

Summer 8-2017

A cross-cultural examination of the conformity effect when co-witnesses discuss a crime

Sungil Bang

CUNY John Jay College, bangsungil87@gmail.com

Follow this and additional works at: http://academicworks.cuny.edu/jj_etds

 Part of the [Cognitive Psychology Commons](#), [Multicultural Psychology Commons](#), and the [Social Psychology Commons](#)

Recommended Citation

Bang, Sungil, "A cross-cultural examination of the conformity effect when co-witnesses discuss a crime" (2017). *CUNY Academic Works*.

http://academicworks.cuny.edu/jj_etds/37

This Thesis is brought to you for free and open access by the John Jay College of Criminal Justice at CUNY Academic Works. It has been accepted for inclusion in Student Theses by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

A cross-cultural examination of the conformity effect when co-witnesses discuss a crime

Sungil Bang

John Jay College of Criminal Justice, The City University of New York

New York, NY

Table of Contents

Introduction.....	3
Memory Conformity.....	4
Attribution of Guilt.....	5
Cultural Influence on Memory.....	6
Present Study.....	7
Method.....	8
Participants and Design.....	8
Materials.....	8
Procedure.....	10
Results.....	11
Discussion.....	15
Limitations and Future Research.....	18
Conclusion.....	19
References.....	20
Appendices.....	23

A cross-cultural examination of the conformity effect when co-witnesses discuss a crime

Eyewitness evidence is one of the most powerful forms of evidence to identify suspects and to convict them when physical evidence, such as DNA, is absent or insufficient (Wells, Memon, & Penrod, 2006). Thus, it is critical for eyewitnesses' testimonies to be as accurate as possible since any mistakes on the part of an eyewitness may have life or death consequences. Indeed, a number of innocent individuals have been unjustly accused of a variety of crimes due to mistaken eyewitness identification (Wells, *et al.*, 2006). The Innocence Project (2016) has led to more than 300 exonerations of innocent prisoners in the United States due to DNA evidence. Seventy percent of these exonerations have been from cases where mistaken eyewitness identification was the main contributing factor. Thus, eyewitness memory, while highly convincing, is not necessarily accurate or reliable (Laney, & Loftus, 2016; Steblay, 2015). In fact, over the last several decades, researchers have begun to focus on the malleability of memory resulting from the misinformation effect, which is the occurrence of memory deficits as a result of exposure to misleading information (Loftus, 2005). For example, in one experiment, when participants who were presented with misinformation in regards to two different sets of pictures, but when the participants were presented with accurate information, their accuracy increased (Wright, Self, & Justice, 2000). A common source of such misinformation stems from false recollections on the part of co-witnesses of a crime (Gabbert, Memon, & Allan, 2003; Hope, Ost, Gabbert, Healey, & Lenton, 2008; Wright, *et al.*, 2000). In line with these findings, eyewitness testimony may be contaminated through the conversations they have with co-witnesses. In other words, eyewitnesses who discuss the facts of the crime with a co-witness have exhibited what is known as a memory conformity effect (Wright, Memon, Skagerburg, & Gabbert, 2009). The memory conformity effect refers to the phenomenon in which information retrieved from other people is incorporated into one's own memory. While the memory conformity effect

has been demonstrated to be a robust phenomenon, there is very little research examining whether and in what ways it extends to other cultures (Peterson & Paterson, 2012). Indeed, most research examining the conformity effect has recruited participants from WEIRD countries (Western, Educated, Individualized, Rich and Democratic; Henrich, Heine, & Norenzayan, 2010). For example, one study examined cultural self-construal and whether it moderates memory conformity effects; however, it only examined participants who lived in a WEIRD country (i.e., Australia; Paterson & Peterson, 2012). Therefore, it is unclear whether their results extend to individuals who live in different countries and are from different cultural backgrounds. The present study examines such a possibility by sampling participants from both the US and South Korea, and also examines whether the occurrence of a conformity effect shapes attributions of guilt. In what follows, I first discuss the memory conformity effect literature and attributions of guilt, what is known about cultural differences and memory, and finally describe the present study.

Memory Conformity Effect

Eyewitnesses often discuss aspects of a crime with co-witnesses before they have contact with the police (Paterson & Kemp, 2006; Skagerberg & Wright, 2008). Through these discussions, eyewitnesses may incorporate co-witness information in their recall when questioned by the police. This phenomenon is known as “memory conformity” (Wright, Memon, Skagerburg, & Gabbert, 2009).

The memory conformity effect is argued to occur as a result of post-event information (PEI; Wright, *et al.*, 2000). PEI is information, presented after the occurrence of an event, which may distort the individual’s memory of the original event (Loftus & Hoffman, 1989). Such instances of false memories can also be created without explicit post-event information (Loftus, 2005). The PEI is argued to come from three sources: suggestive questioning, a re-description of the event (e.g. a media report), or information gained from

other witnesses to the event (Wright, *et al.*, 2000). Critically, research has shown that PEI from a co-witness has a greater likelihood of leading to memory conformity relative to leading questions or media reports (Gabbert, Memon, Allan, & Wright, 2004; Paterson & Kemp, 2006). Thus, the memory conformity effect is a powerful and robust phenomenon.

In an effort to better understand when and under which circumstances memory conformity is likely to occur, a number of researchers have begun to examine individual differences in the susceptibility to memory conformity. For example, Doughty, Paterson, MacCann and Monds (2017) investigated the link between personality factors, used in the big five personality model, and memory conformity. They found that individuals with decreased openness, extraversion, and neuroticism tended to report more post-event misinformation. In addition, Gabbert *et al.* (2003) examined whether age may play a moderating role in the occurrence of the memory conformity effect. The researchers hypothesized that older adults would be expected to show more memory conformity relative to younger adults due to decreased cognitive functioning including memory (Craik & Jennings, 1992; La Rue, 1992) and deficits in source monitoring (Johnson, Hashtroudi, & Lindsay, 1993). What the researchers actually found was that 60% of participants who did not watch a girl steal money gave guilty verdicts after discussion. Interestingly, memory conformity occurred in opposite direction for young participants. A third of those who did witness the theft scene believed that the suspect was *not guilty*.

Attribution of Guilt

Previous research has demonstrated how people attribute guilt to perpetrators depending on ethnicity, compassion, and culture (Sanchez Ordaz, 2013). For instance, it was predicted that interdependent individuals would be more compassionate. This is because interdependent individuals face more situations which require them to feel compassion. As a result, this factor might lead a person to make an immoral decision when it comes to

attribution of guilt. However, little research has examined the attributions of guilt in relation to memory conformity and self-construal. In the current study, we focused on the effect of self-construal on the attribution of guilt in the context of independent and interdependent cultures.

Cultural Influence on Memory

The ways individuals form their self-construal are often shaped by their cultures (Nisbett & Masuda, 2003). Individuals from Western cultures are more likely to identify their selves as more independent; alternatively, those in Eastern cultures are more likely to perceive their identities within social relationships surrounding themselves, such as their social roles (Nisbett & Masuda, 2003). In this regard, the terms *independence* and *interdependence* were found to be associated with Western cultures and Eastern cultures, respectively, even though both an independent and an interdependent self-construal coexist in an individual (Markus & Kitayama, 1991, 2003).

Critically, whether one's self-construal is more independent or interdependent has been found to have important cognitive consequences. For example, one study demonstrated that individuals in interdependent cultures tend to allocate attention more broadly, and thus they remembered more contextual details (things that they were not focusing on) better (Milar, Serbun, Vadalía & Gutchess, 2013). In contrast, people in independent cultures were more likely to have object-based attention, having a beneficial effect on the detection of a focal target. This difference stems from how individuals identify themselves, either as a distinctive existence or a socially connected existence (Nisbett & Masuda, 2003). Individuals in independent cultures tend to value themselves more than others, so they do not need to be conscious of those around them. However, people in interdependent cultures have lived in socially connected communities where public interest is more important. This might lead to collaborating with others even in cases where they should have asserted their own opinions.

In this respect, the vulnerability to contextual information (e.g. co-witness information) may increase in interdependent cultures, while it may decrease in independent cultures (Milar, *et al.*, 2013).

Despite all this research, few studies have examined whether self-construal across cultures moderates the conformity effect. One study relevant to the present research is by Petterson and Paterson (2012) who examined how independent and interdependent self-construal may shape the extent to which individuals exhibit the conformity effect. Specifically, after watching a video simultaneously, the participant and a confederate were instructed to take part in discussion. The confederate gave both correct post-event information and misinformation as instructed before the session. They found that higher levels of independent self-construal were associated with less memory conformity, but higher levels of interdependent self-construal were not related to more memory conformity. However, Petterson and Paterson's study was conducted in a Western country and may have limited applicability to interdependent cultures. For example, even their sample consisting of individuals from more interdependent cultures may have been "contaminated" by living in a more independent culture. Thus, it is not clear whether their results will extend to a sample of participants who have been born and raised in interdependent and independent cultures and how such differences may shape attributions of guilt. The present study addresses this gap in the literature.

Present Study

To address this issue, the present study extends Petterson and Paterson's (2012) research to two populations of participants: one group from a more independent country (USA), and the other group from a more interdependent country (South Korea). Both samples completed the same methodology and were recruited from their home countries. It was predicted that memory conformity would be more likely to occur for the South Korean

sample than the USA sample.

Method

Participants and design

A total of 126 subjects participated in this study, 63 Americans (11 African American, 13 Whites, 37 Hispanics, and 2 others) and 63 South Koreans (63 Asians). The American group consisted of 52 females; the South Korean group consisted of 40 females. Participants from the American group were recruited from a university in New York City and only those born in the USA were allowed to participate. The South Korean participants were recruited from a university in Suwon in South Korea. As compensation, all participants (American and South Korean) received course credit.

The experiment was a 2 (recall condition: individual recall vs. joint recall) x 2 (Culture: South Korean vs. American) between-subjects design. The dependent variables were accuracy of details, confidence in recall, and verdict. Participants within each cultural group were randomly assigned to the two recall conditions. Overall, across the two cultures, 64 participants were assigned to the individual recall condition (33 American participants and 31 South Korean participants) while 62 participants were assigned to the joint recall condition (30 American participants and 32 South Korean participants).

Materials

All materials were first created in English and then translated into Korean by a research assistant bilingual in both Korean and English. Thus, all of the participants were provided with materials in either English or Korean depending on their native language so that they had no problems in understanding the experimental material.

Video. Two different versions of a short video were used to determine whether memory conformity occurred. The videos depicted the same event but each was filmed from a different perspective. Each clip lasted 90 seconds and neither had any sound. The video

starts with a girl entering a vacant research office. From perspective ‘A’ (but not perspective ‘B’), the title of the book that the girl is trying to return is visible, and it is also noticeable that she crumples up a note and throws it away while leaving the room. From perspective ‘B’ (but not perspective ‘A’), it is observable that the girl checks the time on her watch and steals money from a wallet. Except for these differences, the videos were identical (Gabbert *et al.*, 2003).

First recall test. The first recall test was comprised of a free recall and cued recall. In free recall, participants were instructed to provide the events of the video in sequence. It was followed by a cued recall that included seven specific questions about the details surrounding the event (e.g. “what was the stolen object?” Please see Appendix A & B for the full list of the questions) (Gabbert *et al.*, 2003).

Sudoku. All participants were asked to do Sudoku, a logic-based combinational number-placement puzzle, for 10 minutes. The purpose of the Sudoku was to prevent participants from rehearsing aspects of the trial prior to the final recall test.

Final recall test. The final free and cued recall was identical to the first, however, instead of seven specific questions, it included eight surrounding the details of the events. Four out of eight questions involved information visible from both perspective A and B (neutral questions). Half of the remaining four questions (critical questions) focused on information only visible to perspective A (e.g., What was the title of the book that the girl was carrying?); the other half of the questions focused on information only visible to perspective B (e.g., What jewelry was the girl wearing?). Lastly, a final question was included to ask whether the girl in the video was guilty or innocent. We classified these answers into guilty, not guilty, or unsure. Participants were then asked how confident they were with their answers on a scale from 1 to 7 (1= not very confident, 7 = very confident) (see Appendix C for the full list of the questions).

Self-construal scale. In order to examine interdependence and independence, the Self-Construal Scale (SCS; Singelis, 1994) was included. The SCS contains 12 independent relevant self-construal items (e.g., “I enjoy being unique and different from others in many respects”) and 12 interdependent relevant self-construal items (e.g., “Even when I strongly disagree with group members, I avoid an argument”). Each participant rated these statements on a scale of 1 to 7 (1=strongly disagree, 7=strongly agree). Each total score was calculated by adding up each set of 12 items, which resulted in one independent total score and one interdependent total score (Appendix D for the full list of the questions).

Demographic questionnaire. The demographic questionnaire included questions about age, gender, race, and identity. (e.g., How strongly do you identify as an American/Korean citizen?). For the identity question, possible responses ranged from 1 to 7 (1= strongly disagree, 7= strongly agree).

Procedure

When participants arrived to the lab, they were provided with brief instructions about the purpose and the general procedure of the experiment. They then read and signed a consent form. All participants were assigned to either the individual recall (control) or joint recall group (experimental) across cultures. The participants were then assigned to either watch the video from perspective A or perspective B (i.e. if in a pair, one person watched A, and the other watched B, or if not in a pair, one person was asked to watch either A or B). Immediately after watching the videos, the individual recall group was asked to complete the first free and cued recall of the video individually. For those in the joint recall condition, the pairs discussed the video before deciding on one answer for the free recall and one answer for each cued recall question. Afterwards, regardless of the condition, all of the participants worked on a Sudoku puzzle for 10 minutes. Immediately after the 10 minutes elapsed, all the participants, regardless of condition, were instructed to fill out the final free and cued recall

individually. The final free recall allowed us to examine whether the participants conformed to their recollections. Upon completion of this final recall test, all the participants completed the self-construal scale and the demographic questionnaire. Once they finished the demographic questionnaire, they were debriefed and thanked for their participation.

Results

In what follows, first, we analyzed the final free recall results to examine whether a memory conformity effect occurred across cultures. In particular, we examined whether there were any differences in the recall of the actual crime (i.e., the theft of the money). Second, we investigated whether scores of self construal influenced the occurrence of memory conformity. Lastly, we examined whether attributions of guilt differed across recall conditions, versions of the video, and cultures.

Memory Conformity

The number of incorrect free recall answers during the final free recall test was analyzed by examining whether participants incorporated at least one piece of false information from the other participant in the joint recall condition relative to the individual recall condition across culture. In other words, each data point represented a dyad in which memory conformity occurred at least once. Chi-square analysis revealed that participants in the joint recall condition reported more false information, compared to participants from the individual recall condition who served as a control group ($\chi^2(1, n = 63) = 21.66, p < .01$ for Americans, and $\chi^2(1, n = 63) = 22.56, p < .01$ for South Koreans, respectively; see Table 1). When discussing events with a co-witness, more than half of the participants in the joint recall condition included false information provided by their co-witness in their final recall test. However, there was no significant difference between Americans and South Koreans in terms of memory conformity.

Table 1. Memory conformity for the final free recall test across cultures and recall condition.

		Were co-witness items included in the final individual recall test?	
		Yes	No
Americans (<i>n</i> = 63)	Individual recall	0	33
	Joint recall	15	15
South Koreans (<i>n</i> = 63)	Individual recall	0	31
	Joint recall	17	15

The same free recall data was also coded to assess whether there was a memory conformity effect for the theft itself. That is, we focused on whether there was a memory conformity effect, for the theft of money, for those participants who did not actually witness the theft. Chi-square analysis showed that there was a significant difference in the number of participants reporting a co-witness detail associated with the money between the joint recall and individual recall conditions ($\chi^2(1, n = 63) = 8.66, p < .01$ for Americans, and $\chi^2(1, n = 63) = 11.52, p < .01$ for South Koreans, respectively; see Table 2). Again, however, there was no significant difference between Americans and South Koreans.

Table 2. Number of participants including a co-witness detail on the money aspect in the final recall test

		Was the co-witness item involving theft of the money included in the final individual recall test?	
		Yes	No
Americans (<i>n</i> = 63)	Individual recall	0	33
	Joint recall	7	23
South Koreans (<i>n</i> = 63)	Individual recall	0	31
	Joint recall	10	22

The mean scores of confidence in four neutral questions (on information visible from both perspective A and B) and four critical questions (on information visible from either perspective A or B) were calculated. T-test results showed that both Americans and South Koreans indicated greater confidence in their responses to the neutral questions relative to their responses to the critical questions. With respect to the critical questions, Americans had

significantly higher confidence compared to South Koreans ($t = 2.45, p < .05, d = 0.45$) (see Table 3).

Table 3. Mean confidence ratings in two different types of questions across cultures

	Confidence	Mean	Std.Deviation
Americans ($n = 56$)	Neutral Questions	5.38	1.065
	Critical Questions	4.87	1.163
South Koreans ($n = 59$)	Neutral Questions	4.76	.930
	Critical Questions	4.35	1.127

$p < .01^{**}$

Self-Construal and Memory Conformity

We assumed that American individuals have independent self-construal whereas Korean individuals have interdependent self-construal. A t-test showed that Americans were more likely to be independent than South Koreans ($M = 8.97, SD = 13.85$ for Americans, $M = -3.61, SD = 13.53$ for South Koreans; $t = 5.1, p < .01$).

In terms of self-construal and memory conformity, a comparison was made between individuals who scored low and high in terms of independence and interdependence to examine whether these scores influenced the presence of a memory conformity effect. Each score was coded in terms of whether their score was higher for interdependent or independent. For instance, if an individual had a higher independent score than an interdependent score, it was labeled as the high independence score. A chi-square analysis revealed that there was no significant difference between participants with low independence scores and with low interdependence scores in terms of memory conformity, $\chi^2(1, n = 47) = .87, p = .35$; moreover, there was no significant difference between participants with high independence scores and with high interdependence scores in terms of memory conformity, $\chi^2(1, n = 50) = .37, p = .54$ (see Table 4).

Table 4. Self-construal and memory conformity

		Conformity	
		Yes	No
Joint Recall (<i>n</i> = 50)	High Independence	7	9
	High Interdependence	18	16
Joint Recall (<i>n</i> = 47)	Low Independence	18	13
	Low Interdependence	7	9

To further examine the association between self-construal and memory conformity, correlations were run to examine whether there was an association between self-construal and their confidence for their false recall when memory conformity occurred. A single self-construal score was created by subtracting the interdependence score from their independence score. Thus, low overall scores reflect a greater interdependence self-construal while a high score reflects a higher independence self-construal. The results of the correlation analysis revealed a significant, positive association between self-construal and confidence in their false memory (i.e., memory conformity), $r(118) = .21^*$, $p = .021$. Thus, as independence self-construal increased, so do the participants' confidence in their recollection of a false memory.

Attributions of Guilt

All participants were asked whether they thought the individual in the video was guilty of stealing the money. A Chi-square analysis revealed a significant difference in verdicts in terms of which video participants witnessed and culture (Version A: No Theft, Version B: Theft; $\chi^2(2, n = 63) = 22.26$, $p < .01$ for Americans, and $\chi^2(2, n = 62) = 6.71$, $p < .05$ for South Koreans; see Table 5). Eighty one percent of the Americans who watched the version with the theft were more likely to say *guilty*; forty two percent of the American participants who had not witnessed the theft scene stated that the woman was *not guilty*. In contrast, most of the Korean participants were *not sure* about her guilt regardless of whether they witnessed her steal the money. Critically, of those who watched the version of the video showing the actual theft, 87% of Korean participants avoided making a choice between *guilty*

and *not guilty*. It should also be highlighted that only two of them (6%) said she was guilty when they clearly saw her steal the money (see Table 5).

Table 5. Number of participants reporting the girl was guilty depending on the version of a video

		Guilty of stealing?		
		Yes	No	Not Sure
Americans (<i>n</i> = 63)	Version A (No Theft)	7	13	11
	Version B (Theft)	26	2	4
South Koreans (<i>n</i> = 62)	Version A (No Theft)	1	10	20
	Version B (Theft)	2	2	27

Additionally, a subsequent Chi-square analysis revealed that Americans who had not witnessed the theft scene showed a “memory conformity” in terms of verdict ($\chi^2(2, n = 31) = 10.81, p < .01$). That is, 69% of American participants in the individual recall condition supported *not guilty* whereas 60% of those discussing with a co-witness were *not sure* about whether she was guilty or not guilty. For South Korean participants who had not witnessed the theft scene, regardless of the recall condition, more than a half of them were *not sure* about her guilt ($\chi^2(2, n = 31) = 1.57; p = 0.456$). In addition, it is important to note that those in the joint recall condition, who had watched her steal the money, represented a cross-cultural difference ($\chi^2(2, n = 62) = 11.16; p < .01$). Eighty percent of Americans reported her as *guilty*, but 81% of South Koreans were *not sure* about her guilt (see Table 6).

Table 6. Number of participants reporting the girl was guilty when they had seen no proof (Those who did see the girl commit the crime were included in the parentheses.)

		Guilty of stealing?		
		Yes	No	Not Sure
Americans (<i>n</i> = 31)	Individual recall	3 (14)	11 (0)	2 (3)
	Joint recall	4 (12)	2 (2)	9 (1)
South Koreans (<i>n</i> = 31)	Individual recall	0 (0)	4 (1)	11 (14)
	Joint recall	1 (2)	6 (1)	9 (13)

Discussion

The primary goals of this research were to examine: a) whether the conformity effect

differed between independent and interdependent cultures, b) the impact of independent and interdependent self-construal on individuals' confidence in false memories, and c) how attributions of guilt may vary depending on whether participants saw the actual theft, participated in a joint recall and whether they were Americans or South Koreans.

Overall, the present results demonstrate a memory conformity effect for both Americans and South Koreans occurred as a result of discussing the video with a co-witness. These findings provide additional support for the robust results demonstrating memory conformity (Gabbert, *et al.*, 2003; Hope, *et al.*, 2008; Petterson & Paterson, 2012; Wright, *et al.*, 2000; Wright, *et al.*, 2009).

However, contrary to the present hypothesis, there was no significant difference in memory conformity across cultures. These results do not support those found by Petterson and Paterson (2012). In their study, they found that individuals with a more independent self-construal were less vulnerable to memory conformity. In fact, in many cross-cultural studies, Western cultures have been characterized with independent self-construal while Eastern cultures have been more associated with interdependent self-construal (Nisbett & Masuda, 2003; Markus & Kitayama, 1991, 2003). However, the extent to which it makes sense to examine cultures in terms of self-construal is contested (Matsumoto, 1999). Given that culture is a complex and dynamic artifact, Matsumoto argues that, for example, Japanese interdependent culture may be becoming more independent. In other words, there might be no longer differences in independent and interdependent self-construal between Western and Eastern cultures. Thus, the fact that there were no differences across cultures in terms of memory conformity may reflect that fact that cultural differences between Western and Eastern cultures in terms of interdependence and independence may no longer capture any meaningful, cultural differences.

Nevertheless, there was a weak, but significant correlation between self-construal

and false memory confidence. The more independent participants rated their self-construal, the more confident they were in the recollection of a false memory. Thus, self-construal may not moderate the occurrence of memory conformity but the present results suggest that it does shape the extent to which they are confident when they were asked to recollect false memories. Thus, in conjunction with Petterson and Paterson's (2012) study, individuals with independent self construal may or may not exhibit more false recollections relative to interdependent self-construal, but the present results suggest that when independent self-construal individuals recollect false memories, they will be more confident in their recollections. Indeed there is a host of research that demonstrates that confidence does not equate with accuracy (Roediger & DeSoto, 2014). These results add to the growing literature demonstrating how officers with in independent cultures should be cautious when an eyewitnesses exhibit high confidence when making identifications (Sporer, Penrod, Read & Cutler, 1995).

Given that the most critical aspect when memory conformity occurs is if it includes the actual crime, we examined whether there was memory conformity specifically for the theft and whether this influenced attributions of guilt (Gabbert *et al.*, 2003). Again, we found overall memory conformity for the stolen money, but we found no differences across cultures. In terms of attribution of guilt, it is suggested the difference across cultures may be a matter of how much both cultural groups of participants were familiar with providing judgments. The South Korea legal system introduced the jury system for the first time in 2008 (Lee, 2009), as opposed to the United States where jury service is an important civic duties. Thus, this familiarity with determining guilt may have made it easier for American participants to give their verdicts on the case relative to the more "unsure" Korean sample. Another possible account for the cultural difference in the attribution of guilt may stem from how a person expresses an opinion. It is beneficial to express personal opinions in public in more

independent cultures because those who do not express their opinions may be ignored by other members of society (Nisbett & Masuda, 2003). Individuals in more independent cultures recognize their identities by spontaneously revealing ideas, thoughts and emotions. In contrast, it is often considered polite to suppress one's own personal opinion in interdependent cultures in order to maintain social harmony. They often hide their own opinions and thoughts and follow others' to avoid social conflict (Nisbett & Masuda, 2003). However, future research is needed to further examine these possibilities.

Limitations and Future Research

One of fundamental limitations was noticed that the concept of cultural differences between Western and Eastern cultures was heavily relied on the framework of independence versus interdependence. As traditional Eastern cultures are becoming westernized (Matsumoto, 1999), we need to consider diverse aspects of each culture beyond the paradigm of independence versus interdependence in future research. For example, future research may examine whether differences occur in terms of interdependence when it examines cultures more affected by Western culture versus those which have not been influenced by western culture. This concept may be extended to the issue of urban areas versus rural areas due to the reason that interdependent culture would be more likely to remain intact in rural areas rather than urban areas.

In terms of attributions of guilt, it has been found in the present study that there were differences across cultures. Future research should examine how such differences may influence judgments of punishment (Sanchez Ordaz, 2013).

Also, when it comes to measuring whether memory conformity occurred, not only the presence of incorrect information that participants reported, but also the number of correct and incorrect information, and even the ratio of incorrect information to total information should be included in future research.

Conclusion

Overall, the present results demonstrate that a memory conformity effect occurred for both Americans and South Koreans. While there were no significant differences across cultures in terms of a memory conformity effect, there was a cultural difference in terms of confidence in false memories and attributions of guilt. Despite the limitations outlined above, this present study add to the growing research demonstrating the memory conformity effect and suggest that cultural differences may play a greater role in shaping the judgments individuals make, both in terms of their confidence and issues surrounding guilt and innocence.

References

- Doughty, N., Paterson, H. M., MacCann, C., & Monds, L. A. (2017). Personality and memory conformity. *Journal of Individual Differences, 38*(1), 12-20.
doi:10.1027/1614-0001/a000217
- Gabbert, F., Memon, A., & Allan, K. (2003). Memory conformity: Can eyewitnesses influence each other's memories for an event?. *Applied Cognitive Psychology, 17*(5), 533-543. doi:10.1002/acp.885
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature, 466*(7302), 29-29. doi:10.1038/466029a
- Hope, L., Ost, J., Gabbert, F., Healey, S., & Lenton, E. (2008). "With a little help from my friends...": The role of co-witness relationship in susceptibility to misinformation. *Acta Psychologica, 127*(2), 476-484.
doi:10.1016/j.actpsy.2007.08.010
- Horry, R., Palmer, M. A., Sexton, M. L., & Brewer, N. (2012). Memory conformity for confidently recognized items: The power of social influence on memory reports. *Journal of Experimental Social Psychology, 48*(3), 783-786.
doi:10.1016/j.jesp.2011.12.010
- Innocence Project. (2016). *The causes of wrongful conviction*.
Retrieved from <http://www.innocenceproject.org/causes-wrongful-conviction>
- Laney, C., & Loftus, E. F. (2016). Eyewitness Testimony and Memory Biases. *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from
<http://nobaproject.com/modules/eyewitness-testimony-and-memory-biases>
- Lee, J. H. (2009). Getting citizens involved: Civil participation in judicial decision-making in Korea. *East Asia Law Review, 4*(2), 177-277. Available at SSRN:
<https://ssrn.com/abstract=1656312>

- Loftus, E. F., & Hoffman, H. G. (1989). Misinformation and memory: The creation of new memories. *Journal of Experimental Psychology: General*, *118*(1), 100-104.
doi:10.1037/0096-3445.118.1.100
- Loftus, E. F. (2005). Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. *Learning & Memory*, *12*(4), 361-366.
doi:10.1101/lm.94705
- Markus, H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224–253.
- Markus, H.R., & Kitayama, S. (2003). Culture, self, and the reality of the social. *Psychological Inquiry*, *14*(3–4), 277–283.
- Matsumoto, D. (1999). Culture and self: An empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construals. *Asian Journal of Social Psychology*, *2*, 289–310. doi:10.1111/1467-839X.00042
- Milar, P. R., Serbun, S. J., Vadalía, A. & Gutchess, A. H. (2013). Cross-cultural differences in memory specificity. *Cult. Brain*, *1*(2-4), 138-157. doi:10.1007/s40167-013-0011-3
- Nisbett, R. E., & Masuda, T. (2003). Culture and point of view. *Proceedings of the National Academy of Sciences*, *100*(19), 11163-11170. doi:10.1073/pnas.1934527100
- Paterson, H. M., & Kemp, R. I. (2006). Co-witnesses talk: A survey of eyewitness discussion. *Psychology, Crime & Law*, *12*(2), 181-191. doi:10.1080/10683160512331316334
- Petterson, B., & Paterson, H. M. (2012). Culture and conformity: The effects of independent and interdependent self-construal on witness memory. *Psychiatry, Psychology and Law*, *19*(5), 735-744. doi:10.1080/13218719.2011.615821
- Roediger, H. L., & DeSoto, K. A. (2014). Understanding the relation between confidence and accuracy in reports from memory. *Remembering: Attributions, processes, and control*

in human memory: Essays in honor of Larry Jacoby, 347-367.

doi:10.1080/09658211.2013.795974

Sporer, S. L., Penrod, S., Read, D., & Cutler, B. (1995). Choosing, confidence, and accuracy:

A meta-analysis of the confidence-accuracy relation in eyewitness identification studies. *Psychological Bulletin*, *118*(3), 315. doi:10.1037/0033-2909.118.3.315

Stebly, N. K. (2015). Eyewitness memory. In B. L. Cutler & P. A. Zapf (Eds.), *APA*

Handbooks in Psychology. APA Handbook of Forensic Psychology, *2*, 187-224.

doi:10.1037/14462-007

Triandis, H.C. (1989). The self and social behaviour in differing cultural contexts.

Psychological Review, *96*, 506–520.

Wells, G. L., Memon, A., & Penrod, S. D. (2006). Eyewitness evidence: Improving its

probative value. *Psychological Science in the Public Interest*, *7*(2), 45-75.

doi:10.1111/j.1529-1006.2006.00027.x

Wright, D. B., Memon, A., Skagerberg, E. M., & Gabbert, F. (2009). When eyewitnesses

talk. *Current Directions in Psychological Science*, *18*(3), 174-178.

doi:10.1111/j.1467- 8721.2009.01631.x

Wright, D. B., Self, G., & Justice, C. (2000). Memory conformity: Exploring misinformation

effects when presented by another person. *British journal of psychology*, *91*(2), 189-

202. doi:10.1348/000712600161781

- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -

2) Why did the girl enter the room?

3) Please describe any jewellery the girl was wearing.

4) Did you notice if she was left-handed or right-handed?

5) What colour was her bag?

6) How many drawers did she open?

7) Where did she get the notepad from?

8) What did the girl have with her?

- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -
- -

2) Why did the girl enter the room?

3) Please describe any jewellery the girl was wearing.

4) Did you notice if she was left-handed or right-handed?

5) What colour was her bag?

6) How many drawers did she open?

7) Where did she get the notepad from?

8) What did the girl have with her?

Not very confident 1 2 3 4 5 6 7 *Very confident*

- Please can you now answer the following questions. They are asking about specific things that you may not have thought of describing in any detail previously.

1) Please describe the clothes the girl was wearing.

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

2) Please describe any jewellery the girl was wearing.

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

3) Please describe the girl's bag.

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

4) What was the title of the book that was seen?

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

5) What was the girl doing with the notepad?

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

6) Where did the girl get the notepad from?

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

7) Can you think of any clues the girl left that could help the police find out who she is?

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

8) Why, in your opinion, did the girl turn back before leaving the room?

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

- 9) **The girl was accused of stealing money. From what you have witnessed, what evidence could you provide that she was guilty, *or not guilty*, of this crime?**

How confident are you with this answer you have provided?

Not very confident 1 2 3 4 5 6 7 *Very confident*

Appendix D: Singelis SCSINSTRUCTIONS

This is a questionnaire that measures a variety of feelings and behaviors in various situations. Listed below are a number of statements. Read each one as if it referred to you. Beside each statement write the number that best matches your agreement or disagreement. Please respond to every statement. Thank you.

1=STRONGLY DISAGREE**4=DON'T AGREE OR****5=AGREE SOMEWHAT****2=DISAGREE****DISAGREE****6=AGREE****3=SOMEWHAT DISAGREE****7=STRONGLY AGREE**

- ___ 1. I enjoy being unique and different from others in many respects.
- ___ 2. I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am.
- ___ 3. Even when I strongly disagree with group members, I avoid an argument.
- ___ 4. I have respect for the authority figures with whom I interact.
- ___ 5. I do my own thing, regardless of what others think.
- ___ 6. I respect people who are modest about themselves.
- ___ 7. I feel it is important for me to act as an independent person.
- ___ 8. I will sacrifice my self interest for the benefit of the group I am in.
- ___ 9. I'd rather say "No" directly, than risk being misunderstood.
- ___ 10. Having a lively imagination is important to me.
- ___ 11. I should take into consideration my parents' advice when making education/career plans.
- ___ 12. I feel my fate is intertwined with the fate of those around me.
- ___ 13. I prefer to be direct and forthright when dealing with people I've just met.
- ___ 14. I feel good when I cooperate with others.
- ___ 15. I am comfortable with being singled out for praise or rewards.
- ___ 16. If my brother or sister fails, I feel responsible.
- ___ 17. I often have the feeling that my relationships with others are more important than my own accomplishments.
- ___ 18. Speaking up during a class (or a meeting) is not a problem for me.
- ___ 19. I would offer my seat in a bus to my professor (or my boss).
- ___ 20. I act the same way no matter who I am with.
- ___ 21. My happiness depends on the happiness of those around me.
- ___ 22. I value being in good health above everything.
- ___ 23. I will stay in a group if they need me, even when I am not happy with the group.
- ___ 24. I try to do what is best for me, regardless of how that might affect others.
- ___ 25. Being able to take care of myself is a primary concern for me.
- ___ 26. It is important to me to respect decisions made by the group.
- ___ 27. My personal identity, independent of others, is very important to me.
- ___ 28. It is important for me to maintain harmony within my group.

___29. I act the same way at home that I do at school.

___30. I usually go along with what others want to do, even when I would rather do something different.

Appendix E: Demographic Questionnaire

We will now ask you a few additional questions. Please answer as honestly as possible. You are not required to answer any of these questions, if you do not want to. If you do not want to answer one of them, simply proceed to the next question.

1.) What is your age?

2.) What is your gender?

Male = 1

Female = 2

Other = 3

3.) Please indicate the type of environment you currently live in:

Rural = 1

Suburban = 2

Urban = 3

4.) Please indicate your race:

Black or African American = 1

Native Indian = 2

White = 3

Hispanic or Latino = 4

Asian = 5

Other, please indicate: _____ = 6

5.) How strongly do you agree that you identify with being a US citizen?

Strongly disagree = 1

Disagree = 2

Slightly disagree = 3

Undecided = 4

Slightly agree = 5

Agree = 6

Strongly Agree = 7