

2017

What We See Depends On Where We Stand: Distorted Perception Of Social Income Inequality

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WHAT WE SEE DEPENDS ON WHERE WE STAND: DISTORTED PERCEPTION OF
SOCIAL INCOME INEQUALITY

by

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Submitted in Partial Fulfillment of the Requirements

For the Degree of Master of Arts in

Sociology

College of Arts and Sciences

University of South Carolina

2017

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ACKNOWLEDGEMENTS

My sincere gratitude firstly goes to my advisor and mentor Professor Matthew Brashears, who has been very supportive since the day I started the work. His enlightening guidance helped me to work through the whole process from the development of research idea to the writing of this thesis. It has been a great experience to work with such a supportive and knowledgeable advisor, and get valuable suggestion and guidance via the mentorship.

I would like to acknowledge two other members of my thesis committee: Professor Brent Simpson and Professor Shelley Smith, who both provided great supports and encouragements. Their insightful feedback is of great help to the completion of this thesis.

Additionally, I thank my colleagues in the department and my dearest friends who have provided helpful feedback and moral support, accompanying me to go through the ups and downs.

Last but not the least, I thank my parents, who have always been there for me.

ABSTRACT

This research investigates how individuals' structural positions affect their justice perceptions of income distribution. Several previous studies have found the effect of socio-economic status along with other factors on people's preference for how much more high-prestige occupations should be paid than low-prestige occupations. However, there is not much effort on exploring theoretical explanations for those empirical findings. To provide explanations for the effect of structural position on perceptions of income inequality, two potential theoretical perspectives are examined: self-interest theory and Wegener's illusory perception theory. The study uses Chinese General Social Survey data to investigate the impact of individuals' income on the justice gap, which measures the injustice they perceived from general income distribution. The result suggests that high income people tend to perceive less injustice than low income people, supporting the self-interest theory perspective. Pay satisfaction is found to partially explain the effect of income on the perceived injustice. It's concluded that individuals' perceptions of social inequality are distorted depending on their structural positions along the income hierarchy.

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CHAPTER 1

INTRODUCTION

Increasing economic inequality worldwide has raised many concerns, particularly given its effects on various dimensions of society such as educational achievement, health, voting and violent crime (see Neckerman and Torche 2007). One argument is that people's acceptance of inequality has adjusted to the increasing level of inequality, as they tend to internalize the existing inequality and view it as justified (Jost et al. 2003; Trump 2013). As a result, individuals are more tolerant of a large gap between the rich and the poor, underestimate the existing inequality, and perceive less injustice. Individuals' justice perceptions have been connected to specific emotional and behavioral consequences. For instance, an employee who is continuously treated unfairly and underpaid will have a lower level of job satisfaction level and be more likely to quit in order to decrease the cognitive dissonance that they experience (Festinger 1957; Adams 1963, 1965; Walster, Berscheid, and Walster 1973). Similarly, people's judgment of the fairness of the income distribution, which relates to their general view of social inequality, will impact the public's acceptance of social inequality, and consequently any demand for redistribution (Meltzer and Richard 1981). Therefore, it is critical that we understand how people perceive a distribution situation and how the feeling of injustice is generated.

These two questions bring us to the theories of distributive justice, which focus on the preference for normative allocation principles, the situations where a certain

distribution is perceived as unfair, and individuals' reactions toward perceived injustice (Cook and Hegtvedt 1983). Most distributive justice research investigates individuals' perceptions, emotions, and behaviors in a local allocation situation where reward is allocated among two or more individuals, which may or may not include the perceiver¹. When the perceiver directly experiences or observes an allocation, he or she will develop a local justice perception of how fair or unfair the allocation is. In contrast, global justice perception refers to individuals' perception of a general distribution that they do not directly experience. For local justice perception, much effort has been devoted to studying the effects of various socio-demographic or contextual factors such as sex, educational attainment, interaction with ingroup or outgroup members and so on, but not for the general fairness perceived by individuals of distribution in the society as a whole (see Cook and Hegtvedt 1983). Studies on global justice perception usually aggregate individuals' judgment of the income distribution to a macro-level index, and make comparisons across societies with different cultures or dominating political ideologies (e.g., Kelley and Evans 1993; Jasso 1999; Osberg and Smeeding 2006). There seems to be a gap between these two threads of distributive justice research, one focusing on how individual difference affects local justice perception but overlooking global justice perception, and the other focusing on global justice perception but only by comparing across different cultural and political ideologies. What is clearly absent is an understanding of the individual and contextual factors that influence people's perception of the income distribution in their own society.

¹ The perceiver is the actor who makes assessment of the allocation situation, and this person can be the recipient of the reward, the allocator, or just a third-party observer (see Hegtvedt 2006).

In order to bridge the gap, the present research examines whether and how the difference in individuals' social structural positions affects their perception of social inequality, specifically, the justice perception of the income distribution. Several studies have found the effect of socio-economic status along with other factors on people's preference for how much more high-prestige occupations should be paid than low-prestige occupations (e.g., Kelly and Evans 1993; Kiatpongsan and Norton 2014). However, there is not so much effort on exploring theoretical explanations for those empirical findings. This study focuses on testing potential theories and providing explanations for the effect of structural position on perceptions of income inequality. The sections below start with an elaboration of justice perception and justice gap, followed by the discussion of a controversy between two theoretical perspectives regarding the pattern in which the justice evaluation varies by social positions. Then the following section presents the research method and analysis results. The paper concludes with the discussion of theoretical and empirical implications and potential gaps for future research to fill.

CHAPTER 2

THEORIES OF JUSTICE PERCEPTION AND JUSTICE GAP

2.1 JUSTICE PERCEPTION

Justice perception, sometimes also referred to as justice evaluation, is the subjective assessment of how fair the perceiver thinks the situation is. The perceiver is the actor who observes and evaluates a given outcome distribution, procedure or treatment. Scholars in the justice area, especially those that focus their work on local justice perception, distinguish between first-party perception, where the perceiver is evaluating his or her own experience or outcome, and third-party perception, in which the perceiver is not the recipient of the outcome or the target of the treatment. The present study examines individuals' justice perception of the income distribution, in which the perceiver is also involved since they are members of the society. The social distribution is experienced by and affects the perceiver, but it's not a local, personal justice experience. Thus it cannot be simply categorized as a first-party or third-party perception situation.

Previous studies find that individuals are biased by the egocentric tendency when making first-party justice evaluations. People tend to overestimate their input, think that they deserve more than counterparts who make exactly the same contribution, and perceive more injustice in their own outcome than in others' (Ross and Sicoly 1979; Messick and Sentis 1979). Nevertheless, people's justice perception is not solely driven by the egocentric tendency. As part of the foundation for studies on third-party justice perception, it's argued that people do care about the justice experiences of others,

especially those with whom they have interpersonal relationships (Tyler and Dawes 1993; Mikula et al. 1998). In experiments where reward is allocated after a particular group task, friends as partners tend to prefer equal distribution regardless of their performance. In conditions where partners are total strangers, subjects with higher performance prefer equity, i.e. reward is proportional to task performance, and prefer equality when they perform poorly (Austin 1980; Kayser and Lamm 1981). This finding reveals individuals' tendency to favor friends, even when this means sacrificing their own immediate interest. Other studies (Kahneman et al. 1986; Turillo et al. 2002) find that individuals, as third-party perceivers, think negatively of actors who are unfair to others having no relationship with the perceivers, and are willing to punish these unfair actors even at a cost to their own resources.

The egocentric tendency and the tendency to care for others are both expected to play a role in the perception of income distribution. When assessing the overall fairness of the distribution, individuals not only need to consider others' justice experiences but also take their own experiences into account, as they are embedded in the general distribution. The present study examines whether individuals' positions in the system affects their justice perception of that system.

Although this study looks at income distribution, justice perception is definitely not limited to material reward distribution. Justice researchers study both distributive justice and procedural justice. Distributive justice, which started off as the emphasis of early justice research, is about the allocation of benefits or burdens to recipients, perceived using certain normative justice principles: equality, equity or needs (see Cook and Hegtvedt 1983). Procedural justice regards the fairness of the procedure through

which distribution decisions are made and also the treatment one receives (Leventhal et al. 1980; Tyler and Lind 1992). People can perceive injustice in the allocation of not just monetary rewards, but also burdens such as punishment or workload. Furthermore, the feeling of injustice can emerge not because of the allocation per se, but from the procedure during which the allocation is made or the differential treatment toward recipients. For the purpose of this research, the following discussion of justice perception will focus only on distributive justice.

Theoretical and empirical efforts in distributive justice studies have been devoted to answering three central questions: What do people think is just? How do people perceive injustice? And how do people respond to perceived injustice? The major theories of justice consistently define injustice as the discrepancy between what one should get and what one actually gets (See Berger et al. 1972; Walster, Berscheid, and Walster 1973; Homans 1974, 1976). Justice perceptions result from the comparison between “what is” and “what ought to be” in various situations. Typically, people can make comparisons between a particular distribution with some referential standards or compare one’s outcome with another specific person, with general others, or with one’s own past experience. The just amount is generally determined by which distribution principle the perceiver thinks is relevant to the situation. Perceivers’ individual characteristics, beliefs, and motivations, together with some contextual factors, influence their choice of relevant distribution rules, and thus impact their justice perception (see Hegtvedt 2006). One assumption underlying the justice theory is that individuals have a universal longing for justice and the discrepancy between the actual and the expected just distribution will cause distress and tension (Adams 1965). And people will try to restore

justice, either psychologically or behaviorally, to relieve the distress and tension stemmed from perceived injustice (Adams 1965; Walster, Berscheid, and Walster 1973).

However, answering the three central questions above is not enough to fully understand justice perception. Jasso (1978) proposed questions about the magnitude of injustice, asking whether people perceive different degrees of injustice and how it can be reified as the deviation from the perfect justice point in the perceiver's mind. In her specification of justice evaluation, Jasso distinguishes between unjust overreward and unjust underreward, the former referring to the situation where actual reward exceeds just reward while the latter being defined as the situation where actual reward is less than just reward. Measuring the magnitude of perceived injustice in these two situations allows us to differentiate the degree of injustice resulting from underreward and from overreward, and to capture the conceptual range of perceived injustice by looking at the deviations along the two opposite directions from the perfect justice.

2.2 JUSTICE GAP

It should be pointed out that the injustice perceived from an overreward of a certain amount is not equivalent to the injustice perceived from an underreward of the same amount (Jasso 1978). As an extension of Jasso's work on justice evaluation, the justice gap refers to the difference between an individual's justice evaluations of an overreward situation and an underreward situation. Verwiebe and Wegener (2000) introduced the concept of the justice gap in their empirical investigation of income inequality as the situation where a well-paid occupation is perceived as being unjustly overrewarded whereas a poorly-paid occupation is perceived as being unjustly

underrewarded. Individuals' perception of the inequality in the income distribution is considered as consisting of specific comparisons between the actual and the ideal income for various positions in the income structure. These specific justice evaluations constitute individuals' perception of the overall income distribution, and can be aggregated at different levels, for the distribution situation in certain occupations, in some social groups, or in the society as a whole.

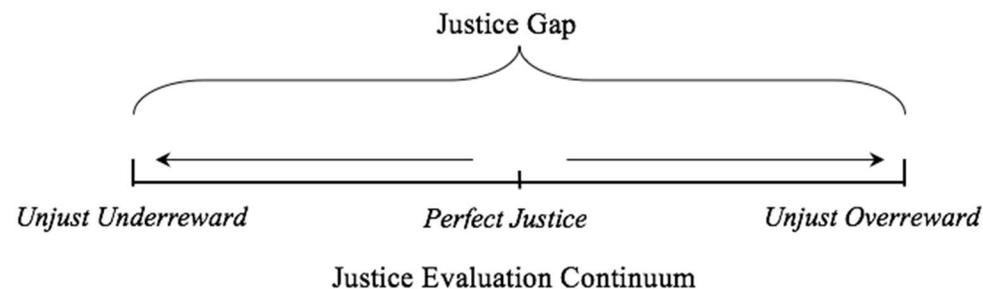


Figure 2.1 The Justice Gap

Imagine the justice evaluation as a continuum from extremely unjust underreward to extremely unjust overreward (as shown in Figure 2.1). The degree of perceived injustice from the social income inequality should be the range of this continuum produced by the income distribution. Therefore, the difference in the justice evaluations of two extremes along the injustice continuum, referred to as extreme justice gap, is used here to reflect individuals' justice perception of the social income inequality.

2.3 SELF-INTEREST THEORY VS. ILLUSORY PERCEPTION PERSPECTIVE

A great number of justice studies have shown that individuals perceive a given allocation situation differently in terms of how just or unjust they believe it to be. Do individuals also differ in the degree of injustice they perceive from the existing social

distribution? The investigation of factors leading to the variation in justice perceptions mainly focuses on individual factors such as demographic characteristics, personal beliefs or motivations activated in specific contexts, and how these factors influence individuals' preference for certain justice rules. This research examines whether the perceived injustice from social inequality varies across different social positions. There are two theoretical perspectives that may provide the answer to the question: self-interest theory and illusory justice perception.

Self-interest theory has often received the most substantial discussion and empirical support (e.g. Leventhal and Anderson 1970; Overlaet and Lagrou 1981). It is argued that individuals' judgment of justice in the distribution of rewards depends on how much they benefit from the current allocation. Following the logic of self-interest theory, individuals tend to perceive an allocation as more fair when they are rewarded more, and as more unfair when they are rewarded less. This self-interest orientation also gives rise to the tendency for people to think they deserve more than others.

Self-interest theory not only applies to local, specific allocation situation but also to general justice perceptions. For instance, higher status groups prefer equity as the distribution principle because allocation proportional to status can maximize their interest, whereas lower status groups prefer equality, which favors lower status people (Alves and Rossi 1978; Shepelak and Alwin 1986). According to self-interest theory, given the existing income inequality, the justice evaluation will differ by whether one is occupying an advantageous position in the income distribution structure. Therefore, individuals with high income would perceive the distribution as more fair than their low

income counterparts. In other words, the hypothesis derived from the self-interest theory is:

Hypothesis A: High income people will perceive less injustice than low income people in the given income distribution.

The second perspective comes from Wegener's (1987, 1990) research about illusory perception, which shows that people's perception of a social hierarchy or distribution is affected by their positions in the hierarchy. People with high status tend to assign higher prestige scores to those at the top of the hierarchy and lower prestige scores to those at the bottom, compared with people with low status (see Wegener 1987). This finding suggests that individuals are prone to perceive the hierarchy in favor of their self-image. As such, those with low status subjectively shorten the range of the hierarchy (i.e. leveling), making themselves less distant to the top. In contrast, those with high status subjectively stretch the hierarchy (i.e. polarization), enlarging the distance to make themselves appear more privileged.

The leveling and polarization tendencies stem from a self-image improving motivation.² This self-image improving tendency is also salient in making justice evaluations. Previous studies have provided evidence that people tend to consider

² This should be differentiated with the motivation of presenting a good image in other's eye. In distribution situations where actors would expect future interactions with others, those who made greater contributions often prefer equal distribution while those contributed less prefer equitable distribution (Shapiro 1975). This preference for a distribution rule that appears to counter their immediate self-interest, labeled as "politeness ritual" (Schwinger 1980), results from individuals' expectation for future gains by maintaining good reputation. With regard to perceiving social inequality, there is no need for individuals to present such a friendly image to boost their gains as in a local allocation situation.

themselves as being approximately the average, and as being justly paid (Shepelak and Alwin 1986; Wegener 1987). Being overrewarded and underrewarded are both perceived as threats to one's self-image, as the inequitable reward violates the code of fairness (Homans 1974; Hegtvedt 1990). Therefore, individuals are motivated to perceive themselves as being fairly paid, in other words, as located in the middle of the justice evaluation hierarchy.

The subjective distortion of the justice evaluation hierarchy occurs relative to the perception of one's own position. Since people with different income levels share the tendency to locate themselves somewhere in the middle, their justice perceptions of the income distribution are expected to be different, consistent with the polarization and leveling pattern discussed by Wegener (1987). High income individuals will subjectively lengthen the justice evaluation hierarchy, perceiving those with higher positions as being even more overrewarded and those below themselves as being underrewarded. By exaggerating the overreward level of the top rank, high income individuals can justify their relatively high income as reasonable compared to those at the top (being extremely overrewarded). Also, to put themselves in the middle range of the hierarchy, high income individuals tend to perceive those with lower position as being underrewarded. As those with relatively lower positions than high income people may still be objectively overpaid or justly paid, subjectively shifting them down to the lower position will consequently make the bottom rank even lower. Thus, with the motivation to enhance self-image, high income individuals will perceive a larger justice gap as they think that those at the top are even more unjustly overrewarded and that those with low income are compensated more

poorly. This perceptual polarization increases the injustice perceived by high income people.

In contrast to the polarization tendency, low income people tend to level the justice evaluation hierarchy by shortening the distance between the top and the bottom. They have a tendency to narrow the gap to diminish their disadvantage, leading to the distorted perception that they are not as unjustly underrewarded as the objective, and to the underestimation of the unjust overreward level for those with higher positions. In the perception of the low income individuals, they are receiving approximately just pay, which means that they are somewhere in the average rank of the justice evaluation hierarchy. Those with lower positions than the low income individuals will be perceived as not so underrewarded, consequently elevate the bottom rank of the hierarchy. And the distance to the top is shrunk to make low income individuals appear less disadvantageous. Therefore, low income people will perceive a narrower justice gap as they subjectively shorten the justice evaluation hierarchy. Critically, low income individuals cannot simply adopt the same polarization approach as high income individuals because their major self-image improving concern is to diminish their disadvantage by shortening their distance to higher positions, rather than amplifying the distance to those at the bottom. So counter to hypothesis A, the hypothesis derived from the illusory perception perspective is:

Hypothesis B: High income people will perceive more injustice than low income people in the given income distribution.

By examining how individuals with different structural positions perceive differently the injustice in the income distribution, the present study resolves the controversy between self-interest theory and illusory justice perception theory regarding how justice evaluation varies across social positions. Specifically, the justice gap is used to capture individuals' perceived injustice and to see whether the magnitude of perceived injustice differs depending on perceiver's position in the income distribution. If individuals' justice perception of the income distribution does relate to their structural positions along the income hierarchy, then the question becomes of which pattern does the association presents.

CHAPTER 3

DATA AND METHOD

The study used data from the 2008 Chinese General Social Survey (CGSS). The Gini Coefficient for China in 2008, as reported by the World Bank, is 0.426³, which indicates a relatively high level of inequality. Such an unequal income distribution should make it more likely that individuals in this society perceive substantial levels of inequality making it easier to detect people's feelings of injustice. This allows the comparison of the difference as hypothesized in the justice perception between individuals occupying different social positions. The sample from 2008 CGSS includes 3,010 adults (aged 18 and above) in China, with an average age of 43, and 52.2% of which are females.

Questions were included in the survey asking how much respondents think a person in certain occupations actually earns and should earn. For instance, respondents were asked, "how much do you think a doctor actually earns?", and then "how much do you think a doctor should earn?". There are five occupations in the series of income estimate questions: a) central government minister; b) chairman of a national corporation⁴; c) medical doctor; d) sales assistant; e) unskilled manual worker, which vary in terms of occupational prestige. The discrepancy between the estimated actual earning and the just earning reveals whether the respondent thinks people in the target

³ See <http://data.worldbank.org/indicator/SI.POV.GINI?page=1>.

⁴ A corporation that is national in scope.

occupation are generally overcompensated, undercompensated, or fairly compensated. The justice gap, comparing the justice perception in over-compensated and under-compensated situations, provides the information about respondents' perceived level of inequality and desired level of inequality regarding income distribution.

3.1 THE JUSTICE EVALUATION FUNCTION

The justice gap is measured using the justice evaluation function developed by Jasso (1978, 1980), based on the idea that justice perception comes from the comparison between actual and expected rewards. The magnitude of injustice perceived is thus dependent on how far away the actual allocation is from the perfect justice (see Jasso 1978, 1980):

$$\text{Justice evaluation} = \ln (\text{actual reward} / \text{just reward})$$

In this function, actual reward is what the recipient actually gets (or how much the perceiver believes the recipient actually gets) in a particular distribution situation. Just reward refers to the amount that the evaluator (i.e., the perceiver) believes the recipient should receive. The natural logarithm operator accounts for the empirical finding that underreward is regarded as more unfair than overreward of the same amount (Jasso 1978; Shepelak and Alwin 1986; Alwin 1987). When actual reward matches just reward, the ratio in the function becomes 1, and the justice evaluation will equal to zero, representing perfect justice. Deviation from such a perfect justice point produces feelings of injustice. Specifically, when actual reward exceeds just reward, the justice evaluation is positive,

meaning that injustice is perceived from overrewarding situation. For situations of underreward, the value of justice evaluation is negative as the actual reward amount is smaller than just reward. The larger the difference between actual reward and just reward, the larger the absolute value of justice evaluation, the more injustice is perceived.

In terms of occupational earnings in the current study, the justice evaluation is specified as the natural log of the ratio of estimated actual earnings to just earnings given by respondents. How unjust respondents perceive the earning for a particular occupation is indicated by the discrepancy between the amount they believe that occupation is actually paid and should be paid. The logarithm form indicates the property that underreward is felt more keenly than overreward of the same amount (Jasso 1978; Wagner and Berger 1985). The justice evaluation scores are computed for 2,054 respondents who made complete income estimations for the five target occupations. Those who didn't give answers to one or more of the income estimation questions (956 respondents in the survey sample) are excluded⁵. Among the five justice evaluation scores for each respondent, the maximum and the minimum are selected out to compute the range of individuals' justice evaluation.

Table 3.1 presents the frequency for each target occupation being selected as producing the maximum or the minimum justice evaluation scores. The maximum justice evaluation score tends to be found in estimates for occupations higher in prestige: central government minister and chairman of a national corporation. And the minimum justice evaluation score for about 60% respondents is their evaluation for unskilled manual workers. Recall that the justice evaluation measure maps a continuum ranging from being

⁵ The missing cases in income estimates were checked using Heckman's selection model (see Heckman 1979). The result indicates no selection bias.

unjustly underrewarded to unjustly overrewarded. The numbers reported in Table 3.1 show a tendency for individuals to perceive people in higher prestige occupations being overrewarded and lower prestige occupations being underrewarded.

Table 3.1 *Frequency of Occupations with the Max and the Min Justice Evaluations*

Occupation	<u>Selected as the Maximum^a</u>		<u>Selected as the Minimum</u>	
	Frequency	Percent (%)	Frequency	Percent (%)
<i>Central government minister</i>	682	33.20	204	9.93
<i>Chairman of a national corporation</i>	499	24.29	163	7.94
<i>Medical doctor</i>	192	9.35	259	12.61
<i>Sales assistant</i>	367	17.87	193	9.40
<i>Unskilled manual worker</i>	314	15.29	1235	60.13

Note: N=2054.

^a *Being selected as the maximum indicates that the occupation is perceived by the respondent to be the most overcompensated among the five target occupations.*

For each respondent, the difference between the highest and the lowest justice evaluation score represents this person’s perception of the justice gap, which captures how much injustice from both underreward and overreward is perceived in the income distribution. The larger the justice gap, the more injustice one perceives.

Questions may be raised about using respondents’ estimation of earnings as the actual earnings to compute the justice evaluation since we cannot assume that people make accurate estimation of occupational earnings. Previous studies have found that

people generally perceive the income distribution inaccurately (e.g. Eriksson and Simpson 2012; Chambers et al. 2014), and their perception of others' earnings may be determined by what they think of as ideal earnings⁶ (Headey 1991). However, the focus in this study is the *perceived* discrepancy between the actual earning and the just earning in people's mind rather than the objective difference, because respondents' emotional or behavioral response is based on their perception, although it might be inaccurate of the reality. In other words, individuals' attitudes or behaviors are directly affected by their perception of the reality, not the reality per se. When asked to estimate the actual earnings, respondents were not given the information about the objective earnings of the target occupations. Their answers are relative to the amount they think of as ideal or just in mind, and the discrepancy between the two reflects the injustice respondents perceived, instead of how much injustice objectively exists. Therefore, respondents' estimated earnings for various occupations are used to compute justice evaluation values.

The operationalization of the justice gap here is different from Verwiebe and Wegener's (2000) in their study where justice gap is computed as the arithmetic difference between the justice evaluation scores for two occupations, "chairman of a large company" and "unskilled manual worker", assuming these two occupations are located at the extremes of the income continuum. Their approach, however, neglects that respondents might not necessarily think CEOs are overcompensated and unskilled workers are undercompensated although they perceive injustice generally regarding to the overall income distribution. As presented in Table 3.1, although high prestige occupations tend to produce the maximum justice evaluation score, still 15.29% of

⁶ Or vice-versa as argued by some other scholars (e.g. Jasso 1980).

respondents perceived unskilled workers to be most overcompensated. And 7.94% of respondents evaluate CEOs as being the most undercompensated. Therefore, it's unwarranted to assume that particular occupations are consensually considered as overcompensated or undercompensated. Relying heavily on individuals' perception of two specific occupations may also introduce bias due to personal attitudes toward the target occupations. To avoid these shortcomings, the present study takes the arithmetic difference between the maximum and the minimum of justice evaluation scores across all the target occupations for each respondent, which better reflects the extent to which respondents perceive injustice in the income distribution.

3.2 INDEPENDENT AND CONTROL VARIABLES

The independent variable, "logwage", is the natural log of respondents' reported wage income, used as the indicator of their relative positions in the income hierarchy. This transformation implies that one money unit difference weights more in the lower positions than in the higher positions along the income hierarchy. For instance, the structural distance between one person earning 20,000 dollars and the other earning 50,000 will be farther than the distance between one earning 100,000 dollars and the other earning 130,000, although the money unit difference is the exactly the same for both cases. As in a pay raise situation, a 30,000 money unit difference would mean much more for a person earning 20,000 dollars ($30,000/20,000 = 150\%$) than for one earning 100,000 dollars ($30,000/100,000 = 30\%$). To be more clearly understood, the difference of income should be expressed as a percent rather than a raw value. In this case, the value difference between $\ln(20,000)$ and $\ln(50,000)$ is about 0.92, while the difference between

$\ln(100,000)$ and $\ln(130,000)$ is 0.27. To get a pay raise of as equal effect as an increase from 20,000 to 50,000 dollars, a person earning 100,000 dollars would need to get a raise of 150% ($\ln(250,000) - \ln(100,000) = 0.92$). As such, the difference between positions along the income hierarchy is better presented by the log-transformed unit.

To better understand the difference in justice perception of income inequality, individuals' satisfaction level with their wage income is also included. The relationship between income level and pay satisfaction has been widely acknowledged and generally high income people are more likely to feel satisfied with their pay. This study also explores whether the effect of income on pay satisfaction can further impact on individuals' perception of the income distribution. Pay satisfaction was measured in a 5-point Likert scale ranging from 1-very unsatisfied to 5-very satisfied.

Table 3.2 Descriptive Statistics of Variables

Variables (N=2054)	Mean	SD	Min	Max
<i>Justice Gap</i>	1.429	1.126	0	6.733
<i>Logwage^a</i>	2.193	1.151	-1.609	6.908
<i>Year of Schooling</i>	9.713	3.696	1	20
<i>Age</i>	41.968	13.874	18	84
<i>Sex (Female =1)</i>	49.66		0	1
<i>Pay Satisfaction</i>	3.27	0.919	1	5

Note: ^a $\text{Logwage} = \ln(\text{wage income})$

Three demographic characteristics, year of schooling, age and gender, are included as control variables in the model⁷. Previous studies on distributive justice have

⁷ Based on the findings of some previous comparative studies, political ideology and cultural orientation might also impact people's perception of social inequality (e.g. Leung and Bond 1984; Tetlock et al. 1993;

examined but failed to find consistent results regarding the effect of age and gender on individuals' preference for distribution rules (see Hegtvedt and Cook 2001). Without consistent results from research about age, models are specified respectively for linear and curvilinear effect of age. Females are proposed as less self-oriented than males in allocating rewards, but in tasks that females are culturally considered as more competent, they turn out to prefer equity as the distribution rule. These variables potentially relate to individuals' justice perception, thus are included as controls. Table 3.2 presents the descriptive statistics of the variables used in the model.

The data were analyzed with OLS regression models, first including the income variable and the controls, and then adding pay satisfaction to the model. The result can indicate whether respondents' wage income impacts their perception of justice gap. And more importantly, to address the controversy between Hypothesis A and Hypothesis B, the result can directly answer the question about whether individuals' income is positively or negatively associated with the justice gap. And the analysis with pay satisfaction would help us to understand the relationship between individuals' income and the amount of inequality they perceived from the income distribution.

Chambers et al. 2014). However, as the present study is focusing on the sample in China, where the political ideology and cultural orientation tends to be homogeneous. So these two factors are not taken into account here.

CHAPTER 4

RESULTS OF DATA ANALYSIS

4.1 JUSTICE EVALUATION

Recall that for each of the five target occupations, each respondent gave his or her estimates of the actual income and the just income, from which a justice evaluation score is computed. Table 4.1 presents the mean actual and just earnings given by respondents, together with the mean justice evaluation scores for the target occupations. Occupational prestige scores in Table 4.1 are assigned using Treiman's Standard International Occupational Prestige scale⁸ (SIOP; Ganzeboom and Treiman 1996).

Occupations with high prestige are perceived as having higher income level and deserving more than low prestige occupations, as the mean income estimates for central government minister and CEO are much larger than those for unskilled manual worker. On average, the estimated actual income for the CEO of a national corporation is nearly 30 times the pay for an unskilled manual worker, and the just income for CEO is about 9.5 times the amount considered just for unskilled manual worker.

The mean justice evaluation scores in Table 4.1 show that high prestige occupations are perceived as being unjustly overrewarded, and that the magnitude of injustice perceived tends to be larger for those top-ranked occupations. In other words, the difference between actual income and just income for top prestige occupations is

⁸ No standard occupational prestige scale available specific for China. Treiman's SIOP scale is used since it's developed as comparative across countries, and also found to be highly consistent with prestige ratings by Chinese sample in previous studies (Lin and Xie 1998; Bian 1996).

much greater than the others, as people think ministers and CEOs are earning a lot more than they should. Among the five occupations, unskilled manual worker is the only one with a negative justice evaluation score, which indicates that it is perceived as being unjustly underrewarded on average.

Table 4.1 Means of Income Estimates and Justice Evaluations for Target Occupations

Occupation	Occupational Prestige (SIOP) ^a	Estimated Actual Income ^b	Just Income	Justice Evaluation Score
<i>Central government minister</i>	71	507.040 (1077.77)	285.346 (640.26)	0.401 (0.924)
<i>Chairman of a national corporation</i>	70	864.233 (13275.29)	349.935 (832.30)	0.417 (0.929)
<i>Medical doctor</i>	73	63.960 (85.27)	53.116 (64.27)	0.080 (0.619)
<i>Sales assistant</i>	32	128.678 (348.60)	88.988 (146.89)	0.182 (0.703)
<i>Unskilled manual worker</i>	18	29.372 (40.27)	36.861 (52.31)	- 0.248 (0.605)

Note: ^a Treiman's Standard International Occupational Prestige (Ganzeboom and Treiman 1996).

^b Unit of income: 1,000 yuan (RMB); Standard deviations in parentheses.

Another pattern is observed based on the standard deviations in Table 4.1. High prestige occupations not only have higher income estimates, but also show greater variance. Especially for central government minister and CEO of a national corporation, the standard deviations of the actual income estimates are respectively 1077.77 and 13275.29, which are extremely large compared with the others. This provides some

evidence that people are more uncertain about the income level of those who are located at the top of occupational prestige hierarchy, hence typically more socially distant.

Do people of different income levels differ in the income estimates? The judgment of how much people in particular occupations should earn reflects the perception of a hierarchy of deservingness. Based on Wegener's illusory perception theory (1987, 1990), compared with low income individuals, high income individuals will think those in high-prestige occupations deserve even more and those in low-prestige occupations deserve even less. So following the logic of the polarization and levelling distortion, for high prestige occupations, the just income estimates given by high income individuals should be greater than those given by low income individuals; whereas, for low prestige occupations, the rich will give lower just income estimates than the poor. For three of the five target occupations, the just income estimates are positively associated with respondents' wage income (for Medical doctor: $b=12.48$, $p<0.001$; Sales assistant: $b=10.33$, $p<0.01$; Unskilled manual worker: $b=4.36$, $p<0.001$). The actual income estimates for medical doctor and unskilled manual worker are also positively related to respondent's income level. This suggests that overall high income people give larger income estimates, for both high and low prestige occupations. But the effect of income on the people's perception of the income distribution cannot be directly inferred from the results of the just and actual income estimates. The justice evaluation as the discrepancy between the actual and the just income controls for the individual variations in terms of raw monetary values and allows us to examine the net effect of people's income on perception of the income distribution.

4.2 REGRESSION MODELS

To investigate the proposed effect of individuals' wage income on their justice perception of income distribution, the data were first analyzed using OLS regressions with logwage and control variables and then including a quadratic term for age (Model 1 and Model 2 in Table 4.2).

Table 4.2 Regressions on Justice Gap

	Model 1	Model 2	Model 3
<i>Logwage</i>	-0.070* (0.031)	-0.070* (0.031)	-0.083* (0.039)
<i>Year of Schooling</i>	-0.003 (0.010)	-0.001 (0.010)	0.002 (0.011)
<i>Sex (Female = 1)</i>	-0.095 (0.059)	-0.100 (0.059)	-0.095 (0.066)
<i>Age</i>	0.001 (0.002)	0.030* (0.013)	0.031* (0.014)
<i>Age²</i>		-0.0003* (0.0001)	-0.0003* (0.0002)
<i>Pay Satisfaction</i>			-0.094** (0.036)
<i>Constant</i>	1.621*** (0.150)	1.018** (0.312)	1.245 *** (0.355)
<i>R²</i>	0.007	0.010	.0188
<i>N</i>	1553	1553	1237 ^a

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ two-tailed. Standard errors in parentheses.

^a N decreases in Model 3 due to the pay satisfaction variable. The survey question about pay satisfaction was included in a module administered only to respondents had non-farm jobs.

Logwage turns out to have a significantly negative effect on perceived justice gap ($b=-0.07$, $p<0.05$). According to the regression result, one unit increase in logwage will lead to 0.07 unit decrease in the perceived justice gap, which indicates that individuals with higher income will perceive smaller justice gap. This finding confirms the hypothesis derived from self-interest theory: High income people perceive less injustice than those with low income. And obviously, this result also contradicts the prediction derived from Wegener's theory of levelling and polarization tendencies.

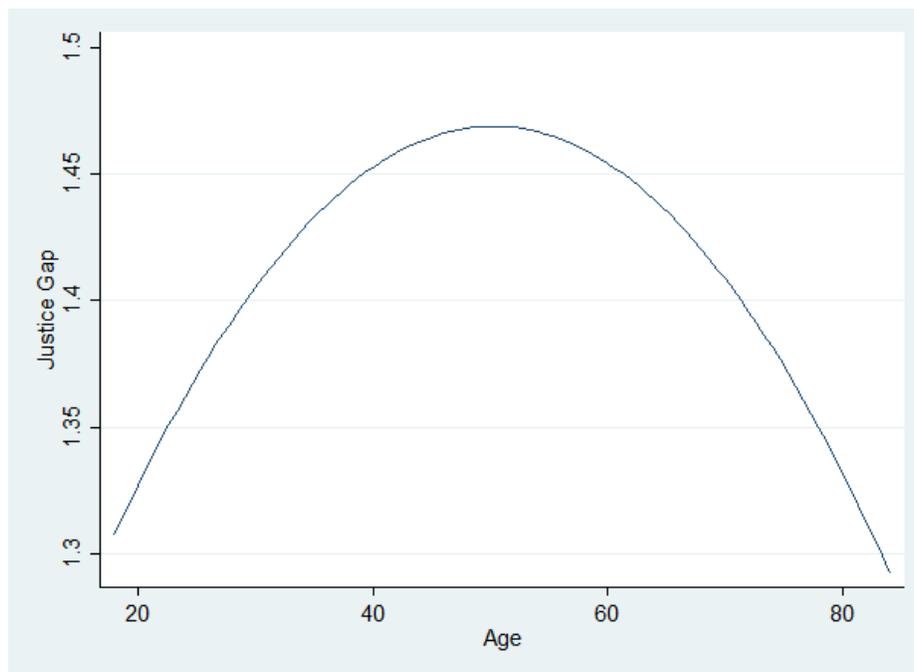


Figure 4.1 *The Relationship between Age and Justice Gap*

Among the control variables, age is found to have a curvilinear relationship with perceived justice gap, presented in Figure 4.1. As age increases, the justice gap becomes larger for individuals in their early adulthood. This positive effect of age is diminishing gradually as it gets closer to the middle-age range. For individuals with age over 50, the

increase in age will reversely lead to a decline in perceived justice gap. And for those passing the turning point, the rate of decline in justice gap by age also becomes greater as age increases. Overall, middle-age individuals perceive more injustice from the income distribution than young adults and the elderly.

4.3 MEDIATION OF PAY SATISFACTION

Pay satisfaction, which is included in Model 3, turns out to be negatively related to the perceived justice gap ($b=-0.094, p<0.01$). This suggests that people who feel more satisfied with their job pay tend to perceive narrower justice gap for the income distribution. Taken together with the relationship between income level and pay satisfaction, the result signals a potential mediation effect of pay satisfaction linking logwage and justice gap.

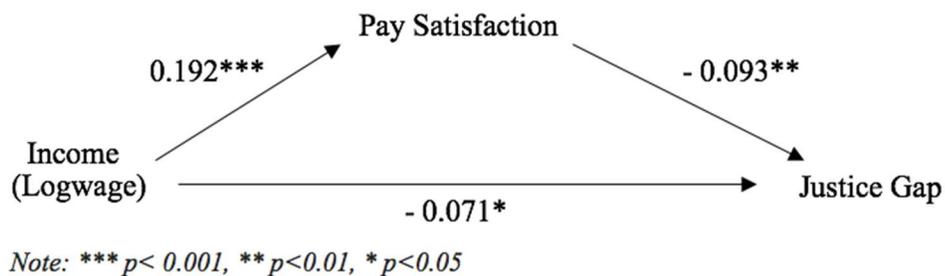


Figure 4.2 Mediation of Pay Satisfaction

The Sobel test is used to examine the mediation effect. The result, as presented in Figure 4.2, shows that logwage has a significant direct effect ($b=0.192, p < 0.001$) on pay satisfaction, and also a significantly negative effect ($b=-0.071, p < 0.05$) on perceived justice gap. Additionally, pay satisfaction is found to significantly influence ($b=-0.093, p < 0.01$) individuals' perceived justice gap. The indirect effect of logwage ($b=-0.018,$

$p < 0.05$) through pay satisfaction is significant, taking up 20% of its total effect ($b = -0.089$, $p < 0.01$) on justice gap.

High income people have a narrower justice gap *partially* because high income leads to high pay satisfaction level, which reduces the injustice they perceive from general distribution. For the effect of individuals' income on perceived justice gap, about one-fifth is carried indirectly through pay satisfaction, so the major part is still the direct effect. Based on the results, people with one unit higher income will directly narrow their justice gap by 0.071, and have a 0.192 increase in their pay satisfaction. One unit increase in pay satisfaction leads to a 0.093 decrease in justice gap. Therefore, one-unit higher income indirectly results in a 0.018 decrease in justice gap through its effect on pay satisfaction. In total, people with one unit higher wage income will perceive a 0.089 narrower justice gap, all others held constant.

CHAPTER 5

CONCLUSION

This study uses the justice gap to capture the injustice individuals perceive in the income distribution, and finds evidence for the negative relationship between individuals' income and the magnitude of perceived injustice as derived from self-interest theory. People with high income tend to have a narrower justice gap, indicating less injustice perceived. In other words, high income individuals do not see those who are undercompensated as suffering from as much injustice as low income individuals do. And compared with high income individuals, low income individuals think people in overcompensated occupations are overpaid to a larger extent. In short, low income people perceive more injustice than high income people of the given income distribution.

On a broader view, the effect of income level on the perceived justice gap suggests that individuals' perception of social inequality is shaped by the social structure they are embedded in. Out of self-interest concerns, people located in higher positions of the income distribution would be more willing to think the existing income distribution is somewhat fair in order to justify their high income, while those in lower positions would exaggerate the injustice, showing that they deserve much more than they actually earn. The justice perception is thus distorted with the self-interest motivations, presenting different tendencies based on individuals' structural positions. In short, what we see depends on where we stand.

The linkage between structural positions and justice perception also underlies the illusory justice perception perspective. However, the hypothesis derived from this perspective is rejected by the result of this study. Then it emerges the question why the justice perception is distorted in a way that follows the self-interest pattern, rather than the polarization and leveling pattern, although these two theoretical perspectives both use the structural position as the explaining factor for distorted perceptions.

One possible reason for the failure of Wegener's illusory perception perspectives in predicting justice gap is that justice evaluation doesn't fall in the scope of the theory. It's uncertain since Wegener is not explicit about the definition of "social hierarchy scaling" or the scope to which his theory can be applied. Income, prestige, and "social importance" are mentioned as examples of qualified social hierarchy in Wegener's studies (1987, 1990). The important difference between those example hierarchies and justice evaluation is that people will always prefer higher income, prestige or social importance, but not higher positions in a justice evaluation hierarchy. Scholars in distributive justice have widely recognized that perceived injustice will cause negative emotional reactions – anger for injustice perceived from being underrewarded and guilt for injustice perceived from being overrewarded (see Hegtvedt 1990). As discussed earlier, justice evaluation captures a hierarchy ranging from extremely unjust underreward up to extremely unjust overreward. High positions along the justice evaluation hierarchy, though manifesting advantage or high prestige, also give rise to negative feelings. Thus, we cannot assume a "the higher, the better" preference in the justice evaluation scenario. For people with high position along the justice evaluation hierarchy, especially those at the top, although the tendency to perceive oneself as the

average exists, it may be difficult to justify their pay and portray themselves as being fairly compensated because that perception contradicts the reality to a very great extent. So they will perceive themselves being overrewarded, but leaning toward the middle range. The polarization, which lengthens the hierarchy, will instead make them appear even more overrewarded compared to those at the bottom, and thus produce more intense guilty feelings. So the distortion in the perception doesn't present the polarization pattern.

Individuals' preference for higher positions may be fundamental to the illusory perception theory, in which perception of a hierarchy is distorted by high status individuals to subjectively amplify their superiority, and by low status individuals to subjectively diminish their disadvantage. Underlying the distortion tendencies is that higher position in the hierarchy is always preferred, no negative byproduct associated with superior positions. Therefore, as individuals do not always enjoy being unjustly overrewarded, the justice evaluation doesn't satisfy a possibly overlooked scope condition in Wegener's theory that higher positions in the hierarchy are always preferred. This may explain why the distortion of justice perception by structural positions does follow the polarization and leveling pattern.

Based on the results, pay satisfaction significantly mediates the effect of income on perceived justice gap. High income leads to high level of pay satisfaction, and this satisfaction feeling further impacts the perceived inequality in the income distribution. Specifically, people with high income feel more satisfied with their pay, and thus perceive less injustice in the income distribution. In contrast, people with low income tend to feel less satisfied with their earnings and perceive more injustice. Nevertheless, it should be noted that there is still a major direct effect of individuals' income on their

justice perception of the income distribution. The mediation of pay satisfaction can only explain part of the story.

In addition to the theoretical contribution, the findings of this study also bear empirical implications. Individuals' perception of social inequality can influence their attitudes toward redistribution policies. As suggested by the study result, people with high income tend to perceive less injustice in the general distribution because of their high positions in the income hierarchy. This implies that higher social status people may turn out to be less supportive than lower status people toward some redistribution policies, because they do not see as much injustice in the existing distribution as low status people do. Also, since people in higher positions are very likely possessing more political power, their underestimation of the injustice will impact the political effort to reduce social inequality. Instead of being Machiavellian schemers, the so-called top 1% may oppose the redistribution policies simply because they truly believe the current distribution of wealth is reasonably fair.

There still exist some limitations in the present study and room for future research. First, a simple income variable is used to indicate individuals' structural position in the income distribution, and then examine its effect on perceptions of social inequality. It can be argued that the structural position should contain more social dimensions than just individuals' income. In order to be comparable to the previous study done by Wegener (1987, 1990) about distorted justice perception, this study uses only income variable. Future research can try with combining salient variables to construct a more informative position factor. Second, the regression results show that gender and education variables controlled in the models are not significant, while the constant is

apparently extremely significant. This indicates that there is a lot of variance in individuals' perceived justice gap remain unaccounted for by the variables included. Since the goal of this study is to test the relationship between structural position and the perceived injustice, rather than explaining the perceived justice gap, the effort of exploring other potential explanatory factors is left for future research along this direction. For instance, political affiliation, cultural orientation and distribution rule preference may have impact on how much injustice one perceives from the general distribution. Third, as discussed above, the rejection of the illusory justice perception hypothesis seems to signal a neglected scope condition of Wegener's theory, but it's not tested in the study. To confirm this potential assumption for the illusory justice perception perspective, some evidence should be provided by research investigating systematic difference in perception of social hierarchies in which higher positions are always preferred, and of hierarchies where higher positions are not necessarily positively valued. This exploration of potential scope conditions result from the unsuccessful application of a theory can also remind us of the importance of explicit definitions and scope conditions in theory development.

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