



The Culture of Cities: Measuring Perceived Cosmopolitanism

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Abstract

Cities like New York and San Francisco have a different feel than cities like Newark and Columbus. But can these differences be captured quantitatively? We argue these places vary along the dimension of cosmopolitanism, that is, the extent to which they offer economic opportunities and emphasize diversity, creativity, and egalitarianism. We present a Cosmopolitan City Scale (CCS) designed to assess perceived cosmopolitanism. The CCS has high internal reliability and correlates with objective indicators of cosmopolitanism such as intergenerational mobility and number of patents generated (Study 1). Consistent with the notion that people with an independent orientation migrate to cosmopolitan places, independence was associated with preference for cosmopolitan cities as measured by our scale (Study 2). High openness to experience, high extraversion, liberalism, high socioeconomic status, and single marital status were also related to greater preference for cosmopolitan cities. We believe the CCS provides a new tool for understanding how cities differ and helps clarify factors that drive migration preferences. We also discuss implications of cosmopolitanism for cultural processes such as acculturation and intergroup relations.

Keywords

cosmopolitanism, independence, Big Five personality dimensions, residential preferences, voluntary settlement

Social scientists interested in culture have developed a number of ways of capturing the cultures of different geographic regions, including measures of self-concept (e.g., independence/interdependence), values (e.g., egalitarianism, secularism, traditionalism), social norms (e.g., tightness/looseness), and personality (e.g., the Big Five personality dimensions). Typically, these dimensions have been used to characterize large geographic units, such as countries or states/provinces. We propose a new framework to capture the culture of cities—cosmopolitanism. Given that much of the world's population inhabits cities, understanding the culture of cities may be as, if not more, important than understanding the culture of larger regions (Glaeser, 2011). Further, given that more immediate situations and norms tend to exert greater influence on people's

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psychology than more distal and diffuse conditions, understanding the cultural characteristics of cities provides a powerful tool for explaining geographic variations in people's behavior and psychological habits. Finally, the construct of cosmopolitanism may shed light on cultural and migration processes, and it may help identify the conditions that foster successful acculturation and positive intergroup relations.

Cosmopolitanism

Scholars from different areas have offered different definitions of cosmopolitanism. In the fields of geography and economics, cosmopolitanism is most often conceptualized as the degree to which a city is ethnically diverse, and it is typically operationalized as the proportion of the inhabitants who are foreign born (Short, 2004). Research in other fields, such as philosophy, political science, and sociology, has linked cosmopolitanism to a commitment to universalistic values and mutual respect among different groups (Appiah, 2006), greater freedom (Mosterin, 2005), and egalitarianism (Gilroy, 2005).

In psychology, Leung, Koh, and Tam (2015) have recently developed a measure of individual differences in cosmopolitanism. Reviewing the literature on cosmopolitanism, they identified three core features of a cosmopolitan orientation: respect for cultural diversity, cultural openness, and global prosociality. Respect for cultural diversity refers to an appreciation for cultural differences. This dimension includes values such as tolerance and respect among different groups and advocating the preservation of cultural diversity. Respect for cultural diversity is measured by items such as "I embrace cultural diversity" (Leung et al., 2015). Cultural openness refers to being intellectually receptive to input from other cultures. That is, individuals with a cosmopolitan orientation are eager to learn from other cultures, open to new ideas, and strive to expand their horizons. This dimension of cosmopolitanism closely mirrors the conceptualization of cosmopolitanism proposed by Cleveland, Laroche, and Papadopoulos (2009), who defined cosmopolitanism as openness to cultural differences and willingness to interact with people from other cultures. Cleveland et al. measured cosmopolitanism using items such as "I enjoy exchanging ideas with people from other cultures and countries." Global prosociality refers to a conviction to promote fairness and equal treatment regardless of people's ethnicity and nationality, recognize basic human rights across the globe, advocate a universal morality, and reject social dominance and inequality. Leung et al. measured global prosociality using items such as "I want to help the unfortunate ones, even if they are from other countries." In the present work, rather than investigating individual-level differences in cosmopolitan orientation, we developed a city-level measure of the degree to which cities are perceived as cosmopolitan.

Cosmopolitan Cities

Drawing on previous conceptualizations of cosmopolitanism, we identify four defining features of cosmopolitan cities. First, following the conceptualization of cosmopolitanism from geography and economics (Short, 2004), we view *diversity* as a defining feature of cosmopolitan cities. In addition to ethnic diversity, this dimension may also include social diversity (e.g., differences in social class, lifestyle, and sexual orientation). Further, on the basis of Leung et al.'s (2015) dimension respect for cultural diversity, we suggest that cosmopolitan cities embrace tolerance and mutual respect among ethnic and social groups.

Second, cosmopolitanism involves a willingness to adopt new ideas and learn from others, similar to Leung et al.'s (2015) dimension of cultural openness. In Leung et al.'s formulation, this dimension focuses on valuing learning from other cultural groups. We propose, however, that it may also include being open to new and innovative ideas in general. For example, cities differ according to the degree to which they harbor creative professions, educational and research institutions, and innovative industries (Florida, 2002a). Therefore, we also view *creativity* as a feature of cosmopolitan cities.

Third, one feature of cosmopolitanism that is consistently identified across the interdisciplinary literature is egalitarianism. Previous scholars have defined cosmopolitanism as a commitment to universalistic values (Appiah, 2006) and posited that it involves a desire to reduce inequalities among people (Gilroy, 2005). Similarly, Leung et al.'s (2015) dimension of global prosociality refers to promoting fairness and equal treatment regardless of ethnicity and nationality. Therefore, *egalitarianism* is another feature of cosmopolitan cities.

Finally, Sevincer, Kitayama, and Varnum (2015) identified another characteristic of cosmopolitan cities. Namely, such cities typically provide abundant economic opportunities that are often independent of traditional modes of employment, including high-technology industries, arts, media, and music. In a similar vein, Sassen (2001) ranked cities according to the degree to which they harbor global financial and entrepreneurial networks (the Global City Index), and Florida (2002a) proposed that diverse, creative, and open-minded cities are a major force for economic development. Thus, *economic opportunities* are our fourth defining feature of cosmopolitan cities.

In sum, we define cosmopolitan cities as urban areas that provide manifold economic opportunities and whose cultures emphasize diversity, creativity, and egalitarianism. Examples of cosmopolitan cities include New York and San Francisco in the United States; Berlin, London, and Barcelona in Europe; and also cities in other parts of the world such as Singapore, Hong Kong, Sydney, and Buenos Aires. Although cosmopolitan cities most often are large metropolitan areas, examples of cosmopolitan places also include smaller towns such as Asheville, North Carolina, and Rochester, New York.

In contrast to cosmopolitan cities, cities that are less cosmopolitan rely on more traditional economic enterprises (e.g., agriculture, heavy manufacturing) and entertain relatively stable, local entrepreneurial networks. Moreover, such cities are relatively ethnically homogeneous and emphasize values such as traditionalism and structural conservatism. Examples of such cities include Buffalo, New York, Tulsa, Oklahoma, and Jacksonville, North Carolina.

In the present work, we developed and validated a measure of perceived cosmopolitanism, the Cosmopolitan City Scale (CCS), which captures the perception of these features of city culture. First, we examined the validity of the scale by assessing its correlations with objective indicators of cosmopolitanism (e.g., ethnic diversity, intergenerational mobility; Study 1). Next, we used the CCS to investigate whether, consistent with previous research (Sevincer et al., 2015), cities that are perceived as more cosmopolitan are the preferred residential destinations of people with a more independent orientation (Study 2). We also explored the relationship between other individual differences (e.g., the Big Five personality traits) and demographic indicators (e.g., socioeconomic status [SES]), and a preference for cosmopolitan cities.

Independence and Residential Preferences

In most Western countries, people frequently change their place of residence in search of better opportunities, self-realization, and new experiences. In the United States, for instance, more than 7 million people move to another state each year (U.S. Department of Commerce, 2015a), many of whom move to major city centers (Ihrke, Faber, & Koerber, 2011). In explaining people's residential preferences, research has increasingly focused on psychological variables such as social orientation, personality, attitudes, and values (e.g., Jokela, 2009; Kitayama, Varnum, & Sevincer, 2014; Rentfrow, 2010). Researchers have also recognized the role that people's perceptions of places—such as the degree to which places symbolize economic and social opportunities—play in guiding their preferences (Fuguitt & Brown, 1990; Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006). People's residential preferences, in turn, strongly influence their actual moving decisions (Fuguitt & Brown, 1990).

One psychological variable that plays a crucial role in guiding people's residential preferences is an independent social orientation. By an independent orientation, we mean people's view of the self as autonomous and bounded as opposed to interconnected with close others (Markus & Kitayama, 1991; Varnum, Grossmann, Kitayama, & Nisbett, 2010). Research suggests that people with an independent orientation choose to settle in places that symbolize economic opportunities, self-realization, and freedom from social conventions—for example, regions that once constituted a frontier (Ishii, 2014; Ishii, Kitayama, & Uchida, 2014; Kitayama, Conway, Pietromonaco, Park, & Plaut, 2010; Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009; Varnum, 2013; Varnum & Kitayama, 2011). On the basis of these findings, Sevincer et al. (2015) suspected that in the modern era, people with a more (vs. less) independent orientation prefer cosmopolitan cities as their residential destinations because, to them, these cities symbolize opportunities for economic success, freedom, open-mindedness, and egalitarianism.

Indeed, in a set of studies conducted in Germany, Sevincer et al. (2015) found that students who indicated that they would move to a more (vs. less) cosmopolitan city (as judged by a separate group of participants in a pretest) reported pursuing more independent goals (e.g., personal success; Kitayama et al., 2009; Oettingen, Sevincer, & Gollwitzer, 2008). Further, participants primed with an independent (vs. interdependent) mind-set preferred more (vs. less) cosmopolitan cities as residential destinations. Finally, students who voluntarily moved to a cosmopolitan city were more independent than those who voluntarily moved to a noncosmopolitan city and those who did not change their location.

In the present research, to verify the validity of the CCS, we examined whether the relationship between independence and preference for cosmopolitan cities also emerges when cosmopolitanism is measured by the CCS. Extending previous work by Sevincer et al. (2015), we investigated whether the relationship between independence and preference for cosmopolitan cities persists when taking into account other individual difference variables known to be related to people's residential preferences, such as the Big Five personality traits (McCrae & Costa, 1987). Although distinct from social orientation, some of these traits do appear to be linked to an independent orientation. In Western cultures, high independence is associated with high extraversion, high openness to experience, and low neuroticism (Benet-Martínez & Karakitapoglu-Aygun, 2003; Kwan, Bond, & Singelis, 1997).

Personality Traits, Political Ideology, and Residential Preferences

Previous research has highlighted the importance of personality in explaining people's residential preferences. For example, high openness to experience, high extraversion, and low agreeableness (McCrae & Costa, 1987) predict residential mobility within the United States (Jokela, 2009). Moreover, a 9-year prospective study found that people high in sociability (a component of extraversion defined as the tendency to seek and enjoy the presence of other people; Buss & Plomin, 1984), were more likely to migrate from rural to urban municipalities in Finland (Jokela, Elovainio, Kivimäki, & Keltikangas-Järvinen, 2008). On a similar note, it has been proposed that people high in openness and extraversion are inclined to move to large metropolitan areas (such as cosmopolitan cities) because these areas likely meet their need for novel experiences and social contact (Rentfrow, 2010; Rentfrow, Gosling, & Potter, 2008). Finally, people seek to live in regions where their political orientation is predominant (Motyl, Iyer, Oishi, Trawalter, & Nosek, 2014). Because many cosmopolitan cities are located in states that typically vote democratic rather than republican (U.S. House of Representatives, n. d.), a more liberal political ideology may predict a preference for cosmopolitan cities. Thus, we also explored whether personality and political ideology are related to a preference for cosmopolitan cities. In this vein, we also examined, whether our previous finding that independence is related to a preference for cosmopolitan cities remains robust when taking into account these other variables.

Overview of the Present Work

We set out to develop a way to characterize the cosmopolitanism of cities. We did so by measuring both lay perceptions of cities and some hard indicators of cosmopolitanism, and by assessing correlations between the two (Study 1). We also sought to test whether independently oriented people feel attracted to cities they perceive as being cosmopolitan and whether this relationship holds when taking into account relevant personality traits (e.g., openness to experience, extraversion), political ideology (liberalism), and demographic characteristics (SES, marital status; Study 2).

Study 1: Developing the CCS

To develop the CCS, we asked American participants to rate the 30 biggest U.S. cities using our scale. We then explored the factor structure and internal consistency of the scale as well as its correspondence with objective indicators of cosmopolitanism.

Method

Participants, design, and procedure. Our sample consisted of 265 American Internet users (152 female, 109 male, 4 unidentified; M age = 38.48, SD = 13.17) recruited through Amazon Mechanical Turk for a study on “how people perceive American cities.” Participants were paid US\$0.50 for taking part. Seventy-eight percent of the participants were Caucasian, 9% were African American, 3% were Asian American, and 10% identified with other ethnic groups. Thirteen percent had some high school education or had completed high school, 69% had either some college education or had completed college, and 19% had either some postgraduate education or had completed a postgraduate education. Forty-two percent were unmarried, 40% were married, and 18% were widowed, divorced, or did not provide marital information. The study used a correlational design. Participants completed the questionnaire online and were debriefed at the end of the study.

Materials

CCS. We presented participants with the 30 most populous U.S. cities in random order and asked them to rate each city on 10 items. The items were designed on the basis of our conceptualization of cosmopolitan cities as places offering opportunities for economic success, diversity, creativity, and egalitarianism, and in part adapted from Sevincer et al. (2015). Participants responded on 7-point scales ranging from 1 (*does not apply at all to that city*) to 7 (*applies very much to that city*).

To capture the overarching construct, cosmopolitanism, in a straightforward way, we generated the item “is a cosmopolitan city.” To measure our first defining feature of cosmopolitan cities as offering economic opportunities, we generated the item “provides opportunities to build one’s career.” To capture the second feature, diversity, in line with the traditional definition of cosmopolitan cities as being ethnically diverse (Short, 2004), we generated the item “is a multicultural city.” In line with Leung et al. (2015), we also included the items “is tolerant toward minority groups” and “is an open-minded city.” To measure creativity, because the domain of arts is prototypical for creative involvement (Florida, 2002a), we included the item “has an active art scene.” Also, to capture creativity more generally, we used the item “fosters innovation and creativity.” To assess our fourth feature of cosmopolitan cities, egalitarianism, we used the item “provides equal opportunities to succeed.” Finally, in addition to the four core features of cosmopolitan cities, because the characteristics of cosmopolitan cities (in particular economic opportunities, diversity, and creativity) should create a vibrant feel and opportunities for unique and novel experiences, we added the items “is an exciting city” and “is a bleak city” (reverse coded).

Demographic Questionnaire. Participants completed a demographic questionnaire that included questions about political ideology, ethnicity,¹ educational attainment, occupation, income, marital status, and current place of residence.

Indicators of objective cosmopolitanism. We selected indicators of objective cosmopolitanism on the basis of our definition of cosmopolitan cities. Specifically, to assess economic opportunities, we used indicators of economic strength and income. To assess diversity, we used indicators of ethnic and sexual diversity as well as migration. To assess creativity, we used indicators of innovation and education, and to assess egalitarianism, we used an indicator of equality. Finally, as a proxy for excitement, we assessed indicators of cultural capital.

Data for six of the following 22 indicators were available for the metropolitan area only rather than for each city (the number of firms, total, domestic and international migration, the number of patents, and Bohemian index). Because data for Dallas and Fort Worth refer to the same metropolitan area, we used the same values for these two cities.

Economic strength. We used three indicators of economic strength: (a) employment rate; (b) percentage of self-employed workers (i.e., freelancers) from people in the workforce, an indicator that has previously been used by Vandello and Cohen (1999) as a state-level indicator of independence; and (c) number of firms in a city. The first two indicators were from the 2009-2011 American Community Survey (retrieved from <http://1.usa.gov/1qnF0lt>); the third indicator was from the 2007 Survey of Business Owners (retrieved from <http://1.usa.gov/T3vXb8>).

Income. We used three indicators of inhabitants' income: (a) per capita income; (b) median household income; and (c) median family income. The data were from the 2009-2011 American Community Survey (retrieved from <http://1.usa.gov/1qnF0lt>).

Diversity. We used three indicators to assess diversity: (a) the proportion of people from all minority ethnic groups combined, this index corresponds closely to the traditional definition of cosmopolitanism; (b) the proportion of foreign-born inhabitants; and (c) an estimate of the proportion of gay and lesbian people. The first two indicators were from the 2009-2011 American Community Survey (retrieved from <http://1.usa.gov/T3w5Yk> and <http://1.usa.gov/1i73ZXT>), and the third indicator was from Black, Gates, Sanders, and Taylor (2000).

Migration. We used three indicators to assess migration: (a) total migration, that is, the number of people who moved to or away from the city; (b) domestic migration, the number of people who moved to or away from that city from/to within the United States; and (c) international migration, the number of people who moved to or away from that city from/to other countries. The data were from the 2011 Population Estimates (retrieved from <http://1.usa.gov/11MGRxs>).

Creativity. We used four indicators to assess creativity: (a) the number of patents generated by each city; (b) the proportion of members of the "creative class" (i.e., people working in the domains of mass media, chemicals, pharmaceuticals, computer, scientific instruments, etc.); (c) the proportion of members of the "supercreative class" (i.e., people working in the arts, design, entertainment, science, etc.; Florida, 2002a); and (d) a high-tech index, rank-order data (reverse coded) that reflects the industrial output that comes from high-tech industries. The first indicator came from the U.S. Patent and Trademark Office (retrieved from <http://1.usa.gov/1vbxB8w>). The other three indicators were created by Florida (2002a, pp. 237/238, and pp. 246/247, respectively).

Education. We used two indicators: (a) percentage of the population with a university degree (Bachelor's or higher)—this index was used by Florida (2002a) as an indicator of a

city's educational potential and (b) number of universities/colleges in a city. Data were taken from the 2009-2011 American Community Survey (retrieved from <http://1.usa.gov/1i73ZXT>), and from the Database of Accredited Postsecondary Institutions and Programs (retrieved from <http://ope.ed.gov/accreditation/>), respectively.

Equality. As an indicator of equal chances for success in a city, we used the intergenerational mobility index. This index estimates how much children's income depends on their family background by comparing children's family income at the age of 30 with their parents' income when the children were between the ages of 15 and 20. The index was created by Chetty, Hendren, Kline, and Saez (2014).

Cultural capital. We used three indicators to assess cultural capital: (a) the Bohemian index, an estimate of the proportion of artistically creative inhabitants (including authors, actors, designers, musicians, and composers) relative to the total population; (b) the number of museums; and (c) vitality index, rank-order data (reverse coded) that are based on factors such as trends, costs, and services as well as an open-ended survey of city officials and residents regarding cultural and athletic attractions, nightlife, streetlife, parks, public spaces, and café society. The first indicator was from Florida (2002b), the second from the Institute of Museum and Library Services (retrieved from <http://1.usa.gov/1w3UsqI>), and the third from Creative Cities International, LLC (retrieved from <http://bit.ly/1thqf2X>).

Results

Factor structure. We explored the factor structure of the CCS in a stepwise fashion. First, we conducted principal-components analysis (PCA) with varimax rotation on all ten items across the 30 cities ($N = 265$ in this and the following analyses). The Kaiser-Meyer-Olkin measure verified sampling adequacy, $KMO = .94$ ("excellent"; Field, 2013; Hutcheson & Sofroniou, 1999), and Bartlett's test of sphericity, $\chi^2(45) = 46485.02, p < .001^2$, indicated that correlations among the items were sufficiently large. The PCA extracted only one component that accounted for 57% of the variance (Eigenvalue: 5.74). The Eigenvalues of all other components were smaller than .89, and the scree plot showed an inflection point at Component 2. Because the item "is a bleak city" did not correlate well with the other items (communality was .16, communalities of all other items were greater than .56), we dropped this item from the scale.

Second, we conducted a PCA with varimax rotation on the remaining nine items across the 30 cities ($KMO = .94$), Bartlett's test $\chi^2(36) = 45506.04, p < .001$. Again, only one component was extracted, and it accounted for 62% of the variance (Eigenvalue: 5.06). The Eigenvalues of all other components were smaller than .65, and the scree plot again showed an inflection point at Component 2. Table 1 depicts the factor loadings and communalities for the nine items.

Third, to explore whether the factor structure is invariant across methods, we repeated Step 2 using principal axis (PA) and maximum likelihood (ML) extraction procedures. The Eigenvalues of factors were virtually identical across methods. Also, we performed Velicer's minimum average partial test (MAP; Velicer, 1976) as suggested by Zwick and Velicer (1986), using the software provided by O'Connor (2000). In line with the results of the PCA, the MAP test extracted one component with an Eigenvalue of 5.61. The Eigenvalues of all other components were smaller than .65. The analyses so far suggest a 9-item unidimensional scale that measures a single construct, which we have labeled "perceived cosmopolitanism."

Because we conducted Steps 1 to 3 across all 30 cities, in a final step, we tested whether the factor structure remains the same if we control for idiosyncratic variance due to specific cities. Specifically, we dummy-coded the cities and regressed each item on all dummies, saving unstandardized residuals. We then performed PCA on the unstandardized residuals. Again, the PCA

Table 1. Study 1: Factor Loadings and Communalities for the 9-Item Cosmopolitanism Scale.

Item	Factor loading for the first component	Communality
Is a cosmopolitan city	.75	.57
Provides opportunities to build one's career	.78	.61
Is a multicultural city	.77	.59
Is tolerant toward minority groups	.77	.59
Is an open-minded city	.84	.71
Has an active art scene	.76	.58
Fosters creativity and innovation	.84	.71
Provides equal opportunities to succeed	.77	.60
Is an exciting city	.82	.67

extracted only one component, which accounted for 58% of the variance (Eigenvalue = 5.26), the Eigenvalues of all other components were smaller than .82 and similar to the Eigenvalues of the 9-item solution from Step 2 (no difference was larger than .18). The scree plot showed an inflection point at Component 2. This analysis suggests that the structure of the scale remains unidimensional even if the variance due to specific cities is taken into account.

Internal consistency. The unidimensional nature of our scale implies that the nine items correlated highly with each other suggesting that the scale is internally consistent. To further explore internal consistency, we calculated alpha reliabilities within as well as across cities.

To explore internal consistency *within* cities, for each of the 30 cities, we calculated Cronbach's alphas for the nine items across participants. Reliabilities ranged between .84 and .92 ($M = 0.90$, $SD = 0.17$), which are good to excellent (Kline, 2000). This analysis suggests that individuals varied in how cosmopolitan they perceived a particular city to be and that our scale reliably captures this variance.

To explore internal consistency *across* cities, we calculated Cronbach's alpha for the mean ratings of each of the nine items across the 30 cities. Reliability was .98, which is excellent (Kline, 2000). This analysis suggests that the cities varied in how cosmopolitan on average they were perceived to be and that our scale reliably captures this variance.

Correspondence with objective cosmopolitanism. Table 2 provides correlations among the indicators of objective cosmopolitanism and of each indicator with cities' mean perceived cosmopolitanism rating as assessed by the 9-item CCS (last row). The cities' cosmopolitanism as rated by participants was significantly positively correlated ($r_s > .38$, $p_s < .04$) with 17 of the 22 indicators examined. The 17 indicators were proportion of self-employed workers, number of firms, per capita income, median household income, median family income, proportion of minorities, proportion of foreign-born inhabitants, proportion of gay and lesbian people, number of migrants from foreign countries, number of patents, proportion of residents who are members of the "supercreative class," high-tech index, percentage of the population with a university degree, number of universities/colleges, intergenerational mobility, proportion of Bohemians, number of museums. Moreover, three indicators (employment rate, the proportion of the "creative class," vitality index) correlated positively with the CCS; these trends, however, were not statistically significant (r_s between .24 and .36, $p_s > .09$). One correlation was close to zero (total number of migrants, $r = -.03$), and only one was the opposite of the predicted direction (number of migrants from within the United States, $r = -.44$, $p = .02$). In explaining the latter finding that people from within the United States move to cities they perceive as less rather than more cosmopolitan, we

Table 2. Study 1: Correlations Between All 22 Objective Indicators of Cosmopolitanism and Perceived Cosmopolitanism as Determined by the Cosmopolitan City Scale.

Indicator	n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1. Perceived Cosmopolitanism	30	—																							
Economic Strength																									
2. Employment rate	30	.24	—																						
3. Self-employed workers	30	.58	.41	—																					
4. Firms ^a	30	.65	-.09	.37	—																				
Income																									
5. Per capita	30	.68	.58	.38	.19	—																			
6. Median household	30	.62	.55	.43	.07	.82	—																		
7. Median family	30	.56	.60	.37	-.04	.86	.95	—																	
Diversity																									
8. Proportion minorities	30	.38	-.06	.05	.47	-.29	-.21	-.08	.27	—															
9. Foreign born	30	.71	.29	.67	.54	.39	.61	.43	-.48	-.29	—														
10. Gays and lesbians	17	.53	.38	.39	-.04	.70	.54	.54	-.60	-.03	.30	—													
11. Total ^a	30	-.03	.55	.25	-.14	.37	.26	.29	.09	.07	.13	—													
12. Domestic ^a	30	-.44	.42	-.07	-.71	.13	.10	.19	.35	-.33	.09	.79	—												
13. International ^a	30	.68	-.01	.42	.98	.25	.18	.05	-.46	.62	-.01	-.04	-.65	—											
Creativity																									
14. Patents ^a	30	.62	.04	.39	.55	.40	.60	.45	-.48	.78	.25	-.08	-.43	.60	—										
15. Creative class	26	.29	.22	.14	.25	.57	.38	.39	-.29	.24	.28	.32	.08	.24	.51	—									
16. Supercreative class	26	.40	.17	.25	.18	.62	.51	.54	.01	.34	.56	.38	.14	.20	.55	.84	—								
17. High-tech index ^b	27	.65	.26	.35	.63	.62	.46	.40	-.27	.48	.60	-.41	-.16	-.66	.63	.55	.58	—							
Education																									
18. University degree	30	.55	.67	.37	.09	.94	.71	.81	-.18	.26	.49	.37	.20	-.74	.28	.62	.63	.62	—						
19. Universities/colleges	30	.65	-.06	.37	.89	.15	.00	-.09	-.50	.58	-.16	-.30	.13	.85	.44	.25	.14	.49	.09	—					
Equality																									
20. Intergenerational mobility	28	.67	.27	.50	.36	.50	.63	.56	-.14	.76	.32	.22	-.10	.44	.66	.42	.62	.49	.39	.35	—				
Cultural capital																									
21. Bohemians ^a	30	.76	.23	.60	.61	.60	.55	.48	-.24	.62	.41	.06	-.35	.65	.66	.36	.39	.33	.53	.49	.55	—			
22. Museums	27	.67	-.01	.21	.81	.36	.16	.12	-.51	.35	.04	-.16	-.60	.79	.40	.42	.36	.46	.28	.84	.37	.52	—		
23. Vitality ^b	23	.36	.03	-.08	.47	.39	.12	.08	-.51	.05	.34	-.18	-.30	.39	.50	.57	.37	.49	.49	.47	.40	.53	.49	—	

Note. Correlation coefficients printed in bold typeface are significant at $p < .05$.
^aData were available for the metropolitan area only.
^bBecause the variables were rank-order data, we used Spearman's rho correlations.

speculate that because cost of living is typically higher in more cosmopolitan cities, people may be more likely to migrate to less cosmopolitan cities even if they would prefer to migrate to more cosmopolitan ones.

Because perceived cosmopolitanism correlated positively with cities' size ($r = .55, p = .002$), we also conducted partial correlations with cosmopolitanism and the seven indicators that were obtained using absolute numbers controlling for population size. When controlling for population size, five of the seven indicators (number of universities/colleges, number of firms, international migration, number of patents, number of universities/colleges, number of museums) remained significantly positively correlated with cosmopolitanism ($r_s > .41, p_s < .02$), one indicator (total migration) correlated positively but nonsignificantly ($r = .19, p = .32$), and the only significant negative correlation (number of migrants from within the United States) became close to zero ($r = .01, p = .99$).

Discussion

Our analyses suggest a 9-item unidimensional scale captures cosmopolitanism. Across the analyses, only one factor emerged that accounted for most of the variance (between 57% and 62%). Moreover, the scale showed good to excellent internal consistency within and across cities. This pattern suggests that our scale reliably assesses a single construct: perceived cosmopolitanism. Also, the scale correlated significantly with numerous objective indicators of cosmopolitanism (e.g., ethnic diversity, intergenerational mobility, the number of patents generated) indicating that the scale has high validity. Table 3 presents the 30 largest U.S. cities ranked according to their mean perceived cosmopolitanism as measured by the CCS. In sum, Study 1 provides strong evidence for the reliability and validity of the CCS. In Study 2, we examined the relation of an independent orientation and other person variables with participants' preference for cities they perceive as cosmopolitan as measured by the CCS.

Study 2: Independence and Preference for Cosmopolitan Cities

Study 2 examined whether, consistent with prior findings, people with an independent orientation prefer cities they perceive as being more cosmopolitan. To measure the perceived cosmopolitanism of participants' preferred cities, participants listed three cities they would most like to move to and rated each city regarding cosmopolitanism using the CCS. To measure independence, participants completed the Self-Construal Scale (SCS; Singelis, 1994). The SCS assesses the degree to which people view themselves as autonomous and bounded as opposed to interconnected with close others. As yet another indicator of independence, participants completed the Cultural Orientation Scale (COS; Triandis & Gelfand, 1998). Whereas the SCS focuses on participants' self-view, the COS also encompasses other aspects of independence such as attitudes and norms (Singelis, 1994; Triandis & Gelfand, 1998).

Moreover, we tested whether other person variables related to residential preferences are associated with a preference for cosmopolitan cities. Specifically, previous research has found that high openness to experience, high extraversion, and low agreeableness predicted within-state migration in the United States (Jokela, 2009), and high sociability (a component of extraversion) predicted migration from rural to urban municipalities in Finland (Jokela et al., 2008). To address this issue, participants completed the Big Five Inventory (BFI; John & Srivastava, 1999) and the Temperament Scale (Buss & Plomin, 1984). We also measured political ideology and demographic indicators (e.g., SES, marital status, age, ethnicity). We predicted that the more independent participants were, the more they would prefer cosmopolitan cities as a residential destination and that this relationship would remain robust when controlling for personality traits, political ideology, and demographic variables.

Table 3. Study I: City Ranking by Perceived Cosmopolitanism.

Rank	Cities	<i>M</i>	<i>SD</i>
1	New York	6.33	1.21
2	San Francisco	6.08	1.11
3	Los Angeles	5.94	1.06
4	San Diego	5.46	1.26
5	Las Vegas	5.39	1.01
6	Chicago	5.36	1.30
7	Washington	5.32	0.96
8	Seattle	5.23	1.19
9	Boston	5.12	1.21
10	San Jose	4.88	1.13
11	Portland	4.75	1.24
12	Atlanta	4.74	1.31
13	Austin	4.74	1.31
14	Dallas	4.70	1.23
15	Philadelphia	4.68	.89
16	Denver	4.58	1.15
17	Houston	4.56	1.31
18	Baltimore	4.48	1.26
19	Phoenix	4.38	1.25
20	Nashville	4.36	1.31
21	San Antonio	4.32	1.25
22	Charlotte	4.08	1.28
23	Memphis	4.06	1.21
24	Fort Worth	3.97	1.27
25	Jacksonville	3.94	1.31
26	El Paso	3.87	1.28
27	Indianapolis	3.83	1.33
28	Columbus	3.77	1.31
29	Milwaukee	3.64	1.20
30	Detroit	3.53	1.38

Method

Participants, design, and procedure. Our sample consisted of 442 American Internet users (261 female, 176 male, 5 unidentified; *M* age = 37.03, *SD* = 13.46). They were recruited through Amazon Mechanical Turk for a survey on “residential preferences and personality” and paid US\$0.50 for their participation. Seventy-six percent of the participants were Caucasian, 8% were African American, 4% were Asian American, and 12% identified with other ethnic groups. Twelve percent had either some high school education or had completed high school, 69% had either some college education or had completed a college education, and 19% had either some postgraduate education or had completed a postgraduate education. Forty-seven percent were unmarried, 40% were married, and 13% were either widowed, divorced, or did not provide information regarding marital status. The study used a cross-sectional correlational design. Participants completed the questionnaire online and were fully debriefed on the last page.

Materials. We used the CCS to measure preference for cosmopolitan cities, two measures to assess social orientation, two personality measures, and a demographic questionnaire.

Preference for self-perceived cosmopolitan cities. To measure how much participants preferred cities they perceived as more rather than less cosmopolitan, we asked them to list the three U.S. cities they would prefer to move to if they had to change their place of residence. Participants read, "Suppose you had to move out of your current city. Please name the three U.S. cities that you would most like to move to." On the next page, participants saw their three chosen cities displayed and were asked to answer the CCS for each city. We averaged the nine items to obtain indexes of how cosmopolitan participants perceived each of their three favorite cities to be. The cosmopolitanism scores of the three cities were above the midpoint of the 7-point scale (most favorite city: $M = 5.34$, $SD = 1.61$; second favorite city: $M = 5.27$, $SD = 1.52$; third favorite city: $M = 5.23$, $SD = 1.55$), indicating that participants preferred more rather than less cosmopolitan cities. Because the three scores correlated positively ($r = .66$, $r = .64$, and $r = .59$, $ps < .001$), to obtain one single indicator of how much participants preferred cosmopolitan cities, we then averaged the three cosmopolitanism scores ($\alpha = .84$).

Social orientation. We assessed self-reported independence using the SCS (Singelis, 1994). The scale consists of 24 items. Half of the items assessed self-beliefs regarding independence (e.g., "I enjoy being different and unique from others in many respects"; $\alpha = .77$) and the other half assessed self-beliefs regarding interdependence (e.g., "My happiness depends on the happiness of those around me"; $\alpha = .78$). Internal consistency was $\alpha = .77$ for the Independence subscale and $\alpha = .78$ for the Interdependence subscale.

Also, participants completed the COS (Triandis & Gelfand, 1998). The scale consists of 16 items. Half of the items assessed individualistic attitudes and norms (e.g., "I'd rather depend on myself than others"; $\alpha = .77$), and the other half assessed collectivistic attitudes and norms (e.g., "Parents and children must stay together as much as possible"; $\alpha = .82$).

Personality. To assess the Big Five personality dimensions (McCrae & Costa, 1987), we used the BFI (John & Srivastava, 1999). The scale consists of 10 items and has five 2-item subscales (Extraversion, Openness, Agreeableness, Conscientiousness, Neuroticism). In our sample, reliabilities of the subscales ranged between .80 and .90.

Participants also completed the Temperament Scale (Buss & Plomin, 1984). This scale has previously been used to explore personality dimensions related to migration in Finland (Jokela et al., 2008). It distinguishes between the personality dimensions emotionality (15 items, for example, "I frequently get distressed," $\alpha = .91$), activity (five items, for example, "I like to keep busy all the time"; $\alpha = .63$), and sociability (five items, for example, "I like to be with people"; $\alpha = .73$).

Political ideology and demographic variables. Participants completed the same demographic questionnaire used in Study 1. The questionnaire included items about political ideology, gender, age, SES, marital status, ethnicity, and current place of residence.³ To assess political ideology, participants responded to the following statement: "Based on what I know about politics I am most likely to vote . . ." using a 9-point scale ranging from 1 (*democratic*) to 9 (*republican*). They also completed the statement, "Based on what I know about politics, I am . . ." on a 9-point scale from 1 (*liberal*) to 9 (*conservative*). We reverse coded and combined the two items into one index of liberal political ideology, $r = .88$ ($\alpha = .94$).

SES is typically measured as a combination of income, education, and occupation (American Psychological Association, n.d.). To assess SES, we thus asked participants to (a) estimate their family income on a 10-point scale ranging from 1 (*less than US\$20,000*) to 10 (*more than US\$200,000*), (b) indicate their highest educational attainment on a 6-point scale ranging from 1 (*some high school*) to 6 (*postgraduate degree*), and (c) list their occupation. To measure occupational prestige, two independent raters coded the named occupations for their prestige on a 4-point scale from 1 (*no at all prestigious*) to 4 (*very prestigious*; interrater reliability: $\alpha = .87$).

Table 4. Study 2: Means, Standard Deviations, and Correlations Among the Measures.

Scale	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived Cosmopolitanism	5.28	1.35	—												
Self-Construal															
2. Independence	5.15	0.79	.22	—											
3. Interdependence	4.66	0.84	.04	.08	—										
Cultural Orientation															
4. Individualism	5.72	1.26	.11	.26	.04	—									
5. Collectivism	6.32	1.28	.04	.31	.64	.16	—								
Big Five															
6. Extraversion	3.36	0.91	.12	.46	.03	.04	.24	—							
7. Openness	3.91	0.71	.23	.46	-.06	.12	.03	.19	—						
8. Agreeableness	4.21	0.68	.08	.23	.32	-.22	.42	.23	.12	—					
9. Conscientiousness	4.32	0.72	.06	.37	.05	.03	.24	.24	.17	.43	—				
10. Neuroticism	3.16	0.98	-.02	-.40	.03	.02	-.17	-.41	-.11	-.47	-.52	—			
Temperament															
11. Sociability	2.74	0.82	.16	.16	.28	-.10	.32	.51	.02	.20	-.05	-.11	—		
12. Activity	2.98	0.75	.06	.29	.16	.14	.24	.49	.14	.19	.37	-.30	.38	—	
13. Emotionality	2.54	0.82	-.07	-.38	.02	.08	-.16	-.34	-.14	-.53	-.52	.86	-.10	-.26	—

Note. Correlation coefficients printed in bold typeface are significant at $p < .05$.

using the Hauser-Warren Socioeconomic Index (Hauser & Warren, 1997). To obtain a single SES indicator, we averaged the three indices (income, education, occupational prestige).

Participants reported their ethnic background by checking one or more of the following categories: (a) Caucasian, (b) African, (c) Asian, (d) Latin, (e) Native American, and (f) Other. If participants checked more than one category, we coded them as multi-ethnic. Because there were only a few participants in each category other than Caucasian, we combined all other categories into one group, Non-Caucasian.

Results

Table 4 provides means, standard deviations, and correlations of all scales used.

Social orientation. First, to test our principal hypothesis that independence predicts the cosmopolitanism of participants' three favorite cities as perceived by participants themselves, we conducted simple regression analyses. Our two indicators of independence, the SCS Independence subscale and the COS Individualism subscale, both predicted preference for cosmopolitan cities, $\beta = .22, p < .001, 95\% \text{ CI } [0.21, 0.53]$ and, $\beta = .11, p = .026, 95\% \text{ CI } [0.01, 0.21]$, respectively. The more independent participants were, the more they preferred cities they perceived as cosmopolitan. Regarding our two indicators of interdependence, neither the SCS Interdependence subscale nor the COS Collectivism subscale predicted preference for cosmopolitan cities, $\beta s < .05, ps > .37$. Apparently, participants' independence but not their interdependence is related to their preference for cosmopolitan cities.

Personality. To explore whether any of the eight personality variables (the Big Five dimensions—openness, extraversion, agreeableness, conscientiousness, neuroticism—and the three temperament dimensions—sociability, activity, and emotionality) predicted perceived cosmopolitanism, we conducted simple regression analyses. High openness, $\beta = .23, p < .001, 95\% \text{ CI } [0.26, 0.60]$, high extraversion, $\beta = .12, p = .009, 95\% \text{ CI } [0.05, 0.32]$, and high sociability, $\beta = .16, p = .001, 95\% \text{ CI } [0.11, 0.41]$, predicted perceived cosmopolitanism of preferred cities. As sociability is a component of extraversion, it is not surprising that both predicted preference for cosmopolitan

cities. Agreeableness, conscientiousness, neuroticism, activity, and emotionality were not related to preference for cosmopolitan cities, β s between $-.07$ and $.16$, $ps > .10$.

Political ideology and demographic variables. To explore whether political ideology and any of the demographic variables (gender, age, SES, marital status, and ethnicity [Caucasian vs. all other ethnic groups combined]) predicted perceived cosmopolitanism, we conducted simple regression analyses. Liberalism, $\beta = .13$, $p = .007$, 95% CI [0.02, 0.12], and single marital status, $\beta = .15$, $p = .002$, 95% CI [0.15, 0.67], predicted preference for cosmopolitan cities. Moreover, high SES, $\beta = .08$, $p = .08$, tended to predict preference for cosmopolitan cities. Gender, age, and ethnicity were not related to preference for cosmopolitan cities, β s between $-.07$ and $.08$, $ps > .11$.

Social orientation, personality, political ideology, and demographic variables predicting perceived cosmopolitanism. Finally, to test our hypothesis that independence predicts preference for cosmopolitan cities above and beyond personality traits, political ideology, and the demographic variables, we conducted hierarchical multiple regression analyses with perceived cosmopolitanism as the dependent variable. In the first step, we entered political ideology and the demographic variables gender, age, SES, marital status, and ethnicity. These variables significantly predicted cosmopolitanism, $F(6, 401) = 4.28$, $p < .001$, explaining 6% of the variance ($R^2 = .06$). In the second step, we added the personality measures (the Big Five dimensions and the three temperament dimensions). Adding the personality variables improved the model, $F_{\text{change}}(8, 393) = 4.45$, $p < .001$, and explained additional 8% of the variance ($\Delta R^2 = .08$). In the final step, we added the social orientation measures (the SCS scales and COS scales). Adding social orientation further improved the model, $F_{\text{change}}(4, 389) = 3.02$, $p = .02$, explaining additional 3% of the variance ($\Delta R^2 = .03$). Thus, as predicted, social orientation predicted preference for cosmopolitan cities above and beyond personality, political ideology, and the demographic variables.

We note that while the SCS Independence scale continued to predict cosmopolitanism, $\beta = .29$, $p = .01$, 95% CI [0.07, 0.52], the COS Individualism scale ceased to predict cosmopolitanism, $\beta = .10$, $p = .11$, 95% CI [-0.02 , 0.22] when entered together with the SCS Independence scale and the other variables in the model. Given that independence and individualism are overlapping constructs—the SCS focuses on self-views, whereas the COS also assesses other aspects of independence/individualism such as attitudes and norms—it is not unusual that either one may cease to be a significant predictor when considered together with the other in one model (Field, 2013). The fact that independence but not individualism predicted cosmopolitanism in this model might suggest that participants' self-views are more central to guiding their residential preferences than other aspects of independence/individualism. We hesitate, however, to draw strong conclusions based on this finding. A full summary of the regression analyses is provided in Supplementary Table 1 online.

When we entered social orientation in the second step and personality in the third step, social orientation explained additional 5% of the variance ($\Delta R^2 = .05$), $F_{\text{change}}(4, 397) = 5.66$, $p < .001$, and personality additional 5% ($\Delta R^2 = .05$), $F_{\text{change}}(8, 389) = 3.10$, $p = .002$. Taken together, the analyses suggest that both social orientation and personality explained variance in predicting preference for cosmopolitan cities in addition to political ideology and the demographic predictors. Social orientation explained between 3% and 5% of the variance, and personality explained between 5% and 8% of the variance.

Discussion

As predicted, the more independent participants were, the more cosmopolitan—as measured by the CCS—were the three cities they named as preferred residential destinations. Also as predicted, the relationship between independence and preference for cosmopolitan cities remained

robust when taking into account various personality dimensions, political ideology, and several demographic variables that were also related to a preference for cosmopolitan cities.

Specifically, the personality traits high openness to experience and high extraversion/sociability, as well as liberal political views, predicted a preference for cosmopolitan cities. This pattern is in line with the idea that people prefer settling in places where their own values are predominant (Motyl et al., 2014; Rentfrow, 2010). Further, consistent with Sevincer et al. (2015), high SES tended to be associated with a preference for cosmopolitan cities. This result is in line with evidence that many affluent people settle in large metropolitan areas (Murray, 2012). Last, single marital status was also related to a preference for cosmopolitan cities. There likely are many reasons why single rather than married people move to cosmopolitan cities (e.g., the pursuit of excitement and entertainment, more unrestricted sexual norms, greater prevalence of desirable mates), and the correlational design of our studies does not allow us to draw causal inferences; however, the observed pattern is generally consistent with research suggesting that many people move to urban areas to find a mate (Gautier, Svarer, & Teulings, 2010; see also Cooke, 2014). In sum, social orientation and personality each explained unique variance in predicting participants' preference for cosmopolitan cities above and beyond demographic factors. This observation highlights the important role psychological variables play in shaping people's residential preferences in addition to demographic and sociological factors.

We should note that interdependence was not related to perceived cosmopolitanism. This pattern may seem perplexing at first. However, it is worth noting that the scales used in the present study view independence and interdependence (or individualism and collectivism) as independent dimensions rather than opposite ends of a spectrum (Singelis, 1994; Triandis & Gelfand, 1998).

Finally, one may ask whether independent participants were more inclined to change their place of residence in general. To assess participants' preference for cosmopolitan cities, we asked them to presume they had to move out of their current city. Thus, Study 2 does not tell us whether people who are more independent are more inclined to move. Previous research suggests, however, that independence is indeed linked to a greater readiness to change one's place of residence (Oishi & Kisling, 2009; Sevincer et al., 2015, Studies 2 and 3).

General Discussion

We developed a scale, the CCS, to assess the degree to which cities have a cosmopolitan culture by asking American participants to judge U.S. cities on a variety of features related to cosmopolitanism. Our results showed that the scale was unidimensional, and its internal consistency was good to excellent, suggesting that the scale has high reliability. Moreover, the scale correlated with numerous objective indicators of cosmopolitanism that assess cities' economic strength (e.g., number of firms, inhabitants' income), ethnic and sexual diversity (e.g., proportion of ethnic minorities as well as gay and lesbian people), creative output (number of patents and proportion of inhabitants with creative professions), equality (intergenerational mobility), and cultural capital (number of museums, vitality). Thus, the CCS appears to have strong validity as an indicator of cosmopolitanism (Study 1).

Next, we used the CCS to examine whether, consistent with previous research, people with a more independent social orientation favor cities they perceive as more cosmopolitan (Study 2). Indeed, the more independent people are, the more they prefer to move to cities they view as highly cosmopolitan. This finding also suggests that the CCS is a valid measure of cosmopolitanism. Finally, we found that independence predicted preference for cities with a cosmopolitan culture above and beyond numerous personality and demographic variables that also predicted cosmopolitan preference (high openness to experience, high extraversion/sociability, liberal political views, high SES, and single marital status).

Implications for Cultural Processes and Policies

Acculturation. It is worth noting that cosmopolitan cities attract foreign-born people (Study 1), and it may be the case that these destinations foster easier acculturation than less cosmopolitan destinations. Acculturation refers to individuals' psychological and behavioral changes that occur as a consequence of contact with a foreign culture (Gibson, 2001). These changes may pertain to the migrants and their descendants as well as to the members of the host culture and their descendants. The bulk of research on acculturation, however, has focused on how the migrants acculturate to their host culture (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). The fourfold model of intercultural adaption (Gudykunst & Kim, 2003), for instance, distinguishes four acculturation strategies that affect migrants' psychological, sociocultural, and health-related adjustment (as measured, for example, by well-being, career success, somatic symptoms): Assimilation (adopting the host culture while rejecting the original culture), separation (rejecting the host culture while retaining the original culture), integration (adopting the host culture while retaining the original culture), and marginalization (rejecting both the host and the original culture). Of these strategies, integration is associated with the best adjustment and marginalization with the worst adjustment (Berry, Phinney, Sam, & Vedder, 2006; Nguyen & Benet-Martínez, 2013). The fourfold model further posits that multicultural environments, such as cosmopolitan cities, foster integration. Future research may look at the degree to which the four strategies are prevalent in cosmopolitan cities and whether cosmopolitan cities foster better adjustment than noncosmopolitan cities.

Intergroup relations. The more cosmopolitan cities are perceived to be, the more ethnically diverse they are (Study 1). Research suggests that ethnic diversity is related to lower solidarity and trust within communities, in particular, between different ethnic groups (Alesina & La Ferrara, 2002; Putnam, 2007; van der Meer & Tolsma, 2014). This relationship, however, is likely moderated by features of the living environment. For example, there are large differences between countries in the degree to which this relationship holds true (van der Meer & Tolsma, 2014). Future work should test whether cosmopolitanism may attenuate the negative relationship between diversity and community cohesion and whether it may foster positive intergroup relations. This could be done by testing the relationship between cosmopolitanism and subjective, as well as objective, indicators of the quality of intergroup relations such as willingness to interact with different ethnic or social groups, the proportion of intergroup marriages, prevalence of intergroup conflict, and support for multicultural policies.

In this vein, future work could also test whether a cosmopolitan culture may not only attract people with certain social and political orientations and personality traits, such as independence, liberalism, and openness to experience but also shape people's orientations in the direction of independence, liberalism, and openness.

Perceived Versus Objective Cosmopolitanism

Perceived cosmopolitanism correlated positively with objective cosmopolitanism (Study 1). Nevertheless, perceived and objective cosmopolitanism may have unique impacts on psychological processes and behaviors. For example, the schemas people have of certain places (whether accurate or not) may play an important role in guiding their moving decisions (Fuguitt & Brown, 1990; Kitayama et al., 2006). Future work may test whether perceived cosmopolitanism is a better predictor than objective cosmopolitanism of residential moves and might also assess whether perceived versus objective cosmopolitanism have stronger effects on acculturation and intergroup relations.

Related Approaches: City Air Hypothesis, Tightness–Looseness, and Entrepreneurial Culture

Our research suggests that the cultures of cities can be differentiated on the dimension of cosmopolitanism. According to the City Air Hypothesis (Yamagishi, Hashimoto, Li, & Schug, 2012), another key feature of urban (vs. rural) areas is their relative lack of social constraints. In line with this hypothesis, residents of urban environments are more independent than those of more rural environments (Kashima et al., 2004; Matsumoto, Willingham, & Ollide, 2009). Further, countries and regions differ in the strength of social norms, a dimension known as tightness–looseness (Gelfand et al., 2011; Harrington & Gelfand, 2014). Thus, future work may investigate whether social constraints are also weaker in more (vs. less) cosmopolitan cities, and whether social norms may be looser in such places (Gelfand et al., 2011).

Another potentially relevant dimension of cities is entrepreneurial culture. Members of entrepreneurial cultures have a personality profile characterized by high extraversion, conscientiousness, and openness to experience but low agreeableness and neuroticism (Obschonka et al., 2015). Previous research has explored variations in entrepreneurial culture between cities and regions and found that cities and regions with a high (vs. low) entrepreneurial culture (e.g., San Luis Obispo-Paso) were more resilient to an economic recession (Obschonka et al., 2016). Future research may explore whether more (vs. less) cosmopolitan cities also have a more entrepreneurial culture.

Limitations and Future Directions

There are several limitations to the present work that provide further directions for future work. First, in Study 2, we assessed residential preferences rather than actual residential moves. Although residential preferences guide actual moves (Fuguitt & Brown, 1990), migration is often constrained by factors such as living costs, family commitments, and old age. Consistent with the idea that independence is related to the actual migration to cosmopolitan cities, in our earlier work (Sevincer et al., 2015; Study 3), students who moved to a cosmopolitan city were more independent than those who moved to a noncosmopolitan city and those who never moved. Nevertheless, future work may explore whether the pattern of Study 2 that independence, openness to experience, and extraversion predict preferences for cosmopolitan cities also holds true for actual movements.

A second limitation is that, in our samples, Caucasian participants were overrepresented (70% in Study 1 and 76% in Study 2 compared with 64% of the U.S. population). Highly educated participants were also overrepresented (78% had some college education or more in Studies 1 and 2 compared with 65% of the U.S. population; U.S. Department of Commerce, 2015b). In Study 2, however, social orientation (independence) and personality (openness to experience and extraversion) predicted preference for cosmopolitan cities above and beyond the demographic variables, suggesting that this pattern was robust when controlling for ethnicity and education. Future research may recruit a more representative sample, however, to explore whether the findings generalize to the general U.S. population.

A third limitation is that, in Study 2, we asked participants to rate the current cosmopolitanism of their preferred residential destinations. City cultures may change over time, however, and people may ground their moving preferences based on how they imagine a city will be in the future rather than the present. Thus, future research may use longitudinal designs to investigate the degree to which participants' perceptions and objective indicators of cosmopolitanism change over time and how this change is related to migration preferences.

Finally, future research should also investigate the relationship between psychological variables and migration to cosmopolitan cities in non-Western cultures (e.g., cities like Singapore or

Buenos Aires). It may also be fruitful in an increasingly interconnected world to extend this framework by thinking about cosmopolitanism in a more global sense. For example, one might map out or rank the world's biggest cities according to their cosmopolitanism.

Conclusion

We developed a new scale, the CCS, to measure the cosmopolitanism of cities. The scale had high reliability and correlated with numerous objective indicators of cosmopolitanism, such as ethnic diversity and creative output. Using this new scale, we found that independent social orientation, the personality dimensions high openness to experience and high extraversion, as well as liberal political ideology, predicted a preference for settling in cosmopolitan cities. The results suggest that cosmopolitan cities attract independently oriented, open-minded, and extraverted people and highlight the importance of studying not only the culture of countries and regions but also the culture of cities.

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Notes

1. Participants' ethnicity may have influenced their responses to some of the cosmopolitanism items. Whether a city is tolerant toward minority groups, for instance, and whether it provides equal opportunities may be perceived very differently by the people from a minority ethnic than those from the majority ethnic. To explore this issue, we compared majority (i.e., Caucasian participants) versus minority ethnicity (i.e., participants of all other ethnicities combined) responses to the two items "is tolerant toward minority groups" and "provides equal opportunities to succeed" for each of the 30 cities. Regarding the tolerance item, only two of the 30 comparisons were significant, and they were in the opposite direction. Regarding the equality item, however, 14 of the 30 comparisons were significant (6 marginally, $ps < .08$), and all of them were in the direction that minority participants rated the respective city as providing *more* equality. This latter pattern suggests that the minority participants in our study—perhaps somewhat surprisingly—perceived the cities as offering more equality than the majority participants.
2. All p values reported in this article are two-tailed.
3. We assessed participants' current place of residence to address the alternative explanations that participants may have named cities as their preferred locations that are close rather than far to their current city. Thus, to examine whether the distance of participants' current location to their favorite locations confounds the results, we first calculated the distance (in km) from participants' current city to each of their three favorite cities. The average distance of participants' three favorite cities to their current city was 1.516 km. This distance is about 3/8 of the distance from the East to West coast of the United States. To explore whether our results hold when controlling for current city distance, we conducted a simultaneous regression analysis with independence (the SCS Independence subscale) and current city distance as predictors and perceived cosmopolitanism as the dependent variable. Independence continued to predict cosmopolitanism over and above city distance, $t(437) = 21.63, p < .001$.

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