau, Seelau, Wells, & Windschitl, 1995).

The findings of the present study are consistent with previous studies in terms of finding both universality and partial cultural variation in counterfactual thinking and regret (Chen *et al.*, 2006). There remain, however, questions to be answered. For instance, experiencing through a given scenario may differ from the actual experience in real-life settings. In addition, different social relationships (vs friendship) to the reference group may cause variations in the patterns of regret across cultures. Finally, future studies may explore in greater detail whether other types of differences in norms help to explain cultural variation in emotion.

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Appendix

Scenario for the intrapersonal norm and high mutability condition

Mr A is 23 years old, single and a student at UIUC. His home town is Los Angeles. Over the last summer break, he had planed a trip to Hawaii with his high school friends. He had been looking forward to the trip for a long time.

The flight to Hawaii was scheduled to depart from LAX airport in Los Angeles at 4 pm. Mr A and his 13 friends left his house together, early enough to make it in time. The group of 14 people was divided into four cars, and their plan was to meet in front of the ticketing desk at the airport. Mr A drove one of the four cars, with two of his friends accompanying him. Mr A had always used the freeway to get to the airport. When he reached a major turnoff, where he could either stay on the freeway or take a side street and still get to the airport, he saw all three other cars containing his friends heading towards the side street. *After pondering for a short time, Mr A chose to stay on the freeway, which is the route that he always used. [After pondering for a while, Mr A chose to follow his friends onto the side street.]* Mr A was caught in a bad traffic jam caused by an accident just in front of his car. *As he looked out his window, he could see that traffic on the side streets was moving smoothly without any traffic jam. [As he looked out his window, he could see that traffic on the freeway was also stuck in a traffic jam and not moving much at all.]*

Mr A finally arrived at the airport at 5 pm, 1 h after the scheduled departure time, and missed his flight. His other friends had boarded the flight, leaving behind a message that Mr A could catch up with them by taking another flight. Unfortunately, all other flights on that day were sold out.

Note: Variations for the interpersonal norm version and the low mutability version are in square brackets.