

Stereotyping Effects on Cities: Measurement Scales for City's Warmth and Competence

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Abstract. *In the endeavor of analyzing urban development perspectives, the current paper aims to find out how warmth and competence stereotypes would operate in the case of a city, predicting its future, as a direct consequence of people's positive or negative feelings and actions. Results of such analyses would be of strategic importance, knowing that various aspects of urban development (from tourism to business, well-being, active population growth and talents retention) depend on people's decisions to visit that city, to invest, to work, to study, to settle down there, or to simply spread positive opinions about it. Therefore, relying on the well-known SCM - stereotype content model, the paper adapts previous warmth and competence scales, and develops a customized research instrument for analyzing connections between people's perceptions and the mental labels attached to a specific city. Considering warmth and competence dimensions, as well as the other variables of interest such as status, cooperation and competition, we use an exploratory procedure for item selection followed by a Q-sorting analysis for scale content validation. The paper adds to the literature in two main ways. It firstly advances an integrative view that connects the theories from social psychology, communication and branding with those from urban development. Secondly, it offers a content validated measurement instrument, as a necessary departure point for future analyses meant to identify challenges and to predict the potential for development of smart and sustainable cities.*

Keywords: *warmth, competence, city competitiveness, smart city, place branding, scale validation, Q-sorting.*

Introduction

The psychological theory of the stereotype content model (SCM) states that people organize the way in which they perceive others based on two major dimensions, warmth and competence (sometimes labeled also as communion and agency). Warmth captures traits as friendliness, sincerity, helpfulness and trustworthiness, while competence reflects efficacy, skills and intelligence. People perceived as having positive and cooperative intentions are labeled as being warm, in contrast to the cold ones – those with perceived negative and competitive intentions. Similarly, people perceived as capable to implement their intentions are stereotyped as competent, whereas those perceived as unable to reach their goals are seen as incompetent. Warmth and competence perceptions have been intensively studied as universal dimensions of social cognition that provide fundamental social structural answers about competition, cooperation and status, and explain both interpersonal and inter-group relationships, as well as stereotype labeling (Andrei, Zaiț, Vătămănescu & Pînzaru, 2016; Andrei & Zait, 2014; Cuddy, Glick & Beninger, 2011; Cuddy, Fiske & Glick, 2008; Fiske, Cuddy & Glick, 2007; Fiske, Cuddy, Glick & Xu, 2002; Lin, Kwan, Cheung & Fiske, 2005; Trifiletti, Andrighetto, Rattazzi, Visintin & Falvo, 2011) All people and all social groups (according to the SCM) fit within one of the four possible combinations of high (or low) level of warmth with high (or low) level of competence. Such framing has important consequences in terms of future reactions towards each category, as positive or negative feelings and actions. Cities, similar to human beings, have their own personality, used in branding strategies and place marketing (Aitken, 2009; Eshuis, Klijn & Braun, 2014; Freire, 2009; Haslberger & Zehetner, 2014; Kavaratsis, Warnaby & Ashworth, 2015; Vicol & Zait, 2014; Zenker, 2011; Zenker & Martin, 2011). The personality of a city can influence people's decisions to visit that city (tourism and leisure activities), to settle down (becoming residents), to invest (business activities), to study in that city (attracting talents), to organize various events (cultural, sports, professional), and to promote the city (various forms of word of mouth). It makes sense to investigate, therefore, how warmth and competence stereotypes would operate for the case of a city. The purpose of this study was to identify the appropriate items that could be used to measure warmth and competence, as well as status, competition and cooperation (initially developed at individual level) at an aggregate level, for a city. We first synthesized results of previous studies on warmth and competence on various human and non-

human subjects (brands), than we analyzed the main issues concerning cities' modern evolution – smartness, competitiveness, branding – which could justify the possible stereotyping effects - and we consequently suggested and tested potential scales for measuring a city's perceived warmth and competence.

Warmth and competence: perception targets

Warmth and competence stereotypes were intensively studied for a significant number of entities: various interactions of human individuals (Cuddy et al., 2008; Fiske et al., 2007; Fiske, et al., 2002), groups and organizations (Aaker, Vohs & Mogilner, 2010; Andrei & Zait, 2014; Bernritter, Verlegh & Smit, 2016; Cuddy et al., 2011; Durante, Pasin & Trifiletti, 2009; Lin et al, 2005), countries and nations (Chattalas & Takada, 2013; Ishii & Watanabe, 2014; Trifiletti et al, 2011) or even non-human entities (such as brands) (Aaker, Garbinsky & Vohs, 2012; Bernritter et al., 2016; Ivens, Leischnig, Muller & Valta, 2015).

For all studied entities and contexts, warmth and competence perceptions were crucial for subjects' reactions – intention to promote or to endorse a brand in social media groups (Andrei et al., 2016), intention to buy (Aaker et al., 2010). Different relational and emotional aspects of brands constitute critical factors for the manner in which people perceive, feel and behave towards specific brands and organizations. Perceptions of a brand's warmth, for example, reduce the efforts that brands need to make in order to achieve consumers' endorsements on social media pages (Bernritter et al., 2016).

The perceived warmth of a newly launched company increases the chances of positive word of mouth from potential consumers (Andrei et al., 2016).

Both direct and mediating effects of warmth and competence shaped consumer responses toward brands in specific situations (Ivens et al, 2015).

Perceived competence and perceived warmth are closely related to other variables, such as perceived status and perceived competition (Fiske et al, 2002) and its opposite, the perception of cooperation (Durante et al., 2009).

Since these stereotyping effects were found for individuals, groups, nations, organizations and brands, why would they not be present in the case of cities, as well?

Taking into account that cities have both for-profit and non-profit dimensions, it would be interesting to examine how warmth and competence perceptions would form and what consequences would have they, considering the findings of previous studies stating that non-profit entities are perceived as warm and for-profits as competent (Aaker et al., 2010). All these studies encouraged us to analyze how warmth and competence stereotypes would operate in the case of the cities. The first step was to design and test a scale for measuring the perceived warmth and competence of a city, since such a scale does not exist in the literature.

City smartness, competitiveness, place branding and stereotyping

The stereotyping effects of warmth and competence could apply to cities if a city can be personified and thus evaluated. This personification already happened in the process of city branding and, largely, in place marketing. Place marketing, based on city branding, is increasingly used by local governments in order to enhance the image of cities and achieve various goals related to economic, social and urban or spatial development (Eshuis, Klijn & Braun, 2014). Researchers already discovered that citizens' involvement in place branding can be used to enhance the quality of the brand and include their feelings into the process of governance. Modern cities need to become smarter, competitive and sustainable at the same time, which might be challenging and even controversial. (Monfaredzadeh & Berardi, 2015) Besides the hard components or competencies of smart cities, related to technologies, the soft part, related to people and civil societies, and to the so called "civilizational competencies", is at least as important for the positive evolution of cities (Campbell, 2009; Freire, 2009; Ishkineeva, Ishkineeva & Akhmetova, 2015; Lombardi, Giordano, Farouh & Yousef, 2012; Winters, 2011; Sztompka, 1993; Zait, 2016). Sustainability and livability are key for the competitiveness of cities, strong city brands being able to attract and retain inhabitants, talents, tourists, investors, various international organizations and events. (McCann, 2007) People have a crucial role in any comprehensive city branding process (Freire, 2009; Haslberger & Zehetner, 2014; Kavaratsis et al., 2015; Vicol & Zait, 2014; Zenker, 2011). Citizens' rights, roles, relationships and responsibilities are important ingredients for place branding (Aitken, 2009), and they also suggest a certain personification of a city. Although for the hard competitiveness and sustainability of a city the competence side is important, for livability and place happiness (Deutch-Burgner, Ravualaparthi & Goulias, 2014) we need the warmth dimension. All these are supplementary arguments in our endeavor of testing warmth and competence perceptions regarding cities.

City's perceived warmth and competence: scale testing

In order to construct a scale for measuring perceived warmth and competence of a city, as well as the other variables of interest (status, cooperation and competition) we combined items previously used in researches on groups, nations and organizations by Chattalas and Takada (2013), Cuddy et al. (2008), Cuddy et al. (2011), Fiske et al. (2002), Fiske et al. 2007, and Trifiletti et al. (2011). Variables of interest are measured on a Likert type scale with four levels. For the final selection of the appropriate items for observing perceptions of warmth and competence in the case of a city we followed an exploratory stage validation process (Berdea & Zait, 2013; Zait & Zait, 2009). We prepared a document with a short description of the two dimensions, warmth and competence, followed by two possible scales – one referring to the people of a city, the other one related to the city – in order to see which one is considered more appropriate for measuring issues related to the entity “city” (an aggregated one, with human and non-human elements on various levels). The document was then sent by e-mail to 15 experts (all from academia, 3 with business relationships, as well – double experience, from different specializations – economics, management, marketing, linguistics, history, communication). The document and tested items are presented in Table 1.

Table 1. Items for the Q-sorting procedure

Short description of warmth and competence

Studies from social psychology and cognitive sciences suggest that people evaluate other people based on two fundamental dimensions: warmth and competence. Warmth refers to people's intentions – good or bad, while competence refers to the capability of materializing those intentions (are people able to accomplish their intended objectives). Usually social groups are perceived as warm if they do not compete with the in-group for the same resources, and they are considered competent if they are high in status (either economically or educationally successful, for example). Thus, lack of competition predicts perceived warmth and status predicts perceived competence. In a very general sense, warmth suggests good intentions, an orientation towards common good, and readiness to helping others; competence suggests the actual capacity of accomplishing one's objectives.

The following statements will be used to measure the perceived warmth and competence for a whole city. There are two alternatives, labeled as scale 1 and scale 2. For both scales, please read the statements and classify them into the warmth or competence category, based on your opinion, by marking them with W if you consider that the item belongs to the warmth category and with a C if you consider that the item belongs to the competence category. When finishing, please indicate which scale you consider that better describes the idea of city – scale 1 (in which statements refer to people from that city) or scale 2 (in which statements refer directly to the city).

Items for scale 1
People from City X are skilled
People from City X are kind
People from City X are intelligent
People from City X are competent
People from City X are competitive
People from City X are helpful
People from City X are ingenious
People from City X have no empathy (r)
People from City X are efficient
People from City X are qualified
People from City X are lazy (r)
People from City X are disorganized (r)
People from City X are friendly
People from City X are warm
People from City X are sociable
People from City X are sincere
People from City X are tolerant
People from City X are achievers
People from City X are generous
People from City X are sensitive
People from City X are independent
People from City X are hospitable
People from City X are reliable
People from City X are cold (r)
Items for scale 2
City X is sincere
City X is highly qualified
City X is an achiever
City X is competent
City X is generous
City X is independent
City X is ingenious
City X is reliable
City X is efficient
City X is helpful
City X is lazy (r)
City X is disorganized (r)
City X is friendly
City X is warm

Warm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sociable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Skilled	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	13	0.86	0.13
Tolerant	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.06	0.93
Kind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Competit	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	12	0.8	0.2
Sensitive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Intelligent	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	13	0.86	0.13
Hospitable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Empat (r)	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	4	0.26	0.73
Cold (r)	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	4	0.26	0.73

To these warmth and competence scales already tested, scales for measuring status, competition and cooperation will be added, for a future research. For these scales we will need two generic cities, X and Y (similar to Durante et al., 2009). The suggested items are presented in table 4 (based on the results of the exploratory research for the warmth and competence scale, for which experts selected the second scale – referring to City X - as being the most appropriate, we used the statements related to City X, and not people from City X).

Table 4. Items for the City Status, Perceived Competition and Perceived Cooperation

Status
City X city has the necessary abilities to get high recognition
City X city is successful
City X city is a natural leader
City X city has an important position in the society
Competition
When people from City Y are preferred for hiring, things get more difficult for City X
Resources that go to City Y are likely to take away from the resources of the City X
Benefits allocated to City Y are likely to take away benefits for City X
Cooperation
Fair relationships of give and take can exist between City Y and City X
City Y can collaborate well with City X
Cooperation is possible, in various social and economic contexts, between City Y and City X.

Conclusions

The results of our scale content validation procedure suggest that a city's perceived warmth and competence makes sense and could be measured using the scale presented in Table 5. Statements refer to the City X as a whole.

Table 5. Scale items for measuring the perceived warmth and competence for a city

City X perceived warmth	City X perceived competence
City X is sincere	City X is highly qualified
City X is generous	City X is competent
City X is helpful	City X is independent
City X is friendly	City X is ingenious
City X is warm	City X is efficient
City X is sociable	City X is a skilled one
City X is tolerant	City X is competitive
City X is kind	City X is intelligent
City X is sensitive	
City X is hospitable	
City X is reliable*	

** This statement was classified as belonging to the warmth category by 10 out of 15 experts (66% agreement), the only item below 0.7, and will need careful consideration during the reliability tests.*

Using a Likert type format with four steps (totally agree, partially agree, partially disagree, totally disagree), the scale suggested in Table 5 can be used to measure the perceived warmth and competence of cities.

The measurement instrument that we are proposing for estimating people's perceptions of cities comprises the items for city's warmth and competence (detailed in Table 5) as well as the items for measuring city's status, perceived competition and perceived cooperation (detailed in Table 4).

What do we bring new, with these results? Our study is important from at least two perspectives. Firstly, we introduced the concept of city warmth and competence stereotyping effect, by connecting previous theories from psychology, sociology, communication and branding, with those from urban development. From the analysis of previous studies on perceived warmth and competence effects for individuals, groups and brands, as well as from the analysis of city's modern challenges (smartness, competitiveness, sustainability, happiness, livability) we concluded that investigating the stereotyping effect of warmth and competence in the case of cities would

represent a step forward future analysis that might bring valuable responses to urban development perspectives.

Secondly, we proposed and tested a scale for measuring the perceived warmth and competence of a city, validating scale content, at nomological level.

A future step will be to apply the measurement instrument comprising city's warmth and competence scale (items detailed in Table 5) and items for measuring city's status, perceived competition and perceived cooperation (detailed in Table 4) on significant samples of city inhabitants, during a field study meant to identify challenges and to predict potential opportunities for development of smart and sustainable cities.

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