

**CULTURE DIFFERENCES IN
FEEDBACK EXCHANGE:
SHOULD I SEND A
😊 OR 😞?**

by

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ABSTRACT

The goal of this thesis was to examine cultural differences in feedback exchange among friends, using emojis as a new measure of emotional response. In two studies, we looked at whether Americans and Chinese would respond to positive and negative feedback from their friends differently, via emojis. We also looked at whether Americans and Chinese would also anticipate different responses from their friends when they gave the feedback. Finally, we tested if the three proposed mediators, relational mobility, changeability, and self-construal, explained the observed cultural differences. In Study 1, we found both nations interpreted common emojis similarly. We also found that Chinese used more positive than negative emojis during the feedback exchange process (feedback-giver and feedback-receiver), compared to Americans. In Study 2, we found that compared to Americans, Chinese anticipated that their friends would have less negative emotional reactions to, and agree more with, negative feedback. Chinese were also more likely to send positive emojis along with their feedback in general than Americans. The three proposed mediators did not explain the cultural difference in feedback exchange. However, we found that the post-hoc mediator of “anticipated agreement” explained cultural differences in expected negative emotional reactions of their friends. Overall we

replicated findings that East Asians show relatively more positive attitudes in receiving negative feedback during friendship interaction.

Chapter 1

INTRODUCTION

Culture exerts a fundamental influence on people's psychology and behaviors, even before their birth. It is also a dynamic and interactive "system", in that culture and human psyche have mutual constructive influence on each other (Shweder, 1990). The two intertwined aspects (culture and human psyche) constantly update the values of one another; therefore, culture is ascribed as both the reason for and the results of behaviors (Markus & Hamedani, 2007). Cultural members rely on culture as a behavioral blueprint to strive for their personal aspirations, fit into social groups, and know how to be a "good" cultural member. These sociocultural values largely influence how people act and feel in different social situations (Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009).

Friendship, an indispensable aspect in one's life, provides companionship, support, and a sense of belonging in general (Aboud, & Mendelson, 1996). However, how does friendship depend on the sociocultural environment and personal values of the individual? Previous research has shown that different cultures expect and foster different ideal behaviors in close relationship interactions. For example, Asian Americans show more positive reception of teasing behaviors, and higher tendency to be affiliated with a teaser compared to European Americans (Campos, Keltner, Beck, Gonzaga, & John, 2007). Previous studies looking at cultural differences in feedback exchange among friends, also showed that East Asians generally have more positive

receptions of negative feedback, compared to European Americans (Lee & Morling, 2016).

Emojis as a new dependent variable

Communication is a major part of social interactions, including friendship interactions. Along with technology development, cyber communication has become an important aspect of social interaction. A key component during social interaction is emotional information exchange. Emotion can be communicated both verbally and non-verbally. It is easy to pick up non-verbal communication cues in a face to face conversation, but how do people communicate non-verbally through screens? The answer, increasingly, is through an emoji. As the New York Times pointed out, “Emoji Has Won the Battle of Words.” Emoji use in cyber communication is now irreplaceable (Bennet, 2014) since its invention. Emojis have been said to provide powerful “affect labor” during cyber communication. The skeuomorphism property of emojis have been presumed to enable emoji to be a signifier of emotion and sociality in textual communication (Stark & Crawford, 2015). In this current project, we decided to add emoji as a new dependent variable in the study of how friends give and receive feedback. One reason is that the feedback vignettes were delivered through an online survey, so by adding emojis, we will be able to investigate participants’ emotional reaction in a more visualized form. A second reason is that text messages have become an important way for friends to communicate in contemporary society, so it would be interesting to see how participants use different emojis during feedback exchange.

Mediators of the relationship

In addition to replicating the previous findings of cultural differences in feedback exchange among friends in the lab, we were also interested in examining three proposed mediators--self-construal, changeability, and relational mobility--that could potentially mediate the observed cultural difference during negative feedback exchange. These mediators are mainly based off the mediation model proposed in Lee's (2016) dissertation.

Independent vs. interdependent self-construal. Research has shown that people raised in different cultural contexts have different ways to define their self-construal, such as who they are, and how they interact with others (Kitayama & Markus, 2001). In European American cultural contexts (e.g., U.S.A), people usually define themselves with personal traits that are distinct and independent from others. East Asian cultural contexts tend to foster an interdependent self-construal, which emphasizes defining the self in terms of one's social roles and relationship with others. These differences can even be encoded in the brain. For example, in a personal trait attribution task, the medial prefrontal cortex (mPFC), and anterior cingulate cortex (ACC) showed higher activation when participants judged personal traits related to the self, compared to traits related to strangers. In addition, when judging traits related to their mothers, Chinese showed similar activation as in self-related traits judgment while Americans did not. This result suggested that Chinese participants viewed themselves and their close others similarly, while Americans did not (Zhu, Zhang, Fan, & Han, 2007).

Changeability. Another important aspect that East Asian culture and European American culture tend to foster differently is motivation. In general, East Asian contexts foster prevention-oriented motivation, emphasizing not to lose face in front of

others; therefore, East Asian cultural members tend to engage in self-reflection and criticism to discover and improve their shortcomings (Heine, 2012). In contrast, European American culture fosters the focus on the positive traits and qualities to emphasize on the individuality of self and others, so people in European American cultures tend to have a promotion-oriented motivation. Therefore, social interactions might serve to different purposes in different cultural contexts. As part of being a “good” cultural member, East Asian friends may be encouraged to point out the shortcomings of each other as means to provide support and to be thoughtful. In contrast, for European Americans, prosocial praise is highly preferred and practices among friendship interaction as a mean to express individuality and affirm the positive qualities in both oneself and one’s friends (Kitayama & Markus, 2000).

Relational mobility. In addition to personal values and motivations, the overall socio-cultural environment also plays an important role in our daily interaction. Relational mobility is the perceived opportunity that one has to establish new relationships with others, and the freedom that one has to break from the current relationships in a given society (Yuki et al., 2007). A high relational mobility would indicate many opportunities to make new friends, and thus, people in high relational mobility contexts tend to have a greater number of friends, and also perceive more freedom to break from the current relationships if necessary. On the other hand, people in a low relational mobility context perceive less opportunity to establish new relationships with others, such as making new friends. Thus, they tend to have a narrower relationship networks and perceived themselves as “permanent residents” in an established relationship (Yuki et al., 2007). Most European American individuals tend to perceive their cultural context as having higher relational mobility, whereas

East Asian individuals tend to perceive the opposite. Relational mobility significantly mediated cultural differences in social rejection sensitivity between Japanese and Americans, and it is proposed that people who perceive lower relational mobility within the society would be more prone to listen to the negative feedback from peers in order to maintain the stability of the relationship (Sato, Yuki, & Norasakkunkit, 2014).

Overview of Studies

In the current project, three questions related to cultural differences in feedback exchange were examined. The first question was simply a pretest to examine if common emojis are interpreted the same between American and Chinese participants. The second question was to investigate if the previously found cultural differences in feedback exchange among friends can be replicated and extended, using emoji choices and other variables related to the feedback exchange process as dependent variables. The third question was to test if the three proposed mediators--self-construal, changeability, and relational mobility--mediated the observed cultural differences in feedback exchange.

Based on the findings from previous research (Lee & Morling, 2016), which found that European Americans responded to negative feedback more negatively compared to East Asians, we hypothesized the following outcomes from this project. First, the emojis would be interpreted generally the same across U.S. and Chinese participants. Second, Americans would have more negative emotional reactions in exchanging negative feedback – indicating they appreciate criticisms less – with friends compared to Chinese, while the emotional reaction would be approximately the same in positively valenced feedback exchange for both cultures. In terms of

emojis, we predicted these negative feelings would be communicated by using more negative emojis (in the U.S.) and positive emojis (In China) in response to negative feedback. Third, the three proposed mediators, self-construal, changeability, and relational mobility, would mediate the relationship between culture and the responses to feedback exchange. For the three proposed mediators, we expected that European American participants would exhibit more individualistic self-construal (as operationalized by the use of self-differentiating trait descriptions in the Twenty Statements Test (TST), while East Asian participants would show more collectivistic self-construal (as operationalized by using more relational descriptions would be mentioned in the TST). Next we predicted that East Asians would indicate more beliefs that things are changeable with the given negative feedback topic compared to European Americans, such that the negative feedback could presumably serve as encouragement to help the friend improve. European Americans would think that things are less changeable, as well as provide less negative feedback, so that they would not hurt their friends' feelings. Finally, it was also expected that the European Americans would show higher relational mobility that they perceived to have more mobility with their relations with others, compared to East Asians. Each of these mediators, in turn, was hypothesized to predict cultural differences in feedback exchanges among friends.

Chapter 2

STUDY 1: EMOJIS AND FEEDBACK RECEIVER

Previous research in the lab showed East Asians had less negative reactions to receiving negative feedback compared to European Americans (Lee & Morling, 2016). In Study 1, we were interested in replicating this effect of emotional reaction in feedback exchange among friends using a realistic text messaging format. We also extended the research in two ways; first, we used Chinese participants instead of Koreans. Second, we added emojis as a new dependent variable to investigate the emotional reactions of participants.

The first goal of Study 1 was to measure if Chinese and U.S. participants interpret the six designated emojis the same way. A secondary goal was to investigate if there were cultural differences in reception of negative feedback during feedback exchange among friends.

We hypothesized that both U.S. and Chinese participants would interpret the six basic emojis generally the same, specifically, that the positive emojis would be rated positively, and negative emojis would be rated negatively by members of both cultures, for all three types of interpretation questions measured within Study 1. Second, in previous research (Lee & Morling, 2016), East Asians accepted negative feedback less negatively compared to European-Americans; therefore, we expected that relatively more negative emojis would be used in response to negative feedback in a U.S. cultural context, while relatively more positive emojis would be used in a Chinese context. More specifically, U.S. participants would respond with negative

emojis to negatively valenced social feedback scenarios (i.e., in responding to negative comments) compared to Chinese participants, but no difference in emoji usage in positively valenced social feedback scenarios (i.e., in responding to positive comment).

Method

Participants

The initial sample included 173 participants, including 102 Americans (28 males, 74 females) and 71 Chinese (26 males, 33 females, and 12 unspecified). American participants were sampled from the University of Delaware PSYC100 subject pool in Fall 2015 session, and 6 Chinese were recruited from the PSYC100 subject pool; however, these six participants were excluded from data analysis due to their unique trans-cultural experience. The remaining 65 Chinese (26 males, 27 females, and 12 unspecified) living in China were sampled through PI's social network by snowball sampling during the winter of 2015. In the following data analysis and results, there were a total of 167 participants, with 102 Americans in U.S. and 65 Chinese in China. There were total 54 males and 101 females, and 12 participants did not fill out gender information.

Procedure

All participants completed the survey through an anonymous Qualtrics online link. The survey took approximately 30 minutes to complete. First, participants answered three types of questions regarding their interpretation of the six emojis. They also filled out the relational mobility scale developed by Yuki et al., (2007). Second, participants rated how they would use the six emojis in different social feedback

situations. Finally, participants filled out their demographic information at the end of the survey. (See Appendix 1 for complete survey items used in Study 1).

Materials

Study 1 was divided into two major parts, emoji interpretation (Part 1) and emoji usage (Part 2). Survey had two language versions, English and Chinese. All survey items were developed in English, while simultaneously considering translatability into Chinese by native English and Chinese speakers.

Interpretation of emoji (Part 1).

Emoji valence rating. Participants rated the positivity or negativity of each emoji on a -3 (*overall negative*) to +3 (*overall positive*) scale. A positive score was interpreted as an overall positive feeling associated with the emoji, and a negative score was regarded as an overall negative feeling associated with the emoji.

Emoji emotion weights. To determine the emotions associated with each emoji, participants deal out a total 100 points (weights) among seven emotions (happiness, sadness, anger, appreciation/gratitude, frustration/annoyance, surprise, rejection). Participants could also enter other emotional description in a textbox and assign a score for their own description.

Emoji phrase association. In order to fully capture the meaning of emojis, we presented 11 phrases (e.g., “shut up”, “you’re the best!” etc.) under each of the given emoji. Participants rated the extent to which that each phrase captures the meaning of the given emoji on a 0 to 2 Likert-scale (0= *not at all*, 1= *a little*, and 2= *a lot*).

Emoji usage (Part 2).

In Part 2, participants used the six emojis in two types of social feedback exchange situations. First, participants rated the likelihood of using a given emoji in various social feedback situations. The six emojis were divided into two blocks, and each block contained three different emojis (block-1 contained smile, angry, and smirk; block-2 contained frown, surprise, and blush). Each participant answered only one of the blocks. Then, participants used all six emojis to answer questions regarding feedback exchange vignettes

Emoji likelihood rating. In order to examine how emojis are used in different social feedback situations, we presented eight different situations (e.g., “If my friend told me something kind of critical about me -- but I didn’t agree with it”, “If my friend was saying something really nice and I did agree with her” etc.) under each emoji, and participants rated the likelihood of using the given emoji in each of the situations. The usage likelihood rating ranged from 0 to 2, with 0= *not at all*; 1= *a little*; and 2= *a lot*. Situations rated above 1 by the majority of the participants, with regard of the given emoji, would indicate a positive association between the situations and the given emoji. Among the eight social situations, we were particularly interested in four types of general situations--those in which people received feedback from friends that was either critical or nice, and that they either agreed or disagreed with.

Emoji choice. To examine how participants would use the emojis voluntarily, we designed four feedback vignettes varying in valence (positive vs. negative) and context (academic vs. appearance). Participants saw each feedback vignette twice, first as the feedback giver, then as the feedback receiver. For each feedback vignette, they would choose one emoji as their answer. More specifically, as a feedback giver, participant imagined giving the feedback vignettes to their friends, and they chose

different emojis to send along with their feedback. Then, as a feedback receiver, participants imagined receiving the feedback vignettes from friends, and they selected different emojis as their responses to different feedback.

We transformed these data so that the dependent variable was the number of positive emojis (smile and blush) sent across the two similar feedback contexts, with possible scores ranging from 0 (no positive emojis sent) to 2 (sent 2 positive emojis). For example, a value of 0 in feedback giver, negative situations indicated that the participant did not send any positive emoji when they provided both negatively valenced academic and appearance feedback vignettes to their friends. A value of 2 in feedback receiver, negative situations indicated that the participant chose two positive emojis, one each, in response to both of the negative academic and negative appearance feedback that they received. Since Chinese and American participants did not agree on the valence of surprise emoji, we coded surprise emoji idiographically, using each participant's individual rating of surprise emoji as its valence.

Relational mobility. As one of the proposed mediators, relational mobility is the perceived opportunity and freedom that people have, within the immediate society, to change their relations with others (Yuki et. al., 2007). Relational mobility was measured using the scale developed by the Yuki et.al., (2007), and has been translated and utilized in many different countries. It is worth mentioning that this scale was designed to measure participant's perceived consensus on relational mobility. Instead of measuring an individual's personal relational mobility (how much freedom/opportunity that oneself has) perceived consensus asks people to think about other members within the society (how much freedom/opportunity do you think *others* have; (Zou et.al., 2009). This type of measure shifted participants' focus outward into

the overall cultural/societal environment and people surrounding them. Therefore, we attempted to measure the perceived relational mobility of the two nations. The scale consists total 12 item, participants rated each item on a 1 to 7 Likert-scale, with 1= *strongly disagree*, and 7= *strongly agree*. The scale was relatively reliable in both nations (U.S. $\alpha= 0.77$, China $\alpha= 0.69$).

Results

Emoji Interpretation (Part 1)

Emoji valence rating. Would Chinese and Americans rate the valence of the six emojis similarly? Figure 1 shows the valence ratings of each emoji from U.S. and Chinese participants. In general, positive emojis (i.e., smile, blush) were rated positively, and negative emojis (i.e., frown, angry, and smirk) were rated negatively. The surprise emoji was rated as a negative emoji by U.S. participants, but rated as a positive emoji by Chinese participants.

Statistically, mean valence ratings from U.S. and Chinese participants were significantly different from zero for all emojis. That is, one-sample t-tests were all significant t 's(32 to 101) = -36.45 to 52.70, all p 's < .01). In general, Chinese valence ratings were closer to zero than American valence ratings.

We also compared mean valence ratings between U.S. and Chinese participants for each of the six emojis using independent group t-tests. The difference in rating for each of the six emojis was statistically significant, that (t 's(45 to 157)= -7.20 to 4.69, p 's < .01), indicating the degree of positivity or negativity for each emoji varied between U.S. and Chinese participants.

Despite the statistically significant mean differences, we also ran a simple correlation between the six Chinese valence means and the six American valence means on each of the six emojis. The correlation was $r(6) = .95$, indicating that the relative ratings in both nations were basically in the same direction.

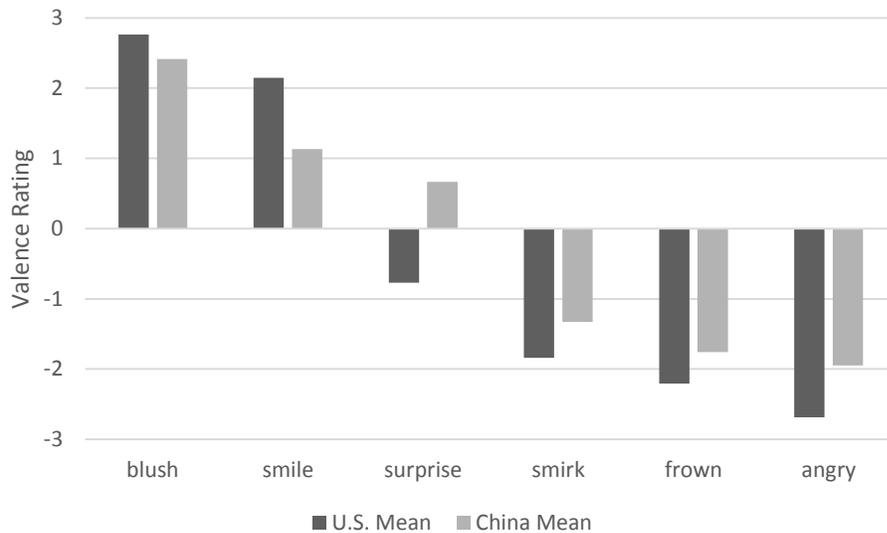


Figure 1. Study 1: Emoji Valence Rating

Emoji emotion weight. Did Chinese and Americans associate similar emotions with each emoji? Table 1 depicted the averaged emotion weights for each of the seven emotions, such as happiness, sadness, anger, across the six emojis from both Americans and Chinese participants. Recall that in this question, participants distributed a total of 100 points among 7 emotions for each emoji. In general, American and Chinese participants agreed on the type of emotions for each of the six emojis.

As before, we ran simple correlations to assess the agreement in mean emotion weights between the two nations for each emoji. As shown in Table 1, the agreement for majority of the emojis was high, even for surprise emoji, among Americans and Chinese, with $r(165 \text{ to } 167) = .98 \text{ to } .99$. The r for smirk emoji was low, that $r(6) = .27$. However, despite the low correlation, both Americans and Chinese distributed the majority of the points for smirk emoji into negative emotions. Therefore, the countries generally agreed on the overall positive and negative emotions associated with each of the six emojis.

Table 1. *Study 1: Emoji Emotion Weights*

Emoji	Nation	Happiness (M)	Appreciation/ Gratitude (M)	Surprise (M)	Sadness (M)	Angry (M)	Frustration / Annoyance (M)	Rejection (M)	Pearson Correlation between 6 means for each nation
Smile	U.S.	80.00	12.84	0.69	1.37	0.44	3.19	0.34	0.99
	China	67.70	8.85	2.69	0.00	0.00	0.03	0.02	
Blush	U.S.	67.21	23.61	3.79	0.10	0.10	0.84	0.29	0.99
	China	66.33	13.62	1.62	0.00	0.00	0.00	0.62	
Surprise	U.S.	0.34	0.00	81.08	1.27	0.83	2.10	5.15	0.99
	China	5.23	2.31	51.09	2.27	1.46	4.31	1.85	
Frown	U.S.	0.05	0.00	0.44	78.44	1.98	5.49	12.34	0.99
	China	1.02	0.08	0.46	57.77	4.38	6.67	8.94	
Smirk	U.S.	0.78	0.49	0.25	5.35	11.59	69.51	9.49	0.27
	China	0.46	0.00	3.54	5.92	7.08	14.49	36.37	
Angry	U.S.	0.29	0.49	0.10	0.95	74.02	22.21	1.96	0.98
	China	2.92	0.15	0.69	2.85	59.55	10.92	9.43	

Emoji phrases association. Would American and Chinese associate the same type of phrases to each emoji? Recall that in this question, participants were asked to

rate the degree to which they would associate each of the eleven phrases with a given emoji. Overall, American and Chinese participants associated similar type of phrases with the given emoji. Table 2 shows the rating results.

We again ran simple correlations between Chinese and American ratings for each emoji. The agreement of phrase association between Chinese and American participants showed general congruency that five out of the six emojis had a correlation score r above 0.8. More specifically, for blush, frown, angry, smirk, surprise emojis had $r(8) = 0.82$ to 0.91 . The smile emoji had a correlation of $r(8) = 0.60$. Despite that the correlation for smile emoji was much lower compared to other emojis, it still showed medium-size correlation between Chinese and American participants. Therefore, we concluded that participants from both nations agreed on the type of phrases being associated with a particular emoji in general.

The agreement is consistent for 5 out of the 6 emojis presented, with the smile emoji to being the exception. For smile emoji, American participants rated the positive phrases above 1 (a little), but Chinese rated a variety of phrases (i.e., “whatever”, “interesting... let me think about it”, “you’re the best!”, “you can do it!”) close to 1 (a little). This shows that U.S. and Chinese participants agree that positive emojis (i.e., blush, smile) are associated with positive phrases, but Chinese might also attach more nuanced, mixed, or complex feelings.

Table 2. Study 1: *Emoji Phrase Association*

Emoji	Nation	shut up (M)	this is not happening (M)	whatever.. (M)	seriously? (M)	I can't believe you said that (M)	what! !?? (M)	interesting..Let me think about it (M)	oops, my bad (M)	love you (M)	you're the best! (M)	you can do it! (M)	Pearson Correlation between 8 means for each nation
Smile	U.S.	0.12	0.25	0.19	0.21	0.14	0.24	0.41	0.24	1.36	1.60	1.63	0.60
	China	0.68	0.47	0.89	0.61	0.48	0.41	0.75	0.44	0.66	0.82	1.00	
Blush	U.S.	0.10	0.09	0.11	0.24	0.24	0.29	0.35	0.34	1.80	1.88	1.74	0.88
	China	0.12	0.13	0.86	0.55	0.16	0.20	0.82	0.63	1.34	1.51	1.46	
Frown	U.S.	0.68	1.32	0.83	0.96	1.19	0.75	0.11	0.96	0.02	0.02	0.04	0.88
	China	0.62	0.93	0.39	0.51	1.08	0.67	0.25	1.12	0.05	0.23	0.15	
Angry	U.S.	1.67	1.45	1.03	1.59	1.63	1.32	0.12	0.16	0.04	0.02	0.05	0.83
	China	1.66	1.12	0.19	0.50	1.53	1.31	0.18	0.18	0.07	0.11	0.21	
Smirk	U.S.	1.42	1.56	1.84	1.69	1.39	0.77	0.27	0.37	0.03	0.03	0.05	0.82
	China	1.39	0.98	0.75	0.82	1.11	1.04	0.31	0.36	0.05	0.11	0.09	
Surprise	U.S.	0.81	1.46	0.27	1.58	1.65	1.82	0.38	1.10	0.04	0.05	0.05	0.91
	China	0.26	1.21	0.56	1.45	1.04	1.41	0.45	0.70	0.30	0.25	0.15	

Summary of emoji interpretation. Based on the overall results of the emoji interpretations, participants from both U.S. and China agreed on the general meanings of the six emojis presented. The positive emojis (i.e., smile, blush) presented positive feelings and were associated with positive phrases. The negative emojis (i.e., frown, angry, and smirk) presented negative feelings and were associated with negative phrases. Despite that, the surprise emoji was rated as positive by Chinese participants, but rated negative by American participants in the valence rating question, the agreement on specific emotions and phrases attached to surprise emoji were in high agreement for both nations. Also, the agreement for emotions attached to smirk emoji was relatively lower compared other emojis between Chinese and American

participants. The valence rating and phrases showed strong association of smirk emoji with negative feelings. Similarly, for phrase associations, the correlation between the two nations was relatively lower than the correlations for other ratings. Even so, the correlation for smile was medium, and the results from valence rating and emotion weight questions showed that smile emoji was correlated with positive feelings. Therefore, we concluded that emojis were interpreted similarly among Chinese and American participants.

Emoji Usage (Part 2)

Likelihood rating. Would Chinese and Americans differ in how they use emojis in different social situations? Previous research in the lab showed that Asians had more accepting attitudes toward negative feedback from their friends, compared to Americans (Lee & Morling, 2016). Therefore, we tested whether Chinese participants would show a higher tendency to use positive emojis (and a lower tendency to use negative emojis) to respond to negative feedback, compared to American participants. We also tested if emoji usage would be mediated by participants' agreement on the feedback. We hypothesized that U.S. participants would have higher tendency to use negative emoji when they disagreed with the feedback compared to Chinese participants.

We analyzed each one of the six emojis individually, and for each emoji, we ran 2 x 2 x 2 Mixed Factorial Analysis of Variance (ANOVA). The dependent variable was the rating score of the likelihood to use the given emoji (e.g., the smile emoji) on a 0 to 2 rating scale. The three independent variables were: Country (China vs. US, between-subjects), Feedback Valence (Critical vs. Nice, within-subjects), and Feedback Agreement (Agreed with feedback vs. Disagreed with feedback, within-

subjects). We predicted that Chinese would be more likely to send positive emojis, compared to American participants, in situations where they disagreed with the feedback, or when the feedback was critical. First, we report three two-way interactions and main effects by each emoji, then we present the results of three-way interactions in two of the emojis. See Table 3, 4, and 5 for detailed statistics of each of the three two-way interactions for all six emojis; Statistics for three-way interactions are presented in Table 6.

Nation x Valence interactions. Four (smile, blush, frown, and smirk) out of the six emojis showed significant Nation x Valence interactions. Each emoji was presented separately in the following sections. See Table 3 for statistical data.

Blush. As predicted, U.S. participants were more likely to use a blush emoji when the feedback was nice compared to when the feedback was critical. On the contrary, Chinese participants were more likely to use a blush emoji when the feedback was critical than when feedback was nice.

Smile. Overall, Chinese participants rated their likelihood of using a smile emoji approximately the same regardless of the valence of the feedback, while American participants were more likely to use a smile emoji when they received a nice feedback compared to when they received a critical one. The Valence main effect was also significant for the likelihood of using smile emoji. Participants generally were more likely to use the smile emoji when the feedback was nice compared to those that are critical.

Smirk. Similar to the smile emoji, for Chinese participants, the tendency to send a smirk emoji was approximately the same regardless of the feedback valence. American participants were more likely to use the smirk emoji when they received

critical feedback compared to nice feedback. The main effect for valence was also significant, such that participants generally were more likely to use a smirk emoji when the feedback was critical compared to feedback that was nice.

Frown. Consistent with our prediction, U.S. participants showed a higher tendency to use a frown emoji when they received critical feedback compared to nice feedback, while Chinese participants showed a higher tendency to use a frown emoji when they received a nice feedback compared critical feedback.

Table 3. *Study 1: Nation x Valence Two-Way Interactions. Error df= 73 to 75*

Likelihood of using Emojis	U.S.		China		Nation x Valence	
	Critical (<i>M</i>)	Nice (<i>M</i>)	Critical (<i>M</i>)	Nice (<i>M</i>)	<i>F</i>	<i>p</i>
Blush	1.56	2.13	1.98	1.32	73.71	<.001
Smile	1.58	2.20	1.86	1.95	16.14	<.001
Surprise	1.72	1.61	1.65	1.71	1.52	n.s
Smirk	1.77	1.42	1.57	1.59	10.56	0.00
Frown	1.78	1.29	1.37	1.75	28.56	<.001
Angry	1.56	1.30	1.40	1.29	1.41	n.s

Nation x Agreement interactions. Four (blush, smile, surprise, and frown) out of the six emojis showed significant Nation x Agreement interactions. Each emoji was presented separately in the following sections. See Table 4 for statistical tests.

Blush. As predicted, U.S. participants indicated a higher tendency to send a blush emoji when they agreed compared to when they disagreed with the feedback, whereas Chinese participants showed higher tendency to send the blush emoji when they disagreed, compared to when they agreed with the feedback. The main effect for Agreement was also significant for the likelihood of using blush. Participants

generally were more likely to use a blush emoji when they agreed with the feedback compared to when they disagreed with the feedback.

Smile. We found the same Nation x Agreement two way interaction pattern for the likelihood of using a smile emoji as those for the blush emoji. No main effect of agreement was found for smile emoji.

Surprise. Generally, American participants were more likely to use surprise when they disagreed with the feedback compared to those that they agreed with, whereas Chinese participants were more likely to use the surprise when they agreed with the feedback compared to when they disagreed with the feedback that they received.

Frown. Consistent with our prediction, American participants were more likely to use a frown emoji when they disagreed with the feedback compared to the feedback that they agreed with. However, Chinese participants showed higher tendency to use a frown emoji when they agreed with the feedback compared to when they disagreed with the feedback. This result is similar to the result found when the feedback was nice compared to critical feedback in the previous section. The main effect for agreement was also significant, such that participants were generally more likely to use a frown emoji when the disagreed with the feedback compared to those that they agreed with.

Table 4. *Study 1: Nation x Agreement Two-Way Interactions. Error df = 73 to 76.*

Likelihood of Using Emojis	U.S.		China		Nation x Agreement	
	Agree (<i>M</i>)	Disagree (<i>M</i>)	Agree (<i>M</i>)	Disagree (<i>M</i>)	<i>F</i>	<i>p</i>
Blush	2.29	1.39	1.40	1.90	82.96	<.001
Smile	2.22	1.56	1.73	2.07	33.03	<.001
Surprise	1.43	1.90	1.83	1.52	23.48	<.001
Smirk	1.34	1.85	1.30	1.87	0.13	n.s
Frown	1.25	1.82	1.64	1.48	33.35	<.001
Angry	1.18	1.68	1.17	1.52	1.16	n.s

Nation x Valence x Agreement interactions. Two (blush and frown) out of the six emojis showed significant Nation x Valence x Agreement three-way interactions. See Table 5 for detailed statistics.

Blush. Americans overall were more likely to send blush emojis when the feedback was nice (compared to when it is critical) and more likely to send blush emojis when they agreed with the feedback, but they were most likely to send blush emojis especially when they agreed with nice feedback. Chinese, on the other hand, were more likely to send blush emojis when the feedback was critical (compared to nice), and also more likely to send blush when they disagreed with the feedback, but they would send blush emojis especially when they disagreed with critical feedback. See Figure 2 for three-way interaction of blush emoji. Even though we did not predict any three-way interactions, this result is consistent with our prediction that more Chinese would respond positively toward negative feedback.

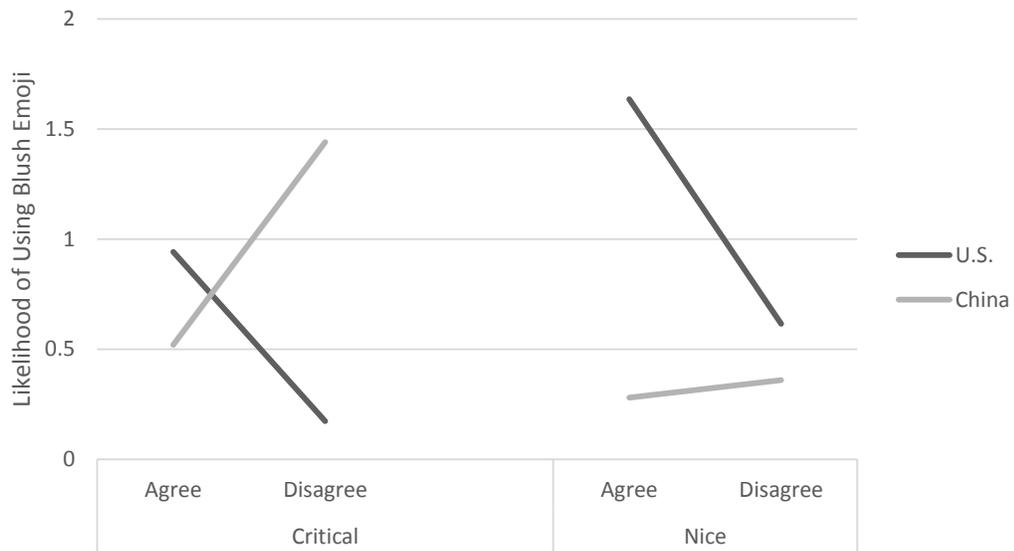


Figure 2. Study 1: Blush Emoji Three-Way Interaction.

Frown. Americans overall were more likely to send frown emojis when they disagreed with the feedback compared to feedback they agreed with, and more likely to send the frown emoji when the feedback was critical compared to when it was nice, but they were most likely to send the frown emoji when they disagreed with the critical feedback. On the contrary, Chinese participants generally were more likely to send a frown emoji when they agreed with the feedback compared to those that they disagreed with, and more likely to send this frown emoji when they feedback was nice compared to those that were critical, but they were most likely to send the frown emoji when they agreed with the nice feedback. See Figure 3 for three-way interaction of frown emoji. The significant three-way interaction for frown emoji was surprising, in that it pushed our general hypothesis further in that Chinese not only showed a more positive attitude toward negative feedback, but also showed the tendency to respond negatively to positive feedback.

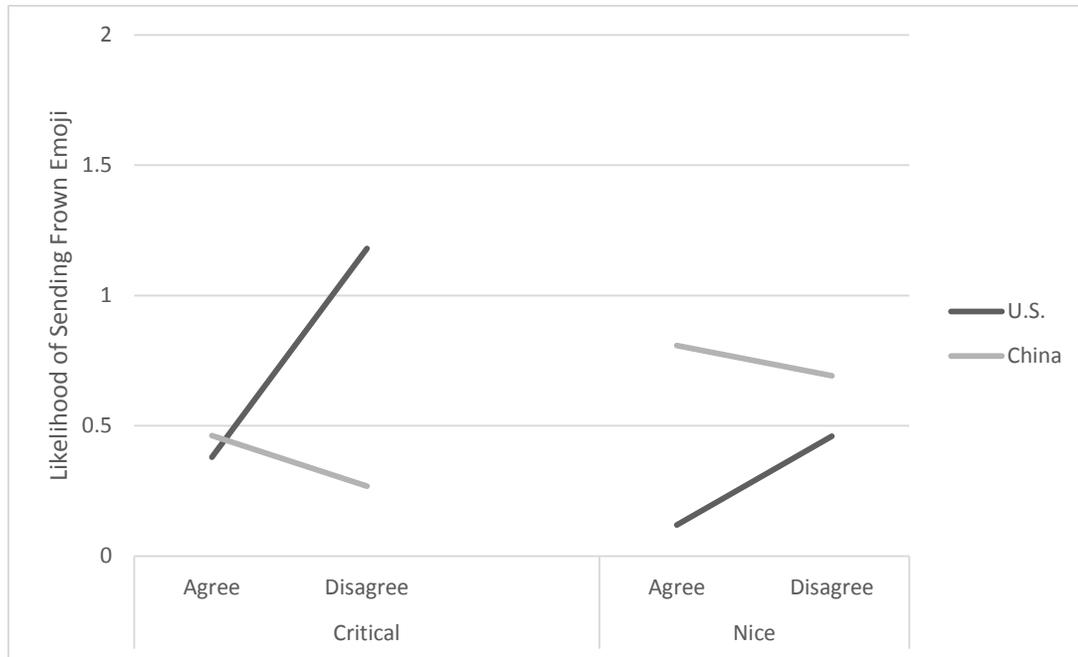


Figure 3. Study 1: Frown Emoji Three-Way Interaction.

Table 5. Study 1: Nation x Valence x Agreement Three-Way Interaction. Error $df = 73$ to 75

Emoji	U.S.				China				Nation x Valence x Agreement	
	Critical		Nice		Critical		Nice		F	p
	Agree (M)	Disagree (M)								
Blush	1.94	1.17	2.64	1.61	1.52	2.44	1.28	1.36	5.43	0.02
Smile	1.90	1.26	2.54	1.86	1.68	2.04	1.79	2.10	0.00	n.s
Surprise	1.55	1.88	1.31	1.92	1.83	1.46	1.83	1.58	0.31	n.s
Smirk	1.52	2.02	1.16	1.68	1.26	1.89	1.33	1.85	0.27	n.s
Frown	1.38	2.18	1.12	1.46	1.46	1.27	1.81	1.69	4.13	0.05
Angry	1.18	1.94	1.18	1.42	1.19	1.62	1.15	1.42	3.87	n.s

Summary of likelihood ratings. Based on the overall data analysis in the likelihood ratings of using emojis in various social situations, in general, U.S. participants were more likely to use positive emojis (i.e., smile, blush) when receiving

positive feedback, or when they agreed with the feedback received from friends. In contrast Chinese participants tended to use more positive emojis when receiving negative feedback, especially when they disagreed with the negative feedback that they received from friends.

Emoji choice. Would there be differences in how Chinese and Americans participants voluntarily used the emojis? Based on the previous findings in the lab (Lee & Morling, 2016), we hypothesized that U.S. participants would generally use more negative emojis during negative feedback exchange, while Chinese participants would use less negative or more positive emojis during negative feedback exchange. Because participants played both feedback giver and feedback receiver during a vignette feedback exchange, we also tested if the emoji choice would be modulated by the role of the participants played during negative feedback exchange.

We ran 2x2x2 Mixed Factorial Analysis of Variance (ANOVA). The dependent variable was the number of positive emojis sent in the negative feedback scenarios, and the possible outcome can be 0, 1 or 2. The independent variables were Nation (U.S. vs. China, between subject), Role (feedback giver vs. feedback receiver, within subject), and Feedback Valence (positive vs. negative, within subject). In the following section, we reported significant two-way interactions in detail, and no significant three-way interaction was found. See Table 6 for statistics two-way and three-way interactions. The overall mean of positive emojis sent in various situations are presented in Figure 4.

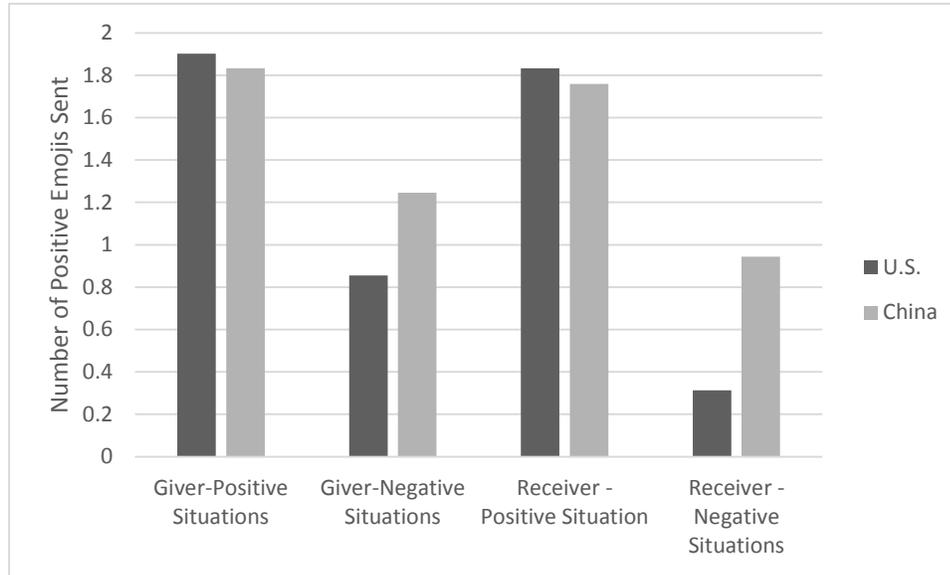


Figure 4. Study 1: Mean of The Number of Positive Emojis Sent in Similar Vignettes.

Two-way interactions. Two (Nation x Feedback Valence, and Role x Feedback Valence) of the two-way interactions were statistically significant.

Nation x Valence. More U.S. participants sent positive emojis when the feedback was positive compared to when it was negative. While the same pattern was found in Chinese participants, fewer U.S. participants sent positive emojis in negative feedback exchange than Chinese participants. We also found a significant main effect for Feedback Valence, such that more participants sent positive emojis in positive feedback exchange compared to in negative feedback exchange.

Role x Valence. In general, feedback givers gave more positive emojis during positive feedback exchange compared to in negative ones. While the same pattern could be found in feedback receivers, fewer feedback receivers responded with positive emoji in negative feedback exchange compared to feedback giver. The main

effect for role was also significant that feedback giver generally provided more positive emojis than feedback receivers did in feedback exchange.

Table 6. *Study 1: Emoji Choice Two-Way Interactions. Error df=144*

DV: The number of positive emoji sent						
Nation x Valence	U.S.		China		Nation x Valence	
	Positive (<i>M</i>)	Negative (<i>M</i>)	Positive (<i>M</i>)	Negative (<i>M</i>)	<i>F</i>	<i>p</i>
	1.86	0.59	1.79	1.10	37.15	< .001
Nation x Role	U.S.		China		Nation x Role	
	Giver (<i>M</i>)	Receiver (<i>M</i>)	Giver (<i>M</i>)	Receiver (<i>M</i>)	<i>F</i>	<i>p</i>
	1.38	1.07	1.53	1.36	2.90	n.s
Role x Valence	Giver		Receiver		Role x Valence	
	Positive (<i>M</i>)	Negative (<i>M</i>)	Positive (<i>M</i>)	Negative (<i>M</i>)	<i>F</i>	<i>p</i>
	1.86	1.05	1.79	0.64	27.55	< .001

Summary of emoji usage. The overall results were consistent with previous research in the lab (Lee & Morling, 2016), in that East Asians held more positive attitudes (here, represented by sending positive emojis) upon receiving negative feedback compared to European Americans. In contrast, American participants used more negative emojis (and fewer positive emojis) when receiving negative feedback compared to Chinese participants. The positive emoji usage in positive feedback exchange was approximately the same among U.S. and Chinese participants. In addition, we also found that feedback givers were more likely to use positive emojis compared to feedback receiver in feedback exchange, especially when providing negative feedback.

Relational Mobility

Would Chinese and American differ in how they perceive the relational mobility within their current societies? Based on previous research, we predicted that

American participants would indicate higher relational mobility compared to Chinese participants. We ran an independent sample t test, with Nation (China vs. U.S.) being the independent variable. The result supported our prediction that , $t(164)= 4.10, p < 0.001$, in that Americans think that there is more opportunity to make new friends and have more freedom to break off current relationships compared to Chinese.

We also tested if relational mobility mediated the cultural differences in feedback exchange observed in current study. Unfortunately, relational mobility was not associated with any of the cultural differences in feedback exchange. See Appendix 3 for detailed mediation analysis.

Discussion: Study 1

Emoji Interpretations

Overall, both nations interpreted the six emojis the same, with positive emojis (smile, blush) representing positive feelings and phrases, and negative emojis (frown, angry, smirk) representing negative feelings and phrases. As mentioned in the Results section, despite small discrepancies, correlations between the two nations for each emoji were consistent at least in two of the interpretation questions. For example, both nations agreed that the surprise emoji represented emotions and phrases associated with surprise, but they disagreed with the valence of surprise emoji, in that Chinese participants generally perceive surprise as positive, while U.S. participants perceived it as negative.

Taken together, we concluded that both Chinese and Americans interpreted the six emojis generally the same.

Emoji Usage

As predicted and consistent with previous findings in the lab, Chinese participants used more positive emoji when receiving negative feedback compared to Americans participants. Also, as predicted, the feedback receiver's agreement with the feedback was positively correlated with positive emoji usage. In addition to previous findings in the lab, we also found role differences in negative feedback exchange, such that across both cultures, feedback givers were more likely to use positive emoji when providing negative feedback to their friends compared to feedback receivers. This is the first time that we investigated role differences in feedback exchange, so in Study 2, we will focus on examining if there are cultural differences in feedback exchange, particularly, in providing negative feedback.

Relational Mobility

The results for relational mobility showed that U.S. participants had a significantly higher relational mobility compared to Chinese participants. As mentioned in the Methods section, the relational mobility scale used in Study 1 was a measure of the social environment and the results supported our hypothesis that the U.S. cultural environment fostered higher relational mobility compared to Chinese culture. However, the full results did not support our hypothesis that relational mobility functioned as a mediator in explaining the cultural differences in feedback exchange among friends. Our suspicion is that the number of Chinese participants was about half of American participants due to snowball sampling. The smaller sample size for Chinese participants may not have given us enough power to detect any mediating effects of relational mobility (Cohen, 1992).

Study 1 mainly focused on investigating the feedback receiver's reactions when receiving negative feedback from friends. However, feedback exchange is a reciprocal process, involving both feedback giver and feedback receiver. The significant role differences in emoji usage questions inspired us to examine if the same cultural difference can be found in feedback givers. In Study 2, we expanded the research by focusing more on the feedback giver's behaviors and rationale. We also explored two other proposed mediators within culture, such as changeability and self-construal. In Study 2, we decided to swap the surprise emoji with a "nope" emoji. Even though both nations agreed on the interpretation of the surprise emoji, the variability in valence was not compatible in our investigation. We are interested in seeing cultural differences in positive vs. negative emoji usage in negative feedback exchange, so it is important to have a consistent valence rating of the emoji from both nations. Therefore, based on an article by Basu (2016), we decided to switch the surprise emoji with a more consistently recognized negative emoji, nope. See Appendix 2 for Study 2 survey items and emojis.

Chapter 3

STUDY 2: FEEDBACK GIVER AND MEDIATORS

The results from Study 1 showed that upon receiving negative feedback from friends, fewer Chinese participants responded with negative emojis compared to U.S. participants. However, feedback exchange is a reciprocal process, which involves both feedback giver and feedback receiver. Therefore, it is important to investigate if there will be cultural differences in feedback exchange in terms of feedback giver's perspective.

The goals of Study 2 were to investigate if there are cultural differences in feedback exchange from a feedback giver's perspective, and to examine if the three proposed mediators within the cultures could explain the observed differences in feedback exchange among Chinese and U.S. participants.

Based on previous findings in cultural differences in feedback receivers, we hypothesized that, in general, Chinese participants would show more positive attitudes (represented as positive emoji usage) in delivering negative feedback, and in anticipating their friends' reception of negative feedback (via rating their anticipation of friends' emotional reactions, and general agreement), compared to American participants. For the three proposed mediators of self-construal, changeability, and relational mobility, we expected that there would be cultural differences on each of the mediator variables. Specifically, we predicted that U.S. participants would indicate higher individualistic self-construal than Chinese participants; Chinese participants would rate higher changeability of the negative feedback; and U.S. participants would

have higher relational mobility than Chinese participants, and these differences would mediate the observed difference in feedback givers' behaviors between the two nations.

Method

Participants

In Study 2, there were 213 participants, including 104 European-Americans (43 males, 28 females, 32 unspecified, and 1 entered “nonbinary”), recruited through Prolific, a British online survey platform, and 109 Chinese (73 females, 36 males) recruited through Sojump, a Chinese online survey platform. To best match the sample collected in Study 1, which were students, we restricted the participants in the 18-25-year age range on both platforms. In addition, to minimize trans-cultural experience, we prescreened the U.S. participants on Prolific to be Caucasian, with English as their first language, and born and currently residing in the U.S. On Sojump, the only explicit restriction was age, because Sojump by default only samples from Chinese living in China.

Procedure

All participants completed the survey through an anonymous Qualtrics online link. The survey took approximately 30 minutes to complete. Participants first rated the valence of the six emojis used in the study, and completed the Twenty Statements Test (TST). Secondly, participants recalled a recent incident of providing either positive or negative feedback to their friend, and answered questions regarding the feedback. Then, participants provided one piece of positive and one negative feedback to a target in hypothetical social situation, and answered questions related to the

feedback they provided. Finally, participants filled out the Relational Mobility Scale (Yuki et al., 2007) and filled out their demographic information (See Appendix 2 for complete survey item used in Study 2). Survey has two language versions, English and Chinese. All items and materials were collaboratively developed in English, while simultaneously considering translatability into Chinese by native Chinese and English speakers.

Materials

Emoji valence rating. At the beginning of Study 2, participants rated each of the six emojis on a -3 (*overall negative*) to 3 (*overall positive*) scale to indicate the valence of each emoji. A positive rating would suggest positive emoji, and a negative rating suggested negative emoji. Since the result from Study 1 valence rating suggested that surprise emoji can both present positive and negative feelings, we decided to swap the surprise emoji with the nope emoji. A recent article by Basu (2016), suggested that the nope face was the universal expression when people experience rejection, or denial or that they detest something. Therefore, the surprise emoji was swapped for nope emoji. See Appendix 2 for emojis.

The rest of Study 2 was divided into two major parts: Free recall (Part 1) and Social situation vignettes (Part 2).

Free recall (Part 1).

In Part 1, participants free recalled an incident where they had provided either positive or negative feedback (randomly assigned, independent groups) to their best friend in a real life situation. Following the feedback they just provided, participants answered four sets of questions regarding the feedback that they just gave: Frequency

(how long ago the feedback was given), their friend's reaction (via emoji), the anticipated agreement from their friends regarding the feedback, and how changeable the feedback topic was.

Frequency. Participants indicated how long ago they gave their friend the feedback on a 1 – 7 scale, with 1 equaling the nearest time point and 7 equaling to the furthest time point. More specifically, 1= *today*; 2= *yesterday*; 3= *about 3 days ago*; 4= *a week ago*; 5= *about a month ago*; 6= *about a year ago*; 7= *more than a year ago*. Therefore, the larger the number, the less frequent that type of feedback exchange occurred in each culture.

Friend reaction as emoji. To examine how the feedback giver perceived their friend's reaction regarding the feedback, participants selected one of the 6 emojis to represent their friends' emotional reaction to it. The six emojis were categorized as Positive Reaction (smile and blush), Negative Reaction (frown, angry, and smirk), and Nope Reaction (nope emoji).

Anticipated agreement. Participants answered three similar questions regarding their anticipation of their friend's agreement, understanding, and appreciation of the feedback on a 0(*not at all*) – 10(*completely*) rating scale, with 0 meaning lowest agreement, understanding, and appreciation, and 10 being the highest. After testing for reliability of the three measures, we combined them into one variable – Anticipated Agreement by computing the mean of the three ratings (U.S. $\alpha=0.772$; China $\alpha=0.803$).

Changeability. Participants indicated how much they thought the feedback was about something that their friend could improve with effort or practice on a 0(*not at all*) – 10(*completely*) rating scale. A high score would indicate that the feedback was

given on something that can be easily improved with effort or practice, and a low score would indicate the opposite.

Vignette social situations (Part – 2).

In Part 2, participants responded to two of four vignette situations varying in context (academic vs. communication) and valence (positive vs. negative). The vignettes were presented as text message screenshots, and participants had to send a text message as their feedback response to their friend in each situation. The four social situation vignettes were divided into two blocks; block 1 contained negative academic vignette and positive communication vignette, and block 2 contained positive academic vignette and negative communication vignette. Participants were randomly assigned to either block 1 or block 2. Participants answered eight questions related to each response. The eight questions were: self-rating of feedback valence, intentions, emoji usage, anticipated emotional reactions, anticipated agreement, changeability, and impact of the feedback.

Self-rating of feedback valence. Participants rated their own feedback in terms of positivity and negativity on a -5 (*overall negative*) to 5 (*overall positive*) rating scale. A positive score suggests self-rated positive feedback, and a negative score suggests self-rated negative feedback.

Intentions. Participants indicated their intentions for giving the feedback by selecting from options, such as “to be helpful”, “to comfort him/her”, and “to be truthful”. Participants could choose multiple intentions and were also given the option to write their own answers. Each of the six intentions were recoded into a dichotomous variable to indicate whether participants chose the particular intention (1) or not (0).

Emoji usage. We were also interested to see if we could replicate the results of emoji choice from Study 1, so we asked participants to select one of the six designated emojis to send along with the feedback they provided. The six emojis were grouped into three categories: positive emojis (smile, blush), negative emojis (frown, angry, smirk) and the nope emoji.

Anticipated emotional reactions. In order to examine how participants anticipated their friend's emotional state after receiving feedback, participants selected and put emotion words, such as *surprised*, *angry*, and *happy* into one of two categories: "my friend will be" and "my friend will not be". An emotion could only be placed into one of the categories, and participants could place more than one emotion into each category. Each emotion choice was recoded as a dichotomous value to indicate if the particular emotion was present (1) or not (0) within each category. Emotion choices were recoded into three emotional categories, positive, negative, and surprise. The number of the positive emotional reactions (*happy*, *grateful*), negative emotional reactions (*angry*, *sad*, *defensive*, *embarrassed*, *denial*, and *rejected*), and surprise (*surprise*, *confused*) were counted.

Anticipated agreement. The questions measuring anticipated agreement were the same as in Part 1. Participants answered three questions regarding their anticipation of friend's agreement, understanding, and appreciation on the feedback and an average score was computed to represent the overall anticipated agreement from feedback giver's perspective. The anticipated agreement was computed in each type of social situation vignette, academic (U.S. $\alpha= 0.687$; China $\alpha= 0.771$) and communication (U.S. $\alpha= 0.798$; China $\alpha= 0.836$).

Changeability. Same as in Part 1, participants rated the extent to which the feedback was about something that their friend can improve with practice or effort on a 0 (*not at all*) to 10 (*completely*) rating scale, with 0 indicating the lowest improvability and 10 being the highest improvability.

Impact of the feedback. We were also interested how participants would evaluate the impact of their feedback. Therefore, first, participants rated whether their friend would make a change based on their feedback on a 0 (*not at all*) to 10 (*completely*) rating scale, with 0 indicating no change, and 10 indicating very likely to make change based on the feedback. Second, participants indicated the impact of the feedback on their friendship from 1: *make us closer*; 2: *make us less close*; 3: *become more stable*; 4: *nothing will change*, and 5: *other*. The choice was recoded into a continuous variable from -1 (the relationship feels further apart) to 1 (the relationship feels closer).

Proposed mediators.

Twenty Statement Test. Self-construal was measured after the emoji valence rating, but results will be presented in the Mediators section for better clarity. Self-construal was measured using a modified version of Twenty Statement Test (TST), in which participants answered a question regarding “who am I?” in a fixed sentence structure. Instead of having participants produce 20 different responses, we reduced the number to ten in hopes of getting higher quality responses. In addition, the “I am ___” structure was modified to “I ___”. The modification was necessary due to differences in linguistic properties between Chinese and English. In English, the “I am ___” can be filled with verbs, nouns or adjectives, while in Chinese, it is uncommon to use adjectives or verbs after “am” (Hong, 2001). We adapted and

modified the instructions from previous research by Watkins et al., (1997), which sampled both Chinese and Caucasian participants. The instruction was translated into an equivalent Chinese version to instruct Chinese participants. We adopted a simplified the coding rubric from previous research by Kanagawa, Cross, & Markus (2001). The PI and a Chinese research assistant coded the Chinese responses, $\kappa = .726$, $p < .001$; a graduate student and an American research assistant coded the American responses, $\kappa = 7.93$, $p < .001$. After resolving disagreement, each answer was categorized into TST-B (interdependent responses, such as I am a daughter/son; I am a good society member), TST-C (independent responses, such as I am smart; I am unique), and TST-Z (miscellaneous responses, such as I have a cell phone; I am a stranger) for data analysis.

Changeability. Perceived improvability of the feedback was measured as part of their feedback evaluation, such that participants were asked to rate the changeability of the topic they provided feedback on within a 0 (*not at all*) to 10 (*completely*) scale.

Relational mobility. Relational mobility was measured using the 12-item measure developed by Yuki et al., (2007).

Results

Emoji Valence Ratings

Would Chinese and American participants rate the valence of each emoji the same as they did in Study 1? The mean of Emoji Valence Ratings are shown in Figure 5. We ran a simple correlation between American and Chinese mean ratings of the six emojis. The Pearson correlation $r(6) = .99$, suggesting that both nation rated the

relative positivity and negativity of the six emoji the same. Moreover, the presumed nope emoji was rated as valence-neutral emoji in both nations.

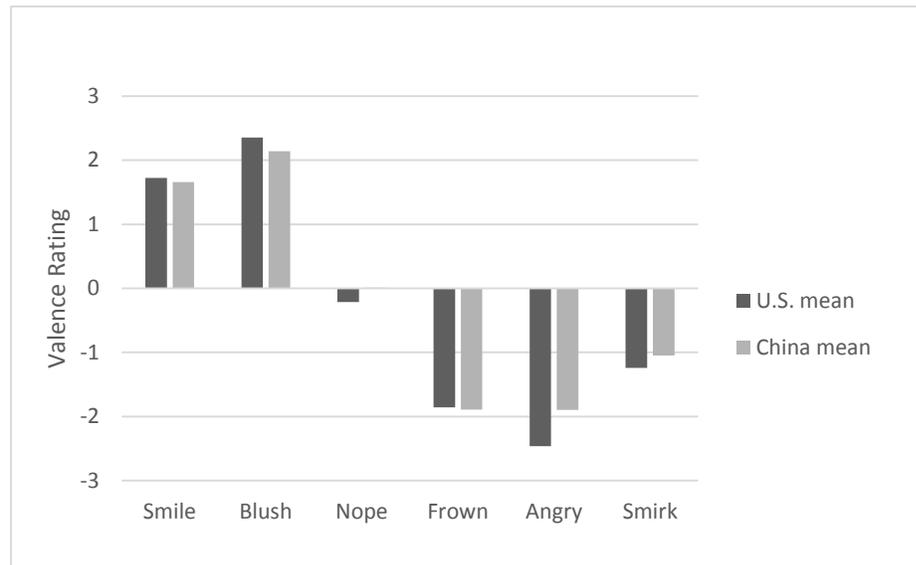


Figure 5. Study 2: Emoji Valence Ratings

Free Recall (Part 1)

In general, we were interested if Chinese would have higher frequency in negative feedback exchange compared to U.S participants, and this is operationalized by measuring how recently they provided a feedback to their friends. Also, we were expecting higher anticipated agreement and higher ratings of improvability for negative feedback in Chinese participants. For American participants, we expected higher frequency in positive feedback exchange, and a lower anticipated agreement and improvability in negative feedback exchange. For each of the dependent variables in the Free recall section, we ran a 2 x 2 ANOVA with the independent variables

between Nation (U.S. vs. China) and Feedback Valence (positive vs. negative). See Table 7 for the statistics of two-way interactions for each variable

Frequency. Did Chinese and American participants differ in the frequency of feedback exchange?

As predicted, the Nation x Feedback Valence interaction was significant, $F(1,209)=7.12, p=.008$. The pattern indicated that U.S. participants gave positive feedback more recently than negative feedback, while Chinese participants provided negative feedback more recently than positive feedback. Of less interest, the main effect for Feedback Valence was significant, $F(1, 209)= 9.46, p=.002$ (positive feedback more recent).

Friend reactions as emoji. Would there be cultural differences in how participants interpreted their friends' reactions after providing feedback? Based on previous findings, we hypothesized that Chinese participants would interpret their friends' reactions as more positive after negative feedback, compared to U.S. participants.

Positive reaction. The Nation x Feedback Valence interaction was significant, $F(1,209)= 9.16, p=.003$, indicating that U.S. participants perceived a more positive reception from their friends, via choosing positive emojis, of the positive feedback than negative feedback. Chinese participants showed the same pattern, but with a less steep slope (see Table 7). The main effect of Nation was significant, $F(1,209)= 6.27, p=.013$, such that U.S. participants generally interpreted their friends' reactions to be overall more positive than Chinese participants. Of less interest, the main effect of Feedback valence was significant, $F(1,209)= 123.01, p<.001$ (more positive reactions to positive feedback).

Negative reaction. The main effect of Feedback valence was significant, $F(1, 209) = 34.82, p < .001$, such that participants interpreted friends' reactions to be more negative when giving negative feedback compared to giving positive feedback. No significant two-way interaction with culture was found, $F(1, 209) = 0.02, p = n.s.$

Nope reaction. The Nation x Feedback Valence interaction was significant, $F(1, 209) = 6.68, p = .01$, indicating that more U.S. participants perceived their friends' reaction as those attached to nope emoji after providing negative feedback compared to positive feedback. Chinese participants showed the same trend, but with a less steep slope compared to U.S. participants. The main effect of Nation was significant, $F(1, 209) = 11.83, p = .001$, suggesting that generally, more U.S. participants interpreted their friends' reactions to be nope compared to Chinese participants. Of less interest, the main effect of Feedback Valence was significant, $F(1, 209) = 37.15, p < .001$ (more nope emoji reaction to negative feedback).

In sum, the results were different from what we predicted, in that American participants generally assumed more positive reactions from friends when providing feedback compared to Chinese participants.

Anticipated agreement. Would Chinese and Americans participants differ in their expectations of their friends' agreement, understanding, and appreciation on the feedback they provided? We ran a between-groups 2 x 2 ANOVA, with anticipated agreement as the dependent variable. We hypothesized that Chinese participants would show higher anticipated agreement, understanding, and appreciation from friends when providing negative feedback compared to U.S. participants.

The main effect of Feedback Valence was significant, $F(1, 209) = 54.638, p < .001$, such that participants generally expected more agreement, understanding, and

appreciation from friends when the feedback was positive as opposed to when the feedback was negative. No significant two-way interaction was found in anticipated agreement from friends, $F(1, 209) = 0.01, p = n.s.$

Changeability. Would there be cultural differences in how participants rate the changeability of the feedback topic? We ran a 2 x 2 ANOVA with the changeability rating as the dependent variable. We predicted that American participants would have a lower rating in changeability for negative feedback topics compared to Chinese participants, and that nations would not differ in positive feedback topic changeability ratings.

The Nation x Feedback Valence interaction was significant, $F(1, 209) = 20.692, p < .001$. However, the direction was different from our prediction. U.S participants rated higher changeability of negative feedback topics than positive, whereas Chinese participants rated the opposite. Chinese participants rated higher changeability on positive feedback compared to those that were negative.

Table 7. Study 2: Free Recall Two-Way Interactions. Error $df = 208$ to 209 .

Free Recall (Part 1)						
DVs:	U.S.		China		Nation x Valence	
	Positive (M)	Negative (M)	Positive (M)	Negative (M)	F	p
Frequency (lower values = more recent)	3.73	4.93	4.60	4.69	7.12	0.008
Positive Reaction/Emojis	0.88	0.13	0.86	0.43	9.16	0.003
Negative Reaction/Emojis	0.04	0.34	0.07	0.39	0.02	n.s.
Nope Emoji	0.06	0.47	0.02	0.19	6.68	0.01
Anticipated Agreement	8.18	6.22	7.82	5.91	0.01	n.s.
Changeability	5.43	7.60	7.11	5.82	20.69	< .001

Summary of free recall. Overall, the results from the Free recall section of Study 2 supported our hypothesis that Chinese would have more frequent negative feedback exchange compared to Americans. However, anticipated friend's reactions did not always support the predictions, in that U.S. participants anticipated higher agreement from their friends when providing negative feedback compared to Chinese. Interestingly, the nope emoji usage suggested that even though participants rated nope emoji as a valence neutral emoji (see Figure 6), they associated it with more negative situations than positive. For this particular emoji, Chinese showed less expectation of nope emoji reaction from friends when providing negative feedback compared to American participants, which presumably aligned with our hypothesis that Chinese expected less negative emotional reactions (as emoji) when providing negative feedback.

Vignette Social Situations (Part 2)

In Part 2 of the study, we generally expected Chinese to believe their critical feedback was more negative compared to American participants. We also expected that in the negative situation vignettes, Chinese would show higher expectation of their friends' positive emotional reaction, agreement, and generally perceive larger influence of their feedback compared to those American participants. No cultural difference was expected in the positive situation vignettes. We ran a between-groups 2 x 2 ANOVA with the independent variables to be Nation (U.S. vs. China) and Vignette Valence (positive vs. negative). The data file was split by vignette context for all data analysis. See Table 8 for the statistics of two-way interactions for each dependent variables.

Self-rating of feedback valence. Would Chinese and American participants differ in how positive they thought their own feedback was? We predicted that Chinese participants would rate their negative feedback more negatively (or less positively) compared to U.S. participants, while both nations would rate the positive feedback in both scenarios approximately the same.

Academic scenario. As predicted, the Nation x Vignette Valence two-way interaction was significant $F(1,209)= 9.24, p= .003$, in that American participants rated their feedback more positively in the positive vignette compared to the feedback provided in negative vignettes. Chinese participants rated their negative feedback more positively than positive feedback, but the overall rating of feedback was lower than Americans'. In supporting our prediction, the main effect for Nation was significant, $F(1,209)= 99.08, p< .001$, such that American participants overall rated their feedback more positively compared to Chinese participants.

Communication scenario. Similar to the result found in the Academic scenario, the main effect for Nation was significant, $F(1,209)= 47.57, p< .001$, such that, overall, American participants rated their feedback more positively compared to Chinese participants. Of less interest, the main effect of Vignette valence was significant, $F(1,209)= 10.10, p= .002$. The Nation x Vignette Valence two-way interaction was not significant, $F(1,209)= 1.94, p= n.s.$

Therefore, the results generally supported our prediction that Chinese rated their feedback lower compared to American participants. Chinese participants rated their negative feedback more positively than supportive feedback, but only in the Academic situations.

Intentions. As an exploration, we were interested in whether Chinese and American participants justify their intention differently when asked to provide different feedback in different vignette situations? Among the six intentions, we were most interested in examining if there were cultural differences in choosing “to comfort him/her” and “to be truthful” as the intention.

Academic scenario.

Truthfulness. No significant Nation x Vignette Valence two-way interaction was found in the academic scenario, $F(1,209)= 0.04$, $p= n.s.$

Comforting. The Nation x Vignette Valence two-way interaction was significant, $F(1,209)= 6.263$, $p= .013$, in using “to comfort him/her” as the intention for providing feedback. More American participants selected comforting as their intention for providing positive feedback compared to providing negative feedback, whereas Chinese participants thought it is equally comforting to friends regardless of the valence of the feedback. The main effect of Vignette valence was also significant, in that overall, more participants chose more comforting as their intention for positive feedback than for negative feedback, $F(1,209)= 7.510$, $p= .007$.

Communication scenario.

Truthfulness. Compared to the null results from the Academic scenario, the main effect of Nation was significant, $F(1, 209)= 16.360$, $p< .001$, such that overall, more American participants chose truthfulness as their justification of providing feedback compared to Chinese participants. The main effect of Vignette Valence was significant, $F(1, 209)= 5.369$, $p= .021$, such that participants chose truthfulness as their justification more often when they provided negative feedback compared to when they

provided positive ones. No significant Nation x Vignette Valence two-way interaction was found, $F(1,209)= 1.41, p= n.s.$

Comforting. The Nation x Vignette Valence two-way interaction was significant, $F(1, 209)= 10.65, p= .001$. Similar to what was found in the Academic scenario, Americans indicated that positive feedback was delivered more as comfort to friends compared to negative feedback. Chinese participants behaved in the similar trend, but to a lesser degree. Of less interest, the main effect of Vignette Valence was significant, $F(1, 209)= 33.68, p< .001$.

Overall, in both academic and communication scenarios, American participants thought positive feedback serves the function to comfort their friends compared to Chinese participants. Truthfulness was used more in American participants for explaining their intention compared to Chinese participants.

Emoji sent. Would Chinese and American participants use emoji differently when providing different feedback to their friends? We ran between-groups 2 x 2 ANOVA, in which the dependent variables were Positive Emojis, Negative Emojis, and Nope Emoji. We predicted that American participants would use more negative emoji when providing negative feedback compared to Chinese participant, and Chinese participants would use more positive emojis compared to American participants.

Academic scenario.

Positive emojis. The main effect of Nation was significant, $F(1, 209)= 6.078, p< .001$, such that, overall, Chinese participants were more likely to use positive emoji compared to American participants. Of less interest, the main effect of Vignette

valence was also significant, $F(1)= 15.377, p < .001$. No significant Nation x Vignette Valence was found, $F(1,209)= 2.72, p = n.s.$

Negative emojis. The main effect of Vignette Valence was significant, $F(1, 209)= 8.34, p = .004$, such that participants used more negative emojis when providing negative feedback compared to when providing positive feedback. No significant Nation x Vignette Valence was found, $F(1,209)= 2.96, p = n.s.$

Nope emoji. The same pattern was found for Nope Emoji usage, with the Vignette Valence main effect of $F(1, 209)= 11.691, p = .001$. No significant Nation x Vignette Valence was found, $F(1,209)= 1.691, p = n.s.$

Communication scenario.

Positive emoji. As with the Academic scenario, we found the main effect of Nation was significant, $F(1, 208)= 19.597, p < .001$, such that Chinese participants generally sent more positive emojis compared to American participants. Of less interest, the main effect of Vignette Valence was also significant, $F(1, 208)= 12.381, p = .001$. No significant Nation x Vignette Valence was found, $F(1,209)= 3.17, p = n.s.$

Negative emoji. The main effect of Nation was significant, $F(1, 208)= 4.287, p = .04$, such that American participants sent more negative emojis compared to Chinese participants. Of less interest, the main effect of Vignette Valence, as found in the Academic scenario, was marginally significant, $F(1, 208)= 3.923, p = .049$. The Nation x Vignette Valence two-way interaction was not significant, $F(1,209)= 2.04, p = n.s.$

Nope emoji. The main effect of Nation was marginally significant for nope emoji usage during feedback exchange in the communication scenarios, $F(1, 208)= 3.937, p = .049$. The pattern indicated that more U.S. participants sent more nope

emojis compared to Chinese participants in the communication scenario. The Nation x Vignette Valence two-way interaction was not significant, $F(1,208)= 0.841, p= n.s.$

In sum, even though the results did not support our interaction prediction, the patterns were generally consistent with our hypothesis that American participants used more negative emojis compared to Chinese participants, and Chinese used more positive emojis when delivering feedback exchange.

Anticipated emotional reactions. Would Chinese and American participants anticipate their friends' emotional reactions differently they provided different feedback? We were mostly interested in participants' anticipation of what "my friends will be..." category. We ran a between-groups 2 x 2 ANOVA for each type of emotions in the "my friends will be..." category. The dependent variables were Negative Emotions, Positive Emotions and Surprise. We predicted that Chinese participants would anticipate more positive emotional reaction (and less negative emotions) from friends when providing negative feedback; American participants would expect more negative emotional reactions when providing negative feedback, and more positive emotions when providing positive feedback compared to Chinese participants.

Academic scenario.

Negative emotional reaction. The Nation main effect was significant, $F(1, 209) = 14.938, p < .001$, indicating that, overall, U.S. participants anticipated more negative emotional reaction from their friends than Chinese in the Academic scenario. Of less interest, the main effect of Vignette Valence was also significant, $F(1, 209)= 9.96, p= .002$. No significant Nation x Vignette Valence two-way interaction was found, $F(1,209)= 2.27, p= n.s.$

Positive emotional reaction. The main effect of Vignette Valence was significant, $F(1, 209) = 8.230, p = .005$, such that participants generally expected more positive emotional reactions when providing positive feedback compared to when providing negative ones. No significant Nation x Vignette Valence two-way interaction was found, $F(1, 209) = 2.46, p = n.s.$

Surprised. The main effect of Vignette Valence was significant, $F(1, 209) = 4.962, p = .027$, indicating that when providing negative feedback, participants expected to see more surprise emotions when providing negative feedback compared to when providing positive ones. No significant Nation x Vignette Valence two-way interaction was found, $F(1, 209) = 0.05, p = n.s.$

Communication scenario.

Negative emotional reaction. In the communication scenario, the Nation x Vignette Valence two-way interaction was significant, $F(1, 209) = 16.18, p < .001$. As predicted, the pattern suggested that American participants anticipated more negative emotions from friends when providing negative feedback compared to when providing positive ones. However, Chinese participants expected approximately the same amount of negative emotional reactions from their friends, regardless if they were providing negative feedback or positive ones. Similar to the Academic scenario, the main effect of Nation was significant, $F(1, 209) = 37.73, p < .001$, and indicated that American participants generally anticipated more negative emotions from friends than Chinese participants did. Of less interest, the main effect of Vignette Valence was also significant, $F(1) = 22.29, p < .001$ (more anticipated negative emotions was expected when providing negative feedback).

Positive emotional reaction. The Nation x Vignette Valence two-way interaction was significant, $F(1, 209) = 7.25, p = .008$. Consistent with our prediction, the result indicated that Americans anticipated more positive emotional reactions from friends when providing positive feedback compared to when providing negative one. Chinese participants expected the positive emotional reaction in the same direction as American participants, but to a less magnitude. Of less interest, the main effect of Vignette Valence was also significant, $F(1, 209) = 35.03, p < .001$.

Surprised. Similar to the academic scenario, only the Vignette Valence main effect was significant, $F(1, 209) = 7.43, p = .007$, such that participants expected more surprise reaction from friends when they provided negative feedback compared to when they provide positive ones. The Nation x Vignette Valence was not significant, $F(1, 209) = 1.18, p = n.s.$

Overall, the results supported our prediction of American participants' anticipation of friends' emotional reactions during feedback exchange. In general, American participants expected more negative emotion reactions towards negative feedback, and more positive emotion reactions toward positive feedback. Chinese participants generally anticipate their friends' reaction the same way as American participants did. However, consistent with our prediction, Chinese participants' expectation of negative emotional reactions when providing negative feedback was generally lower compared to American participants in both scenarios.

Anticipated agreement. Would Chinese and Americans participants differ in their anticipation of their friends' agreement, understanding, and appreciation on the feedback they provided in different social situation vignettes? We expected that Chinese participants would anticipate higher agreement, understanding, and

appreciation from friends when providing negative feedback compared to U.S. participants.

Academic scenario. No significant Nation x Vignette Valence was found in the academic scenario, $F(1,209)= 1.26, p= n.s.$

Communication scenario. In the communication scenario, the Nation x Vignette Valence two-way interaction was significant, $F(1, 209)= 18.09, p< .001.$ The pattern showed that American participants anticipated more agreement, understanding, and appreciation from friends when providing positive feedback compared to when providing negative ones. Chinese participants anticipated the agreement, understanding, and appreciation approximately the same regardless of the valence of the feedback. Of less interest, the main effect of Vignette Valence was also significant, $F(1, 209)= 16.523, p< .001.$

Changeability. How would Chinese and American participants rate the improbability of the feedback topic in the given social scenario vignettes? We predicted that American participants would rate the changeability lower in negative feedback compared to Chinese participants. No cultural difference for positive feedback was expected between Chinese and Americans. We ran a 2 x 2 ANOVA, with the dependent variable to be the anticipated agreement.

Academic scenario. In the academic scenario, the Nation x Vignette Valence two-way interaction was significant, $F(1, 209)= 14.97, p< .001.$ However, the pattern was in the opposite direction with our prediction, such that American participants thought there was more possibility of improvement regarding the negative feedback compared to feedback that was positive. Chinese participants perceived similar potential for improvement regardless of the valence of the feedback that they

provided. Of less interest, the main effect of Vignette Valence was also significant $F(1, 209) = 17.759, p < .001$.

Communication scenario. In the communication scenario, no significant Nation x Vignette Valence two-way interactions was found, $F(1,209) = 0.87, p = n.s.$

Therefore, the results were in the opposite direction of our prediction that U.S. participants suggested higher improvability of the feedback topic when providing negative feedback, while Chinese participants did not differ in their expectation on the improvability of feedback in either valence. This result might indicate that when “required” to provide negative feedback in particular situations, U.S. participants might use high-improvability to justify their emotional discomfort in providing negative feedback. In contrast, among Chinese friends, negative feedback was commonly exchanged, so there might be less emotional discomfort to be adjusted for.

Impact of the feedback. Would Chinese and American participants evaluate the impact of their feedback differently? We predicted that American participants would rate their feedback being less impactful on friends’ behaviors and the relationship, whereas Chinese participants would rate their feedback to be more influential on both behaviors and the friendship. We ran 2 x 2 ANOVAs, with the dependent variables being the ratings of friends’ behavior change, and the ratings of friendship change.

Behavior change. What would Chinese and American participants anticipate about the influence of their feedback on their friends’ behavioral change?

Academic scenario. In the academic scenario, the Nation x Vignette Valence was significant, $F(1,209) = 7.95, p = .005$. The pattern indicated that American rated higher possibility of their friends’ behavior change when they provided negative

feedback compared to positive feedback. On the other hand, Chinese participants rated their friends' behavior changes approximately the same regardless of the valence of the feedback. In supporting our prediction, the main effect of Nation was also significant, $F(1,209)= 20.75, p < .001$, such that, Chinese perceived higher influence of their feedback on friends' behavior change compared to American participants, regarding the feedback valence. Also, the Vignette Valence was also significant, $F(1,209)= 5.824, p = .017$, such that, in general, participants expect more friends' behavior change when providing negative feedback than positive feedback.

Communication scenario. The Nation x Vignette Valence two-way interaction was significant $F(1, 209)= 9.50, p = .002$. Different from the pattern from the Academic scenario, the result indicated that American participants rated higher impact of the feedback on their friends' behavior change when they provided positive feedback compared to the feedback that was negative. In contrast, Chinese participants assumed the opposite, that their feedback would be more influential when it was negative compared to when the feedback was positive. The main effect of Nation was significant, $F(1, 209)= 10.314, p = .002$, suggesting that overall, Chinese participants expected their feedback to be more influential to their friends' behavior than American participants did. Of less interest, the main effect of Vignette Valence was significant, $F(1, 209)= 4.206, p = .042$.

Impact on friendship. Would Chinese and American participants differ in how they perceive the impact of their feedback on their friendship?

Academic scenario. No significant Nation x Vignette Valence interaction was found in the academic scenario, $F(1, 209)= 0.21, p = n.s.$

Communication scenario. The Nation x Vignette Valence two-way interaction was significant, $F(1, 209) = 4.21, p = .041$. The pattern suggested that American participants assumed their positive feedback would have a positive influence on their friendship compared to when the feedback was negative. In contrast, Chinese participants assumed their feedback would not make much differences on their friendship, regardless of the feedback valence. Of less interest, the main effect of Vignette Valence was significant, $F(1, 209) = 4.252, p = .04$.

Therefore, the results supported our prediction that overall, Chinese participants perceived higher influence of their feedback on their friends' behavior change than did American participants did. In addition, the results also indicated that valence affected how American participants anticipated the influence of their feedback, while valence did not show an obvious effect on Chinese' perception of their feedback impact.

Table 8. *Study 2: Academic Scenario Two-Way Interaction. Error df= 208 to 209*

Social Situation Vignettes - Academic Scenario						
DVs:	U.S.		China		Nation x Valence	
	Positive (M)	Negative (M)	Positive (M)	Negative (M)	F	p
Self-Rating of Feedback Valence	3.26	2.26	-1.21	-0.13	9.24	0.003
Intention - Truthful	0.32	0.33	0.23	0.21	0.04	<i>n.s.</i>
Intention - Comforting	0.79	0.45	0.62	0.61	6.26	0.013
Positive Emoji	0.45	0.55	0.60	0.68	2.72	<i>n.s.</i>
Negative Emoji	0.17	0.22	0.25	0.21	2.96	<i>n.s.</i>
Nope Emoji	0.32	0.22	0.13	0.07	1.69	<i>n.s.</i>
Negative Emotional Reaction	0.38	0.86	0.13	0.30	2.27	<i>n.s.</i>
Positive Emotional Reaction	1.70	1.31	1.43	1.32	2.46	<i>n.s.</i>
Surprised	0.23	0.39	0.11	0.25	0.05	<i>n.s.</i>
Anticipated Agreement	7.39	7.28	7.45	6.91	1.26	<i>n.s.</i>
Changeability	5.77	8.22	6.72	6.82	14.97	< .001
Impact on Behavior	4.40	5.88	6.49	6.38	7.95	0.005
Impact on Friendship	0.19	0.20	0.34	0.29	0.21	<i>n.s.</i>

Table 9. *Study 2: Communication Scenario Two-Way Interactions. Error df= 208 to 209.*

Social situation vignettes - Communication Scenario						
DVs:	U.S.		China		Nation x Valence	
	Positive (M)	Negative (M)	Positive (M)	Negative (M)	F	p
Self-Rating of Feedback Valence	3.04	1.47	0.20	-0.42	1.94	<i>n.s.</i>
Intention - Truthful	0.43	0.60	0.20	0.32	1.41	<i>n.s.</i>
Intention - Comforting	0.65	0.11	0.36	0.21	10.65	0.001
Positive Emoji	0.74	0.43	0.89	0.79	3.17	<i>n.s.</i>
Negative Emoji	0.60	0.19	0.04	0.06	2.04	<i>n.s.</i>
Nope Emoji	0.12	0.23	0.07	0.09	0.84	<i>n.s.</i>
Negative Emotional Reaction	0.33	1.34	0.09	0.17	16.18	< .001
Positive Emotional Reaction	1.47	0.66	1.30	1.00	7.25	0.008
Surprised	0.22	0.51	0.23	0.36	1.18	<i>n.s.</i>
Anticipated Agreement	7.70	6.16	7.06	7.09	18.09	< .001
Changeability	6.63	6.23	6.61	6.74	0.87	<i>n.s.</i>
Impact on Behavior	6.37	4.85	6.72	6.41	9.50	0.002
Impact on Friendship	0.35	0.09	0.32	0.32	4.21	0.041

Summary of social situation vignettes. In summary, the results from the Social situation vignettes (Part 2) of Study 2 were mixed. Overall, the findings supported our prediction on American participants' behavior when providing feedback, in that the positive feedback exchange was more recent/frequent, their anticipation of friends' emotional reaction aligned with the valence of the feedback provided, and they also perceive less influence of their feedback on their friends' behavior compared to Chinese. On the other hand, American participants also showed higher anticipated agreement when providing negative feedback, and indicated higher changeability of negative feedback topics compared to Chinese participants. It is possible that American participants presumed more agreement and changeability from friends and feedback topics, respectively, in part to adjust their emotional discomfort when asked to provide negative feedback to friends. As we hypothesized that Chinese participant would have more positive attitudes toward negative, this emotional discomfort adjustment was not necessary, so that the feedback valence had small effect on the perceived changeability and anticipated agreement regarding the feedback provided. Also, communication vignette prompts generally showed more consistency with our prediction compared to academic vignettes, and this might due to the ambiguous content within the message (see Appendix 2 for exact vignette content).

Proposed Mediators

We tested if the three proposed mediators showed significant cultural differences using Independent Sample T-tests. See Table 10 for detailed statistics. Overall, as expected, Chinese used more social membership-oriented phrases, such as “daughter,” “student,” or “citizen,” to define themselves in TST task, and Americans

use more individual-oriented phrases, such as “smart,” “genius,” or “outgoing,” to define themselves. Changeability results were presented in the Results section along with each manipulation. Generally, opposite with our prediction, Americans indicated higher changeability when providing negative feedback compared to Chinese. No cultural difference was found in relational mobility in current study.

We also explored if the three proposed mediators, self-construal, changeability, and relational mobility could explain the observed culture difference in feedback exchange among friends. Unfortunately, none of the three proposed mediators predicted the cultural differences found in Study 2. See Appendix 3 for detailed mediation report.

Table 10. *Study 2: Descriptive Statistics Associated with the Mediators*

Mediators	U.S.		China	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
TST-B	3.40	2.90	4.51	2.81
TST-C	5.69	2.99	4.71	3.04
Relational Mobility	4.69	0.94	4.71	0.82

Post-hoc Mediator – Anticipated Agreement

Although anticipated agreement was not one of the proposed mediators at the beginning, we explored whether anticipated agreement can explain the culture difference in feedback exchange post-hoc. Data analysis was the same as for the proposed mediators, and the results indicated that Anticipated agreement, successfully explained the cultural difference in Anticipated Negative Emotions in when providing

negative feedback in the communication situation vignettes. See Appendix 3 for detailed mediation analysis.

Discussion: Study 2

Cultural differences in providing feedback

In general, our Study 2 results suggested some interesting patterns for how Chinese provide negative feedback, in comparison with Americans. First of all, Study 2 results supported our predictions that negative feedback occurred more frequently among Chinese friends in everyday life compared to Americans. However, Chinese friends tended to deliver this feedback in a more positive way (via positive emoji usage) in general. When asked to evaluate their own feedback, although Chinese rated their feedback to be more negative compared to Americans, they expected their friends to respond with less negative emotions, compared to American participants. Chinese also expected their feedback to be more influential in general on their friends' behavior. Contrary to what we expected, Chinese generally did not perceive their friends to show more agreement to the feedback, nor did they expect greater changeability with the negative feedback than positive feedback.

In contrast, American participants expected more agreement, understanding and appreciation from friends when providing negative feedback, compared to positive feedback. Americans also suggested that there was greater possibility for improvement after their negative feedback, compared to after giving positive feedback. As predicted, Americans generally expected their friends' emotional reaction to be consistent with the valence of the feedback, and they generally presumed their

feedback to be less impactful on friend's behavior, compared to nation or feedback type?

Taken together, compared to Chinese participants, American participants showed a tendency to provide less negative feedback and more positive feedback in daily friendship interactions, and they tended to evaluate their feedback more positively compared to Chinese. In situations when negative feedback was necessary, Americans generally anticipated more agreement and positive reactions from friends compared to Chinese participants. On the other hand, Chinese participants' answers generally suggested that negative feedback exchange was a relatively common practice in daily friendship interactions. In general, Chinese rated their feedback to be less positive compared to Americans, and they expected less negative emotional reactions from their friend when providing negative feedback compared to Americans. The emoji usage results suggested that Chinese tend to deliver the feedback in a more positive manner compared to Americans in general, and Chinese participants also expected their feedback to be more influential in changing their friends' behaviors compared to Americans.

Mediators

None of the three proposed mediators statistically explained the cultural differences observed in feedback exchange among American and Chinese friends. One reason might be cultural change. Specifically, recent research has indicated that China has merged as the "middle land" between individualistic and collectivistic culture, in that the Chinese are almost as individualistic as Americans (Li, Zhang, Bhatt, & Yum, 2006), and the authors denoted this trend partly due to Chinese emerging economic power and trading activities around the world.

In a post-hoc analysis, anticipated agreement showed significant mediating effect of the cultural differences in anticipated negative emotion reactions of friends when gave negative feedback in the communication social situation vignettes. This indicated that in the communication social scenario, Chinese participants were more likely to show lower anticipated agreement, and the lower anticipated agreement was associated with less negative emotional reaction when receiving negative feedback from friends. However, this mediating effect should be interpreted with caution because the likelihood of Type I error is high, given the large quantity of the variables being analyzed in the current study.

Chapter 4

General Discussion

Overall, with this current project, we found cultural differences in feedback exchange among friends, such that Chinese, as measured by many variables, had more positive attitudes toward negative feedback exchange, either receiving or giving, when compared to American participants.

In Study 1, we examined the interpretation of basic emojis (blush, smile, surprise, angry, smirk and frown), and confirmed that both cultures interpreted the six emojis generally the same regarding to the valence, emotions, and associated phrases. We also used emojis as a dependent variable to investigate the culture difference in negative feedback receptions between Chinese and Americans, and found that more Chinese showed positive emotional response via emoji usage after receiving negative feedback from friends compared to Americans. In addition, we also discovered that feedback givers used more positive emojis during feedback exchange in general, especially during negative feedback exchange. Several possibilities might be able to explain this role difference during feedback exchange. First, unlike feedback receivers, feedback givers tend to be the initiator during an interactive communication, and providing negative feedback voluntarily might presumably be more irritating than receiving a negative feedback for the feedback giver. Also, it is expected that negative feedback, such as criticisms, would cause uncomfortable feelings for feedback receiver. In order to deliver the negative information in a less irritating way, and to make it easier for feedback receiver to accept the information, it became necessary for

feedback givers to show more positive feelings and intentions when delivering the feedback.

In Study 2, we examined the cultural difference in feedback exchange focusing on feedback givers' perspectives, and examined the three proposed mediators. The results overall indicated a balance-oriented feedback exchange characteristic among Chinese. More specifically, even though negative feedback exchange occurred more recently compared to American participants, Chinese also used more positive emojis (as emotion expression) when providing feedback. Chinese also expected their friends to react more positively towards their criticisms than praise. In American participants, the results consistently showed that Americans prefer positivity and valence congruency during feedback exchange. Most Americans provided positive feedback recently, and they expected their friends' emotional reaction to be the same as the valence of the feedback valence, such that they expected more positive emotional reactions from friends when providing positive feedback, and more negative emotional reactions when the feedback was negative. American participants generally evaluate their feedback to be more positive, regardless of the feedback valence compared to Chinese participants.

One limitation of this project is that there were many dependent variables, and the chance of type I error to occur seems likely during our data analysis. Therefore, replication of the current results is essential to validate our finding results. Also, the design of social situation vignettes in Study 2 was not fully crossed, in that participants were randomly assigned to either negative academic and positive communication vignettes (block 1), or positive academic and negative communication

vignette (block 2). This design created a lot of confusion and trouble in presenting the data in a clear manner.

In the current studies, the main goals were to investigate the differences in positive and negative emotional reactions during feedback exchange in interpersonal interaction, especially among friends. The emojis used in the two studies were mainly categorized to be positive or negative based on their valence rating scores. This simplified categorization may have failed to capture subtler feelings associated with individual emojis, such as shame and pride. Because of this, the valence categorization, especially for negative emojis, might have limited our potential to examine participants' intentions of different emotion expressions. More specifically, a frown emoji can be used to express personal negative feeling, but it can also be used to express empathy during feedback exchange. This difference in intention was a potentially important question that we did not address in the two studies.

Although individual results might be attributable to Type I error, the overall pattern of results was highly consistent with the direction of our hypothesis, that East Asians had less negative/more positive attitudes during negative feedback exchange compared to American participants. Also, the dependent measures (emojis) and feedback vignettes (text messages) used in current project mimicked real life feedback exchange among friends, and these operations were different from previous lab research, yet the results still showed agreement in the our general hypothesis. In addition, the East Asian sample population in current project were Chinese, while previous results were mainly based on Koreans, and the results in this project were consistent with previous research findings (Lee & Morling, 2016) that East Asians showed more positive attitudes towards negative feedback compared to European

Americans. Therefore, the cultural differences in feedback exchange found in this research should be relatively valid.

Future Studies

Integrating the results from Study 1 and Study 2, we found one pattern to be intriguing and puzzling. Negative feedback exchange appeared to be more common among Chinese friends compared to Americans, and Chinese participants generally think that their friends' would agree with their criticism more, and thus show more positive emotional reactions regarding the criticisms that they provided. However, Chinese participants also indicated that it is harder for their friends to improve with practice or effort regarding their criticism. In addition, while Chinese participants did not anticipate changeability/improvability for their friends, they further indicated that their negative feedback would play a relatively important role in in changing friend's behaviors. One possible explanation might related to the concept of Yin-Yang in the Chinese philosophy, in which two contradictory elements can exist at the same time (Peng & Nisbett, 1999). Like the small white (black) dot standing inside the opposite-colored hemisphere in a Yin-Yang symbol, even though there is not much an individual can change in a tough situation, facing the problem/hardship with positive attitudes and putting the effort to try is the least that one can do. Research on Chinese communication has shown that this paradoxical, Yin-Yang-oriented communication style has been historically and culturally nourished, and it is still a powerful and predominant communication characteristic in Chinese Society (Fang & Faure, 2011). Future studies can look into the intentions of providing negative feedback more in detail, such that does the negative feedback serves as encouragement, support, or

reminder, as well as to investigate more in detail regarding the purpose of emoji usage, does it show empathy or personal feeling toward the feedback?

Conclusion

In conclusion, we replicated the previous findings in the lab, in which East Asians showed more positive/less negative attitudes in receiving negative feedback during friendship interaction. In expanding previous research, we also found cultural consistency in interpreting the emojis in terms of their valence, emotional feelings, as well as phrases associated. We also found differences in feedback givers and receivers in feedback exchange, such that feedback givers tended to express more positive emotions when providing feedback, especially when delivering negative feedback. The three proposed mediators: self-construal, changeability, and relational mobility did not explain the observed cultural differences in current project, but anticipated agreement partially explained the cultural differences in feedback exchange. The seemingly contradictory answers, such that Chinese participants generally tend to provide more negative feedback, and Chinese expected lower changeability for their friends with their criticisms, might prompt further investigation into the intention behind the negative feedback exchange among friends.

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Appendix A

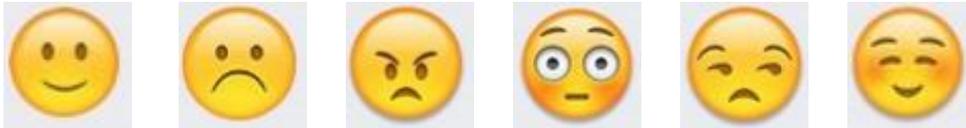
STUDY 1 – SURVEY ITEMS

Instructions: For this study, you will be presented with a series of emojis. Look through each of them and answer the questions below. Please note that you are not required to answer questions that may make you feel uncomfortable.

Note: the emojis used in this study come from iOS system. It is okay that you might not be very familiar with these emojis; just answer the following questions based on your interpretation of each emoji.

Part 1: Pretesting Emoji (What emotions are these Emoji conveying?)

1. What kind of feeling(s) would you use to describe this emoji? (Open ended question)



2. Emojis often express several emotions at once. For example, you might think an emoji means somebody is mostly happy, but also a little bit sad or angry, too.

Please indicate how much of each emotion you think the following emoji expresses. Your numbers should add up to 100%.

- a. Happiness
 - b. Sadness
 - c. Anger
 - d. Appreciation/ Gratitude
 - e. Frustration/ Annoyance
 - f. Surprise
 - g. Rejection
 - h. Other emotion(s) not listed
3. Please rate the extent to which you think this emoji is overall negative or positive. Rating scale -3 (overall negative, -2, -1, 0 (neutral), +1, +2, +3 (overall positive))

4. Please rate whether the following phrases best captures the feeling(s) of the emoji above?

Rating scale 0 (Not at all), 1 (A little) 2(a lot)

- a. “Shut up!” (negative anger)
- b. “This is not happening” (stressed)
- c. “Whatever ...” (disagreement)
- d. “Seriously?”
- e. “I can’t believe you said that” (disbelief)
- f. “What!!??” (surprise)
- g. “Interesting...Let me think about it” (neutral surprise)
- h. “Oops, my bad” (I’m embarrassed)
- i. “Love you”
- j. “You’re the best!”
- k. “You can do it!”
- l. Other (Please use your own words to describe a phrase you might use to capture of the feeling of this emoji.)

Relational Mobility

How much do each of the following statements accurately describe the people in the immediate society (your school, workplace, town, neighborhood, etc.) in which you live?

Please indicate how much you agree with each statement.

Rating scale 1(strongly disagree) to 7 (strongly agree).

- In general, people are able to get to know a lot of other people.
- For the most part, people are able to choose those who they interact with.
- Even though they would rather leave, people often have no choice, but to stay in groups they don't like.
- It is common for people to have a conversation with someone they have never met before.
- For the most part, people are able to choose the groups and organizations they belong to.
- Even if people are not satisfied with their current relationships, they often have no choice but to stay with them.
- In most circumstances, it is easy for people to make new acquaintances.
- If people do not like their current groups or relationships, they will tend to leave that group or relationship for a new one.
- Even if one belongs to an inferior group, most people have no choice but to stay in that group.
- It is strange for people to have a conversation with someone they do not know.

- It is often the case that people cannot freely choose who they associate with.
- Even if one is unhappy with the group they belong to, they will usually stay with it anyway.

Part 2: Emoji Usage (How do people use Emojis in their own lives?)

(Note: Randomly assign people to 3 Emoji- create blocks of emoji for #1 and #2; block #1 contains smile, angry and smirk; block #2 contains frown, surprise, blush)

1. Briefly describe a conversation/ situation in which you have used, or might use this emoji.

Open ended:

Closed ended:

2. Please indicate which situation(s) you have used, or might use this emoji.

Rating scale 0 (Not at all), 1 (A little) 2(a lot)

- If my friend said or did something I didn't agree with.
- If my friend was trying to be silly, and I wanted to play along.
- If my friend had had a bad day and I wanted to comfort her.
- If my friend told me something really nice about me—but I didn't agree with it
- If my friend told me something kind of critical about me—but I didn't agree with it
- If my friend was saying something really nice and I did agree with her
- If my friend had just made a mistake or did something risky.
- If my friend said something critical about me –but I appreciated her honesty.

3. How often have you used this (or a similar type of) emoji?

0 (I have never used this emoji before)

1 (I have rarely use this emoji)

2 (I use this emoji about once a day)

3 (I use this emoji multiple times a day)

4 (This is the emoji that I use the MOST)

4. Think about your closest same-sex friend. Put down her initials or nickname here:

Imagine that you are **giving** your friend the following comment in a text message to the friend that you indicated above. Which emoji would you be most likely to

add at the end of your text message? (This could be text message screenshots in the Qualtrics version, or it could just be in writing form)

Note: Randomly present the vignettes

- Positive vignette (academics)
 - o I know you are concerned about whether your major is the right choice for the career goal you have in mind. You should have faith in yourself- I'm confident that you're making the right decisions.
- Negative vignette (physical appearance)
 - o You looked really tired and pale in class today. You had really dark under eye circles!
- Negative vignette (academics)
 - o I know you are concerned about whether your major is the right choice for the career goal you have in mind. If you aren't sure about it, you should reevaluate your major and career decisions.
- Positive vignette (physical appearance)
 - o You looked really good in class today. Your skin was glowing!

Screenshot example of feedback giver:

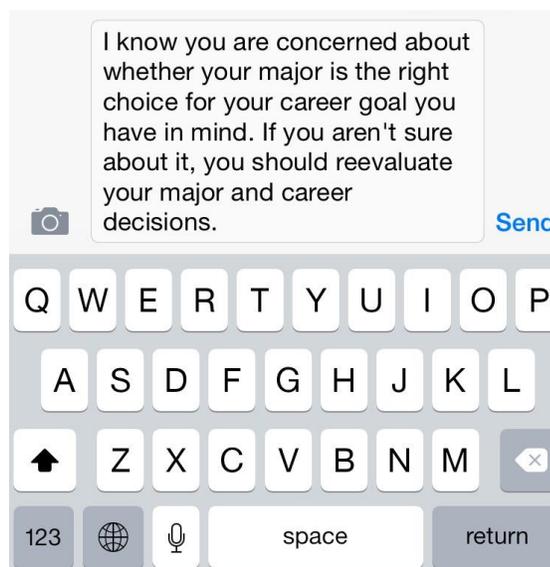


Figure 6. Study 1: Feedback Vignette Screenshot Example (Giver)

Now, imagine that you **received** the following comment in a text message from the friend you indicated above. Imagine that you are going to respond to your friend. If you had to select one emoji as a response, which one would you use?

- Positive vignette (academics)
 - I know you are concerned about whether your major is the right choice for the career goal you have in mind. You should have faith in yourself- I'm confident that you're making the right decisions.
- Negative vignette (physical appearance)
 - You looked really tired and pale in class today. You had really dark under eye circles!
- Negative vignette (academics)
 - I know you are concerned about whether your major is the right choice for the career goal you have in mind. If you aren't sure about it, you should reevaluate your major and career decisions.
- Positive vignette (physical appearance)
 - You looked really good in class today. Your skin was glowing!

Screenshot example of feedback receiver:

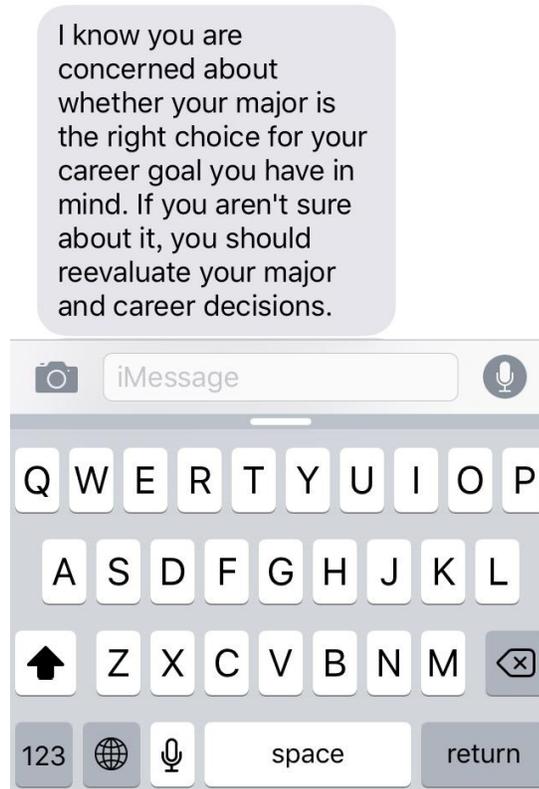


Figure 7. Study 1: Feedback Vignette Screenshot Example (Receiver)

Demographics

Brief Individualism/ Collectivism—Perceived consensus (Zou et al; Wan et al. wording)

Respond to the following items thinking about how people in your cultural think in general.

To what extent would fellow members of your culture think that their personal identity, independent of others, is very important to them?

To what extent would fellow members of your culture think that it is important to do their job better than others?

To what extent would fellow members of your culture feel good when they cooperate with others?

To what extent would fellow members of your culture think that it is important to respect the decisions made by their groups?

Age

Ethnicity/ Race

Which country did you live for the majority of your life?

What type of phone do you use?

Appendix B

STUDY 2 – SURVEY ITEMS

Emojis present in this study



Instructions:For this study, you will be presented with a series of emojis. Look through each of them and answer the questions below.

Note:The emojis used in this study come from an iOS system (iPhones). It is okay if you are not familiar with these emoji; just answer the following questions based on your interpretation of each emoji as it is shown here.

Emoji Valence Rating & Self-Construal (TST)

1. Please rate how positive or negative you think the following emoji is.

Scale bar [-3 ~ 3]

-3 = overall negative

3 = overall positive

2. Instruction:

In the following blank spaces, please list words or phrases that describe who you are, following each of the "I am" sentence stems. (Please write down the first things that come to mind. Answer as many of the spaces as you can.)

I am _____

Part 1: Free Recall of Feedback Exchange (How do provide feedback in real life)

(Note: Randomly assign people to either positive prompt or negative prompt, questions within each prompt will be the same)

1. Please think of your CLOSEST same gender FRIEND, and write down his/her initials.

Textbox

2. Do you see this person as a lifelong friend?

Scale bar [0 ~ 100]

0 = I am absolutely certain we will NOT be friends for life.

100 = I am absolutely certain we will always be friend.

Instructions: Please answer the following questions with regard to the CLOSEST friend that you just mentioned.

[Negative prompt]

Friends exchange feedback on a daily basis. Please think of a time when you gave your closest friend (the one you nominated just now) a **negative** feedback. For example: you might tell your friend that he/she spends too much time surfing on the Internet.

[positive prompt]

Friends exchange feedback on a daily basis. Please think of a time when you gave your closest friend (the one you nominated just now) some **positive** feedback. For example: you might tell your friend that he/she looks really good today.

3. What is the **topic** that you gave the feedback on?

Text box

4. What exactly did you say to your friend? Try to remember as accurately as possible

Text box

5. How long ago did this situation happened?

Multiple choice

- Today
- Yesterday
- about 3 days ago
- about a week ago
- about a month ago
- about a year ago
- more than a year ago

6. When you gave your friend the feedback, what was your friend's reaction? If your friend had selected an emoji to respond to you, which emoji do you think he/she would have sent?

Choose from the following emojis that could best represent your friend's reaction.

Multiple Choice

- 6 emojis
- Other(please describe):
 - Textbox

7. To what extent do you think that your friend **appreciated** the feedback you gave in the situation?

Scale [0 ~ 10]

0 = not at all

10 = completely

8. To what extent do you think that your friend **understood** your **intention** at the time?

Scale [0 ~ 10]

0 = not at all

10 = completely

9. To what extent do you think that your friend internally **agreed** with what you said?

Scale [0 ~ 10]

0 = not at all

10 = completely

10. Was the feedback about something that your friend is able to **change** with effort or practice?

Scale [0 ~ 10]

0 = not at all

10 = completely

Part 2: Social Situation Vignettes (How do people provide feedback under hypothetical situations?)

(Note: Vignettes were divided into two blocks, and randomly assign people to either block #1 or block #2; block #1 contains negative academic & positive communication vignettes, and block # 2 contains positive academic and negative communication vignettes. Questions within each block will be the same)

Instruction: Now we will show you a description of a hypothetical person. Please imagine that this person is your CLOSEST FRIEND that you wrote about in previous questions and respond to the items below.

Scenairos

[Negative_academic]

Your friend is a generous and nice person, but sometimes she/he doesn't work very hard as a student.

Now image that this is a text message exchange between you and your friend. (your friend is in grey, and you are in blue).

"Just got out of my math exam..."

"Feeling good?"

"Nope. The professor is terrible. Fast pace, lots of homework, exams are way too hard!"

"..." (Q: what would you say if you wanted to encourage your friend to put in more effort?)

[Positive_academic]

Your friend is a generous and nice person, and he/she Generally works hard as a student.

Now image that this is a text message exchange between you and your friend. (your friend is in grey, and you are in blue).

"Just finished the math exam..."

"Feeling good?"

"Not sure, I have no idea how I did..."

"..." (what would you say if you want to assure your friend that he/she is probably doing okay?)

[Negative_Communication]

Your friend is a generous and nice person, but sometimes he/she can be a bad communicator.

Now image that this is a text message exchange between you and your friend. (your friend is in grey, and you are in blue).

"Hey, what are you doing tonight?"

"working on my group project..."

"I thought you finished it already?"

"My teammates just won't give up their stupid ideas. Mine is clearly the way to go!"

"..." (what would you say if you want to encourage your friend to communicate well with her group?)

[Positive_Communication]

Your friend is a generous and nice person, and he/she has always been a good communicator with people.

Now image that this is a text message exchange between you and your friend. (your friend is in grey, and you are in blue).

"Hey, what are you doing tonight?"

"working on my group project..."

"I thought you finished it already?"

"My teammates have a lot of ideas... don't know if they'll work out. I'm just worried that I'm being too bossy!"

"..." (what would you say if you want to assure your friend that he/she is probably doing okay?)

Example of text message screenshot:



Figure 8. Study 2: Feedback Vignette Screenshot Example

Questions follow every vignettes:

1. Imagine that you are going to send a text message back to your friend. Please write down what would you say if you wanted to encourage your friend to (...content varies depending on the scenarios given).

Text box

2. In your own view, how positive or negative do you think the text message you just gave?

Scale bar [-5 ~ 5]

-5 = overall negative

5 = overall positive

3. What is your intension in giving this response?(please select all that apply).

Multiple multiple choice

- To be helpful
- To be supportive
- To be truthful
- To comfort him/her
- To play safe
- To express my opinion
- Other: please specify
 - a. Textbox

4. Choose an emoji that you would send along with the text message.

Multiple choice

- 6 Emojis
- Other (please describe)
 - Textbox

5. Why did you pick this emoji to send along with the text message?

Textbox

6. Please IMAGE what your CLOSEST friend's immediate EMOTIONAL reaction will be when he/she sees your text message response (Please put at least one item in each box).

Items for drag and drop:

- Surprised
- Confused
- Angry
- Sad
- Happy
- Grateful
- Defensive
- Embarrassed
- Denial
- Rejected

boxes:

1. he/she will be
2. he/she will not be

7. To what extent do you think that your friend will **appreciate** this feedback?

Scale [0 ~ 10]

0 = not at all

10 = completely

8. To what extent do you think that your friend **understand** your **intention**?

Scale [0 ~ 10]

0 = not at all

10 = completely

9. To what extent do you think that your friend will **agree** with what you said?

Scale [0 ~ 10]

0 = not at all

10 = completely

10. To what extent do you think this is something that your friend is able to **change** with effort or practice?

Scale [0 ~ 10]

0 = not at all

10 = completely

11. To what extent do you think that your friend will **actually make changes** based on your message?

Scale [0 ~ 10]

0 = not at all

10 = completely

12. How do you think your text message response will impact your **FRIENDSHIP** with this friend (eventually)?

multiple choice

- Make us closer
- make us less close
- become more stable
- nothing will change
- Other: (please specify)

Relational Mobility Scale

You are almost done! Next we will ask you a number of questions about yourself. How much do each of the following statements accurately describe the people in the immediate society (your school, workplace, town, neighborhood, etc.) in which you live?

Matrix table

- Please indicate how much you agree with each statement.
- In general, people are able to get to know a lot of other people.
- For the most part, people are able to choose those who they interact with.

- Even though they would rather leave, people often have no choice, but to stay in groups they don't like.
- It is common for people to have a conversation with someone they have never met before.
- For the most part, people are able to choose the groups and organizations they belong to.
- Even if people are not satisfied with their current relationships, they often have no choice but to stay with them.
- In most circumstances, it is easy for people to make new acquaintances.
- If people do not like their current groups or relationships, they will tend to leave that group or relationship for a new one.
- Even if one belongs to an inferior group, most people have no choice but to stay in that group.
- It is strange for people to have a conversation with someone they do not know.
- It is often the case that people cannot freely choose who they associate with.
- Even if one is unhappy with the group they belong to, they will usually stay with it anyway.

Demographic

1. What is your age?

Textbox

2. Do you identify as...?

Multiple Choice

- Male
- Female
- Other (please specify)

3. What is your ethnicity/race? (You may check more than one box if relevant).

Multiple choice

- Native American
- Asian/Pacific Islander
- Black/Africa American
- Hispanic
- White/Caucasian
- Other(please specify)

a. Textbox

4. Which country did you live for the majority of your life?

Textbox

5. What is the highest level of education that your mother has?

Multiple Choice

- Primary School
- High School

- Some College
- College Degree
- Graduate Degree

Appendix C
MEDIATION RESULTS

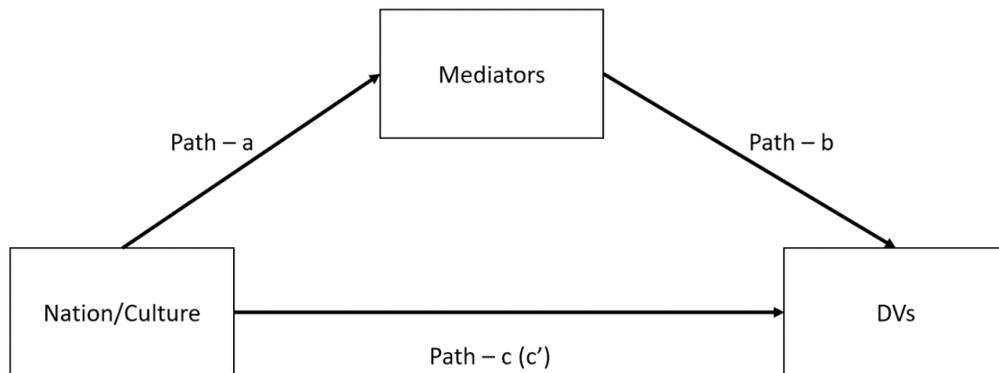


Figure 9. Mediation Pathway Diagram

Study 1: Emojis and Feedback receiver

In Study 1, only relational mobility was tested for mediation effect. We predicted that RM would explain the cultural differences in feedback exchange, such that Chinese would have lower relational mobility than Americans, and this lower relational mobility would be associated with lower usage of negative emoji in negative feedback exchange.

We used regression to examine potential association between Nation to dependent variables (path c), Nation to RM (path a), RM to dependent variables (path b), and both Nation and RM to dependent (path c'), and all dependent variables showed cultural differences were tested.

The Nation to Relational Mobility (RM) pathway (path a) was significant in Study 1, (path a: $B=-0.18$, $SE=0.052$, $p=0.001$).

Likelihood rating

Blush. The Nation to the likelihood of using blush emoji when the feedback nice and participants agreed with it (path c) was significant (path c: $B=-0.25$, $SE=0.095$, $p=0.012$), and RM to likelihood of using blush emoji was also significant (path b: $B=0.25$, $SE=0.12$, $p=0.041$). Nation to the likelihood of using blush emoji was still significant when controlling for RM (path c': $B=-0.21$, $SE=0.098$, $p=0.038$). However, Sobel test showed that the reduction was not significant.

When the feedback was critical and participants disagreed with it, Nation to the likelihood of using blush emoji was significant (path c: $B=0.25$, $SE=0.083$, $p=0.003$), but RM failed to show association in path b, so no further mediation test was performed.

Smile. Similar to the findings for blush emoji, when the feedback was critical and participants disagreed with it, Nation, the likelihood of using smile emoji and RM were significantly related each other (path c: $B=0.17$, $SE=0.06$, $p=0.003$; path b: $B=-$

0.28, SE=0.097, $p=0.005$; path c' : $B= 0.137$, SE=0.06, $p=0.017$), but the Sobel test showed the reduction of path c was not significant.

When the feedback was nice and the participants agreed with it, the Nation to the likelihood of using smile was significant (path c : $B= -0.14$, SE=0.059, $p=0.023$), RM was also significantly related to the likelihood of using smile emoji (path b : $B=0.26$, SE=0.10, $p=0.014$). However, the path c failed to show significant relationship when controlling for RM, therefore, no further mediation test was performed.

When the feedback was nice, but participants disagreed with it, the Nation to dependent variable, the likelihood of using smile emoji, was significant (path c : $B= 0.12$, SE=0.058, $p=0.049$), but path b was not significant, so no further mediation test was performed.

Frown. When the feedback was critical and participants disagreed with it, only Nation to the likelihood of using frown emoji (path c) was significant (path c : $B= -0.25$, SE=0.08, $p=0.003$), so no further mediation test was performed.

Smirk. When the feedback was nice and participants agreed with it, only Nation to the likelihood of using smirk emoji (path c) was significant (path c : $B=0.096$, SE=0.047, $p=0.046$), so no further mediation test was performed.

Emoji choice

When participants were the feedback receiver, and the feedback vignette was positive, the Nation, RM, and the number of positive emoji sent were significantly related to one another (path c : $B=-0.13$, SE=0.03, $p<0.001$; path b : $B= 0.1$, SE=0.046,

$p = 0.031$; path c' : $B = -0.13$, $SE = 0.03$, $p < 0.001$), but the Sobel test showed that the reduction was not significant.

When participants were the feedback giver, and the feedback vignette was positive, only Nation to the number of positive emoji sent (path c) was significant (path c : $B = 0.098$, $SE = 0.047$, $p = 0.035$), so no further mediation test was performed.

Overall, relational mobility did not mediate the cultural differences found in Study 1.

Study 2: Feedback giver and mediators.

In Study, we tested the mediation effect of the three proposed mediators, self-construal, changeability, and relational mobility. We used regression to examine potential association between Nation to dependent variables (path c), Nation to Mediator (path a), Mediator to dependent variables (path b), and both Nation and Mediator to dependent (path c'), and all the dependent variables showed cultural differences in the Free recall (Part 1) and communication scenario in Social situation vignettes (Part 2) were tested. For each analysis, data file was split by Valence of the prompt (Part 1) or vignette (Part 2). See Figure 1 for mediation pathway diagram. Since none of the proposed mediators worked, the general pattern of each mediator was described below.

Self-construal

Free recall. Overall, the patterns for TST-B and TST-C were similar. In this section, only Frequency was significantly associated Nation (path c) in the positive prompt; and both TST-B and TST-C was significantly associated with nation only in the positive prompt (path a); and none of the dependent variables were significantly associated with either TST-B or TST-C in the positive prompt (path b), so neither of them worked in explaining the cultural differences observed in Study 2 Free recall.

Communication scenario. Nation was significantly associated with 4 out of the 10 DVs in both positive and negative vignettes (path c); similar with the Free recall section, TST-B and TST-C was only significantly associated with Nation in the positive vignettes (path a); and neither of TST-B and TST-C was significantly associated with any DVs (path b) in the positive vignettes.

Therefore, Self-construal (TST) cannot explain the observed cultural differences in Study 2.

Changeability

Free recall. Despite that in there were one DV in positive prompt and two DVs in the negative prompt were significantly associated with Nation (path c), and changeability showed significant association to Nation in both positive and negative prompts (path a), none of the dependent variables in this part of the study was significantly related to changeability. Therefore, no further mediation tests were performed.

Communication scenario. As in the Free recall section, several DVs showed significant association with Nation (path c), but Changeability was not significantly associated with Nation in either of the positive or negative vignettes, so no further mediation tests were performed.

Overall, Changeability did not mediate the cultural differences in feedback exchange observed in current study.

Relational mobility

Free recall. The Nation to RM (path a) was not significantly associated in either positive or negative prompt, therefore, no mediation test was performed for RM in the Free recall section.

Communication scenario. Same as in the Free recall, RM did not associate with Nation significantly, so no further mediation was performed.

Therefore, Relational mobility could not explain the observe cultural differences in current study.

Post-hoc mediator: Anticipated agreement.

Although anticipated agreement was not one of the proposed mediators at the beginning, we explored whether anticipated agreement can explain the culture difference in feedback exchange post-hoc.

Free recall. The Nation to Anticipated agreement (path – a) was not significant in either positive or negative prompts, therefore, no further mediation test was performed for Anticipated agreement mediation in the Free recall section.

Communication social vignette. In the positive vignettes, Nation was significantly associated with Self-rating of feedback (path c), and four other dependent variables, but all of the variables failed to show significant association to Anticipated agreement (path b), therefore, no further mediation test was performed for positive vignettes.

In the negative situations, the Nation to Anticipated Negative Emotion (path – c) was significant (path c: $B = -1.170$, $SE = 0.2$, $p < 0.001$), and Nation to Anticipated agreement was also significant (path a: $B = -0.64$, $SE = 0.24$, $p = 0.008$), also, the Anticipated agreement to Anticipated Negative Emotion (path – b) was also significant (path b: $B = -0.33$, $SE = 0.07$, $p < 0.001$). When both Nation and Anticipated agreement are used to predict Anticipated Negative Emotions, the coefficient for Nation was still significant (path c') $B = -0.96$, $SE = 0.2$, $p < 0.001$). A Sobel test found that the difference between c and c' was significant ($z = -2.40$, $SD = 0.09$, $p = 0.02$). A similar result was found in Anticipated agreement predicting the Impact on Friendship (path c: $B = 0.23$, $SE = 0.08$, $p = 0.006$; path c': $B = 0.19$, $SE = 0.09$, $p < 0.025$), but the Sobel test indicated that the c' beta reduction was not significant.

Therefore, Anticipated agreement, successfully explained the cultural difference in Anticipated Negative Emotions in when providing negative feedback in the communication situation vignettes.