

# **Culture, Public Appearances, and Threat Perception in Competitions**

By

Albert Lee (Kai Chung)

A thesis submitted to the Graduate Program of Psychology  
in conformity with the requirements for the  
Degree of Doctor of Philosophy

Queen's University  
Kingston, Ontario, Canada

August, 2013

Copyright © Albert Lee (Kai Chung), 2013

## **Abstract**

The present research examined cultural differences between Euro-Canadians and Chinese in threat perception in competitive settings. Based on past cultural psychological research on self and thinking, we predicted that, compared to Chinese, Euro-Canadians would perceive greater correspondence between public appearances and reality – inferring an opponent as competent and threatening if he or she appears competent. As predicted, Euro Canadians perceived greater threat than did Chinese in an opponent who appeared competent or domineering, whereas Chinese perceived greater threat than Euro Canadians in an opponent who appeared non-distinct or ordinary (Studies 1 to 4). Consistent with my predictions, these cultural differences were partially mediated by perceived unpredictability associated with different appearances (Study 3) and fully mediated by the more general beliefs that appearances can be unreliable reflections of reality (Study 4). The results have important implications for judgment and decision making in competitions.

## **Co-Authorship**

Li-Jun Ji provided suggestions on the methods and design, data analysis, and writing for each of the studies. Li Ye contributed to data collection in China for Study 3 and 4.

Albert Lee (Kai Chung) was responsible for the conceptual designs, methodology, data collection, data analysis, and write-up.

## Acknowledgements

Thank you, Li-Jun, for your endless support and understanding. I am grateful for having you as a mentor and as a friend. There were times when you ran out of patience, but you always returned with more the next day.

Thank you, Lee Fabrigar, for all the advice, statistics tutorials, and good chats. Social Influence was my very first course at Queen's. It was the most eye-opening and interesting course I have ever taken. It still is.

Thank you, Jill Jacobson, for being incredibly attentive to the details and pointing out mistakes in my writing. These lessons will come in handy for years to come. Your classes were hard, but they were very rewarding in many ways.

Thank you, the outstanding research assistants who have contributed to the Culture and Cognition Lab, for all the hard work that makes research happen.

Thank you, my good friends, for being there. Flying all the way to join me at SPSP conferences was a crazy idea. But you did.

Thank you, sister, for not backing up from challenges. You saw obstacles, you feared, and you conquered them one step at a time. I am proud of you.

Thank you, Mom and Dad, for showing the empathy, persistence, kindness, and sacrifices it takes to raise a child. I begin to understand.

Thank you, Abby, for sharing your good heart, being who you are, being where you are, seeing hopes when there seemed to be none, and not giving up.

## Table of Contents

Abstract.....	ii
Co-Authorship.....	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures.....	vi
Chapter 1 Introduction.....	1
Chapter 2 Study 1.....	13
Chapter 3 Study 2.....	16
Chapter 4 Study 3.....	19
Chapter 5 Study 4.....	30
Chapter 6 General Discussion.....	38
References.....	44
Appendix A: Materials for Study 1.....	56
Appendix B: Materials for Study 2.....	57
Appendix C: Materials for Study 3.....	58
Appendix D: Materials for Study 4.....	63
Appendix E: Letter of Information and Consent Form.....	66
Appendix F: Debriefing Form.....	67
Appendix G: Letter of Ethics Review Clearance.....	68

## List of Figures

Figure 1. Threat perceived from each company by Euro-Canadians and Chinese. (Study 1).....	15
Figure 2. Threat perceived from each candidate by Euro-Canadians and Chinese. (Study 2).....	17
Figure 3. Threat perceived from each debater by Euro-Canadians and Chinese. (Study 3).....	24
Figure 4: Mediation model of culture, unpredictability, and threat perception. (Study 3) .....	26
Figure 5. Threat perceived from each debater by Euro-Canadians and Chinese. (Study 4).....	33
Figure 6: Mediation model of culture, beliefs that appearances can be unreliable, and threat perception. (Study 4) .....	35

# CHAPTER 1

## Introduction

Imagine you are a general guarding a city. An attack by an enemy troop is forthcoming, but all your troops have been sent to fight elsewhere, and you cannot recall them in time to help. What would you do to defeat the enemy? When faced with such a situation two thousand years ago in China, Zhuge Liang, the military advisor of the Shu kingdom, did the following: He ordered all of the gates to be opened, had a couple of peasants sweeping the city's gateway like they normally would, while he, keeping his composure, sat high on the gate wall playing a zither to the approaching force. When the enemy commander arrived at the city gate with his army, he was bewildered by the scene. Suspecting that an enormous danger could be waiting behind the scene of unusual serenity, and that entry into the apparently empty city would draw his troops into an ambush, the commander immediately ordered his troops to retreat without looking back. Only later the enemy commander came to realize that he had been fooled and lost a rare opportunity to defeat the Shu kingdom. This story, called the "Empty city ruse," highlights some interesting cultural beliefs in the perception of an opponent's appearance in competitive settings, which is the focus of the present paper.

Despite the richness of cultural diversity in competitions, relatively few studies have examined the psychological impact of culture on social judgments in these settings. Given the broad impact of culture on thoughts and behaviors (e.g., Cousins, 1989; Fiske, Kitayama, Markus, & Nisbett, 1998; Markus & Kitayama, 1991; Nisbett, 2003; Triandis, 1989), cultural differences may exist in how inferences are made under competitive conditions. In this research, we examined how culture shapes the ways Euro-Canadians

and Chinese infer their opponents' actual competence from the appearance they project. We begin by reviewing the literature on culture and self, self-presentation and perception of competence in competitions, and correspondence thinking across cultures. We propose that Euro-Canadians hold stronger beliefs than Chinese in the correspondence between appearance and reality. As a result, we hypothesized that in competitive contexts, Euro-Canadians would perceive greater threat than would Chinese in an opponent who appears competent or domineering, whereas Chinese would perceive greater threat than would Euro-Canadians in an opponent who appears non-distinct or ordinary. We report four empirical studies to support these predictions and to explore psychological mechanisms for such cultural differences. We conclude by discussing theoretical and practical implications of this research.

### **Culture and Self**

Research has shown that culture shapes the ways the self is construed (Cousins, 1989; Markus & Kitayama, 1991; Triandis, 1989). An independent self-construal, typically found in North American cultures,<sup>1</sup> emphasizes autonomy and consistency (Fiske et al., 1998; Markus & Kitayama, 1991). The need for autonomy prescribes that people's desires, feelings, and thoughts should take precedence over situational pressures in motivating their choices and decisions (Geertz, 1975; Heine, 2007; Markus & Kitayama, 1991; Shweder & LeVine, 1984). For example, research has shown that American children are most motivated when making their own choices, whereas Asian

---

<sup>1</sup> Certain cultural populations in North America and East Asia are more frequent targets of investigations than others in the social psychology of cultures. In this paper, the term *North Americans* refers specifically to Americans and Canadians of European descent, whereas the term *East Asians* refers primarily to Chinese, Japanese, and Koreans.

children are most motivated when working on things chosen by their mother or trusted seniors (Iyengar & Lepper, 1999).

An independent self also places greater emphasis on consistency (Heine & Lehman, 1997), particularly the consistency in thought and action across time and situations (e.g., Bond & Cheung, 1983; Kanagawa, Cross, & Markus, 2001; Rhee, Uleman, Lee, & Roman, 1995). Researchers have found that North Americans tend to maintain coherence in their self-concepts, as their self-descriptions do not vary much from one situation to another. Consistency bears implications for self-presentation, as North Americans are strongly guided by the norm of authenticity (Knowles & Ames, 1999), or the cultural expectations that people ought to display and express themselves in ways consistent with who they truly are, particularly between their public and private selves (Heine, 2010) or between their words and deeds (Schlenker & Leary, 1982). In fact, consistency is so central to North American cultures that it constitutes a major predictor of psychological well-being as suggested by various self-report studies (Cross, Gore, & Morris, 2003; Diener & Suh, 2000; Suh, 2002).

In contrast, an interdependent self-construal, typically associated with East Asians, places relatively stronger emphasis on social roles, connectedness, and flexibility in response to situational demands (Fiske et al., 1998; Markus & Kitayama, 1991). An interdependent self is defined primarily in relation to others, with Chinese (Bond & Cheung, 1983), Koreans (Rhee et al., 1995), Indians (Dhawan, Roseman, Naidu, & Rettke, 1995), and Malaysians (Bochner, 1994) more likely to describe themselves in terms of social roles and group memberships.

Studies have shown that the need for consistency seems to be much weaker in East Asians than in North Americans in a number of ways. Specifically, cultural work illustrates that consistency in the self is less pronounced in interdependent cultures. For example, Kanagawa and colleagues (2001) found that Japanese participants described themselves with marked variability, depending on who was in the room with them during the self-description task. This phenomenon was not found in their American samples. In addition, likely driven by their stronger conformity to social norms (Kim & Markus, 1999), and by their relatively weaker need for congruence between attitudes and actions (Kashima, Siegel, Tanaka, & Kashima, 1992), East Asians have been shown to align their thoughts and behaviors with group standards even when these standards are inconsistent with their personal beliefs (Heine & Lehman, 1997). When confronted with interpersonal disagreements, both Americans and Japanese had similar incentives to maintain their original opinions. However, Americans made greater attempts to change the other person's view, whereas Japanese were more likely to avoid social conflicts by feigning agreement with the other person (Iwao, 1988). East Asians also have a stronger tendency to describe themselves with seemingly contradictory personality traits (Choi & Choi, 2002; Hamamura, Heine, & Paulhus, 2008), presumably because of the relatively greater emphasis on attuning their behaviors to different situations. Finally, relative to North Americans, the impact of self-consistency on psychological health is much weaker among East Asians (Diener & Suh, 2000; Suh, 2002). These findings highlight the context sensitivity of people with an interdependent self and how their behaviors or public expressions may correspond to their actual selves less often (versus North Americans) due to external influences.

## **Self-Presentation**

Self-presentation is the process by which people attempt to control the impressions others form of them (Baumeister, 1982; Goffman, 1959; Jones, 1964, Jones & Pittman, 1982; Leary, 1995; Leary & Kowalski, 1990; Porter, Allen, & Angle, 1981; Schilit & Allenby, 1988; Schlenker, 1980). Numerous studies have systematically delineated the major motivations and goals of self-presentation, the dispositional and situational antecedents of these activities, and how these activities are perceived by others under various conditions (see Schlenker, 2012, 2003; see also Leary 1995). In the following section, we will review some of this literature particularly relevant to competitive settings, as the present research focuses on judgments in competitions.

According to Leary and Kowalski (1990), people are more motivated to think about how others perceive them in certain circumstances, such as when the goal is to impress the audience (Arkin & Baumgardner, 1986; Baumeister, 1982; Schneider, 1981; Tedeschi & Norman, 1985; Weiss & Feldman, 2006), to reach a desired outcome (Gould & Penley, 1984; Jones, 1962; Judge & Bretz, 1994; Stevens & Kristof, 1995), or to enhance self-esteem (Schneider, 1981; Tedeschi, 1981). Self-presentation motives are also paramount when the interaction outcome is considered important (Schlenker, 2003) or highly uncertain (Shepperd & Socherman, 1997), as in the case when people with similar qualifications are competing for scarce resources or opportunities (e.g., job interviews). Not surprisingly, as a competition becomes more intense, so is the prevalence of strategic self-presentations (Pandey & Rastagi, 1979).

Various personality factors moderate self-presentation processes. For instance, people who are self-conscious pay more attention to aspects of themselves that are prone

to the judgements of others, such as their appearance, social status, and the ways they behave. Consequently, they are more sensitive to other people's impressions of them and more likely to manage their impressions than those with low self-consciousness (Buss, 1980; Carver & Scheier, 1981). Likewise, the need for social approval and fear of rejection also predict self-presentation behaviors; people who score highly on these two dimensions are more likely to control their impressions (Jones & Tager, 1972; Leary, Barnes, & Griebel, 1986). A major part of self-presentation is to act in ways that are appropriate to social contexts. Accordingly, people who are constantly mindful of their actions and public appearance (Snyder, 1979), or high self-monitors, tend to tailor themselves more often to meet situational demands compared to low self-monitors (Lippa & Donaldson, 1990). Others studies showed that high scorers in Machiavellianism have a stronger tendency to present themselves strategically to influence others than low Machs (Christie & Geis, 1970). Finally, Lewis and Neighbors (2005) have found that people high on autonomy are associated with fewer uses of self-presentational strategies than those low on autonomy.

Although the literature has documented different classes of self-presentational strategies (Gibson & Sachau, 2000; Jones & Pittman, 1982; Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999; Shepperd & Socherman, 1997),<sup>2</sup> some seem to be more pertinent to competitive conditions than others as suggested by previous research. Self-promotion, for example, occurs when one attempts to appear in a way seen by others as competent, typically by highlighting one's positive aspects (e.g., achievements, resources, abilities)

---

<sup>2</sup> There are five strategies in Jones and Pittman's (1982) original theoretical framework: self-promotion, ingratiation, exemplification, supplication, and intimidation. Subsequent research has expanded this framework with additional strategies, such as sandbagging, self-handicapping, excuses, apologies, justifications, disclaimers, entitlement, enhancement, and blasting (Gibson & Sachau, 2000; Lee et al., 1999).

in a credible fashion (Jones & Pittman, 1982). Specifically, Godfrey and others (1986) have shown that participants with self-promotional goals in mind are more likely to present themselves as possessing strength, efficiency, and competence. Although life can present many motives and occasions for self-promotion, empirical work suggests that they seem to be more prevalent in settings in which people are competing with one another for limited opportunities, such as in schools and workplaces (Goldstein, 1971; Guion, 1965; Hendricks & Brickman, 1974). Not surprisingly, self-promotional skills are positively linked with hiring decisions (Kacmar, Delery, & Paris, 1992; Stevens & Kristof, 1995), probably because they are associated with qualities that are necessary or essential for many professions (e.g., competence, confidence, and ambition).

Contrary to self-promotion, sandbagging represents a common strategy in competitive settings, and it involves making false claims or feigned displays of inability in order to create low expectations the opponent has for the sandbagger (Gibson & Sachau, 2000; Shepperd & Socherman, 1997). Sandbaggers need not portray themselves as completely weak and incompetent – it simply requires one to look less competent than he or she actually is. The major goal of sandbagging is to instigate opponents into putting their guards down by inducing a false sense of security. Research has shown that people who score low on Machiavellianism are more likely to sandbag than are high scorers (Shepperd & Socherman, 1997). Finally, sandbagging may be used to lower an observer's expectation for the sandbagger's performance, which, in turn, reduces performance anxiety when he or she is actually carrying out the task (Gibson & Sachau, 2000).

Although self-promotion and sandbagging present varying images of competence to an opponent, to function well, they both depend on a central underlying assumption – that people believe in a strong, positive correspondence between outward appearances and actual competence. For example, for a strong image to be perceived as competent and threatening, the perceiver (as well as the presenter) must have some pre-existing notions that a strong image indicates strong underlying abilities. In fact, research has shown that participants (typically North Americans) tend to associate public displays of positive qualities with higher competence, such that when people appear confident, capable, smart, tough, or strong, they are also judged by strangers to be more competent (e.g., Bolino & Turnley, 2003; Paulhus & Morgan, 1997; Whitehead & Smith, 1999). Similarly, other studies have found that athletes who projected a positive and confident image to their opponents were seen as more competent players (Zinsser, Bunker, & Williams, 1998). Conversely, sandbagging works only if people assume that an ordinary or non-distinct appearance reflects low competence.

Few empirical studies have examined the impact of culture on self-presentation. Lalwani and Shavitt (2009) have cast some new light on the links between cultural self-construals and self-presentational goals through priming. They reasoned that because an independent self-construal is commonly associated with goals concerning skilfulness and self-reliance, activating people's independent self-construal should heighten their tendency to align themselves with these goals, such as engaging in tasks that advertise their skills or generating favorable self-descriptions. Conversely, because an interdependent self-construal emphasizes relational harmony and avoidance of social disapproval, a salient interdependent self-construal should lead people to present

themselves in socially sensitive ways, such as engaging in tasks that highlight their social appropriateness. These hypotheses were supported using various self-presentational measures. For example, participants primed with an independent self-construal were more likely to self-enhance, present themselves desirably, and engage in activities that supposedly measured self-reliance. Conversely, participants primed with an interdependent self-construal were more likely to present themselves as socially warm and participate in activities that supposedly measured social appropriateness.

### **Culture and Thinking**

Culture shapes different ways of thought (e.g., Nisbett, 2003), with North Americans thinking more analytically and East Asians thinking more holistically. Analytic thinkers have been shown to attend more strongly to focal objects or people compared to holistic thinkers, who are relatively more sensitive to situational and contextual factors (Nisbett, Peng, Choi, & Norenzayan, 2001). Accordingly, causal complexity – the assumption that a given outcome is a consequence of numerous possible factors or causes – tends to be stronger in holistic East Asians than in analytic North Americans (e.g., Choi, Koo, & Choi, 2007).

Cultural ways of thinking have consequences for the correspondence bias in causal attribution, which is the tendency to draw inferences about a person's enduring characters from his or her behavior and discount the influence of situational forces (Gilbert & Malone, 1995). Compared to North Americans, East Asians are less likely to infer corresponding traits from behaviors across various domains (e.g., Cho et al., 2007; Ho, 2004; Lee, Hallahan, & Herzog, 1996; Miller, 1984; Miyamoto & Kitayama, 2002; Morris & Peng, 1994). Past cultural analyses have repeatedly shown that North

Americans frequently look for the internal qualities such as personalities, attitudes, or motives within the actor as the basic units of analysis, whereas East Asians focus more on the relationships between the actor and the surrounding contexts, suggesting a lower correspondence thinking in East Asian attribution processes.

Different ways of thinking also affect how people perceive the magnitude of outcomes and their causes. In a set of studies, Spina, Ji, Guo, Zhang, Li, & Fabrigar (2010) examined cultural differences in causal inferences and found that compared to Chinese, Euro-Canadians are more likely to link major outcomes (e.g., a fatal disease outbreak) with large causes (e.g., highly infectious bacteria) and minor outcomes (e.g., hospitalization) with small causes (e.g., standard bacteria), consistent with the notion that analytic thinkers (more prevalent in Euro-Canadians) typically attribute fewer causes to a particular outcome than do holistic thinkers (more prevalent in Chinese). In other words, Chinese are more likely to associate the magnitude of outcomes and causes in an inverse fashion compared to Euro-Canadians, suggesting that correspondence thinking in causal inferences may be relatively weaker in Chinese.

Based on these findings, we speculate that Euro-Canadians may engage in correspondence thinking – expecting correspondence between two related events or processes – to a greater degree than Chinese do. If so, Euro-Canadians also may expect greater correspondence between appearances and actual competence relative to Chinese.

### **Present Research**

The present research examined social perception in which public appearances are taken as major social cues for understanding reality. Such inferential processes may differ across Euro-Canadians and Chinese and be driven by culture-specific views about how

appearances and reality correspond to each other. Such views we argue, would be weaker among Chinese than Euro-Canadians. In the contexts of competitions, an opponent who looks competent (i.e., appearances) may be perceived as more or less competent (i.e., reality) – and thus more or less threatening – by different cultural groups, depending on their abstract worldviews about how appearances and reality are related. In light of previous research, we predicted that between an opponent who appears competent and an opponent who appears non-distinct, Euro-Canadians would perceive greater threat in the former than would Chinese, whereas Chinese would perceive greater threat in the latter than would Euro-Canadians.

With regard to within-culture comparisons, we expected Euro-Canadians to perceive greater threat from a competent-looking opponent than a non-distinct opponent, a prediction derived unambiguously from past research (e.g., Bolino et al., 2003). However, It is less clear as to whether such difference would be weaker in Chinese or if the opposite pattern would emerge (e.g., more threatened by an ordinary-looking opponent than a competent-looking opponent). There are theoretical reasons for both. On the one hand, most cross-cultural research on correspondence thinking shows differences in magnitude instead of directions (Heine, 2010; Masuda et al., 2008; Morris & Peng, 1994; Spina et al., 2010). These results lead one to expect that Chinese would associate appearances and reality in the same way as would Euro-Canadians but to a weaker degree. On the other hand, both philosophical analyses (Fung, 1952; Legge, 1861) and empirical studies (Ji, Su & Nisbett, 2001; Ma-Kellams & Blascovich, 2012; Nisbett, 2003; Peng & Nisbett, 1999) have shown that East Asians have a stronger tendency than North Americans to think dialectically, tolerating and anticipating the coexistence of opposite

states. From this perspective, one would expect Chinese to associate competent appearances with low competence (and low threat) and non-distinct appearances with high competence (and high threat).

### **Overview of Studies**

In four studies, we examined the role of culture in threat perception through different competition scenarios. We tested if Euro-Canadians and Chinese would perceive two opponents with contrasting public appearances in different ways. Studies 1 and 2 demonstrated the basic cultural effects in threat perception. In Studies 3 and 4, we aimed to identify the underlying processes that may explain the systematic effects of culture on threat perception.

Unless indicated otherwise, Euro-Canadian samples across all studies were native English speakers raised in Canada. Chinese samples, if recruited at Queen's University, were bilingual whose native language was either Cantonese or Mandarin. All participants at Queen's University were tested in English in exchange for half a course credit or \$5. Chinese samples recruited in Mainland China were tested in Chinese and compensated with a small gift.

All test materials were translated from English to Chinese independently by three bilingual researchers (including the author) to ensure accuracy and cultural equivalence. Discrepancies were resolved through discussion. We collected demographic information such as age and gender at the end of each study.

## CHAPTER 2

### Study 1

If correspondence thinking about appearances and reality does vary across cultures, an opponent who appears in a particular way may be interpreted differently by Euro-Canadians and Chinese, leading to cultural variations in threat perception. We tested this basic effect in Study 1 in the context of a business competition. We predicted that a rival company that displays an ambitious and competent appearance would be perceived as more threatening to Euro-Canadians than to Chinese. In contrast, an opponent who appears non-distinct and low-profiled would be more threatening to Chinese than to Euro-Canadians.

### Method

#### Participants

Participants were 23 Euro-Canadian (16 women;  $M_{\text{age}} = 18.7$  years,  $SD_{\text{age}} = .83$ ) and 28 Chinese students recruited at Queen's University (14 women;  $M_{\text{age}} = 18.7$  years,  $SD_{\text{age}} = 1.36$ ). The Chinese participants had lived in Canada for 8.3 years on average.<sup>3</sup>

#### Design, Procedure, and Materials

This study had a 2 x 2 mixed design, with Culture (Euro-Canadian vs. Chinese) a between-participant factor and Appearance (competent vs. non-distinct) a within-participant factor.

Participants read a scenario depicting two companies with contrasting appearances. Specifically, they were to imagine that they had decided to start a company

---

<sup>3</sup> In all four studies, gender had no interaction effect with other predictors (Study 1:  $ps \geq .33$ ; Study 2:  $ps \geq .71$ ; Study 3:  $ps \geq .42$ ; Study 4:  $ps \geq .19$ ). When age was entered as a covariate, the Culture by Appearance interactions remained significant in the same pattern (Studies 1-4:  $ps \leq .009$ ). These variables will not be discussed further.

in an industry currently shared by two major firms; one company “maintains a highly ambitious image and appears to be significantly more resourceful than yours,” and the other company “keeps a low profile; there is very little information about its financial competence, although there is no doubt that it is also a competitive firm.”

We operationalized a competent appearance as one that reveals ambition and resourcefulness, and an ordinary appearance as one that keeps a low profile and reveals no particular self-relevant information. On a scale from 1 (*very unlikely*) to 7 (*very likely*), participants rated the likelihood that each company, respectively, would be a threat to their own company’s success. These ratings served as the main dependent measures of this study.

## **Results and Discussion**

We conducted a 2 (Culture) x 2 (Appearance) mixed-design ANOVA on participants’ threat perception of each rival company. The main effect was significant for culture and marginal for appearance such that, in general, Chinese gave higher ratings than did Euro-Canadians,  $F(1, 49) = 4.40, p = .04$ , and the company that appeared competent was judged as slightly more threatening than the company that appeared non-distinct,  $F(1, 49) = 3.72, p = .06$ . More importantly, these effects were qualified by a significant culture by appearance interaction,  $F(1, 49) = 21.45, p < .001, \eta_p^2 = .30$ . As expected, follow-up mixed-design tests on the interaction indicated that Euro-Canadians ( $M = 5.87, SD = 1.46$ ) rated the company appearing competent as a more threatening opponent than did Chinese ( $M = 4.39, SD = 1.83$ ),  $F(1, 49) = 9.83, p = .003, \eta_p^2 = .17$ , whereas Chinese ( $M = 5.50, SD = 1.20$ ) rated the company appearing non-distinct as more threatening than did Euro-Canadians ( $M = 3.18, SD = 1.92$ ),  $F(1, 49) = 27.65, p$

< .001,  $\eta_p^2 = .36$  (See Figure 1). Within-culture comparisons further showed that Euro-Canadians perceived greater threats in the company appearing competent than in the company appearing non-distinct,  $F(1, 49) = 19.60, p < .001$ , whereas the reverse was found among Chinese,  $F(1, 49) = 4.05, p = .05$ . These findings provided initial support to our predictions: an opponent with the same appearance may trigger different levels of threat in Euro-Canadians and Chinese, presumably because of their varying beliefs about how appearances and reality are associated.

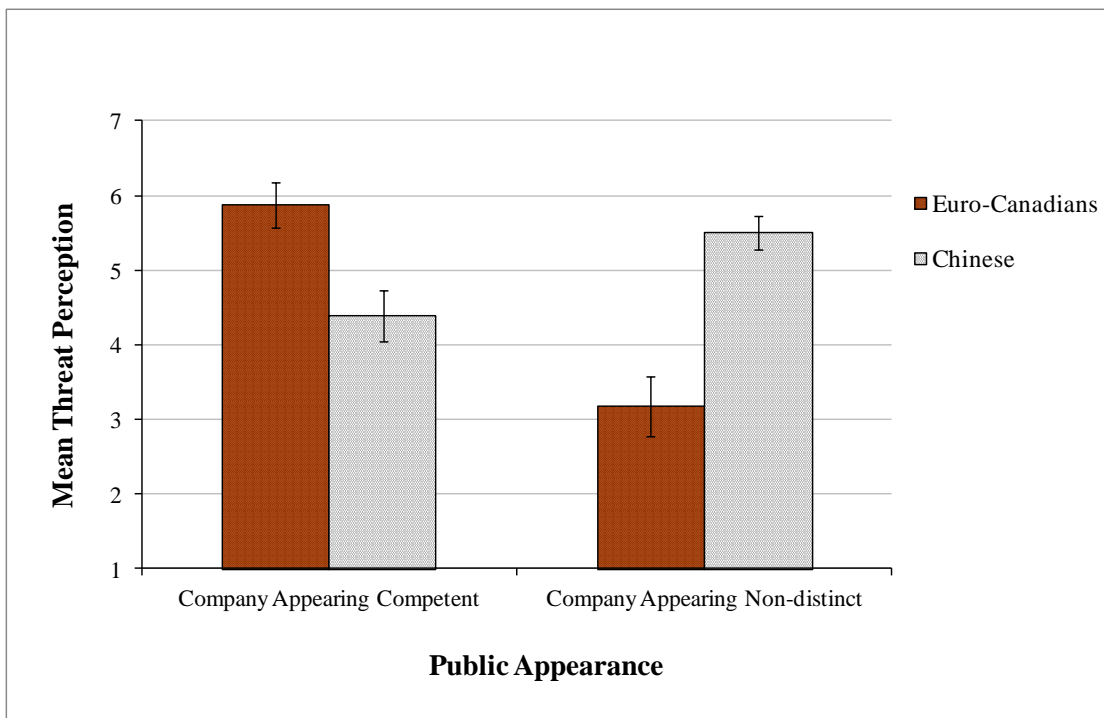


Figure 1. Threat perceived from each company by Euro-Canadians and Chinese

## CHAPTER 3

### Study 2

In Study 2, we attempted to replicate results with a different scenario with larger samples.

#### Methods

##### Participants

Participants were 78 Euro-Canadian students (68 women; age  $M_{\text{age}} = 17.8$  years,  $SD_{\text{age}} = 2.01$ ) at Queen's University and 70 Chinese students at a large university in China (32 women; age  $M_{\text{age}} = 21.8$  years,  $SD_{\text{age}} = 2.87$ ).

##### Design, Procedure, and Materials

This study had a 2 x 2 mixed design, with Culture (Euro-Canadian vs. Chinese) as a between-participant factor and Appearance (competent vs. non-distinct) as a within-participant factor.

Participants received a scenario about a reality show tournament, which, similar to the television series "The Apprentice", awards the winning contestant an employment contract. They further read about two candidates, one being described as "someone who projects a competitive image, is assertive, competent in appearance, in short, the kind of people who would appear in the spotlight", and the other candidate was "relatively indistinctive, silent and reserved in appearance, in brief, someone who does not stand out in the rest." On two rating scales from 1 (*very unlikely*) to 7 (*very likely*), participants judged each of the two candidates respectively on the likelihood that they were a true threat to other contestants.

## Results and Discussion

We conducted a 2 (Culture) x 2 (Appearance) mixed design ANOVA on participants' threat perception. The test revealed no main effect of culture,  $F < 1$ ,  $p = .38$ , but a significant main effect of appearance,  $F(1, 146) = 56.10$ ,  $p < .001$ ,  $\eta_p^2 = .28$ . However, this effect was qualified by a significant interaction between culture and appearance,  $F(1, 146) = 16.94$ ,  $p < .001$ ,  $\eta_p^2 = .10$ . Replicating Study 1, follow-up mixed-design tests showed that the candidate who appeared competent was judged by Euro-Canadians ( $M = 5.99$ ,  $SD = 0.99$ ) as more threatening than by Chinese ( $M = 5.14$ ,  $SD = 1.25$ ),  $F(1, 146) = 20.92$ ,  $p < .001$ ,  $\eta_p^2 = .13$  (see Figure 2). Conversely, the candidate with a non-distinct appearance was perceived as more threatening by Chinese ( $M = 4.54$ ,  $SD = 1.45$ ) than by Euro-Canadians ( $M = 3.92$ ,  $SD = 1.56$ ),  $F(1, 146) = 6.21$ ,  $p = .01$ ,  $\eta_p^2 = .04$ .

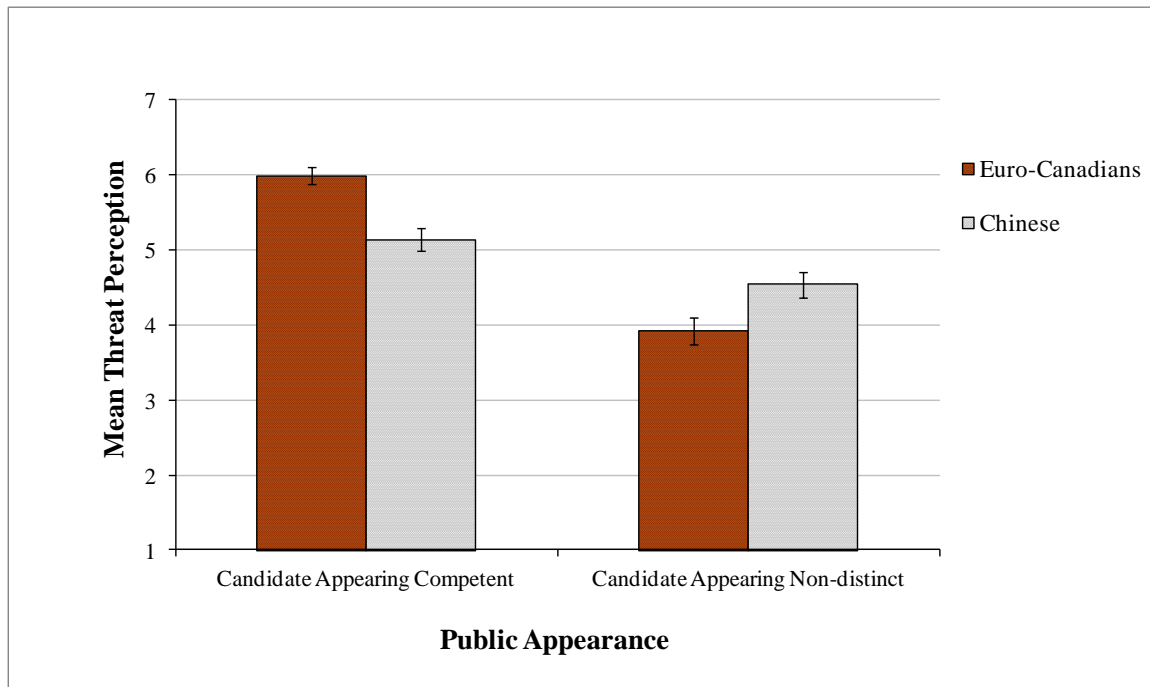


Figure 2. Threat perceived from each candidate by Euro-Canadians and Chinese

Within-culture comparisons revealed that both Euro-Canadians ( $F[1, 146] = 71.20$ ,  $p < .001$ ,  $\eta_p^2 = .51$ ) and Chinese ( $F[1, 146] = 5.40$ ,  $p = .02$ ,  $\eta_p^2 = .06$ ) perceived the competent-looking candidate as more threatening than the candidate who looked non-distinct. We did not replicate the complete cross-over interaction found in Study 1 although the general pattern of results was consistent with our hypotheses. Three possibilities may explain why that was the case. First, reality shows have been introduced to Mainland China from the West only quite recently. In the absence of their own reality show culture, a reasonable heuristic would be to import the norms from the original version, which may explain why a candidate who appears competent may be more appealing to the audience than one who does not. Secondly, exposure to a particular cultural product (i.e., reality show) may temporarily shift the perceiver's standards and expectations towards that culture, a possibility that is consistent with previous findings on cultural icon priming and mental frames switching (Hong, Morris, Chiu, & Benet-Martinez, 2000; Verkuyten & Pouliasi, 2002; Wong & Hong, 2005). Finally, the company scenario in Study 1 involved participants making judgments for themselves (i.e., threat to their own firm) whereas the reality show scenario required them to evaluate the threat to another person, instead of themselves. Such subtle distinction in perspectives might have somehow contributed to how opponents were perceived across both studies.

## Chapter 4

### Study 3

So far, we have contrasted competent and non-distinct appearances in Studies 1 and 2 and found that compared to Chinese, Euro-Canadians tend to feel more threatened by opponents who look strong and competent and perceive less threat in opponents with a non-distinct or ordinary appearance. We proposed that such cultural effects are, at least in part, driven by systematic differences in the perceived link between appearances and reality, which we hypothesized to be weaker in Chinese than in Euro-Canadians. This hypothesis suggests cultural differences in the interpretation of appearances: a particular appearance may mean one thing to Euro-Canadians and something else to Chinese.

In the context of competitions, the cultural habits to decipher appearances in one way or another may lead people to perceive an opponent as more or less unpredictable. For example, research has shown that East Asians are strong dialectical thinkers who are more inclined (versus North Americans) to consider contradictory information in social judgments (Peng & Nisbett, 1999; Spencer-Rodgers, Williams, & Peng, 2010), whereas Euro-Canadians are less so. Applying this reasoning to threat perception, one might then expect Euro-Canadians to infer the presence of underlying strengths from an opponent who looks competent (e.g., Bolino & Turnley, 2003), whereas Chinese may be more inclined to infer both the strengths *and* weaknesses of the opponent from the way he or she appears. In other words, an opponent who advertises his strength (with a competent appearance) also shows his weakness to Chinese, and thus should be more predictable to Chinese than to Euro-Canadians. In contrast, an opponent who projects a non-distinct appearance is likely taken by Euro-Canadians as a lack of competence as suggested by

previous research (Paulhus & Morgan, 1997), but to Chinese such non-distinct appearance may mask potential weaknesses as well as hidden strengths. Consequently, we predicted that a non-distinct opponent would be perceived as more unpredictable by Chinese than by Euro-Canadians.

Furthermore, we tested how unpredictability is linked to threat perception and how it may mediate cultural differences in threat perception in Study 3. Based on previous research on the role of unpredictability in triggering threat (e.g., Badia, Suter, & Lewis, 1967; Pervin, 1963), we predicted that a competent-looking opponent would be more predictable, and thus results in less threat to Chinese than to Euro-Canadians. In contrast, a non-distinct opponent would be more unpredictable, and thus results in greater threat to Chinese than to Euro-Canadians.

Another goal of Study 3 was to address two alternative explanations: the correspondence bias and modesty. If Euro-Canadians are more likely to infer corresponding traits from behaviors than are Chinese as suggested by past findings (Morris & Peng, 1994), they might be more likely than Chinese to judge someone as (in)competent based on his or her (in)competent appearance. We were interested in whether the cultural differences observed in our studies would remain even after we control for the correspondence bias, which would suggest that the effects observed in the current project are not just a form of correspondence bias. In addition, modesty is emphasized by Chinese more than by Euro-Canadians (e.g., Takata 1987). Perhaps, Chinese participants' perception of greater threat from the non-distinct opponents was a result of perceiving those targets as being modest (and thus their appearance was not reflective of their actual competence or threat).

## Method

### Participants

Participants were 126 Euro-Canadian (103 women;  $M_{\text{age}} = 21.1$  years,  $SD_{\text{age}} = 4.76$ ) students at Queen's University and 118 Chinese students at a large university in China (98 women;  $M_{\text{age}} = 20.3$  years,  $SD_{\text{age}} = .78$ ).

### Design, Procedure, and Materials

This study had a 2 x 2 mixed design, with Culture (Euro-Canadian vs. Chinese) as a between-participant factor and Appearance (competent vs. non-distinct) as a within-participant factor.

Participants imagined that they were chosen to represent their university debating team, then read about two debaters whom they would compete against. One debater “adopts a competitive image and has no problem posturing by talking about their debating techniques and skills to the public,” whereas the other debater “adopts a relatively low-profile image and does not say much to the public.” The two debaters were presented in a counterbalanced order.<sup>4</sup>

To address some alternative explanations and obtain a more refined measure of threat perception, participants judged each debater on the following seven dimensions on a rating scale from 1 (*not at all*) to 7 (*very much*):

- 1) *How much of a threat does the debater pose to your victory?*
- 2) *How much do you feel threatened or pressured by the debater?*
- 3) *How competent do you think the debater is?*
- 4) *How unpredictable is the debater to you?*

---

<sup>4</sup> A 2 (Culture) x 2 (Order) x 2 (Appearance) mixed-design ANOVA revealed no main or interaction effect of order,  $ps > .18$ , and thus will not be discussed further.

5) *How modest do you think the debater is?*

6) *How much do you like the debater?*

7) *How confident do you think the debater is?*

Next, we measured correspondence bias by having participants read two short and unpersuasive essays allegedly written by two university students for a seminar: an anti-essay against genetic engineering and a pro-essay in favor of it. Then, participants learned that the essays were written under situational constraints: the sides taken in both essays were actually pre-assigned by course instructors. At the end, participants estimated the true attitude of the essay writers on genetic engineering, on two separate rating scales from 1 (*very strongly opposing*) to 15 (*very strongly supportive*). This design was modelled after the classic paradigm used by Jones and Harris (1967). A similar paradigm has been used to examine cultural differences in correspondence bias, with East Asians (e.g., Japanese in Miyamoto & Kitayama, 2002; Koreans in Choi & Nisbett, 1998) more sensitive to situational constraints than Americans in their attitude estimations under certain conditions.

## **Results and Discussion**

A factoring analysis revealed that Threat perceived, Pressure felt, Competence perceived, and Confidence perceived tapped onto the same underlying construct, so we computed a composite score of threat perception by summing up these four measures for both debaters, respectively<sup>5</sup>, to be used in subsequent analyses<sup>6</sup>. Unpredictability was not combined as it was analyzed separately as a potential mediating variable.

---

<sup>5</sup> A Principle Axis Factoring Analysis (Direct Oblimin Rotation) conducted on the dependent measures, revealed two major underlying dimensions: Threat, Perceived Pressure, Competence, Confidence, and Unpredictability represented one factor (Eigenvalue 2.93, explained 41.85% of variance), whereas

## Main Analyses on Threat Perception

Using threat perception for both debaters as dependent variables, we conducted a 2 (Culture) x 2 (Appearance) mixed-design ANOVA and found a marginal effect of culture,  $F(1, 243) = 3.25, p = .07, \eta_p^2 = .01$ , and no effect of appearance. However, these effects were qualified by a significant interaction,  $F(1, 243) = 41.32, p < .001, \eta_p^2 = .15$ . As expected, follow-up mixed-design tests showed that the competent-looking debater invoked greater threat in Euro-Canadians ( $M = 20.03, SD = 4.04$ ) than in Chinese ( $M = 18.00, SD = 4.31$ ),  $F(1, 243) = 14.50, p < .001, \eta_p^2 = .06$ . Conversely, the debater appearing non-distinct was more threatening to Chinese ( $M = 21.23, SD = 3.91$ ) than to Euro-Canadians ( $M = 17.99, SD = 4.25$ ),  $F(1, 243) = 38.27, p < .001, \eta_p^2 = .14$  (See Figure 3). Within-culture comparisons revealed that whereas Euro-Canadians found the competent appearance to be more threatening than the non-distinct appearance,  $F(1, 243) = 11.62, p = .001, \eta_p^2 = .09$ , the opposite pattern was found in Chinese,  $F(1, 243) = 33.65, p < .001, \eta_p^2 = .22$ .

---

Likeability and Modesty represented the other (Eigenvalue 1.46, explained 20.78% of variance). This analysis offer a theoretical basis for combining the measures the way it was.

<sup>6</sup> The same pattern of results was found when these variables were analyzed independently.

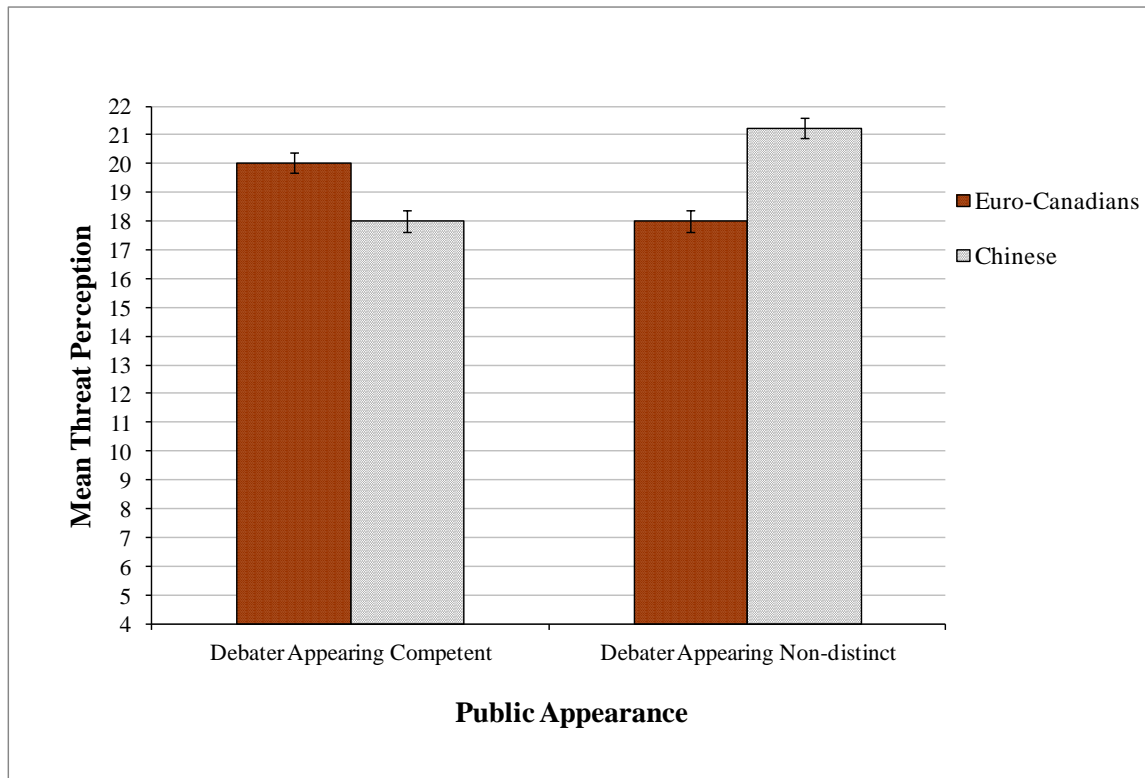


Figure 3. Threat perceived from each debater by Euro-Canadians and Chinese

### Unpredictability

Using perceived unpredictability as dependent measure, we performed a 2 (Culture) x 2 (Appearance) mixed-design ANOVA, which revealed a significant interaction,  $F(1, 243) = 20.17, p < .001, \eta_p^2 = .08$ , with the competent-looking debater being more unpredictable to Euro-Canadians ( $M = 3.71, SD = 1.81$ ) than to Chinese ( $M = 2.82, SD = 1.21$ ),  $F(1, 243) = 19.93, p < .001, \eta_p^2 = .08$ , and the non-distinct debater being more unpredictable to Chinese ( $M = 6.08, SD = .94$ ) than to Euro-Canadians ( $M = 5.60, SD = 1.71$ ),  $F(1, 243) = 7.57, p = .006, \eta_p^2 = .03$ . These results supported our predictions on how unpredictability may be associated with different appearances based on cultural beliefs. Not surprisingly, both cultural groups judged the non-distinct debater as more unpredictable than the competent-looking debater,  $F_s > 78.74, p_s < .001$ .

**The mediating role of unpredictability in threat perception.** We predicted that perceived unpredictability associated with each debater contributes to cultural differences in threat perception. To find out, we created an index by subtracting the unpredictability rating of the non-distinct debater from that of the competent-looking debater. This resulted in a net measure; positive scores suggest that the competent-looking debater was perceived as more unpredictable than the non-distinct debater; negative scores indicate the opposite. A score of zero indicates that both were equally unpredictable. This measure was significantly more negative for Chinese ( $M = -3.23, SD = 1.60$ ) than for Euro-Canadians ( $M = -1.89, SD = 2.95$ ),  $t(243) = 4.49, p < .001, \eta_p^2 = .08$ . Thus, although the non-distinct debater was generally more unpredictable to both cultural groups, this effect was stronger for Chinese than for Euro-Canadians.

Next, we formed a new dependent measure by subtracting the threat perception rating of the non-distinct debater from that of the competent-looking debater. Positive scores suggest that the competent-looking debater was perceived as more threatening than the non-distinct debater. Negative scores suggest the opposite. A score of zero indicates that both were equally threatening. As expected, the score was negative for Chinese ( $M = -3.23, SD = 6.07$ ) and positive for Euro-Canadians ( $M = 2.04, SD = 6.72$ ), and the difference was significant,  $t(243) = 6.43, p < .001, \eta_p^2 = .15$ . One-sample  $t$ -tests indicated that both Euro-Canadian ( $t[125] = 3.41, p = .001$ ) and Chinese ( $t[118] = 5.80, p < .001$ ) scores were significantly different from zero.

With Preacher and Hayes' (2008) macro INDIRECT, we found that culture (-1 = Chinese, 1 = Euro-Canadian) predicted the unpredictability index ( $b = .69, p < .001$ ). As reported above, compared with Euro-Canadians, Chinese associated greater

unpredictability with the non-distinct debater than with the competent-looking debater. Culture also had a total effect on threat perception ( $b = 2.63, p < .001$ ) in the expected directions. As seen in Figure 4, when both culture and unpredictability were entered into the model, the unique impact of unpredictability on threat perception was significant ( $b = .86, p < .001$ ), highlighting the positive link between feelings of unpredictability and feelings of threat. Culture remained a significant predictor of threat perception after we controlled for unpredictability ( $b = 2.04, p < .001$ ). Bootstrapping analyses showed that the confidence interval values at 95% did not cross zero [.30, .98], confirming a partial mediation.<sup>7</sup> Hence, cultural differences in threat perception between Euro-Canadians and Chinese were, at least in part, driven by how unpredictable they thought the opponents were.

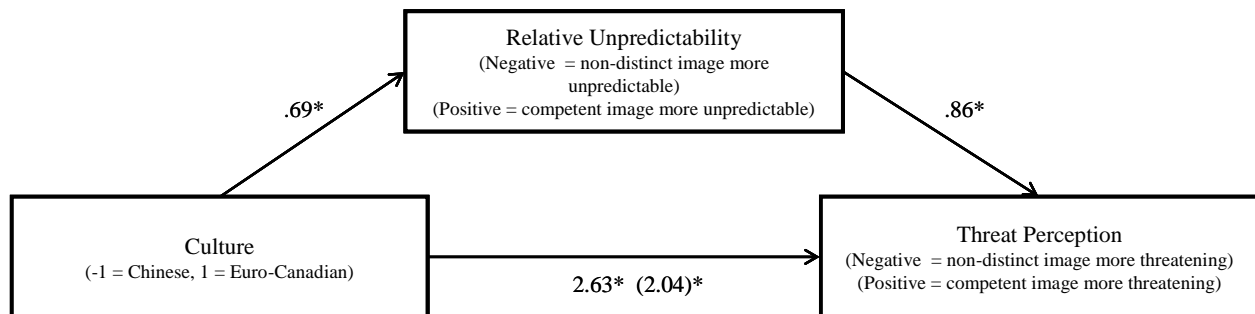


Figure 4: Unstandardized regression coefficients for the links between culture and threat perception, partially mediated by relative unpredictability. The regression coefficient after controlling for unpredictability is in parentheses.  $*p < .001$ .

## Likeability

<sup>7</sup> A different mediation model was tested in which unpredictability became the dependent measure and threat perception became the mediating construct. Culture was associated with threat perception ( $b = 2.63, p < .001$ ) and unpredictability ( $b = .69, p < .001$ ). When culture and threat perception were entered into the model, their unique influence (culture:  $b = .37, p = .02$ ; threat perception:  $b = .12, p < .001$ ) on unpredictability remained significant. Bootstrapping analysis at 95% confidence interval revealed a partial mediation, [.17, .50]. Conceptually, the alternative model presented in the text makes more sense, as past research has shown that unpredictability leads to perceived threat, but perceived threat does not necessarily lead to feelings of unpredictability.

Did Euro-Canadians and Chinese vary in how much they liked the two debaters? We performed a 2 (Culture) x 2 (Appearance) mixed-design ANOVA with likeability as the dependent measures and found a significant interaction,  $F(1, 243) = 11.69, p = .001, \eta_p^2 = .05$ . Follow-up mixed-design tests showed that Euro-Canadians ( $M = 2.52, SD = 1.22$ ) liked the competent-looking debater slightly less than did Chinese ( $M = 2.82, SD = 1.40$ ),  $F(1, 243) = 3.19, p = .08, \eta_p^2 = .01$ , whereas Chinese ( $M = 4.08, SD = 1.42$ ) liked the non-distinct debater less compared to Euro-Canadians ( $M = 4.66, SD = 1.20$ ),  $F(1, 243) = 12.08, p < .001, \eta_p^2 = .05$ . Finally, both cultures liked the non-distinct debater significantly more than the competent-looking debater,  $ps < .001$ , which is consistent with mounting evidence that a self-satisfied or conceited appearance makes a good recipe for a socially unfavorable impression (Cialdini & de Nicholas, 1989; Tetlock, 1980; Wosinska, Dabul, Whetstone-Dion, & Cialdini, 1996).

### **Confidence**

We also explored cultural differences in how confident the two debaters were perceived through a 2 (Culture) x 2 (Appearance) mixed-design ANOVA. A significant interaction emerged,  $F(1, 243) = 17.78, p < .001, \eta_p^2 = .07$ , with the competent-looking debater rated as more confident by Euro-Canadians ( $M = 5.58, SD = 1.56$ ) than by Chinese ( $M = 5.03, SD = 1.55$ ),  $F(1, 243) = 7.53, p = .007, \eta_p^2 = .03$ . Conversely, the nondistinct debater was more confident to Chinese ( $M = 5.03, SD = 1.19$ ) than to Euro-Canadians ( $M = 4.37, SD = 1.39$ ),  $F(1, 243) = 15.88, p < .001, \eta_p^2 = .06$ . Perhaps more interesting, within-culture comparisons showed that the non-distinct debater was rated as significantly less confident than the competent-looking debater by Euro-Canadians,  $F(1, 243) = 33.50, p < .001, \eta_p^2 = .21$ , but no such difference was found in Chinese,  $p = .97$ ,

suggesting that an appearance that is viewed as confident or not in one culture might not receive the same evaluations in another culture.

### **Alternative Explanations**

To examine the possible influence of modesty, we performed a 2 (Culture) x 2 (Appearance) mixed-design ANOVA and found a significant interaction effect,  $F(1, 243) = 8.36, p = .004, \eta_p^2 = .03$ , with the competent-looking debater rated as equally (im)modest by Chinese ( $M = 2.11, SD = 1.12$ ) as by Euro-Canadians ( $M = 1.90, SD = 1.12$ ),  $F(1, 243) = 2.21, p = .14$ . Conversely, the non-distinct debater was significantly less modest to Chinese ( $M = 5.16, SD = 1.31$ ) than to Euro-Canadians ( $M = 5.59, SD = 1.15$ ),  $F(1, 243) = 7.38, p = .007, \eta_p^2 = .03$ . A lower modesty rating found in Chinese is consistent with our reasoning that they might have a stronger tendency to perceive the non-distinct appearance – instead of an act of modesty – as a strategy to guard information. When modesty was indexed and included in the mediation model above as a covariate, it did not have any unique impact on the model ( $p = .91$ ) and the pathways remained unchanged and significant, thus ruling out modesty as an explanation for the cultural differences in threat perception.

Can correspondence bias explain cultural differences in threat perception? To obtain an index for correspondence bias, for each participant, we subtracted the attitude estimation of the anti-essay writer from that of the pro-essay writer, such that the more positive the score, the stronger the correspondence bias. For instance, if a participant rated the pro-essay writer a “12” (inferring a supportive attitude) and a “2” for the anti-essay writer (inferring an opposing attitude) – both suggesting correspondence bias – the difference between the two scores would be 10. Alternatively, giving both debaters a

rating of “8” (the midpoint of the scale) means the rater is not anchoring his or her ratings to the positions taken in the essays and, thus, would receive an index score of zero after data conversion, indicating no correspondence bias.<sup>8</sup> Importantly, when this correspondence bias measure was entered to the 2 (Culture) x 2 (Appearance) mixed-design ANOVA as a covariate with threat perception as dependent measures, the interaction between culture and appearance remained significant in the same pattern,  $F(1, 243) = 39.39, p < .001, \eta_p^2 = .14$ , and correspondence bias did not show any main or interaction effects,  $ps > .60$ . Thus, cultural differences in threat perception were not driven by the tendency to explain behaviors in terms of dispositional traits.

---

<sup>8</sup> Chinese participants ( $M = 5.90, SD = 4.26$ ) actually showed a *stronger* correspondence bias than did Euro-Canadians ( $M = 3.13, SD = 4.48$ ),  $t(243) = 4.94, p < .001, \eta_p^2 = .09$ . Though somewhat surprising, this finding actually works against our hypothesis: With a stronger correspondence bias, Chinese participants should assume a stronger correspondence between public appearance and actual competence compared to Euro-Canadians, but that was not the case.

## CHAPTER 5

### Study 4

Using a similar scenario as in Study 3, Study 4 included open-ended questions to better understand the reasons behind participants threat ratings. Study 4 also attempted to examine a conceptually different but related mediating variable: the beliefs that appearances are misleading reflections of reality, which is a more general belief people hold regarding how reliable appearances are in reflecting reality. Furthermore, Study 4 aimed to address another alternative account: promotion versus prevention focus. Cultural comparative work has shown that North Americans are more promotion-focused, whereas East Asians are more prevention-focused (e.g., Markus, Uchida, Omoregie, Townsend, & Kitayama, 2006; Ouschan, Boldero, Kashima, Wakimoto, & Kashima, 2007). In particular, driven by the motivation to pursue security and avoid losses, Chinese may focus more on an opponent who is non-distinct and unpredictable than one who is less so, as an unpredictable enemy can be more dangerous. We included a promotion versus prevention focus scale to examine this possibility.

### Method

#### Participants

Participants were 84 Euro-Canadians (46 women; age  $M_{\text{age}} = 18.9$  years) at Queen's University and 71 Chinese (59 women; age  $M_{\text{age}} = 22.7$  years) at a large university in China.

#### Design, Procedure, and Materials

This study had a 2 x 2 mixed design, with Culture (Euro-Canadian vs. Chinese) a between-participant factor and Appearance (competent vs. non-distinct) a within-participant factor.

Participants read the debate scenario used in Study 3 involving two debaters with contrasting images (competent vs. non-distinct). They rated how likely it was that each debater would be a threat to their own victory against them on two rating scales, from 1 (*very unlikely*) to 7 (*very likely*). They were asked to explain their judgments in their own words.

Next, we probed a mechanism through proverbs, an approach employed by Peng and Nisbett (1999) in their comparative work on cultural ideas and beliefs. We selected two proverbs in the Oxford Dictionary of Proverbs (2004): “Beware of a silent dog and still water” (a Latin proverb) and “A wise falcon hides his talons” (an Italian proverb). Foreign to both Euro-Canadians and Chinese, this pair of proverbs shares the notion that appearances can be unreliable representations of reality and that things can deviate from what they appear to be. Participants rated the extent to which they agreed with these proverbs on a scale from 1 (*not at all*) to 7 (*very much*), which were embedded in other filler proverbs.<sup>9</sup>

Next, participants completed the Regulatory Focus Strategies Scale (RFSS; Ouschan et al., 2007), a validated measure of promotion and prevention focuses for cross-cultural comparisons. Cronbach’s alpha for the prevention-focus subscale was .72 for

---

<sup>9</sup> To ensure the validity of the two proverbs, we had a separate group of pretest participants rate a list of statements, including the two target proverbs, on a 7-point scale (1 = *totally disagree*; 7 = *totally agree*). The two proverbs were positively correlated,  $r = .71, p = .005$ . In addition, agreement ratings for both proverbs were positively correlated with the item “Appearances are misleading,”  $r_s \geq .60, p_s \leq .02$ , and did not correlate with conceptually different items (e.g., “Silence is golden, speech is silver” and “Good seed makes a good crop”),  $p_s \geq .23$ .

Euro-Canadian and .67 for Chinese; for the promotion-focus subscale, .73 for Euro-Canadians and .72 for Chinese.

## Results and Discussion

### Threat Perception

To examine cultural differences in perceived threat, we performed a 2 (Culture) x 2 (Appearance) mixed-design ANOVA on threat perception. No main effect of culture or appearance was found,  $ps > .58$ . As predicted, the culture by appearance interaction was significant,  $F(1, 153) = 5.79, p = .02, \eta_p^2 = .04$ . As seen in Figure 5, follow-up mixed-design tests revealed that the debater with a competent appearance was more threatening to Euro-Canadians ( $M = 4.92, SD = 1.39$ ) than to Chinese ( $M = 4.39, SD = 1.52$ ),  $F(1, 153) = 5.00, p = .03, \eta_p^2 = .04$ , whereas the debater appearing non-distinct was more threatening to Chinese ( $M = 4.90, SD = 1.50$ ) than to Euro-Canadians ( $M = 4.42, SD = 1.49$ ),  $F(1, 153) = 3.84, p = .05, \eta_p^2 = 0.02$ . Thus, supporting our hypotheses and replicating earlier studies, threat perception on the basis of appearances is sensitive to cultural background. Within-culture analyses showed similar trends to previous studies. Specifically, the competent-looking opponent was slightly more threatening to Euro-Canadians than the non-distinct opponent,  $F(1, 153) = 3.04, p = .08$ . The reverse was found for Chinese, who perceived slightly greater threats from the non-distinct opponent than from the competent-looking opponent,  $F(1, 153) = 2.77, p = .10$ .

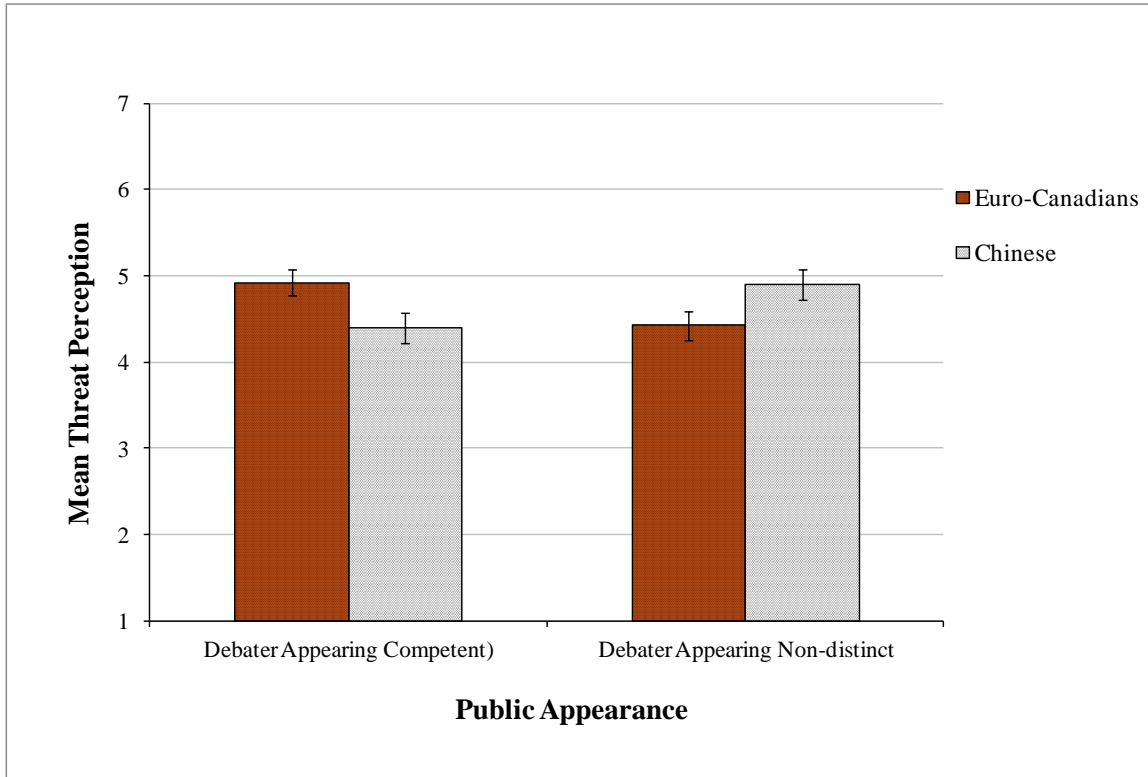


Figure 5. Threat perceived from each debater by Euro-Canadians and Chinese

### Mediation Analysis

For the purpose of mediation analysis, we created a threat perception index by subtracting the threat ratings of the non-distinct debater from that of the competent-looking debater. Similar to Study 3, positive scores indicate that the competent-looking debater was perceived as more threatening than the non-distinct debater. The mean score was significantly different between Chinese ( $M = -.51, SD = 2.61$ ) and Euro-Canadians ( $M = .49, SD = 2.52$ ),  $t(153) = 2.41, p = .02, \eta_p^2 = .04$ . One-sample  $t$ -tests further revealed that Chinese score, below zero, was trending towards significance,  $t(70) = 1.64, p = .11$ , whereas Euro-Canadians' score was marginally significantly above zero,  $t(84) = 1.77, p = .08$ .

Agreement ratings of the two target proverbs were averaged. Higher scores represented stronger beliefs in the unreliable nature of appearances. This index served as the mediating variable. As expected, such beliefs were more strongly held by Chinese ( $M = 5.11, SD = 1.42$ ) than by Euro-Canadians ( $M = 3.88, SD = 1.55$ ),  $t(152) = 5.08, p < .001, \eta_p^2 = .15$ .

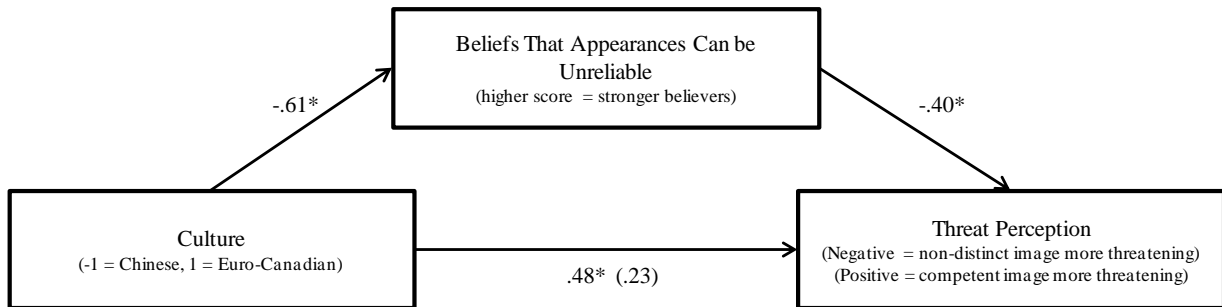
We proposed that beliefs in the unreliable nature of appearances mediate cultural differences in threat perception. The threat perception index was used as the dependent variable in the mediation analysis. We conducted a series of regression analyses. First, culture (-1 = Chinese, 1 = Euro-Canadians) had a significant total effect on threat perception,  $\beta = .48, p = .02$ , indicating that compared to Chinese, Euro-Canadians perceived greater threat in the competent-looking debater than in the non-distinct debater. Next, culture significantly predicted the agreement with proverbs,  $\beta = -.61, p < .003$ , indicating that appearances are believed to be more unreliable to Chinese than to Euro-Canadians. Such beliefs had a unique impact on threat perception,  $\beta = -.40, p = .003$ , with strong believers feeling more threatened by the non-distinct opponent and weak believers more threatened by the competent-looking opponent. When beliefs were controlled for, culture no longer predicted threat perception,  $\beta = .23, p = .30$  (See Figure 6).

Bootstrapping analysis (Preacher & Hayes, 2008) revealed that the confidence interval values at 95% did not cross zero [.08, .49], confirming a full mediation.<sup>10</sup> Thus, the

---

<sup>10</sup> A reverse model was tested in which proverb agreement was the dependent measure and threat perception was the mediating construct. Culture predicted threat perception ( $b = .48, p = .03$ ) and proverb agreement ( $b = -.61, p < .001$ ) in the expected directions. When culture and threat perception were entered into the model, the unique impact of culture ( $b = -.55, p < .001$ ) and threat perception ( $b = -.14, p = .003$ ) on proverb agreement remained significant. Bootstrapping analysis at 95% confidence interval revealed a partial mediation, [-.17, -.007].

beliefs that appearances are unreliable explained the systematic cultural differences in how Euro-Canadians and Chinese interpreted public images in competitions.



*Figure 6:* Unstandardized regression coefficients for the links between culture and Threat Perception Index, fully mediated by the beliefs that appearances can be unreliable reflection of reality. The regression coefficient after controlling for unpredictability appears in parentheses.  $*p < .05$ .

### Open-ended Explanations

Explanations from both cultural groups were independently coded by two bilingual coders who were blind to the hypotheses (Inter-rater  $r = 78.1\%$ ). The coding scheme consisted of four major categories that are particularly relevant to our hypotheses: (a) competent appearances reflect positive qualities, (b) non-distinct appearances reflect negative qualities, (c) competent appearances reflect negative qualities, and (d) non-distinct appearances reflect positive qualities. In the content analysis, we combined (a) and (b) for explanations that capture a strong appearances-reality correspondence, and (c) and (d) for explanations that highlighted the misleading nature of appearances. Coding was conducted such that explanations could potentially fall into more than one category. Below are sample explanations from both cultural groups:

Euro-Canadian: *“Debater A most likely is loud and open about his techniques because he is confident in his abilities and is therefore most likely very good.*

*Debater B is most likely the opposite. Also debating requires confidence therefore Debater A is already qualified”.* (categories 1 and 2)

*“Debater A, you know about their techniques and skills and seem to be putting on a show to hide their true inability to debate”.* (category 3)

*“The talkative one is more likely to slip up. Talk less, less likely to make a fool of yourself. Could be hiding vast intelligence”.* (category 4)

Chinese: *“Debater A looks like a very competitive person who refuses to concede. With such confidence and the ability to articulate he should be very strong. Debater B may be hiding, but a lack of confidence and courage is also a possibility”.* (category 1 and 2)

*“Debater A is too showy. The feeling I get from these people is that they might have skills, but fatal weaknesses are always in them, [such as] not being prudent in their reasoning”.* (category 3)

*“One who has real talent does not reveal himself, so it is possible that Debater B is hiding one's light under a bush”.* (category 4)

We performed chi-square analyses and, as expected, explanations that suggested a strong appearances-reality correspondence were more common in Euro-Canadians (54.8%) than in Chinese (33.8%),  $\chi^2(1, N = 155) = 6.83, p < .01$ . In contrast, Chinese (32.4%) were more likely than Euro-Canadians (16.7%) to point out that appearances can be misleading,  $\chi^2(1, N = 155) = 5.24, p = .02$ . These results provided strong support for

our hypotheses that cultural differences in threat perception can be explained by the culture-specific beliefs about how strongly appearances are related to reality.

### **Promotion and Prevention Focuses**

Euro-Canadians ( $M = 3.56$ ,  $SD = .62$ ) and Chinese ( $M = 3.55$ ,  $SD = .74$ ) did not differ in promotion focus as measured by RFSS,  $p = .99$ , nor in prevention-focus, with Euro-Canadians ( $M = 3.07$ ,  $SD = .59$ ) and Chinese ( $M = 3.06$ ,  $SD = .70$ ),  $p = .92$ . We included both measures in the Culture by Appearance mixed ANOVA as covariate. Results showed that prevention focus had no main or interaction effect,  $ps > .31$ ; promotion showed no interaction effect,  $p = .76$ , but had a main effect on threat perception,  $F(1, 151) = 6.36$ ,  $p = .01$ ,  $\eta_p^2 = .007$ . Importantly, cultural differences in threat perception remained significant in the same pattern,  $F(1, 151) = 5.73$ ,  $p = .02$ ,  $\eta_p^2 = .04$ , indicating that the present results cannot be explained by promotion or prevention focus.

## Chapter 6

### General Discussion

Many aspects of social cognition rely on one's understanding about how physical appearance and social reality are linked. We proposed that compared to Chinese, Euro-Canadians tend to assume a stronger correspondence between public appearances and reality, thus expecting relatively smaller discrepancies between how things look and what they are. In contrast, appearances are believed to be more misleading by Chinese; things are not what they seem, and in some situations they may well be the opposite of what it appears (Fung, 1952; Nisbett, 2003). To our knowledge, this is the first paper examining these questions directly and empirically at a cross-cultural level.

We tested these predictions across four studies, comparing Euro-Canadians and Chinese in how they infer actual competence of the opponents from their appearances. As predicted, Euro-Canadians felt more threatened than did Chinese by opponents who looked competent, whereas Chinese were more threatened than Euro-Canadians by an opponent who looked non-distinct (Studies 1 to 4). Generally, Euro-Canadians perceived greater threats from a competent-looking opponent than from an opponent appearing non-distinct (Studies 1 to 4), whereas the reverse seems to be the case for Chinese (Studies 1, 3, and 4). Consistent with our predictions, these cultural differences were partially mediated by perceived unpredictability associated with different appearances (Study 3) and fully mediated by the beliefs that appearances are unreliable reflections of reality, both stronger among Chinese compared to Euro-Canadians.

A number of alternative explanations have been addressed. First, the present findings cannot be explained by modesty. Compared to Euro-Canadians, modesty is more

emphasized by Chinese and their person perception processes can be affected more strongly by modesty in different interpersonal contexts (Chen, Bond, Chan, Tang, & Buchtel, 2009; Chen & Jing, 2012). In the present research, both Euro-Canadians and Chinese rated the opponent appearing non-distinct as more modest, but it did not reliably predict threat perception.

We also found no systematic link between correspondence bias (Gilbert & Malone, 1995) and threat perception. We argue that both situational and dispositional attributions can explain the association between a non-distinct appearance and high competence in actuality. For example, “he is indeed competent, but the crowd makes him quiet” (situational attribution), or “he is indeed competent, but he is too shy to show it” (dispositional attribution). Likewise, both situational and dispositional attributions can explain cases that competent people project competent appearances. For example, “he is indeed competent, and the crowd (or the environment) just brings it out more” (situational attribution) versus “he is indeed competent, and showing off is part of who he is” (dispositional attribution). Thus, the beliefs about appearances and reality and attribution styles are theoretically different of each other, and they address different questions. The former deals with the “what” question (What lies behind the appearance?), and the latter deals with the “why” question (Why does he present himself this way?).

Conceptually, the motivations to pursue goals and advancements (i.e., promotion focus) and the motivations to ensure security and protection (i.e., prevention focus) overlap much with various psychological processes in competitions, but neither revealed any effect on threat perception in the present findings. Their roles in competitive settings

may be more directly relevant in cases where people make concrete choices and decisions for themselves (instead of perceiving others). Future research can test this possibility.

### **Theoretical Implications**

Social psychologists have long acknowledged that self-concepts (e.g., their own attributes or abilities) are strongly related to how one is perceived and evaluated by others. Accordingly, public appearances have a profound impact on the development of identity, motives, emotions, behaviors, and possibly the actual self (e.g., Fiske, 2004; Leary, 2007). Cooley (1902)'s notion of "looking-glass self", for example, posits that one way to guide how people view themselves is by observing how others perceive and respond to them; self-perception theory (Bem, 1967) argues that one major way to obtain self-knowledge is by looking at one's own behavior. A thread that runs through these frameworks is strong correspondence thinking about appearance and reality – the ways people advertise or express themselves are consequential to how they understand and develop their true characters. As the present research shows, such correspondence thinking is prone to cultural differences and thus may bear theoretical relevance to the frameworks discussed above.

Going beyond threat perception, the extent to which appearances are believed to be unreliable has implications for other psychological processes, such as emotion perception. Witnessing the appearance of happiness or sadness in a person is indicative of that person's true feelings to many Euro-Canadians, but this inferential process could be weaker among Chinese. A person with a happy face does not necessarily mean that he is truly happy within. As a result, Chinese may be more likely to turn their attention to other situational sources for information or confirmation. Support for this idea comes from

Masuda et al. (2008). They showed participants cartoons depicting a happy, sad, angry, or neutral person surrounded by other people expressing either the same emotion as the central person or a different one, and they found that the surrounding people's emotions influenced Japanese but not Westerners' perceptions of the central person's emotional states.

An important question is to what extent the present results can be found in non-competitive domains, including settings that do not involve any incentive to outperform other individuals. A caveat, however, is that some features are more central to competitive settings than to non-competitive ones (e.g., motives for rewards). Conversely, some features in non-competitive settings are less emphasized in competitions. Identifying these variables may help clarify some of the potential complexity between appearance-reality correspondence thinking and social inferences – within culture or cross-culturally – and shed light on theoretical boundary conditions that may accentuate or diminish these processes.

### **Practical implications**

Cultural differences in the beliefs about appearance and reality may not only influence the way people interpret public appearances in competitions, but also influence how people respond to self-presentation tactics (such as promotion and sandbagging). For example, self-promotion tactics may be effective in many competitive settings in North America, but they could be perceived very differently (if not backfire) by groups that do not share the same cultural assumptions. Or if one decides to appear non-distinct in a competition with Canadian opponents, the results of one's tactic may differ dramatically from one's original intention. Consequently, cultural differences in the associations

between appearances and reality may provide an account to explain intercultural confusion, misjudgements, or stereotypes in some situations.

The influence of public images on organizational identification has received growing recognition in organizational research (Dutton, Dukerich, & Harquail, 1994; Kreiner & Ashforth, 2004). Consistent with theories in organizational behaviors (March & Simon, 1958), the more attractive the public image projected by the organization, the stronger the level of identification found in Western employees (Weisenfeld, Raghuram, & Garud, 2001). More importantly, increasing organizational identification among members has been shown to improve their morale, productivity, and efficiency (Pratt, 1998). From these findings, creating a successful, competent image for the organization seems to be a mission toward which managerial personnel should strive. The present findings, however, cast doubt on this assumption in the contexts of international business. To the extent that Chinese assume a weak (or even inverse) relationship between public appearances and actual competence, it becomes debatable if pouring resources into crafting a highly successful image is an optimal decision for an organization that operates in a Chinese cultural context. To be clear, business decisions are complex, and they certainly involve many variables that the present research did not examine. Future research can address this possibility more systematically.

Finally, if appearances and reality are expected to converge in the same direction in some cultures more than in others, then maintaining a favorable appearance or “fixing” it – whether to change “reality” or not – may be more consequential to people in the former cultures. Whether they are politicians, business people, or organizations, not only do they need to be reliable, they have to *look* reliable as it is a very important source of

public confidence and approval. Presenting an exceptionally positive appearance, however, may be less relevant in groups that do not assume a strong appearance-reality association. These speculations have cross-cultural implications for advertisement, resource allocation, public relations, and campaigns.

In summary, the present research demonstrates that Euro-Canadians and Chinese gauge opponents differently based on appearances. The research also sheds light on why such cultural differences occur by linking them with culturally specific beliefs that appearances are less (by Chinese) or more (by Canadians) reliable. The cultural patterns and the culture-specific beliefs identified by the present research may be part of a more general tendency; thus the present findings may inform future research on perception and judgements in other aspects of social life.

## References

- Arkin, R. M., & Baumgardner, A. H. (1986). Self-presentation and self-evaluation: Processes of self-control and social-control. In R. Baumeister (Ed.), *Public and private aspects of the self*. New York: Springer-Verlag.
- Badia, P., Suter, S., & Lewis, P. (1967). Preference for warned shock: Information and/or preparation. *Psychological Reports*, *20*, 271-274.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, *91*, 3-26.
- Bem, D. J. (1967). Self-Perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, *74*, 183-200.
- Bolino, M. C., & Turnley, W. H. (2003). More than one way to make an impression: Exploring profiles of impression management. *Journal of Management*, *29*(2), 141-160.
- Bond, M. H. & Cheung, T. (1983). College students' spontaneous self-concept: The effect of culture among respondents in Hong Kong, Japan, and the United States. *Journal of Cross-Cultural Psychology*, *14*, 153-171.
- Bochner, S. (1994). Cross-cultural differences in self concept. *Journal of Cross Cultural Psychology*, *25*, 273-283.
- Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco: Freeman.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer Verlag.
- Chen, S. X., Bond, M. H., Chan, B., Tang, D., & Buchtel, E. E. (2009). Behavioral manifestations of modesty. *Journal of Cross-Cultural Psychology*, *40*, 603-626.

- Chen, F.F., & Jing, Y. (2012). The impact of individualistic and collectivistic orientation on the judgment of self-presentation. *European Journal of Social Psychology, 42*(4), 470-481.
- Choi, I., & Choi, Y. (2002). Culture and self concept flexibility. *Personality and Social Psychology Bulletin, 28*, 1508–1517.
- Choi, I., Koo, M., & Choi, J. A. (2007). Individual differences in analytic versus holistic thinking. *Personality and Social Psychology Bulletin, 33*, 691–705.
- Choi, I., & Nisbett, R. E. (1998). Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personality and Social Psychology Bulletin, 24*, 949–960.
- Christie, R., & Geis., F. L. (1970). How devious are you? Take the Machiavelli test to find out. *Journal of Management in Engineering, 15*, 4-17.
- Cialdini, R. B., & de Nicholas, M. E. (1989). Self-presentation by association. *Journal of Personality and Social Psychology, 57*, 626–631.
- Cooley, C. H. (1902). *Human nature and social order*. New York: Scribner's.
- Cousins, S.D. (1989). Culture and self-perception in Japan and the United States. *Journal of Personality and Social Psychology, 56*, 124–131.
- Cross, S., Gore, J., & Morris, M. (2003). The relational interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology, 85*, 933 – 944.
- Dhawan, N., Roseman, I. J., Naidu, R. K., Thapa, K., & Rettek, S. I. (1995). Self-concepts across two cultures: India and the United States. *Journal of Cross-Cultural Psychology, 26*, 606-621.

- Diener, E., & Suh, E. M. (2000). *Culture and subjective well-being*. Cambridge, MA: MIT Press.
- Duckett, B. (2004). *The Oxford dictionary of proverbs* (4th Ed.) Bingley, West Yorkshire: Emerald Group Publishing Limited.
- Dutton J., Dukerich, J., & Harquail, C. (1994) Organizational images and member identification. *Administrative Science Quarterly*, 39, 239-263.
- Fiske, S. (2004). *Social beings*. Hoboken, NJ: Wiley.
- Fiske, A., Kitayama, S., Markus, H.R., & Nisbett, R.E. (1998). The cultural matrix of social psychology. In D. Gilbert, S. Fiske, & G. Lindzey, *The handbook of social psychology*, vol. 2 (4th ed., pp. 915–981). San Francisco: McGraw-Hill.
- Fung, Y. L. (1952). *A history of Chinese philosophy, Volume One*. Princeton: Princeton University Press.
- Greetz, C. (1975). *The interpretation of cultures*. London: Hutchinson.
- Gibson, B., & Sachau, D. (2000). Sandbagging as a self-presentation strategy: Claiming to be less than you are. *Personality and Social Psychology Bulletin*, 26, 56-70.
- Gilbert, D. T. & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117(1), 21-38.
- Godfrey, D. K., Jones, E. E., & Lord, C. G. (1986). Self-promotion is not ingratiating. *Journal of Personality and Social Psychology*, 50, 106-115.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York, NY: Doubleday.
- Goldstein, J. A. (1971). Investigation of doubling as a technique for involving severely withdrawn patients in group psychotherapy. *Journal of Consulting and Clinical Psychology*, 37, 155-162.

- Gould, S., & Penley, L. E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organisational Behaviour and Human Performance*, 34, 244-265.
- Guion, R. M. (1965). *Personnel testing*. New York: McGraw-Hill.
- Hamamura, T., Heine, S. J., & Paulhus, D. L. (2008). Cultural differences in response styles: The role of dialectical thinking. *Personality and Individual Differences*, 44, 932-942.
- Heine, S. J. (2010). Cultural psychology. In D. T. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (5th Edition), (pp. 1423-1464). New York: Wiley.
- Heine, S. J. (2007). Culture and motivation. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 714-733). New York: Guilford.
- Heine, S. J., & Lehman, D. R. (1997). Culture, dissonance, and self-affirmation. *Personality and Social Psychology Bulletin*, 23, 389-400.
- Hendricks, M., & Brickman, P. (1974). Effects of status and knowledgeability of audience on self-presentation. *Sociometry*, 37, 440-449.
- Ho, I. T. (2004). A comparison of Australian and Chinese teachers' attributions for student problem behaviors. *Education Psychology*, 24(3), 375-390.
- Hong, Y. Y., Morris, M. W., Chiu, C. Y., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, 55, 709-720.
- Iwao, S. (1988, August). Social psychology's models of man: Isn't it time for East to meet West? Invited address to the International Congress of Scientific Psychology, Sydney, Australia.

- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the role of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349–366.
- Jones, E. E. (1964). *Ingratiation: A social-psychological analysis*. New York: Appleton-Century-Crofts.
- Jones, E.E., & Harris, V.A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3, 1-24.
- Jones, E. E., & Pittman, T S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives of the self* (pp. 231-261). Hillsdale, NJ: Erlbaum.
- Jones, S. C., & Tager, R. (1972). Exposure to others, need for social approval, and reactions to agreement and disagreement from others. *Journal of Social Psychology*, 86, 111-120.
- Judge, T. A., & Bretz, R. D. (1994). Political influence behavior and career success. *Journal of Management*, 20, 43-65.
- Kacmar, K. M., Delery, J. E., & Ferris, G. R. (1992). Differential effectiveness of applicant impression management tactics on employment interview decisions. *Journal of Applied Social Psychology*, 16, 1250-1272.
- Kanagawa, C., Cross, S.E., and Markus, H.R. (2001). Who am I? The cultural psychology of the conceptual self. *Personality and Social Psychology Bulletin*, 27(1), 90–103.

- Kashima, Y., Siegal, M., Tanaka, K., & Kashima, E. S. (1992). Do people believe behaviors are consistent with attitudes? Towards a cultural psychology of attribution processes. *British Journal of Social Psychology, 31*, 111-124.
- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology, 77*(4), 785-800.
- Kreiner, G.E., & Ashforth, B.E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior, 25*, 1-27.
- Lalwani, A. K. & Shavitt, S. (2009). The “me” I claim to be: Cultural self-construal elicits self-presentational goal pursuit. *Journal of Personality and Social Psychology, 97*(1), 88-102.
- Leary, M. R. (1995). *Self-presentation: Impression management and interpersonal behavior*. Boulder: Westview.
- Leary, M. R. (2007). Motivational and emotional aspects of the self. *Annual Review of Psychology, 58*, 317-344.
- Leary, M. R. Barnes, B. D., & Griebel, C. (1986). Cognitive, affective, and attributional effects of potential threats to self-esteem. *Journal of Social and Clinical Psychology, 4*, 461-474.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model, *Psychological Bulletin, 107*, 34-47.
- Lee, F., Hallahan, M., & Herzog, T. (1996). Explaining real-life events: How culture and domain shape attributions. *Personality and Social Psychology Bulletin, 22*(7), 732-741.

- Lee, S., Quigley, B. M., Nesler, M. S., Corbett, A. B., & Tedeschi, J. T. (1999). Development of a self-presentation tactics scale. *Personality and Individual Differences, 26*, 701-722.
- Legge, J. (1861). *Confucian Analects, the Great Learning, and the Doctrine of the Mean*. Oxford: Clarendon Press.
- Lewis, M. A., & Neighbors, C. (2005). Self-determination and the use of self-presentation strategies. *Journal of Social Psychology, 145*, 469-489.
- Lippa, R. & Donaldson, S. I. (1990). Self-monitoring and idiographic measures of behavioral variability across interpersonal relationships. *Journal of Personality, 58*, 465-479.
- Ma-Kellams, C. & Blascovich, J. (2012). Enjoying life in the face of death: East-West differences in responses to mortality salience. *Journal of Personality and Social Psychology, 103*(5), 773-786.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York, Wiley.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224-253.
- Markus, H.R., Uchida, Y., Omoregie, H., Townsend, S., & Kitayama, S. (2006). Going for the gold: Models of agency in Japanese and American contexts. *Psychological Science, 17*, 103-112.
- Masuda, T., Ellsworth, P. C., Mesquita, B., Leu, J., Tanida, S., & van de Veerdonk, E. (2008). Placing the face in context: Cultural differences in the perception of facial emotion. *Journal of Personality and Social Psychology, 94*, 365-381.

- Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology*, 46, 961–978.
- Miyamoto, Y., & Kitayama, S. (2002). Cultural variation in correspondence bias: The critical role of attitude diagnosticity of socially constrained behavior. *Journal of Personality and Social Psychology*, 83(5), 1239-1248.
- Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, 67(6), 949–971.
- Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently ... and why*. New York: The Free Press.
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, 108, 291-310.
- Ouschan, L., Boldero, J. M., Kashima, Y., Wakimoto, R., & Kashima, E. S. (2007). Regulatory focus strategies scale: A measure of individual differences in the endorsement of regulatory strategies. *Asian Journal of Social Psychology*, 10, 243-457.
- Pandey, J., & Rastogi, R. (1979) Machiavellianism and ingratiation. *The Journal of Social Psychology*, 108, 221-225.
- Paulhus, D. L., & Morgan, K. L. (1997). Perceptions of intelligence in leaderless groups: The dynamic effects of shyness and acquaintance. *Journal of Personality and Social Psychology*, 72(3), 581-591.
- Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist*, 54, 741–754.

- Pervin, L. A. (1963). The need to predict and control under conditions of threat. *Journal of Experimental Psychology*, *31*, 570-585.
- Porter, L. W., Allen, R. W., & Angle, H. L. (1981). The politics of upward influence in organizations. In B. M. Shaw and L. L. Cummings (Eds.), *Research in organizational behavior*, vol. 3. Greenwich, CT: JAI Press.
- Pratt, M. G. (1998). To be or not to be: Central questions in organizational identification. In D. A. Whetten & P. C. Godfrey (Eds.), *Identity in organizations* (pp. 171–207). Thousand Oaks, CA: Sage.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891.
- Rhee, E., Uleman, J.S., Lee, H. K., & Roman, R. J. (1995). Spontaneous self-descriptions and ethnic identities in individualistic and collectivistic cultures, *Journal of Personality and Social Psychology*, *69*(1), 142-152.
- Schilit, W. K., & Allenby, J. S. (1988). Upward influence in organizations: Towards review and synthesis. *International Journal of Contemporary Sociology*, *25*, 15-45.
- Schlenker, B. R. (2012). Self-presentation. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2<sup>nd</sup> ed., pp. 542-570. New York: Guilford.
- Schlenker, B. R. (2003). Self-presentation. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 492-518). New York: Guilford Press.
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA: Brooks/Cole.

- Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization and model. *Psychological Bulletin*, *92*, 641-669.
- Schneider, D.J. (1981). Tactical self-presentations: Toward a broader conception. In J.T. Tedeschi (Ed.), *Impression management theory and social psychological research* (pp. 23-40). New York: Academic Press.
- Shepperd, J. A., & Socherman, R. E. (1997). On the manipulative behavior of low Machiavellians: feigning incompetence to “sandbag” an opponent. *Journal of Personality and Social Psychology*, *72*, 1448–1459.
- Shweder, R., and R. LeVine. (1984). *Culture Theory: Essays on Mind, Self and Emotion*. New York: Cambridge University Press.
- Snyder, M. (1987). *Public appearances/private realities*. New York: Freeman.
- Spencer-Rodgers, J., Williams, M. J., & Peng, K. (2010). Cultural differences in expectations of change and tolerance for contradiction: A decade of empirical research. *Personality and Social Psychological Review*, *14*(3), 296-312.
- Spina, R. R., Ji, L. J., Guo, T., Zhang, Z, Ye, L., & Fabrigar, L. (2010) Cultural differences in the representativeness heuristic: Expecting a correspondence in magnitude between cause and effect. *Personality and Social Psychology Bulletin*, *36*, 583-597.
- Stevens, C. K., & Kristof, A. L. (1995). Making the right impression: A field study of applicant impression management during job interviews. *Journal of Applied Psychology*, *80*, 587-606.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology*, *83*, 1378-1391.

- Takata, T. (1987). Self-depreciative tendencies in self evaluation through social comparison. *Japanese Journal of Experimental Social Psychology*, 27(1), 27-36.
- Tedeschi, J. T. (1981). *Impression management theory and social psychological research*. New York: Academic press, Inc.
- Tedeschi, J. T., & Norman, N. (1985). Social power, self-presentation, and the self. In B. R. Schlenker (Ed.), *The self and social life* (pp. 293–322). New York: McGraw-Hill.
- Tetlock, P. E. (1980). Explaining teacher explanations of pupil performance: A self-presentation interpretation. *Social Psychology Quarterly*, 43, 283–290.
- The Oxford Dictionary of Proverbs (2004) 4<sup>th</sup> edition. Ed. Jennifer Speake. Oxford University Press, 2003.
- Triandis, H.C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 93, 506–520.
- Journal of Personality and Social Psychology*, 84, 1093–1102.
- Verkuyten, M., & Pouliasi, K. (2002). Biculturalism among older children: Cultural frame switching, attributions, self-identification, and attitudes. *Journal of Cross-Cultural Psychology*, 33, 596–609.
- Weiss, B., & Feldman, R.S. (2006). Looking good and lying to do it: Deception as an impression management strategy in job interviews. *Journal of Applied Social Psychology*, 36, 1070-1086.
- Wiesenfeld, B. M., Raghuram, S., & Garud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of Management*, 27(2), 213-229.

- Whitehead, G. I., & Smith, S. H. (1999). Self-presentational strategies of modern and traditional presidents. *Journal of Social Behavior and Personality*, *14*, 479–490.
- Wong, R. Y., & Hong, Y. (2005). Dynamic influences of culture on cooperation in the prisoner's dilemma. *Psychological Science*, *16*, 429–434.
- Wosinska, W., Dabul, A. J., Whetstone-Dion, R., & Cialdini, R. B. (1996). Self-presentational responses to success in the organization: The costs and benefits of modesty. *Basic and Applied Social Psychology*, *18*, 229–242.
- Zinsser, N., Bunker, L., & Williams, J. M. (1998). Cognitive techniques for building confidence and enhancing performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (pp. 270-295). Mountain View, CA: Mayfield.

### Appendix A: Materials for Study 1

Imagine that you have decided to start a company in an industry currently shared by two major firms, Company A and Company B. It is widely known that Company A maintains a highly ambitious image and appears to be significantly more resourceful than yours. On the other hand, Company B keeps a low profile; there is very little information about its financial competence, although there is no doubt that it is also a competitive firm. Given this information, how likely is it that each of these two companies would be a threat to the future success of your firm?

Company A

1	2	3	4	5	6	7
Very unlikely						Very likely

Company B

1	2	3	4	5	6	7
Very unlikely						Very likely





**Appendix C: Materials for Study 3 (cont'd)**

[ESSAY OPPOSING GENETIC ENGINEERING]

Steve's Essay

I think that genetic engineering should not be supported. If parents are able to remake a child's genetic makeup, they are in a sense writing the genetic instructions that shape his or her entire life. If the parents make their kid tall instead of medium height, if they choose a passive over an aggressive personality, their choices will have a direct, lifelong effect on him. Genetic engineering, thus, is immoral because it limits the kind of lives people can have.

**Please do NOT turn to the next page until  
you have read the essay.**



### **Appendix C: Materials for Study 3 (cont'd)**

[ESSAY SUPPORTING GENETIC ENGINEERING]

#### Mike's Essay

I think that genetic engineering should be supported. People's destinies are limited by their natural genetic makeup that they are born with and cannot change. A short person, for example, would be unlikely to join the basketball team because his height makes it difficult for him to compete with his tall peers. A kid who has a passive personality will find it difficult to become a leader. It is only through genetic engineering that the world can become more fair.

**Please do NOT turn to the next page until  
you have read the essay.**

### Appendix C: Materials for Study 3 (cont'd)

**Dr. Patterson is a professor at a major university. In a course on legal studies that he is teaching, he expects students to discuss various topics and issues every week. Genetic engineering was the topic of this week. Dr. Patterson instructed Mike to write an essay supporting genetic engineering. Mike wrote an essay according to Dr. Patterson's instruction, which is presented on the previous page.**

On a 15-point rating scale, please estimate the real attitude of the Mike on genetic engineering.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Very Strongly Opposing														Very Strongly Supportive

### Appendix D: Materials for Study 4

Imagine that you are on the school debating team. This year, you have been chosen to represent your university in a competition against two visiting debaters (Debater A and Debater B) from other schools. Because your performance matters to both the school's reputation and your future career, it is important that you take these two contests seriously. It is known that Debater A adopts a competitive image and has no problem posturing by talking about their debating techniques and skills to the public. On the other hand, Debater B adopts a relatively low-profile image and does not say much to the public. Given the information available, how much of a threat do Debater A and Debater B pose to your victory?

(a) Debater A

1	2	3	4	5	6	7
Very unlikely						Very likely

(b) Debater B

1	2	3	4	5	6	7
Very unlikely						Very likely

### Appendix D: Materials for Study 4 (cont'd)

Instructions: We have collected a list of sayings. Please use the following scale to answer the following questions. For each question, choose a number that best represents your opinion and write it into the corresponding box.

1                      2                      3                      4                      5                      6                      7

Not at all

Very much

	How much do you agree with this saying?
There is nothing constant but inconstancy.	
One bad apple can spoil the whole bunch.	
Appearances are deceptive.	
Silence is golden, speech is silver.	
Good seed makes a good crop.	
The knife cuts both ways.	
Beware of a silent dog and still water.	
What goes up must come down.	
A wise falcon hides his talons.	



## Appendix E: Letter of Information and Consent Form

### LETTER OF INFORMATION & CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT

[Study name]

Albert Lee, M.Sc. & Li-Jun Ji, Ph.D.  
Department of Psychology, Queen's University

**NAME OF PARTICIPANT** (please print): \_\_\_\_\_

**PURPOSE OF THE STUDY:** This experiment has been designed to examine the patterns of beliefs and behaviors of different people.

**PARTICIPANT:** You will participate in a study in a room and the experimenter will verbally introduce the content of the experiment. The experiment includes a questionnaire which contains a battery of personality measures and a demographic sheet. You may be asked to complete a behavioral task. The entire experiment will take about 30 minutes.

**RISKS:** No risks are anticipated. However, if there is something that makes you uncomfortable, you have the right to refuse to answer any question or withdraw from the study at any time and without penalty. We emphasize that the measures included in this study are strictly for research purposes only.

**BENEFITS:** You will receive 0.5 credit per half hour for Psychology 100 course through the Queen's University Psychology subject pool for participation [or receive \$5]. You will also have the opportunity to learn more about social psychology and research in general.

**CONFIDENTIALITY:** Any information gathered from this study may be used in multiple analyses related to social and personality psychology, and that this information will remain entirely confidential and anonymous and will be stored in a locked cabinet in a secured building for the duration. The use of all records and personal data derived from this experiment are for research purposes. Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by the researchers without your separate consent, except as specifically required by law.

**IF I HAVE QUESTIONS:** Any questions about study participation may be directed to the Dr. Li-Jun Ji at 613-533-6000 ext. 75617 or [lijunji@queensu.ca](mailto:lijunji@queensu.ca). Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at 613-533-6081 or [Chair.GREB@queensu.ca](mailto:Chair.GREB@queensu.ca).

**VOLUNTARY PARTICIPATION:** By signing below, you indicate that you have read this Letter of Information & Consent Form, understand the nature of this study, and agree to participate in this study voluntarily. In addition, the experimenter has answered your questions satisfactorily. Again, you may refuse to answer any questions or discontinue your involvement at any time without penalty.

\_\_\_\_\_  
**SIGNATURE OF PARTICIPANT**

\_\_\_\_\_  
**DATE**

This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen's policies.

## Appendix F: Debriefing Form

### DEBRIEFING LETTER – [Study name] Department of Psychology, Queen's University

This form will explain what the study is about, and how your participation will help us understand important aspects of human thinking.

Previous studies in psychology have suggested that people differ in the way they define themselves and think about the world. In this study, we are investigating the particular ways by which cultural beliefs are related to the ways we present ourselves to other people. Specifically, there is evidence showing that Canadian and Chinese cultures endorse different beliefs and expectations about how they are perceived by others in different social settings. For example, compared to Canadians, Chinese may generally assume a weaker link between appearance and reality, rendering appearance more misleading to them. In this study, we are interested in studying how these assumptions may affect judgments and decisions in social contexts. We also measured a number of psychological variables so we can statistically exclude their influence on the relationship we are primarily interested in – the relationship between cultural assumptions between appearance and reality (independent variable) and how people perceive others or present themselves (independent variable).

Please note once again that the questionnaires included in this study were for research purposes only. If answering any of the questions in this study has raised concerns for you or made you uncomfortable, and/or if you would like to speak to a psychologist about a psychological or emotional issue, please contact Health, Counselling, and Disability Services at 613-533-2506. We also have a treatment referral list available for your convenience; please ask the experimenter and we will provide you with this list.

Any questions about study participation may be directed to Dr. Li-Jun Ji at 613-533-6000 ext. 75617 or [6kcl@queensu.ca](mailto:6kcl@queensu.ca). Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at 613-533-6081 or [Chair.GREB@queensu.ca](mailto:Chair.GREB@queensu.ca).

We would appreciate it if you would not reveal the purpose and hypotheses of this study to others as this may bias their performance should they sign up for this study.

If you are interested in this area of research, you may wish to read the following reference:

Nisbett, R.E., & Norenzayan, A. (2002). Culture and cognition. In H. Pashler & D. L. Medin (Eds.), *Stevens Handbook of Experimental Psychology: Cognition* (3d Ed., Vol. 2) (pp. 561-597). New York: John Wiley & Sons.

Thank you very much for your participation!

Albert Lee  
M.Sc.

Li-Jun Ji, PhD  
Associate Professor

## Appendix G: Letter of Ethics Review Clearance



December 05, 2012  
Mr. Kai Chung Lee  
Ph.D. Candidate  
Department of Psychology  
Queen's University 62 Arch Street  
Kingston, ON K7L 3N6

GREB Ref #: GPSYC-589-12; Romeo # 6007564  
Title: "GPSYC-589-12 Culture, Appearance, and Reality"

Dear Mr. Lee:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "GPSYC-589-12 Culture, Appearance, and Reality" for ethical compliance with the Tri-Council Guidelines (TCPS) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (article D.1.6) and Senate Terms of Reference (article G), your project has been cleared for one year. At the end of each year, the GREB will ask if your project has been completed and if not, what changes have occurred or will occur in the next year.

You are reminded of your obligation to advise the GREB, with a copy to your unit REB, of any adverse event(s) that occur during this one year period (access this form at [https://eservices.queensu.ca/romeo\\_researcher/](https://eservices.queensu.ca/romeo_researcher/) and click Events - GREB Adverse Event Report). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To make an amendment, access the application at [https://eservices.queensu.ca/romeo\\_researcher/](https://eservices.queensu.ca/romeo_researcher/) and click Events - GREB Amendment to Approved Study Form. These changes will automatically be sent to the Ethics Coordinator, Gail Irving, at the Office of Research Services or [irvingg@queensu.ca](mailto:irvingg@queensu.ca) for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

A handwritten signature in black ink that reads "Joan Stevenson".

Joan Stevenson, Ph.D.  
Professor and Chair  
General Research Ethics Board

cc: Dr. Li-Jun Ji, Faculty Supervisor  
Dr. Leandre Fabrigar, Chair, Unit REB  
Marie Tooley, Dept. Admin.