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Using data from a 2009 national household survey (N = 2,866), this study investigates the differential experience of perceived institutional and interpersonal discrimination among rural-to-urban migrants in China, and the consequences of these two types of discrimination on measures of subjective well-being. The results indicate that rural-to-urban migrants perceive institutional discrimination more frequently than interpersonal discrimination. However, perceived interpersonal discrimination has a more detrimental effect than perceived institutional discrimination for rural-to-urban migrants, and this effect takes the form of self-rated physical health and depressive distress. The research calls for a more equitable social environment and equal distribution of resources and opportunities in China.

Key words: *China, migration, perceived discrimination, subjective well-being*

Since the 1950s, Chinese authorities have relied on the household registration (*hukou*) system to restrict the geographical mobility of the population, particularly from rural to urban areas (Chan, 1994; Cheng & Seldon, 1994; Wang, 2005). Post-1978 economic reforms, however, have dramatic effects on mobility: in the past 20 years, over 200 million rural residents left their land and started new lives in cities as migrant labor while the *hukou* system stays largely untouched (Chan & Zhang, 1999; Fan, 2008; Liang & Ma, 2004). The Chinese *hukou* system has had many socio-economic and political functions. One of the functions is to (re)distribute social resources within

a certain administrative-geographical area. *Hukou* is often regarded as an important institutional barrier, particularly for rural-to-urban migrants, to the achievement of equal rights to employment, education, housing, health care, and social services (Solinger, 1999). Studies document that Chinese rural-to-urban migrants experience severe restrictions due to the *hukou* and other government policies, and encounter discrimination and unfair treatment in urban areas (Chan & Buckingham, 2008; Wang, 2008).

In the wake of the strict enforcement of the *hukou* system and media reports of harsh detentions of migrants, the past few years have seen the introduction of a number of government policies designed to promote urbanization and reduce discrimination against migrants, including localized phase-outs of the distinction between agricultural and non-agricultural *hukou*, and increased funding to provide migrants and their children with access to urban schools and public services (Chan & Buckingham, 2008; Liu, 2007). Have these recent initiatives loosened the restrictions on migrants and promoted equal treatment? Does the migrant population still experience more difficulties and discrimination than their rural and urban counterparts when looking for work, going to school, or using medical services? How do migrants perceive their treatment in urban areas? Do they report more discrimination than the non-migrant population?

Discrimination takes the form of harmful and degrading beliefs and actions on the part of individuals and institutions (Gee, 2002). Although scholars claim that rural migrants in China experience discrimination in urban areas (Chan & Buckingham, 2008; Solinger, 1999; Wang, 2008), the empirical evidence of such behavior at the individual and institutional levels is limited. Scholars assert that perceived discrimination—defined as a behavioral manifestation of a negative attitude or judgment, or unfair treatment toward members of a group (Banks, Kohn-Wood, & Spencer, 2006; Williams, Spencer, & Jackson, 1999)—can be characterized as a form of stressful experience (Pascoe & Richman 2009; Williams, Neighbors, & Jackson, 2003; Williams, Yu, Jackson, & Anderson, 1997). Numerous studies have documented the detrimental impacts of perceived discrimination on physical health, mental health,

and quality of life in other societies (Gee, Ro, Shariff-Marco, & Chae, 2009; Pascoe & Richman, 2009). Such studies are rarely conducted in China.

Using data from the cross-sectional component of the second wave of the national household survey "Chinese Attitudes toward Inequality and Distributive Injustice," this study differentiates between perceived institutional and interpersonal discrimination, and investigates the potential consequences of these two types of discrimination on the subjective well-being of rural-to-urban migrants. The research addresses three vital questions: First, to what extent do rural-to-urban migrants perceive themselves as the most likely targets of institutional and interpersonal discrimination? Second, what are the factors that account for perceived institutional and interpersonal discrimination? Third, are perceived institutional and interpersonal discrimination associated with self-rated physical health, depressive distress, perceived social standing, and life satisfaction, and if so, how do the associations among rural-to-urban migrants differ from those among urban and rural residents?

Migration and the Experience of Discrimination

Although migrants have made huge contributions to China's industrial development and economic growth in past decades, their work often does not receive public recognition, especially on the part of urbanites (Zhang, Li, Fang, & Xiong, 2009). Rural-to-urban migrants in China are frequently marginalized and suffer from discrimination. Scholars argue that this group is more likely to experience discrimination and maltreatment as a result of political and structural barriers (Chan & Buckingham, 2008; Solinger, 1999; Wang, 2008). Studies have documented that rural-to-urban migrants often work in dangerous, dirty, and difficult jobs at the bottom of the occupational hierarchy, with little hope of advancement (Liang, 2004; Yang & Guo, 1996). Migrants have a high risk of contracting sexually transmitted diseases (Hong et al., 2006; Smith & Hugo, 2008; Yang, 2004), a general ignorance regarding health issues, and limited access to urban health care (Liu, 2003; Wang, Ren, Zhan, & Shen, 2005). They experience stress arising from

work- and family-related difficulties (Pun, 2005; Wong et al., 2008), and have a higher incidence of mental health problems than rural residents (Li et al., 2007). Urbanites view migrants as people of low "population quality" (*suzhi*), a perception that is shared by the Chinese state (Murphy, 2004). Migrants are considered marginal citizens who are responsible for rising crime rates and are perceived as a threat to guaranteed employment (White, 1996). As a result, urban residents and government bodies are unwilling to allow them equal access to schools and public services (Kwong, 2004; Murphy & Fong, 2006). Fully aware of this antipathy, migrants are hesitant to identify themselves as urbanites (Jacka, 2006; Lin & Zhang, 2008; Pan, 2007). They interact and network primarily through hometown connections and within their migrant communities (Lee, 1998; Mobrand, 2006; Xiang, 2000; Zhang, 2001). Given the political and structural barriers that migrants face, scholars fear that they will form a new urban underclass (Solinger, 2006; Wang, 2008), live in poor migrant enclaves (Zhou & Cai, 2008), and compete with urban residents for increasingly inadequate resources and public services (Gustafsson, Shi, & Sicular, 2008).

There are two types of discrimination that rural-to-urban migrants in China are likely to experience. The first is restricted access to jobs, education, and health care (Knight & Gunatilaka, 2010), which is rooted in the political and institutional constraints imposed on the migrant population: this is institutional discrimination. The second is unpleasantness in social encounters, such as verbal disrespect, deliberate avoidance, or assumptions of inferiority (Wong, Chang, & He, 2007). These experiences, involving interactions at the individual level between migrants and urban residents, are examples of interpersonal discrimination.

The experience of discrimination is often measured through self-perception in existing studies. Although reported without verification of actual events, the perception of discriminatory treatment is highly stressful (Pascoe & Richman, 2009; Williams, Neighbors, & Jackson, 2003; Williams et al., 1997). Focus group interviews with members of the migrant population in Shanghai conducted by Wang et al. (2010) reveal that the participants frequently perceived discrimination at

work and while searching for jobs due to their lack of Shanghai *hukou*. Many participants also reported facing discriminatory attitudes from their clients because they could not speak the Shanghai dialect or being marginalized by Shanghai citizens as outsiders. Such experience indicates that discrimination against the migrant population is manifested in interpersonal relationships through words and attitudes of disrespect.

Different types of discrimination, however, are often not distinguished or analyzed in depth in existing studies. In Wen and Wang's (2009) survey of migrant workers in Shanghai, participants were asked if they experienced any personal or institutional forms of discrimination. The specific examples of discrimination given in the questionnaire include supercilious or superior looks, barred entry (e.g., to an entertainment club), cross-questioning by the police in public, unfair treatment by employers (e.g., less pay for equal work), inquiries about Shanghai *hukou* by a prospective employer, and other forms of discrimination. Wen and Wang (2009), however, did not differentiate between these forms of discrimination in their analysis. The variable was dichotomized: participants either had experienced discrimination or had not. Half of the respondents reported that they had experienced some form of personal or institutional discrimination. Lin and colleagues (2011), in a survey of rural-to-urban migrants in Beijing, asked the participants whether they had perceived or experienced any or all of 20 listed discriminatory or unfair acts in their work and personal life. The researchers did not differentiate between forms of discrimination. The overall mean score on the 20 items for the study sample is about 1.88 on a 4-point scale (where 1 = "never happened" and 4 = "happened frequently"). Employing the same instrument, Zhang et al. (2009) coded the measure of discrimination into four subsets: work, distrust, attitudes, and law enforcement. The respondents reported the highest level of perceived discrimination when they were looking for a job or at their workplace.

This study distinguishes between perceptions of discrimination rooted in institutional constraints and those based on interpersonal contacts. The study deals not only with migrants' experiences but also those of urban and rural residents for comparison purposes. At the institutional level,

the study aims to discover whether the migrant population experiences more difficulties and discrimination while looking for work, going to school, and using medical services than the non-migrant population. At the interpersonal level, the study explores the extent to which rural-to-urban migrants perceive themselves to be the recipients of less courtesy and respect than their urban and rural counterparts.

Discrimination and Subjective Well-being

Research on the effects of rural-to-urban migration in China focuses primarily on the more visible socio-economic and demographic consequences of migration. Although the socio-demographic consequences are important social issues, the effects of rural-to-urban migration on subjective well-being also have a significant influence on human development and state welfare (Knight & Gunatilaka, 2010). "Subjective well-being involves a multidimensional evaluation of life, including cognitive judgments of life satisfaction and affective evaluations of emotions and moods" (McGillivray & Clarke, 2006, p. 4). Measures of subjective well-being can capture people's feelings or real experiences in a direct way, and thus provide important feedback to policy-makers and practitioners (McGillivray & Clarke, 2006; van Hoorn, 2008).

Experience of discrimination can directly and indirectly affect subjective well-being. Directly, discrimination can increase exposure to toxic work environments and limit access to social services such as public education and health care (Wang et al., 2010). Such experience can shape people's appraisal of their lives and the world (Harrell, 2000), and reinforce their perception of secondary social status (DuBois, Burk-Braxton, Swenson, Tevendale, & Hardesty, 2002). Indirectly, discriminatory attitudes and actions can cause a variety of negative psychological and physiological changes such as stigmatization, frustration, low self-esteem, and loss of self-control (Perlow, Danoff-Burg, Swenson, & Pulgiano, 2004; Williams & Williams-Morris, 2000), which erode an individual's protective resources and increase vulnerability (Gee, Spencer, Chen, & Takeuchi, 2007). Cumulatively, the effects of discrimination can lead to greater risks for physical illnesses such as high blood pressure (Brondolo, Rieppi, Kelly, & Gerin, 2003; Williams, Neighbors,

& Jackson, 2003), higher rates of mental disorders (particularly depressive distress and anxiety) (Williams & Williams-Morris, 2000; Zhang et al., 2009), and lower levels of perceived social standing and life satisfaction (Wen & Wang, 2009).

A growing body of research has provided empirical evidence of the detrimental impacts of perceived discrimination on physical health, mental health, and quality of life in many other countries and among different racial and ethnic groups (see Gee et al., 2009; Paradies, 2006; Pascoe & Richman, 2009; Williams & Mohammed, 2009; Williams et al., 2003; Williams et al., 1997). The small but growing body of research on migration and discrimination in China is scattered over several areas and contains few empirical studies. Using the same survey data on a rural-to-urban migrant sample in Beijing, Lin et al. (2011), Wang et al. (2010), and Zhang et al. (2009) investigated the direct and indirect effects of social stigma and discriminatory experience on psychological distress and quality of life. Their findings demonstrate that a greater incidence of perceived stigma and discrimination is associated with higher levels of psychological distress and poorer quality of life. Based on survey data from Shanghai, Wen and Wang (2009) examined the role discrimination plays in migrants' psychological well-being, using measures of loneliness and satisfaction. Their results show that the effects of experiencing discrimination on psychological well-being were overwhelmingly negative, far outreaching the effects of other demographic, socio-economic, and psychosocial variables. Based on the estimated happiness functions and decomposition analyses of data from a 2002 national household survey, Knight and Gunatilaka (2010) found that certain features of the migrant experience lead to unhappiness, and that the mean migrant happiness score (ranging from 0 to 4, with 0 = not at all happy and 4 = very happy) would rise by 0.17 if all reported zero discrimination.

All the existing studies point to the same conclusion: perceived discrimination has a negative effect on the subjective well-being of migrants in China. What is lacking in the existing literature is a more detailed analysis of how perceived discrimination from a range of sources is associated with various measures of subjective well-being. To fill this gap, this study looks at four measures of subjective well-being: self-rated physical health, depressive distress, perceived social standing, and life

satisfaction. The analysis assesses the differential associations of perceived institutional discrimination and perceived interpersonal discrimination with these measures of subjective well-being, and compares the findings for rural-to-urban migrants with those for urban and rural residents.

Methods

Sample and Data Collection

The study analyzes the cross-sectional data from the second wave of the national household survey "Chinese Attitudes toward Inequality and Distributive Injustice" conducted in 2009 (Whyte, 2010). The cross-sectional sample (N = 2,866) is representative of all Chinese adults between the ages of 18 and 70. The survey employed spatial probability sampling technology to achieve the nationally representative sample. With spatial probability sampling, actual physical spaces are selected based on the local population density. This density is computed by combining census statistics with information gained from satellite images of the sampled spaces. Once each space is enumerated, one adult is randomly selected from each dwelling according to the Kish grid method. The great advantage of spatial probability sampling is that the survey selects actual locations and then interviews local residents regardless their registered *hukou* status. The result is a highly representative sample which includes both migrants and formally registered respondents (Landry & Shen, 2005). Probability and post-stratification weights were developed to adjust for the sampling design and to correct for small age and gender imbalances based on the 2005 One-percent National Population Sampling Survey (National Bureau of Statistics of China, 2009).

A total of 4,279 household addresses were sampled and 2,866 interviews were completed for the cross-sectional component of the national survey, with a response rate of 67.0%. All interviews were conducted in person by trained interviewers, and the average interview length was 43.5 minutes. To ensure quality control, more than 40% of the participants were contacted either by phone or in person after the interview to validate the data. 133 cases were excluded due to missing data on variables used in this study, leaving a sample of 2,733 for the analysis.

Measures

Perceived discrimination. Perceived discrimination is assessed with a multi-part question: "In your day-to-day life, how often have any of the following circumstances happened to you? Would you say never, seldom, sometimes, often, or very often?" The circumstances are given in six statements: "You encounter more difficulties in finding jobs than others"; "You or your family members encounter more difficulties in receiving medical treatment than others when you are sick"; "You or your children encounter more difficulties in attending local schools than others"; "People act as if they don't want to get close to you"; "You are treated with less courtesy than other people"; and "You are called names or insulted." The scores on the first three items, which address perceived institutional discrimination, are totaled and then averaged (Cronbach's $\alpha = 0.78$). The scores on the last three items are totaled and then averaged to measure perceived interpersonal discrimination (Cronbach's $\alpha = 0.84$). Both measures range from 1 to 5, with 1 indicating "never" and 5 indicating "very often."

Self-rated physical health. The respondents' answer to the question "In general, how would you rate your overall health status?" is measured on a 5-point scale: 1 = "very poor"; 2 = "poor"; 3 = "fair"; 4 = "good"; and 5 = "very good."

Depressive distress. The short form of the Center of Epidemiological Studies Depression Scale (CES-D), an 8-item questionnaire that measures the depressive symptoms experienced by the respondent during the previous week, was administered (Cronbach's $\alpha = 0.76$). The CES-D was introduced into China in the 1990s and its validity has been tested in various studies (Boey, 1999; Yang et al., 2005; Zhang et al., 2011). The final score, which is the sum of responses to the 8 items, ranges from 0 to 22, with higher scores indicating higher levels of depressive distress.

Perceived social standing. Respondents were asked to rank their relative socio-economic status in the society, with 1 indicating "at the bottom" and 10 indicating "at the top." The measure is coded as a continuous variable ranging from 1 to 10.

Life satisfaction. Respondents answered the question "Are you satisfied with your current life?" on a 7-point scale. The

measure is coded as a continuous variable ranging from 1 indicating "very unsatisfied" to 7 indicating "very satisfied."

Demographic characteristics. Demographic information includes age, gender (1 = female; 0 = male), marital status (1 = married; 0 = other), and ethnicity (1 = ethnic minority; 0 = Han).

Socio-economic status. Measures of socio-economic status include education (1 = less than middle school; 2 = middle school; 3 = high school or vocational school; and 4 = college or above), and employment and occupation (1 = not working; 2 = farmer; 3 = working in a non-professional/managerial occupation; and 4 = working in a professional/managerial occupation).

Migration and residency status. Three categories of migration and residency status are coded and included in the analysis: urban residents (those with urban *hukou* residing in an urban area), rural-to-urban migrants (those with rural *hukou* residing in an urban area), and rural residents (those with rural *hukou* residing in a rural area).

Analysis

The analysis takes into account the survey design effects by using the "svy" (survey) commands in Stata 10.0, which allow for estimation of standard errors in the presence of stratification and clustering. Weighted descriptive statistics are first computed and compared among urban residents, rural-to-urban migrants, and rural residents. Multiple regressions are then applied to model the associations of perceived institutional discrimination and perceived interpersonal discrimination with migration and residency status, demographic characteristics, and socio-economic status. According to Lin et al. (2011), migration, and particularly economics-driven internal migration, is associated with not only institutional and interpersonal discrimination but also status-based discrimination. Zhang et al. (2009) also note that rural-to-urban migrants often perceive and experience discrimination because of their ethnicity and low socio-economic status. The analysis thus controls socio-economic status and demographic characteristics including ethnicity.

The analysis further employs multiple regression techniques to assess the associations between perceived discrimination and self-rated physical health, depressive distress, perceived social standing, and life satisfaction. Separate models are estimated for urban residents, rural-to-urban migrants, and rural residents. Socio-demographic characteristics are controlled in the estimations. The analysis demonstrates the differential effects of perceived institutional and interpersonal discrimination on the four measures of subjective well-being.

Results

Comparisons of Rural-to-Urban Migrants to Urban and Rural Residents

Table 1 displays the descriptive statistics on measures of perceived discrimination, subjective well-being, and socio-demographic characteristics for urban residents, rural-to-urban migrants, and rural residents. Compared to urban residents, rural-to-urban migrants perceive a significantly higher level of institutional discrimination (1.76 versus 1.54, $p < .05$). The levels of perceived institutional discrimination and perceived interpersonal discrimination reported by rural residents (1.73 and 1.44) are similar to those reported by rural-to-urban migrants (1.76 and 1.40). On the four measures of subjective well-being, rural-to-urban migrants do not show any significant differences from either urban residents or rural residents.

Demographically, rural-to-urban migrants are more likely to be male than rural residents, and more likely to be married than urban residents. Rural-to-urban migrants and urban residents show huge and significant differences in socio-economic status. More than 40% of rural-to-urban migrants did not finish middle school; among urban residents, this applies to less than 10%. Less than 5% of rural-to-urban migrants have attended college, which is far below the 30% attendance rate of urban residents. The level of education among rural residents lags behind even further: nearly 60% did not finish middle school and only about 10% attended high school. When asked about employment and occupation, only about 3% of rural-to-urban migrants reported holding professional or managerial positions, far less than the percentage among urban residents (nearly 20%). Unsurprisingly, the majority of rural residents

Table 1. Descriptive Statistics of Perceived Discrimination, Subjective Well-being, and Socio-demographic Characteristics among Urban Residents, Rural-to-urban Migrants, and Rural Residents.

	Urban Residents (n = 983)		Rural-to-Urban Migrants (n = 555)		Rural Residents (n = 1,195)	
Perceived Discrimination	mean	s.e.	mean	s.e.	mean	s.e.
Institutional discrimination (range 1-5)[a]	1.54	(0.06)	1.76	(0.09)	1.73	(0.07)
Interpersonal discrimination (range 1-4.7)	1.30	(0.05)	1.40	(0.05)	1.44	(0.11)
Subjective Well-being	mean	s.e.	mean	s.e.	mean	s.e.
Self-rated physical health (range 1-5)	3.88	(0.06)	3.79	(0.09)	3.62	(0.13)
Depressive distress (range 1-22)	8.16	(0.36)	7.52	(0.31)	8.15	(0.70)
Perceived social standing (range 1-10)[c]	5.09	(0.10)	4.64	(0.25)	4.66	(0.12)
Life satisfaction (range 1-7)	4.29	(0.08)	4.32	(0.17)	4.35	(0.06)
Demographic Characteristics	mean	s.e.	mean	s.e.	mean	s.e.
Age (years)[c]	39.97	(1.06)	40.48	(1.40)	43.46	(1.15)
	%	s.e.	%	s.e.	%	s.e.
Gender (female)[b]	47.05	(3.53)	42.88	(2.70)	52.63	(2.30)
Marital status (married)[a,c]	73.20	(4.46)	83.10	(1.99)	84.74	(3.40)
Ethnicity (ethnic minority)	4.89	(1.87)	10.34	(6.06)	7.86	(2.54)
Socio-economic Status						
Education[a,c]	%	s.e.	%	s.e.	%	s.e.
Less than middle school	9.83	(1.96)	43.24	(4.75)	57.09	(5.45)
Middle school	26.23	(2.45)	36.42	(3.30)	32.07	(3.28)
High school/vocational school	33.99	(4.23)	15.83	(3.05)	7.04	(1.82)
College or above	29.95	(4.69)	4.52	(1.07)	3.80	(3.01)
Employment & occupation[a,b,c]	%	s.e.	%	s.e.	%	s.e.
Not working	35.21	(2.88)	21.11	(3.89)	15.30	(3.84)
Farmer	2.28	(1.27)	40.98	(10.37)	72.11	(4.54)
Non-professional/managerial occupation	43.24	(3.20)	35.04	(6.95)	11.54	(2.46)
Professional/managerial occupation	19.27	(3.17)	2.86	(0.91)	1.05	(0.33)

Note: Survey design effects (strata, cluster, and individual weight) are adjusted in the mean estimations. [a] Difference between urban residents and rural-to-urban migrants significant at $p < 0.05$. [b] Difference between rural-to-urban migrants and rural residents significant at $p < 0.05$. [c] Difference between urban residents and rural residents significant at $p < 0.05$.

are farmers. Less predictably, more than 40% of rural-to-urban migrants still reported their occupation as farmer.

Associations of Perceived Discrimination with Socio-demographic Factors

Multiple regressions are estimated to examine the demographic and socio-economic factors associated with the perceptions of institutional and interpersonal discrimination. Table 2 presents multiple models for each type of discrimination. In Model 1, demographic variables are entered in the first step of the multiple analysis. Rural-to-urban migrants show a significantly higher level of perceived institutional discrimination than urban residents (coefficient = .20, $p < .05$), but no significant difference in perceived interpersonal discrimination.

Socio-economic measures are entered into the estimations in Model 2, and the significant difference in perceived institutional discrimination between rural-to-urban migrants and urban residents no longer pertains. Higher levels of education are strongly associated with lower levels of perceived institutional discrimination. The coefficients on middle school, high school or vocational school, and college or above education are -.23, -.31, and -.48 respectively, all with $p < .01$. Being a farmer (coefficient = -.17, $p < .05$) or working in professional or managerial occupation (coefficient = -.13, $p < .05$) significantly reduces the level of perceived institutional discrimination. Socio-economic measures are also significantly associated with perceived interpersonal discrimination, though to a lesser extent.

Associations between Perceived Discrimination and Subjective Well-being

Tables 3A & 3B and Tables 4A & 4B present the results of analysis of the associations between perceived discrimination and self-rated physical health, depressive distress, perceived social standing, and life satisfaction for urban residents, rural-to-urban migrants, and rural residents respectively. The multiple regression results on self-rated physical health and depressive distress are included in Tables 3A & 3B. Among rural-to-urban migrants, perceived interpersonal discrimination is significantly associated with self-rated physical health (coefficient = -.30, $p < .01$), whereas the association between perceived institutional discrimination and self-rated physical health is weak

Table 2. Associations of Perceived Discrimination with Migration and Residency Status and Socio-demographic Characteristics

	Institutional Discrimination				Interpersonal Discrimination			
	Model 1		Model 2		Model 1		Model 2	
Migration and Residency Status								
Urban resident (ref. grp.)	--	--	--	--	--	--	--	--
Rural-to-urban migrants	0.20*	(0.09)	0.08	(0.10)	0.11	(0.07)	0.03	(0.08)
Rural residents	0.18+	(0.11)	0.06	(0.08)	0.14	(0.14)	0.04	(0.08)
Demographic Characteristics								
Age (years)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Gender (female)	-0.06	(0.04)	-0.09*	(0.04)	0.02	(0.02)	-0.01	(0.03)
Marital status (married)	-0.04	(0.06)	-0.02	(0.06)	-0.07+	(0.04)	-0.06	(0.04)
Ethnicity (ethnic minority)	0.45*	(0.17)	0.41*	(0.16)	-0.06	(0.10)	-0.08	(0.11)
Socio-economic Status								
Education								
< Middle sch. (ref. grp.)			--	--			--	--
Middle sch.			-0.23**	(0.08)			-0.17	(0.13)
High sch. /vocational sch.			-0.31**	(0.09)			-0.22+	(0.11)
College or +			-0.48 **	(0.10)			-0.22 *	(0.09)
Employment and occupation								
Not working (ref. grp.)			--	--			--	--
Farmer			-0.17 *	(0.08)			-0.03	(0.08)
Non-prof./ managerial occupation			-0.09	(0.07)			-0.02	(0.04)
Prof/ managerial occupation			-0.13 *	(0.06)			-0.09 +	(0.05)
Constant	1.51**	(0.09)	2.06 **	(0.13)	1.27 **	(0.09)	1.59 **	(0.11)
Wald F Statistics	3.89	(6, 54)	6.78	(12, 54)	1.92	(6, 54)	3.50	(12, 54)

Multiple regressions are estimated. n = 2,733; Survey design effects (strata, cluster, and individual weight) are adjusted in the model estimations; Coefficients are reported; standard errors in parentheses; ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

and insignificant. Neither type of perceived discrimination is associated with self-rated physical health among urban residents, but both types are significant predictors of self-rated physical health for rural residents.

The associations between the two types of perceived discrimination and depressive distress are more consistent: for all three groups, both perceived institutional discrimination and perceived interpersonal discrimination are associated with greater depressive distress, at least at the $p < .10$ significance level. The effect of perceived interpersonal discrimination, however, is much greater than that of perceived institutional discrimination—more than double among rural-to-urban migrants (1.34 versus .65) and more than triple among rural residents (2.88 versus .95).

Tables 4A & 4B contain results from the multiple regressions on perceived social standing and life satisfaction. Perceived institutional discrimination is significantly associated with a lower level of perceived social standing among urban (coefficient = -.29, $p < .05$) and rural residents (coefficient = -.53, $p < .01$), but it is not a significant factor among rural-to-urban migrants. Perceived institutional discrimination is a significant predictor for life satisfaction only among urban residents (coefficient = -.29, $p < .01$). The association between perceived interpersonal discrimination and perceived social standing (coefficient = -.47, $p < .10$) and between perceived interpersonal discrimination and life satisfaction (coefficient = -.40, $p < .10$) is only marginally significant among rural-to-urban migrants.

Discussion

Based on data from the second wave of the national household survey "Chinese Attitudes toward Inequality and Distributive Injustice," this study investigates the experience of two types of discrimination—perceived institutional discrimination and perceived interpersonal discrimination—among rural-to-urban migrants, and the associations with four measures of subjective well-being—self-rated physical health, depressive distress, perceived social standing, and life satisfaction. The study distinguishes between discrimination due

Table 3A. Associations between Perceived Discrimination and Self-rated Physical Health among Urban Residents, Rural-to-Urban Migrants and Rural Residents

	Self-Rated Physical Health					
	Urban Residents (n = 983)		Rural-to-Urban Migrants (n = 555)		Rural Residents (n = 1,195)	
Perceived Discrimination						
Institutional discrimination	-0.05	(0.07)	-0.05	(0.09)	-0.24 **	(0.07)
Interpersonal discrimination	-0.11	(0.11)	-0.30 **	(0.11)	-0.19 *	(0.09)
Demographic Characteristics						
Age (years)	-0.02 **	(0.00)	-0.02 **	(0.00)	-0.03 **	(0.00)
Gender (female)	-0.06	(0.07)	-0.29 **	(0.09)	-0.26 **	(0.08)
Marital status (married)	0.26 *	(0.10)	-0.03	(0.12)	-0.08	(0.08)
Ethnicity (ethnic minority)	-0.24 +	(0.13)	-0.46	(0.31)	0.05	(0.13)
Socio-economic Status						
Education						
< middle school (reference group)	--	--	--	--	--	--
Middle school	0.29*	(0.11)	0.07	(0.12)	0.14	(0.09)
High school or vocational school	0.28*	(0.14)	0.09	(0.12)	0.19	(0.12)
College or +	0.33 +	(0.18)	0.03	(0.30)	0.07	(0.21)
Employment and occupation						
Not working (reference group)	--	--	--	--	--	--
Farmer	-0.08	(0.23)	-0.14	(0.19)	-0.03	(0.18)
Non-prof./ managerial occupation	0.09	(0.14)	-0.11	(0.14)	-0.26	(0.26)
Prof./ managerial occupation	0.01	(0.15)	-0.18	(0.21)	0.23	(0.17)
Constant	4.29 **	(0.28)	5.21 **	(0.28)	5.60 **	(0.31)
Wald F Statistics	50.13	(12, 48)	29.54	(12, 37)	62.43	(12, 46)

Multiple regressions are estimated. Survey design effects (strata, cluster, and individual weight) are adjusted in the model estimations. Coefficients are reported; standard errors in parentheses. ** $p<0.01$, * $p<0.05$, + $p<0.1$

Table 3B. Associations between Perceived Discrimination and Depressive Distress among Urban Residents, Rural-to-Urban Migrants and Rural Residents

	Depressive Distress					
	Urban Residents (n = 983)		Rural-to-Urban Migrants (n = 555)		Rural Residents (n = 1,195)	
Perceived Discrimination						
Institutional discrimination	0.86 **	(0.31)	0.65 +	(0.33)	0.95 **	(0.25)
Interpersonal discrimination	1.02 +	(0.56)	1.34 **	(0.48)	2.88 **	(0.50)
Demographic Characteristics						
Age (years)	-0.02	(0.02)	0.04 **	(0.02)	0.04 **	(0.01)
Gender (female)	0.35	(0.66)	0.64	(0.53)	-0.11	(0.58)
Marital status (married)	-1.93 +	(1.06)	-1.77 *	(0.66)	-0.48	(0.83)
Ethnicity (ethnic minority)	-0.50	(0.70)	1.12	(0.97)	-1.50 **	(0.47)
Socio-economic Status						
Education						
< middle school (reference group)	--	--	--	--	--	--
Middle school	-0.78 +	(0.44)	-0.21	(0.43)	-1.03 **	(0.30)
High school or vocational school	-0.67	(0.59)	-0.09	(0.53)	-1.39 *	(0.59)
College or +	-1.44 *	(0.59)	0.11	(1.30)	0.23	(0.84)
Employment and occupation						
Not working (reference group)	--	--	--	--	--	--
Farmer	1.54	(0.99)	1.24	(0.74)	-1.00 *	(0.42)
Non-prof./ managerial occupation	-0.01	(0.54)	0.65	(0.56)	-0.83	(0.75)
Prof./ managerial occupation	-0.62	(0.48)	2.35 **	(0.66)	-2.96 **	(0.90)
Constant	8.55 **	(1.86)	3.07 **	(1.08)	2.67 *	(1.03)
Wald F Statistics	24.08	(12, 48)	33.23	(12, 37)	54.33	(12, 46)

Multiple regressions are estimated. Survey design effects (strata, cluster, and individual weight) are adjusted in the model estimations. Coefficients are reported; standard errors in parentheses. ** p<0.01, * p<0.05, + p<0.1

Table 4A. Associations between Perceived Discrimination and Perceived Social Standing among Urban Residents, Rural-to-Urban Migrants, and Rural Residents

	Perceived Social Standing					
	Urban Residents (n = 983)		Rural-to-Urban Migrants (n = 555)		Rural Residents (n = 1,195)	
Perceived Discrimination						
Institutional discrimination	-0.29 *	(0.14)	-0.04	(0.15)	-0.53 **	(0.10)
Interpersonal discrimination	-0.02	(0.25)	-0.47 +	(0.23)	-0.03	(0.10)
Demographic Characteristics						
Age (years)	0.00	(0.01)	0.02 *	(0.01)	-0.01	(0.01)
Gender (female)	-0.04	(0.12)	-0.26	(0.27)	-0.04	(0.12)
Marital status (married)	0.33 *	(0.13)	-0.25	(0.34)	0.11	(0.25)
Ethnicity (ethnic minority)	0.19	(0.29)	-0.93	(0.62)	0.04	(0.23)
Socio-economic Status						
Education						
< middle school (reference group)	--	--	--	--	--	--
Middle school	-0.15	(0.23)	0.61 *	(0.22)	0.06	(0.15)
High school or vocational school	0.07	(0.26)	0.55 +	(0.29)	0.16	(0.30)
College or +	0.53 *	(0.26)	0.81 *	(0.37)	0.03	(0.65)
Employment and occupation						
Not working (reference group)	--	--	--	--	--	--
Farmer	-1.06	(0.65)	0.06	(0.27)	-0.51 +	(0.27)
Non-prof./ managerial occupation	0.02	(0.20)	-0.34	(0.25)	-0.50 +	(0.28)
Prof./ managerial occupation	0.16	(0.24)	0.38	(0.32)	0.16	(0.63)
Constant	4.97 **	(0.65)	4.56 **	(0.64)	6.30 **	(0.90)
Wald F Statistics	6.34	(12, 48)	11.49	(12, 37)	13.51	(12, 46)

Multiple regressions are estimated. Survey design effects (strata, cluster, and individual weight) are adjusted in the model estimations. Coefficients are reported; standard errors in parentheses. ** $p<0.01$, * $p<0.05$, + $p<0.1$

Table 4B. Associations between Perceived Discrimination and Life Satisfaction among Urban Residents, Rural-to-Urban Migrants, and Rural Residents

	Life Satisfaction					
	Urban Residents (n = 983)		Rural-to-Urban Migrants (n = 555)		Rural Residents (n = 1,195)	
Perceived Discrimination						
Institutional discrimination	-0.29 **	(0.09)	-0.17	(0.15)	-0.16 +	(0.09)
Interpersonal discrimination	0.05	(0.15)	-0.40 +	(0.20)	-0.21	(0.12)
Demographic Characteristics						
Age (years)	0.01	(0.00)	0.01 **	(0.01)	0.00	(0.01)
Gender (female)	0.05	(0.08)	-0.22	(0.13)	0.02	(0.07)
Marital status (married)	0.32 +	(0.17)	0.44 *	(0.18)	0.10	(0.20)
Ethnicity (ethnic minority)	0.30	(0.25)	-0.473	(0.32)	0.06	(0.21)
Socio-economic Status						
Education						
< middle school (reference group)	--	--	--	--	--	--
Middle school	0.10	(0.13)	0.14	(0.17)	-0.13	(0.17)
High school or vocational school	0.12	(0.19)	-0.08	(0.24)	0.17	(0.21)
College or +	0.46 *	(0.22)	0.16	(0.36)	-0.01	(0.32)
Employment and occupation						
Not working (reference group)	--	--	--	--	--	--
Farmer	-0.24	(0.31)	-0.05	(0.19)	0.12	(0.15)
Non-prof./ managerial occupation	0.20	(0.17)	-0.34 +	(0.18)	-0.31	(0.33)
Prof./ managerial occupation	0.10	(0.19)	0.45	(0.38)	-0.14	(0.39)
Constant	3.81 **	(0.42)	4.46 **	(0.38)	4.86 **	(0.46)
Wald F Statistics	6.01	(12, 48)	22.15	(12, 37)	3.49	(12, 46)

Multiple regressions are estimated. Survey design effects (strata, cluster, and individual weight) are adjusted in the model estimations. Coefficients are reported; standard errors in parentheses. ** p<0.01, * p<0.05, + p<0.1

to institutional constraints and that arising from interpersonal contacts. Two intriguing findings emerge regarding rural-to-urban migrants.

First, institutional discrimination is perceived more frequently than interpersonal discrimination—which is understandable, given that rural-to-urban migrants encounter more difficulties because of *hukou* and other policy constraints in urban areas. However, migrants do not perceive more discrimination than non-migrants with similar demographic characteristics or socio-economic status. This finding is consistent with that of Lin et al. (2011) and Zhang et al. (2009), whose analysis of the migration process demonstrates that status-based discrimination is strongly associated with perceived institutional discrimination.

Second, the consequences of perceived discrimination on subjective well-being differ according to the source of discrimination. Among rural-to-urban migrants, perceived interpersonal discrimination has a more detrimental effect, which is particularly evident in the incidence of self-rated physical health and depressive distress. Yet, perceived institutional discrimination is not significantly associated with perceived social standing or life satisfaction among rural-to-urban migrants, as it is among urban or rural residents. This may be explained by the more positive social attitudes or higher aspirations towards achievement that migrants hold compared to their urban or rural counterparts (Knight & Gunatilaka, 2010; Li & Li, 2007).

The distinction between perceived institutional discrimination and perceived interpersonal discrimination is important for developing effective policy strategies and creating a more equitable social environment. Compared to urban residents, rural-to-urban migrants report more institutional discrimination before socio-economic measures are controlled. However, when socio-economic status is included in the analysis, rural-to-urban migrants do not perceive more institutional discrimination, whereas education and occupation are significantly related to the level of perceived institutional discrimination. In order to reduce discrimination at the institutional level, the socio-economic disparity associated with the Chinese *hukou* system and the urban-rural divide must be addressed. Reforms should focus on reducing inequalities in the

distribution of resources and opportunities between the urban and rural areas. More specifically, measures to bolster rural areas, such as waiving tuition fees in rural schools, implementing the new rural medical insurance scheme, boosting modern agriculture, and increasing infrastructure construction, should be further promoted. It needs to be ensured that adequate resources are allocated for the sustainable development of the rural economy, so that the living conditions and opportunities in the countryside can be eventually improved.

The differential consequences for subjective well-being according to whether institutional or interpersonal discrimination is experienced have direct implications for government policies and interventions. Particularly, for rural-to-urban migrants, mental and physical health concerns have grown increasingly urgent. This study shows that perceived interpersonal discrimination has a particularly detrimental effect on migrants' self-rated physical health and depressive distress. In recent years, several government policy initiatives have aimed to reduce discrimination against migrants at the institutional level by increasing migrants' access to urban services, providing migrant children access to urban public schools, and allowing migrants to obtain the birth certificate for their first child at their actual place of residence. Still, in order to promote migrant mental and physical health status, efforts need to be made to educate the general public about the contribution of the migrant population and to reduce discrimination against them at the interpersonal level. Community-based programs should also be implemented to empower migrants, improve their self-images, and give them the tools for understanding their rights and challenging discrimination.

When examining the experience and consequences of perceived discrimination, a few caveats need be recognized. Perceptibility is a concern when dealing with self-reports of discrimination. Although scholars have asserted its validity in measuring experiences of discrimination (Banks et al., 2006; Williams et al., 1999), a combination of this measure with other instruments, such as discriminatory incidents or events, would provide a more comprehensive understanding. Also it should be noted that, in this study, the identification of predictors of perceived interpersonal discrimination was not as successful as that of

perceived institutional discrimination. Future studies should pursue this distinction and explore potential predictors of perceived interpersonal discrimination, such as contact opportunities (Goto, Gee, & Takeuchi, 2002), in the Chinese context. Finally, the results of this study indicate that people's experience of perceived discrimination is associated with subjective measures of well-being. The analysis, however, is based on cross-sectional data. Causal inferences drawn from cross-sectional data must be approached with extreme caution. It is necessary to collect longitudinal data on these measures to further explore the issue and determine how the experience of perceived discrimination and its associated consequences change over time.

Despite the above caveats, this study is an initial effort to distinguish the experience of perceived institutional discrimination from that of perceived interpersonal discrimination among rural-to-urban migrants, and to compare their experiences with those of urban and rural residents. It stresses the differential consequences of perceived discrimination on subjective well-being according to the source of discrimination. This study represents a provocative and informative glimpse into the experience and consequences of perceived discrimination and unfair treatment among Chinese people in a rapidly changing social and policy context.

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References

Banks, K. H., Kohn-Wood, L. P., & Spencer, M. S. (2006). An examination of the African American experience of everyday discrimination and symptoms of psychological distress. *Community Mental Health Journal, 42*(6), 555-570.

Boey, K. W. (1999). Cross-validation of a short form of the CES-D in Chinese elderly. *International Journal of Geriatric Psychiatry, 14*(8), 608-617.

Brondolo, E., Rieppi, M. A., Kelly, K. P., & Gerin, W. (2003). Perceived racism and blood pressure: A review of the literature and conceptual and methodological critique. *Annals of Behavioral Medicine, 25*(1), 55-65.

Chan, K. W. (1994). *Cities with invisible walls: Reinterpreting urbanization in post-1949 China*: Hong Kong: Oxford University Press.

Chan, K. W., & Buckingham, W. (2008). Is China abolishing the *hukou* system? *The China Quarterly, 195*, 582-606.

Chan, K. W., & Zhang, L. (1999). The *hukou* system and rural-urban migration: Processes and changes. *The China Quarterly, 160*, 818-855.

Cheng, T., & Selden, M. (1994). The origin and social consequences of China's *hukou* system. *The China Quarterly, 139*, 644-668.

DuBois, D. L., Burk-Braxton, C., Swenson, L. P., Tevendale, H. D., & Hardesty, J. L. (2002). Race and gender influences on adjustment in early adolescence. *Child Development, 73*(5), 1573-1592.

Fan, C. (2008). *China on the move: Migration, the state, and the household*: New York: Routledge.

Gee, G. C. (2002). A multilevel analysis of the relationship between institutional and individual racial discrimination and health status. *American Journal of Public Health, 92*(4), 615-623.

Gee, G. C., Ro, A., Shariff-Marco, S., & Chae, D. (2009). Racial discrimination and health among Asian Americans: Evidence, assessment, and directions for future research. *Epidemiologic Reviews, 31*(1), 130-151.

Gee, G. C., Spencer, M. S., Chen, J., & Takeuchi, D. T. (2007). A nationwide study of discrimination and chronic health conditions among Asian Americans. *American Journal of Public Health, 97*(7), 1275-1282.

Goto, S., Gee, G. C., & Takeuchi, D. T. (2002). Strangers still? The experience of discrimination among Chinese Americans. *Journal of Community Psychology, 30*(2), 211-224.

Gustafsson, B. A., Shi, L., & Sicular, T. (2008). *Inequality and public policy in China*: Cambridge and New York: Cambridge University Press.

Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry, 70*(1), 42-57.

Hong, Y., Stanton, B., Li, X., Yang, H., Lin, D., Fang, X., et al. (2006). Rural-to-urban migrants and the HIV epidemic in China. *AIDS and Behavior, 10*(4), 421-430.

Jacka, T. (2006). *Rural women in urban China: Gender, migration and social change*: Armonk and London: ME Sharpe.

Knight, J., & Gunatilaka, R. (2010). Great expectations? The subjective well-being of rural-urban migrants in China. *World Development, 38*(1), 113-124.

Kwong, J. (2004). Educating migrant children: Negotiations between the state and civil society. *The China Quarterly, 180*, 1073-1088.

Landry, P., & Shen, M. (2005). Reaching migrants in survey research: The use of global positioning system to reduce coverage bias in China. *Political Analysis, 13*(1), 1-22.

Lee, C.-K. (1998). *Gender and the south China miracle: Two worlds of factory women*: Berkeley: University of California Press.

Li, P., & Li, W. (2007). Migrant worker's economic status and social attitude in the transition of China (in Chinese). *Sociological Studies, 22*(3), 1-17.

Li, L., Wang, H., Ye, X., Jiang, M., Lou, Q., & Hesketh, T. (2007). The mental health status of Chinese rural-urban migrant workers. *Social Psychiatry and Psychiatric Epidemiology, 42*(9), 716-722.

Liang, Z. (2004). Patterns of migration and occupational attainment in contemporary China: 1985-1990. *Development and Society, 33*(2), 251-274.

Liang, Z., & Ma, Z. (2004). China's floating population: New evidence from the 2000 census. *Population and Development Review, 30*(3), 467-488.

Lin, D., Li, X., Wang, B., Hong, Y., Fang, X., Qin, X., et al. (2011). Discrimination, perceived social inequity, and mental health among rural-to-urban migrants in China. *Community Mental Health Journal, 47*(2), 171-180.

Lin, Z., & Zhang, L. (2008). *Migrant workers: Participatory action research (in Chinese)*: Beijing: Social Sciences Academic Press.

Liu, X. (2007). *Study of Chinese policies towards migrant workers (in Chinese)*: Changsha: Hunan People's Publishing House.

Liu, Z. (2003). Institution and inequality: The *hukou* system in China. *Journal of Comparative Economics, 33*, 133-157.

McGillivray, M., & Clarke, M. (2006). Human well-being: Concepts and measures. In M. McGillivray & M. Clarke (Eds.), *Understanding human well-being* (pp. 3-15): United Nations University Press.

Mobrand, E. (2006). Politics of cityward migration: An overview of China in comparative perspective. *Habitat International, 30*(2), 261-274.

Murphy, R. (2004). Turning Chinese peasants into modern citizens: 'population quality', demographic transition, and primary schools. *The China Quarterly, 177*, 1-20.

Murphy, R., & Fong, V. L. (2006). Introduction: Chinese experiences of citizenship. In R. Murphy & V. L. Fong (Eds.), *Chinese citizenship: Views from the margins* (pp. 1-8): New York: Routledge.

National Bureau of Statistics of China. (2009). *China statistical yearbook 2009*. Beijing: China Statistical Press.

Pan, Z. (2007). *Society, subjectivity and order: Spatial turn on peasant-worker studies (in Chinese)*: Beijing: Social Sciences Academic Press.

Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International Journal of Epidemiology, 35*(4), 888-901.

Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531-554.

Perlow, H. M., Danoff-Burg, S., Swenson, R. R., & Pulgiano, D. (2004). The impact of ecological risk and perceived discrimination on the psychological adjustment of African American and European American youth. *Journal of Community Psychology, 32*(4), 375-389.

Pun, N. (2005). *Made in China: Subject, power and resistance in a global workplace*: Durham: Duke University Press.

Smith, C. J., & Hugo, G. (2008). Migration, urbanization, and the spread of sexually transmitted diseases: Empirical and theoretical observations in China and Indonesia. In J. R. Logan (Ed.), *Urban China in transition* (pp. 294-314): Oxford: Blackwell Publishing.

Solinger, D. (1999). *Contesting citizenship in urban China: Peasant migrants, the state, and the logic of the market*: University of California Press.

Solinger, D. (2006). The creation of a new underclass in China and its implications. *Environment & Urbanization, 18*(1), 177-193.

van Hoorn, A. (2008). A short introduction to subjective well-being: Measurement, correlates and policy uses. In OECD (Ed.), *Statistics, knowledge and policy 2007: Measuring and fostering the progress of societies* (pp. 215-229): Paris: OECD Publishing.

Wang, F.-L. (2005). *Organizing through division and exclusion: China's hukou system*: Stanford University Press.

Wang, F. (2008). *Boundaries and categories: Rising inequality in post-socialist urban China*: Stanford University Press.

Wang, F., Ren, P., Zhan, S., & Shen, A. (2005). Reproductive health status, knowledge, and access to health care among female migrants in Shanghai, China. *Journal of Biosocial Sciences, 37*(5), 603-622.

Wang, J.-W., Cui, Z.-T., Cui, H.-W., Wei, C.-N., Harada, K., Minamoto, K., et al. (2010). Quality of life associated with perceived stigma and discrimination among the floating population in Shanghai, China: A qualitative study. *Health Promotion International, 25*(4), 394-402.

Wen, M., & Wang, G. (2009). Demographic, psychological, and social environmental factors of loneliness and satisfaction among rural-to-urban migrants in Shanghai, China. *International Journal of Comparative Sociology, 50*(2), 155-182.

White, L. T. (1996). Migration and politics on the Shanghai delta. In B. J. Lin & J. T. Myers (Eds.), *Contemporary China in the post-war era*: University of South Carolina Press.

Whyte, M. K. (2010). *Myth of the social volcano: Perceptions of inequality and distributive injustice in contemporary China*: Stanford University Press.

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*(1), 20-47.

Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health, 93*(2), 200-208.

Williams, D. R., Spencer, M. S., & Jackson, J. S. (1999). Race, stress and physical health: The role of group identity. In R. J. Contrada & R. D. Ashmore (Eds.), *Self and identity: Fundamental issues* (pp. 71-100): Oxford University Press.

Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity and Health, 5*(3-4), 243-268.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socioeconomic status, stress and discrimination. *Journal of Health Psychology, 2*(3), 335-351.

Wong, D., Wong, F. K., He, X., Leung, G., Lau, Y., & Chang, Y. (2008). Mental health of migrant workers in China: Prevalence and correlates. *Social Psychiatry and Psychiatric Epidemiology, 43*(6), 483-489.

Wong, D. F. K. W., Chang, Y. L., & He, X. S. (2007). Rural migrant workers in urban China: Living a marginalised life. *International Journal of Social Welfare, 16*(2), 32-40.

Xiang, B. (2000). *Transcending boundaries-zhejiangcun: The story of a migrant village in Beijing (in Chinese)*: Beijing: Joint Publishing.

Yang, H., Li, X., Stanton, B., Chen, X., Liu, H., Fang, X., et al. (2005). HIV-related risk factors associated with commercial sex among female migrants in China. *Health Care for Women International, 26*(2), 134-148.

Yang, Q., & Guo, F. (1996). Occupational attainment of rural to urban temporary economic migrants in China, 1985-1990. *International Migration Review, 30*, 771-787.

Yang, X. (2004). Temporary migration and the spread of STDs/HIV in China: Is there a link? *International Migration Review, 38*(1), 212-235.

Zhang, B., Fokkema, M., Cuijpers, P., Li, J., Smits, N., & Beekman, A. (2011). Measurement invariance of the center for epidemiological studies depression scale (CES-D) among Chinese and Dutch elderly. *BMC Medical Research Methodology, 11*, 74.

Zhang, J., Li, X., Fang, X., & Xiong, Q. (2009). Discrimination experience and quality of life among rural-to-urban migrants in China: The mediation effect of expectation-reality discrepancy. *Quality Life Research, 18*(3), 291-300.

Zhang, L. (2001). *Strangers in the city: Reconfigurations of space, power, and social networks within China's floating population*: Stanford University Press.

Zhou, M., & Cai, G. (2008). Trapped in neglected corners of a booming metropolis: Residential patterns and marginalization of migrant workers in Guangzhou. In J. R. Logan (Ed.), *Urban China in transition* (pp. 226-249). Oxford: Blackwell Publishing.