Justice and Guanxi in Hiring:

Fairness Reactions of US and Chinese Students

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Author Note

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Abstract

This study investigated cross-cultural perceptions of justice between U.S. and Chinese students. The experimental design included four allocation rules along with conditions of hired/not hired and most qualified/least qualified. Hofstede’s cultural dimensions and organizational justice are used for hypothesis development, with procedural and distributive justice as dependent variables. Results show U.S. students perceiving equity as fairer than Chinese students and Chinese students perceiving guanxi as fairer than U.S. students under certain conditions. Surprisingly, U.S. students rated equality and need allocation as more fair than Chinese students in some conditions, contrary to what was hypothesized.

Keywords: allocation rules, China, decision-making, guanxi, hiring, justice
Justice and Guanxi in Hiring: Fairness Reactions of US and Chinese Students

Decision-making processes are extremely important in fostering fairness perceptions among employees because people who feel mistreated often respond by engaging in negative workplace behavior (Berry et al., 2007). Individuals expect decisions to be fair, and decision makers often consider a variety of rules in determining an appropriate decision outcome. One set of decision rules, sometimes referred to as allocation rules (Leventhal, 1976), is based on the principles of equity, need, and equality in distributing resources. For example, if two employees are eligible for promotion, the equity rule is used when the most qualified employee receives the promotion; the need rule is used when the employee with the greatest need receives the promotion; and the equality rule is used to promote both employees to distribute the reward equally between the two.

While some may assume the equity rule should be used to allocate resources and rewards in a business context, this may not always be the case. For example, a hiring manager may choose a new employee by selecting the applicant with the most need who is slightly less qualified than other applicants, but still has excellent qualifications. The manager may believe choosing the person with the most need over the most qualified person is fair since the most qualified applicant will probably get another offer and helping someone in need results in a greater benefit to society. This reasoning is not unlike employment laws requiring preferential treatment for certain groups. Texas, for instance, requires state agencies to give preferential treatment to qualified veterans who apply for state positions (Texas Government Code, 2015). The law is designed to allocate more opportunities to veterans who have higher rates of unemployment than other groups. Managers who hire qualified veterans under the law do not personally profit from the decision. However, if managers allocate jobs based on personal connections and profit from the decision, the actions may be considered unfair or unethical. Leventhal’s (1976) allocation rules do not include distribution of resources based on personal
connections or based on enhancing personal profit, and this paper extends the literature in this regard by including a fourth allocation rule – guanxi.

Guanxi is loosely defined as personal connections or relationships, and it is a key part of Chinese culture (Ma et al., 2015). More specifically, “Guanxi refers to a personal and reciprocal social connection, which is the basis for effective collaboration within Chinese society” (Charoensukmongkol, 2021, p. 40). Guanxi is grounded in Chinese culture and personal, political, and business decisions are often made as a result of these relationships (Chen et al., 2004). Further, guanxi plays a role in how resources and assets are allocated (Ho & Redfern, 2010). However, even though Guanxi is prevalent in Chinese culture, it is important to note that decision makers in all cultures use political or social connections for personal gain. Indeed, professional networking and social events provide multiple opportunities for US businesspeople to forge personal connections to exchange favors. A key distinction between guanxi and the traditional US models of connection, however, is that guanxi is ingrained in the Chinese culture but not in the US culture. This difference is partly explained by Hofstede’s (1980) cultural dimensions of collectivism and individualism. China has a collectivist culture focused on group loyalty (family, nationality, organization, etc.) while the US has an individualist culture focused on individual achievement and responsibility. The tradition of group loyalty in Chinese culture encourages guanxi in business relationships while the expectation of individual accountability in the US discourages guanxi-like transactions.

Because we work in a global economy, a better understanding of other forms of allocation, like guanxi becomes critically important. The nuances of how and why gains or benefits are allocated become increasingly vital, for example, as we review historical business facts we see that those looking for employment in China have increasingly used guanxi connections to obtain a position as we observed a 40 percent increase in 1978 to 80 percent in 2009 (Bian & Huang, 2015; Bian, 2018). These observations should not be foreign to
Americans and Europeans as about 80 percent of these individuals indicate that they found work through personal networks (Wenderoth, 2018). Thus, understanding the nuances of guanxi can assist in better understanding our global economy and how it functions.

The purpose of this paper is to examine allocation rules in the context of a hiring decision by comparing justice perceptions of students from China and the US in an experimental study. While previous studies have examined Leventhal’s (1976, 1980) rules in a general comparison of cross-cultural nations, this paper extends the literature by adding guanxi as a fourth allocation rule. The rules are then analyzed in a broad overview like previous studies, but then go beyond current literature by analyzing experimental conditions encompassing both favorable and unfavorable outcomes to show how outcome impacts the cross-cultural results. Instrumental and relational models of procedural justice are related to the dimensions of individualism and collectivism to help explain the differences in justice perceptions.

**Literature Review**

Researchers propose that individuals who receive unfavorable outcomes often scrutinize the decision process to determine whether it was fair (Lind & Tyler, 1988), and job applicants are likely to react in a similar manner if they are not hired. The perception of fair policies and procedures is important in maintaining the integrity of an organization and in protecting the organization from legal challenges. Allocation rules are often used as explanations for business decisions such as using the need allocation rule to justify the Texas law to improve veteran employment levels. The equality allocation rule may be used to justify across-the-board pay increases so that all employees benefit from a cost-of-living adjustment, and the equity allocation rule is often used to justify hiring or promoting the most qualified individual. When decision processes are just, employees are more likely to accept the decision outcome and view it as fair, sometimes referred to as the fair process effect (Brockner & Wiesenfeld, 1996).
Organizational Justice

The perceptions of fairness related to decisions, processes, and outcomes play an important role in how productive and engaged an employee will be within organizations. The two primary aspects of justice that impact employee’s behaviors and productivity are distributive and procedural justice (Colquitt, 2001). Distributive justice refers to the fairness of a decision outcome or the fairness of resource distribution and is based heavily on equity theory (Adams, 1965). Outcome fairness is related to process fairness, and thus, procedural justice refers to the fairness of methods or procedures by which a decision is made. Conversely, procedures are likely to be considered fair if they are consistent, unbiased, and based on prevailing ethical standards (Colquitt, 2001). Two seminal theories of procedural justice are the instrumental model and the relational model.

The instrumental model of procedural justice (Lind & Tyler, 1988) is based on the idea that a decision process is instrumental in helping an individual get what they want in the long-term even if they must forfeit short-term personal gain. For example, an employee might accept losing a promotion to a colleague if the process for determining promotions allows the employee to successfully compete in the future. The individual accepts the unfavorable outcome because the process allows them to maximize personal gain in the long-term. However, individuals sometimes make fairness judgments based on another person’s need without regard to maximizing personal gain. To incorporate this more altruistic view of human nature into the justice literature, the relational model of procedural justice was developed. The relational model (Lind & Tyler, 1988) is based on the idea that identification with the group influences behavior differently from behavior influenced by self-interest needs and desires. Because individuals identify with a group, they accept group decisions even when the decision is unfavorable. Social dilemma research partially supports this idea by showing that individuals sometimes put personal desires aside for the good of the group as a whole (Dawes & Messick, 2000).
**Allocation Rules**

Managers routinely make decisions that involve the allocation of organizational resources, and the rules used to make these allocations are important components in forming justice perceptions (Leventhal, 1976, 1980). The equity rule proposes that fairness is evaluated based on the contributions and outcomes of the individuals involved; thus, the person who contributes the most should receive the most. The needs rule is applied when fairness is evaluated based on individual need; thus, the person who has the highest need should receive more outcomes than individuals with less need. The equality rule is applied when fairness is evaluated in terms of individuals obtaining equal outcomes, regardless of contribution or need.

An examination of allocation rules using the lens of organizational justice theory suggests equity rules may be associated with the instrumental model of procedural justice. Equity allocations allow individuals to compete for outcomes with a defined procedure (highest contribution=highest outcome). The consistency of the procedure helps individuals understand, prepare for, and attain long-term outcomes even if they fail in the short-term. Need and equality rules may be associated with the relational model. The relational model proposes that group needs may take precedence over personal needs; thus, allocating resources equally to the entire group or to those with the greatest need would serve overall group needs and could strengthen group members’ identification/relationship with the group. The prevalence of group needs over individual needs is a trait of collectivism while the prevalence of individual needs over group needs is a trait of individualism (Hofstede, 1980).

Cross-cultural studies of allocation rules have found mixed results, with some studies reporting the equity rule is preferred across cultures (Fan et al., 2012) and other studies reporting that collectivist cultures perceive the equality rule as more fair than equity (Giacobbe-Miller et al., 2003) or that allocation rule fairness varied according to the situation (Chen et al., 1998). Although the combined results of these studies indicate the disparity between cultures...
may be smaller than expected, it is important to note that each study found some variation consistent with cultural differences. These differences, however, were not very strong, perhaps because there is another allocation rule that would better differentiate the East-West cultures.

A 2004 study examining Leventhal’s rules operationalized the current allocation rules into eight subdivisions, three representing equity, two representing equality, two representing need, and one based on political reasons (Conlon et al., 2004). The political reasons allocation rule, defined as allocations made to create indebtedness or to repay a past favor, is similar to the concept of guanxi since the focus is on the connection or exchange relationship with another person. Conlon et al. (2004) do not advocate the political reasons rule as a fourth general principle of allocating outcomes; however, their inclusion of the rule is based on the theoretical concept of reciprocity, where there is an expectation of mutual exchange in business or personal interactions (Gouldner, 1960). Thus, we believe it to be a valid allocation rule pertinent to the study of East-West cultural differences. While Western cultures use social/political connections, the prevailing view of the US business environment is that individuals should be evaluated on their productivity, not their connections. If Eastern cultures are more likely to acknowledge social/political connections in a business setting, we would expect to find significant differences in justice perceptions between Chinese and US students when using a political reasons allocation rule based on reciprocity, or more specifically, a guanxi allocation rule.

Guanxi

We believe that guanxi functions as an allocation rule should be better developed and understood. “Guanxi, when applied in a business context, refers to the interpersonal relationships, personal contacts, or nepotism that may bring people certain work benefits, such as a desirable job or a promotion” (Liu et al., 2016, p. 296). Researchers have categorized guanxi into different typologies based on whether the guanxi is affective in nature (family,
personal and informal) or instrumental in nature (nonfamily, impersonal and formal), with business relationships encompassing a mixture of all of the above (Chen et al., 2013, p. 171). Business guanxi has also been classified into two dimensions: 1) favor-seeking guanxi which is positive and sustained by trust and commitment within the relationships; and 2) rent-seeking guanxi which is negative and based on social collusion and power exchanges (Fan et al., 2012). Rent-seeking guanxi, which is instrumental in nature, is the type of guanxi that is the subject of interest for this paper. Grasping the role of guanxi when understanding allocations across countries is key to individuals perceiving processes and outcome distributions to be fair.

**Hypothesis Development**

China’s economic history of socialism has fostered a societal perspective of equality and collectivism that is quite different from the capitalist individualism of the US. The socialist philosophy ideally creates social and financial equality for all citizens, and this philosophy combined with the collectivist culture of China suggests Chinese citizens should have higher expectations of equal treatment and in-group support than Americans. Indeed, Confucian dynamism, a separate cultural dimension, describes societies high in this dimension as emphasizing contribution to society (Jaw et al., 2007), placing greater importance on other stakeholders than themselves, and being more likely to confine themselves within social norms (Lu et al., 1999). Therefore, when allocation rules are used to make hiring decisions, Chinese citizens may be more focused on equal treatment and in-group support while Americans may be more focused on individual merit and differentiation between the candidates.

A desire to be treated fairly is central to the nature of mankind. However, a societal structure influences the makeup of an individual and ultimately how they perceive fairness. Thus, the fairness of the process used to allocate rewards (procedural justice) and the perceived fairness of the actual distribution of rewards (distributive justice) is likely to be interpreted differently by individuals from different cultures. We believe individuals from
collectivist cultures high in Confucian dynamism will be more likely to perceive higher
perceptions of justice when rewards are allocated based on what is best for the entire group
(need or equality) while those from individualist cultures will be more likely to perceive higher
perceptions of justice when rewards are allocated based on what is best for the individual
(equity). Based on these key aspects of fairness and justice, we believe that we will observe the
following relationships:

Hypothesis 1a: US students will have higher perceptions of procedural justice
than Chinese students when equity rules are used to make a
hiring decision.

Hypothesis 1b: US students will have higher perceptions of distributive justice
than Chinese students when equity rules are used to make a
hiring decision.

Hypothesis 2a: Chinese students will have higher perceptions of procedural
justice than US students when equality allocation rules are used to
make a hiring decision.

Hypothesis 2b: Chinese students will have higher perceptions of distributive
justice than US students when equality allocation rules are used to
make a hiring decision.

Hypothesis 3a: Chinese students will have higher perceptions of procedural
justice than US students when need allocation rules are used to
make a hiring decision.

Hypothesis 3b: Chinese students will have higher perceptions of distributive
justice than US students when need allocation rules are used to
make a hiring decision.
Guanxi rules are related to decisions being made because of the type of relationship that exists between people. Americans are familiar with the idea that relationships often play a role in business decisions; however, to perceive a high level of fairness in the decision, Americans would have to know these types of relationships do not outweigh individual qualifications such as experience or performance. The individualistic culture is thwarted when personal relationships override individual achievement, such as that experienced in a guanxi exchange, suggesting Americans will perceive the decision process and outcome as unfair. Conversely, guanxi exchanges should be more acceptable in collectivist cultures high in Confucian dynamism such as China since building relationships and focusing on the group is expected in business transactions. Indeed, while Western business firms tend to assume the business transactions come first and personal relationships second, Wee (2014) suggests Chinese business firms tend to build relationships first and then move to business transactions. This premise is supported by studies showing guanxi influence in talent management (Gibb & Zhang, 2017), performance appraisal (Bai, 2005; Gu & Nolan, 2017), and job seeking (Weng & Xu, 2018).

**Hypothesis 4a:** Chinese students will have higher perceptions of procedural justice than US students when guanxi allocation rules are used to make a hiring decision.

**Hypothesis 4b:** Chinese students will have higher perceptions of distributive justice than US students when guanxi allocation rules are used to make a hiring decision.

**Method**

Data were obtained from undergraduate students from the US and China with a paper and pencil survey completed in a classroom setting. Students first completed scales measuring equity sensitivity, social desirability, and justice orientation. Next, the survey contained a
description of a situation involving a potential job for which the respondent and four of his/her classmates interviewed. Based on a specific allocation rule, subjects then were given a favorable outcome (the job was offered to them) or an unfavorable outcome (the job was not offered to them). Finally, subjects were asked about the fairness of the hiring process and the hiring outcome.

The situation presented in the study told subjects they, along with four classmates, were graduating in three months and actively engaged in the job search process. The subjects were asked to assume the role of a student who interviewed and to respond accordingly to the hiring decision outcome. Allocation rules incorporated into the context included equity, need, equality and guanxi. In the equity condition, the most qualified subject (based on GPA and experience) got the job; in the need condition, the subject with the greatest financial need got the job. In the equality condition, either all of the most qualified subjects were hired at slightly reduced pay so that all could work or none of the least qualified subjects were hired because the company wanted to wait several months for more money to hire all applicants. Lastly, in the guanxi condition, the one subject who created a unique relationship with the interviewer by offering to perform a special favor for the interviewer got the job. The favor involved the student offering to introduce the recruiter’s son to one of the college professors at the school. The recruiter’s son is marketing a new product to the academic community and would benefit from the relationships the student has cultivated at the school. The student’s offer indicates the student is of a high enough social standing to introduce the son to the professor as a favor. This situation sets the stage for a single transaction of guanxi to occur, similar to rent-seeking guanxi (Fan et al., 2012) that is frequently temporal, casual, and instrumental in nature.

Surveys were translated into Chinese following procedures recommended by Brislin (1970) that involved initial translation into Chinese and subsequent back translation into English.
Discrepancies were corrected where found. Four bilingual master’s students and two bilingual PhD’s were involved in the translation and back translation.

Data were collected during the same one-week period from two universities in the US, and one university in China. Consent forms were provided to students and they had the option to decline participation. Of the 849 surveys collected, eight were discarded due to high levels of missing data. Overall, 441 responses were obtained from the US and 400 from China. The US sample consisted of 49.4% males and 49.2% female. Most were Caucasians (54.9%), followed by Asians (16.1%), Hispanic and Latinos (12%) and African Americans (10.9%). Many of them (81.2%) were juniors or seniors with an average age of 22.6. It is important to note that the US university has a very low number of international students (i.e., about one percent). The Chinese sample consisted of 39% males and 59% females. Most were Hans (93.8%), with very few minorities (4.3%). Most of these students were juniors and seniors (98.3%) with an average age of 21.37.

Measures

All variables, except for age, sex, and equity sensitivity were measured using seven-point Likert-type scales ranging from 1 (strongly disagree) to 7 (strongly agree). Procedural and distributive justice were measured using items adapted from Colquitt (2001). Procedural justice was measured with six items (α = .85), and distributive justice was measured with five items (α = .89).

Control Variables. To rule out their effect on our dependent variables, the following control variables were used in our analysis: age, sex, equity sensitivity, social desirability, and justice orientation. Equity sensitivity was measured with five questions from King and Miles (1994) which had two response choices requiring allocation of 10 points between the two choices. Possible scores ranged from 0 to 50, with high scores implying benevolence. Social desirability, the tendency to respond in a socially desirable manner, was measured using 32
items from the Crowne and Marlowe (1960) scale of social desirability (α = .77). Justice orientation, the extent to which individuals are cognizant of fairness issues around them, was measured with 15 items from the justice orientation scale (Rupp et al., 2003) (α = .81).

Analysis

Hypotheses were tested using analysis of covariance (ANCOVA) with the GLM procedure in SPSS. Analyses were done separately for the two dependent variables, procedural and distributive justice. Sex, age, equity sensitivity, social desirability and justice orientation were entered as covariates in a univariate GLM procedure with procedural or distributive justice as the dependent variable and country (US vs China) entered as the fixed factor. Cell sizes were fairly equal and ranged from 90 to 116 for all conditions, alleviating concerns about homogeneity of variances.

Results

Table 1 contains the correlation table along with means, standard deviations and reliabilities of the measures.

Table 1

| Correlation Matrix |
|--------------------|
|                    |
|                    |
| Constructs        | Mean | SD  | 1   | 2  | 3   | 4   | 5   | 6   | 7   |
|--------------------|------|-----|-----|----|-----|-----|-----|-----|-----|
| 1. Sex             | 1.55 | .50 | 1   |    |     |     |     |     |     |
| 2. Age             | 22.06| 3.20| -.07| 1  |     |     |     |     |     |
| 3. Equity Sensitivity | 24.99| 6.32| -.04| .08*| .1  |     |     |     |     |
| 4. Social Desirability | 4.31 | .56 | .01 | .14**| .35**| (.77)|     |     |     |
| 5. Justice Orientation | 4.65 | .68 | .08*| .04 | .14**| .17**| (.81)|     |     |
| 6. Procedural Justice | 4.15 | 1.07| .01 | -.04| .04 | .07*| -.03| (.85)|     |
| 7. Distributive Justice | 3.84 | .97 | -.01| -.02| .07*| .05 | -.05| .65**| (.89)|

Note: Coefficient alphas indicating scale reliabilities are in parentheses on the diagonal. *p<.05, two-tailed. **p<.01, two-tailed. Gender was coded as Male (1) and Female (2).
Table 2 contains the mean scores of procedural and distributive justice for US and Chinese students for all four allocation conditions of equity, equality, need, and guanxi, along with the estimated marginal means which are adjusted for the effect of covariates. A comparison of the results shows that there is little difference between the means and the estimated marginal means, suggesting that control variables did not have a significant impact on the dependent variables.

Table 2

Means and Estimated Marginal Means

| Allocation  | Country | N   | Mean (SD)   | Estimated | Significance |
|-------------|---------|-----|-------------|-----------|--------------|
| Equity      | US      | 104 | 5.20 (.98)  | 5.21      | .001         |
|             | China   | 90  | 4.56 (.93)  | 4.64      |              |
| Equality    | US      | 102 | 4.25 (1.13) | 4.22      | .001         |
|             | China   | 93  | 3.67 (.82)  | 3.63      |              |
| Need        | US      | 113 | 4.22 (1.19) | 4.23      | .407         |
|             | China   | 97  | 4.35 (.89)  | 4.38      |              |
| Guanxi      | US      | 116 | 3.10 (1.43) | 3.04      | .057         |
|             | China   | 97  | 3.44 (1.18) | 3.43      |              |

| Allocation  | Country | N   | Mean (SD)   | Estimated | Significance |
|-------------|---------|-----|-------------|-----------|--------------|
| Equity      | US      | 104 | 5.37 (.98)  | 5.36      | .001         |
|             | China   | 97  | 4.62 (1.19) | 4.76      |              |
| Equality    | US      | 100 | 3.54 (1.20) | 3.46      | .734         |
|             | China   | 98  | 3.48 (1.13) | 3.53      |              |
| Need        | US      | 116 | 4.17 (1.49) | 4.13      | .333         |
|             | China   | 100 | 3.98 (1.32) | 4.04      |              |
| Guanxi      | US      | 116 | 3.36 (1.70) | 3.28      | .452         |
|             | China   | 98  | 3.52 (1.35) | 3.58      |              |
Tables 3 through 6 contain the results of the ANCOVA. In support of H1a (F=6.22; p=.001; Adj R²=.15), it was found that US students had higher mean levels of procedural justice (mean = 5.20) than did Chinese students (mean = 4.56). We also found that US students had higher levels of distributive justice (US mean = 5.37; Chinese mean = 4.62), in support of H1b (F=3.55; p=.01; Adj R²=.08). Table 3 contains the results of H1a and H1b.

Table 3

Equity Condition: Hierarchical Regression Results

| Model 1a: Dependent Variable: Procedural Justice (Adj. R² = .15) |
|---|---|---|---|---|
| Source | DF | Sums of Squares | Mean | F Value | p |
| Model | 6 | 30.83 | 5.14 | 6.22 | .001 |
| Error | 171 | 107.93 | .83 | | |
| Corrected Total | 177 | 128.35 | | | |

| Source | DF | Sums of Squares | Mean | F Value | p |
|---|---|---|---|---|---|
| Gender | 1 | 0.57 | 0.57 | 0.69 | .41 |
| Age | 1 | 5.94 | 5.94 | 7.19 | .01 |
| Equity Sensitivity | 1 | 0.08 | 0.08 | 0.09 | .76 |
| Social Desirability | 1 | 1.79 | 1.79 | 2.17 | .14 |
| Justice Orientation | 1 | 3.49 | 3.49 | 4.22 | .04 |
| Country | 1 | 18.29 | 18.29 | 22.14 | .001 |

| Model 1b: Dependent Variable: Distributive Justice (Adj. R² = .08) |
|---|---|---|---|---|
| Source | DF | Sums of Squares | Mean | F Value | p |
| Model | 6 | 25.02 | 4.17 | 3.55 | .01 |
| Error | 171 | 111.65 | 1.17 | | |
| Corrected Total | 177 | 3945.01 | | | |

| Source | DF | Sums of Squares | Mean | F Value | p |
|---|---|---|---|---|---|
| Gender | 1 | 0.49 | 0.49 | 0.42 | .52 |
| Age | 1 | 0.81 | 0.81 | 0.69 | .41 |
| Equity Sensitivity | 1 | 0.35 | 0.35 | 0.30 | .59 |
| Social Desirability | 1 | 0.06 | 0.06 | 0.05 | .82 |
| Justice Orientation | 1 | 2.02 | 2.02 | 1.72 | .19 |
| Country | 1 | 20.74 | 20.74 | 17.67 | .001 |

Hypothesis 2 stated that Chinese students would have higher perceptions of procedural and distributive justice under conditions of equality. Results, however, indicated that US students (mean=4.25) had higher perceptions of procedural justice than did Chinese students.
(mean=3.67) in contradiction of H2a (F=5.27; p =.001; Adj R²=.13). H2b relating to distributive justice was not supported.

We also did not find any differences between Chinese and US students in the need condition, indicating lack of support for both H3a and H3b. H4 hypothesized that Chinese students would have higher perceptions of procedural (H4a) and distributive (H4b) justice under a guanxi allocation rule. However, only procedural justice (H4a) was supported. Mean levels of procedural justice for US students was 3.10, and for Chinese students was 3.44 in support of H4a (F=2.73; p=.02; Adj R²=.05).

Table 4

Equality Condition: Hierarchical Regression Results

| Model 2a: Dependent Variable: Procedural Justice (Adj. R² = .13) |
|---------------------------------------------------------------|
| Source | DF | Sums of Squares | Mean | F Value | p |
|--------|----|-----------------|------|---------|---|
| Model  | 6  | 28.64           | 4.77 | 5.27    | .001|
| Error  | 171| 154.83          | .91  |         |    |
| Corrected Total | 177 | 2955.97 | | | |

| Source | DF | Sums of Squares | Mean | F Value | p |
|--------|----|-----------------|------|---------|---|
| Gender | 1  | 0.03            | 0.03 | 0.03    | .87 |
| Age    | 1  | 8.46            | 8.46 | 9.34    | .003|
| Equity Sensitivity | 1 | 0.07 | 0.07 | 0.07 | .79 |
| Social Desirability | 1 | 0.26 | 0.26 | 0.29 | .59 |
| Justice Orientation | 1 | 1.99 | 1.99 | 2.20 | .14 |
| Country | 1 | 15.64 | 15.64 | 17.27 | .001|

| Model 2b: Dependent Variable: Distributive Justice (Adj. R² = .003) |
|---------------------------------------------------------------|
| Source | DF | Sums of Squares | Mean | F Value | p |
|--------|----|-----------------|------|---------|---|
| Model  | 6  | 8.52            | 1.42 | 1.08    | .38 |
| Error  | 171| 225.64          | 1.32 |         |    |
| Corrected Total | 177 | 2409.08 | | | |

| Source | DF | Sums of Squares | Mean | F Value | p |
|--------|----|-----------------|------|---------|---|
| Gender | 1  | 0.18            | 0.18 | 0.13    | .72 |
| Age    | 1  | 4.38            | 4.38 | 3.32    | .07 |
| Equity Sensitivity | 1 | 1.81 | 1.81 | 1.37 | .24 |
| Social Desirability | 1 | 0.17 | 0.17 | 0.13 | .72 |
| Justice Orientation | 1 | 2.16 | 2.16 | 1.64 | .20 |
| Country | 1 | 0.05 | 0.05 | 0.04 | .85 |
**Table 5**

*Need Condition: Hierarchical Regression Results*

**Model 3a: Dependent Variable: Procedural Justice (Adj. R² = .003)**

| Source            | DF | Sums of Squares | Mean | F Value | p   |
|-------------------|----|-----------------|------|---------|-----|
| Model             | 6  | 7.25            | 1.21 | 1.10    | .364|
| Error             | 189| 205.58          | 1.10 |         |     |
| Corrected Total   | 195| 214.83          |      |         |     |

**Source**

| Source           | DF | Sums of Squares | Mean | F Value | p   |
|------------------|----|-----------------|------|---------|-----|
| Gender           | 1  | 0.49            | 0.49 | 0.45    | .51 |
| Age              | 1  | 0.33            | 0.33 | 0.30    | .59 |
| Equity Sensitivity| 1  | 1.69            | 1.69 | 1.54    | .22 |
| Social Desirability| 1  | 1.69            | 1.69 | 1.54    | .22 |
| Justice Orientation| 1  | .001            | .001 | .001    | .97 |
| Country          | 1  | 1.55            | 1.55 | 1.41    | .24 |

**Model 3b: Dependent Variable: Distributive Justice (Adj. R² = .01)**

| Source            | DF | Sums of Squares | Mean | F Value | p   |
|-------------------|----|-----------------|------|---------|-----|
| Model             | 6  | 16.61           | 2.77 | 1.44    | .20 |
| Error             | 189| 362.37          | 1.92 |         |     |
| Corrected Total   | 195| 378.98          |      |         |     |

**Source**

| Source           | DF | Sums of Squares | Mean | F Value | p   |
|------------------|----|-----------------|------|---------|-----|
| Gender           | 1  | 0.27            | 0.27 | 0.14    | .71 |
| Age              | 1  | 4.47            | 4.47 | 2.33    | .13 |
| Equity Sensitivity| 1  | 9.93            | 9.93 | 5.18    | .02 |
| Social Desirability| 1  | .007            | .007 | .004    | .95 |
| Justice Orientation| 1  | 0.72            | 0.72 | 0.37    | .54 |
| Country          | 1  | 0.28            | 0.28 | 0.15    | .70 |
Table 6

Guanxi Condition: Hierarchical Regression Results

| Source                  | DF  | Sums of Squares | Mean   | F Value | p   |
|-------------------------|-----|-----------------|--------|---------|-----|
| Model                   | 6   | 26.99           | 4.50   | 2.73    | .02 |
| Error                   | 187 | 308.26          | 1.65   |         |     |
| Corrected Total         | 193 | 335.25          |        |         |     |

| Source                  | DF  | Sums of Squares | Mean   | F Value | p   |
|-------------------------|-----|-----------------|--------|---------|-----|
| Gender                  | 1   | 1.47            | 1.47   | 0.89    | .35 |
| Age                     | 1   | 11.79           | 11.79  | 7.16    | .008|
| Equity Sensitivity      | 1   | 0.63            | 0.63   | 0.38    | .54 |
| Social Desirability     | 1   | 5.79            | 5.79   | 3.51    | .06 |
| Justice Orientation     | 1   | 4.79            | 4.79   | 2.90    | .09 |
| Country                 | 1   | 10.42           | 10.42  | 6.32    | .01 |

| Source                  | DF  | Sums of Squares | Mean   | F Value | p   |
|-------------------------|-----|-----------------|--------|---------|-----|
| Model                   | 6   | 26.38           | 4.40   | 1.92    | .08 |
| Error                   | 187 | 428.30          | 2.29   |         |     |
| Corrected Total         | 193 | 454.67          |        |         |     |

| Source                  | DF  | Sums of Squares | Mean   | F Value | p   |
|-------------------------|-----|-----------------|--------|---------|-----|
| Gender                  | 1   | 2.89            | 2.89   | 1.26    | .26 |
| Age                     | 1   | 1.72            | 1.72   | 0.75    | .39 |
| Equity Sensitivity      | 1   | 0.68            | 0.68   | 0.30    | .59 |
| Social Desirability     | 1   | 10.00           | 10.00  | 4.37    | .04 |
| Justice Orientation     | 1   | 13.67           | 13.67  | 5.97    | .02 |
| Country                 | 1   | 6.18            | 6.18   | 2.70    | .10 |

Discussion

The purpose of this paper was to examine allocation rules in the context of a hiring decision by comparing justice perceptions of students from China and the US. We hypothesized that US students would perceive higher levels of justice when the equity rule was used and that Chinese students would perceive higher levels of justice when the equality, need, and guanxi rules were used. Although the need hypothesis was not significant, there was strong support for equity and mixed results on equality and guanxi. Hypothesis findings are discussed below.
The support for equity (H1) may be explained by differences in individualism and collectivism. US culture focuses on individual accountability, and equity rules that reward individual contributions reinforce this cultural characteristic. Because individuals may have more control over outcomes received from the equity rule than from the need and equality rules, equity rules may be more instrumental in helping individuals receive positive long-term outcomes, resulting in higher justice perceptions for US students. Chinese culture, however, focuses on group loyalty, and rewarding the collective group rather than individuals; thus, rewarding individual outcomes resulted in lower justice perceptions overall. However, we wondered if the differences in US and Chinese students would be similar in all experimental conditions. A post hoc analysis of the equity rule compared students based on the conditions of qualified (most or least) and outcome (hired or not hired). The results in Table 7 show when the most qualified US students were hired, their perceptions of justice remained about the same as overall perceptions shown in Table 2.

However, the perceptions of justice for the most qualified Chinese students who were hired increased such that the difference between US and Chinese students was no longer significant in the post hoc analysis. When the least qualified students were not hired, the difference in justice perceptions was once again significant in the post hoc analysis. Thus, it appears that the outcome may drive justice perceptions for the Chinese students in the equity condition, but not for US students.

The lack of support for equality (H2) shown in Tables 2 and 4 was unexpected since US students had higher perceptions of procedural justice than Chinese students. The post hoc analysis of equality rules in Table 7 showed a similar pattern of results with US students rating procedural justice, but not distributive justice, higher than Chinese students. The insignificant results for need (H3) shown in Tables 2 and 5 were also unexpected. However, the post hoc analysis of need shown in Table 7 indicates that US students had higher perceptions of
distributive justice than Chinese students in the least qualified/not hired condition – the opposite of what was predicted. Why would US students rate justice perceptions higher than Chinese students in equality and need conditions? This finding seems to contradict the premises of individualism and collectivism, but perhaps organizational justice theory provides a better perspective.

**Table 7**

*Post hoc Analysis of Allocation Rules*

| Allocation | Most Qualified |         | Least Qualified |         |
|------------|----------------|---------|----------------|---------|
|            | Hired          | Not Hired | Hired          | Not Hired |
| Equity     | 5.43           | 5.35     | na             | na      |
|            | 5.43           | 5.35     | 3.05           | 2.91    |
| Guanxi     | 5.18           | 4.73     | 1.90**         | 2.79**  |

*In the manipulation of equality allocation, either all of the most qualified students were hired at slightly reduced pay so that all could work or none of the least qualified students were hired because the interviewer wanted to hire all applicants but decided to wait until there were enough openings to hire everyone at the same time. The instrumental model of procedural justice states that unfavorable outcomes will be acceptable if the procedures in place will allow individuals to receive a favorable outcome in the future. US students who were the most qualified and hired may have reasoned that the equality rule process was instrumental in obtaining a positive outcome in the present and could lead to more positive outcomes in the future.*

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future if the organization granted across-the-board raises, for example. US students who were the least qualified and not hired may have reasoned that they could still get hired in the future. In fact, the equality rule could increase their chances of being hired since they were less qualified than others; thus, the equality allocation process might be instrumental in helping them achieve future favorable outcomes from the company. In addition, US students rated distributive justice positively when receiving an unfavorable outcome under the need rule, perhaps again recognizing that a need allocation process, while uncommon, could still be instrumental in obtaining future positive outcomes, especially if they found themselves in financial need.

Chinese students may have viewed the equality allocation process from a relational model perspective, however, such that group identification and desire for positive group outcomes drives justice perceptions. In the most qualified/hired condition, the entire group was penalized with a lower salary than was expected to hire everyone, and in the least qualified/not hired condition, the entire group was punished with no one hired. Thus, even though the entire group was treated the same way, Chinese students reacted negatively to the procedure, suggesting that collectivism may negatively impact perceptions of procedural justice if overall group outcomes are perceived as unfavorable. Interestingly, Chinese students also reacted more negatively than US students to distributive justice perceptions when the least qualified person was not hired in the need allocation condition. These findings may once again suggest that outcomes drive justice perceptions for the Chinese students, but not for US students. In addition, needs are not always known or taken into account in a hiring situation, which may have played a role in these results based on our stimulus materials.

The fourth hypothesis proposed that Chinese students will have higher perceptions of justice than US students when a guanxi allocation rule is used to make a hiring decision. This hypothesis was supported for procedural justice but not distributive justice as shown in Tables 2 and 6. The post hoc analysis shown in Table 7, however, shows higher ratings of procedural
and distributive justice for Chinese students when using the guanxi allocation rule, but only when the most qualified applicant was not hired. In addition, Chinese students ranked distributive justice higher than US students when the least qualified applicant was hired. As seen in Table 7, both US and Chinese students seemed unhappy with guanxi allocations in all conditions of not being hired with means below 3.5 on a 7-point scale, but Chinese students appeared more accepting of the guanxi practice in general. We believe collectivism and the relational model of justice help explain the results. The collectivist culture of focusing on group loyalty encourages reciprocity and reinforces a social norm where individuals rely on one another because it helps the overall group. In addition, the relational model of procedural justice focuses on group identification and acceptance of group outcomes, so it is expected that Chinese students would be more accepting of guanxi transactions than US students.

Interestingly, further data analysis indicates the Chinese students felt more entitled (mean = 5.30) than US students (mean = 4.76) and the difference is significant (t=-6.244, p < .001). This statistic might help explain why Chinese perceptions of justice in this study appear to be more outcome-driven than process-driven.

**Practical Implications**

The current business world suggests that global competition as well as collaborative efforts across nations are increasing. To be able to properly compete and communicate with collaborators it is critical that we better understand how decisions are made and resources are allocated within organizations across different cultures. As we delve into grasping these concepts an understanding as what is perceived to be fair and appropriate becomes vitally important as individuals in working spaces and relationships continue to be concerned about the fairness of transactions, decisions, and more. This work helps to inform about fairness and what are appropriate business transactions as analyzed from the perspective of two countries with
dominant cultures that appear to be very different as one country is individualistic (i.e., America) and the other country is collectivist (i.e., China).

**Limitations**

The data were collected from a single source, making it subject to common method variance and potentially inflating relationships between the variables (Podsakoff MacKenzie, Lee, & Podsakoff, 2003). The cross-sectional nature of the study also makes it difficult to make statements relating to causality, and our study purports to only indicate the existence of differences between US and Chinese students. Clearly this is not a field setting, as we asked students to respond to an artificial situation relating to a job search, and this limits our ability to generalize results because of the hypothetical nature of questions and related responses. However, this context is appropriate for our sample considering that most participants were upperclassmen that were, or soon would be, interviewing for permanent jobs.

In addition to the methods limitations, the study examines guanxi from a narrow perspective. Hundreds of guanxi studies have identified multiple typologies, bases, qualities, and dynamics of guanxi that comprise the robust, complex nature of the construct. Since our primary purpose was to examine allocation rules and compare justice perceptions, however, we chose to use a basic definition of guanxi and operationalize it such that both US and Chinese students could understand the nature of the situation. Future studies might consider using variations of guanxi to determine their impact on justice.

Another potential limitation is the focus on the instrumental and relational models of justice. Many justice theories could be used to explain the cross-cultural findings, and Shao et al. (2013) used multiple theories to explain the differences in justice perceptions across cultures in a meta-analysis. While future studies may consider other justice theories, the focus on guanxi and the individualism/collectivism dimension in the present study seems to fit the instrumental and relational models well.
Conclusion

This study has uncovered some important relationships regarding allocation rules and perceptions of justice in a cross-cultural investigation. First, we found that US students find equitable allocation rules to be more fair overall as compared to students from China. However, the post hoc analysis showed this difference to be significant only when students were in the “not hired” condition. When students were in the “hired” condition, there was no significant difference between US and Chinese students. Second, the post hoc analysis of equality and need allocation rules showed US students had higher justice perceptions than Chinese students in some conditions. Although unexpected, these results may indicate that Chinese students expected decisions to be positive for the overall group and not just equal for the group. On the other hand, US students may focus on whether the process is instrumental in achieving a positive outcome for the individual. Third, the findings on the guanxi allocation rule show that Chinese students have higher perceptions of procedural justice than US students in a guanxi hiring context, but only certain conditions. These findings could help clarify the mixed results of previous studies, especially when explained by the instrumental and relational models of procedural justice. US students may be more concerned with what they gain from a business decision, indicating a possible relationship between individualism and the instrumental model of procedural justice. Conversely, Chinese students may be more concerned about social factors when hiring decisions are made, indicating a possible relationship between collectivism and the relational model of procedural justice.

To our knowledge, this is the first empirical study to examine guanxi as an allocation rule in an experimental US/China cross-cultural hiring context. Liu et al. (2016) examined Chinese reactions to selection methods, but their study only included Chinese graduates without comparing to other countries. Anderson et al. (2010) examined cross-cultural applicant reactions to specific selection processes in a meta-analysis, but while that study included 17
different countries, it did not include China, and Singapore was the only country represented from the Far East. We believe including a guanxi or political reasons allocation rule in studies of workplace decision fairness would increase our understanding of employee reactions to workplace decisions, especially as many workplaces today struggle with complaints about COVID-19 accommodations and accusations of systemic racism in workplace decisions. Any decision that appears to favor one group over another may produce perceptions of unfairness which lead to negative workplace behavior.

Although this study demonstrates that cultural factors may color how individuals from different nations will perceive and respond to allocation rules, managers in all cultures should be aware that allocation rules utilized in business decisions can have a significant impact on whether or not subordinates perceive that they are being treated justly.
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