

Melting the “Seattle Freeze”: The effect of regional cultural stereotypes on building social connections

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Abstract: Research shows that social connections are important for our happiness and well-being. However, there are regional cultural differences in beliefs about how easy it is to build new social connections. For instance, in the city of Seattle, WA, one such cultural belief is known as “Seattle Freeze” – the belief that it is difficult to make new social connections in the city due to Seattleites being unfriendly. In two studies, I investigated the connection between this belief and social connections among participants living in Seattle. Study 1 (N = 285) found a negative correlation between the endorsement of “Seattle Freeze” and the feeling of belonging and the number of local friends that participants reported. Study 2 (N = 360) suggested that exposure to the idea that the “Seattle Freeze” is real was associated with lower ratings of friendliness and warmth toward Seattleites, as well as less favorable attitudes overall. In sum, these studies show that regional cultural beliefs about the friendliness of residents directly affect people’s perception and willingness to build new social connections.

Keywords: social connection, regional culture, self-fulfilling prophecy, stereotypes

1. Introduction

Meaningful social connections are a fundamental human need, deeply rooted in our evolutionary history (Baumeister & Leary, 1995). These connections are not only associated with greater subjective well-being, defined as the experience of positive affect, life satisfaction, and low negative affect (Diener, 1984; Diener et al., 1999; Diener & Seligman, 2002), but also with physical health benefits, including reduced mortality risk (Holt-Lunstad et al., 2010). However, the ability to form these connections is influenced by a wide array of factors, including individual personality traits, such as extraversion, which facilitates approach behavior and social engagement (Asendorpf & Wilpers, 1998), interpersonal skills (Cameron et al., 2019), and broader cultural contexts, for instance the emphasis on interdependence in East Asian cultures versus independence in Western cultures (Kitayama et al., 2009). One particularly underexplored yet significant influence is the impact of regional cultural stereotypes – widely held, place-based beliefs about the typical behavior and social norms of residents in a given area. These stereotypes can shape both the likelihood of social approach behavior and the ease with which outsiders integrate into new social networks.

1.1 Social connections and well-being

Well-being is a broad, multidimensional construct encompassing both hedonic (e.g., subjective well-being: life satisfaction, presence of positive affect, absence of negative affect; Diener, 1984; Diener et al., 1999) and eudaimonic dimensions (e.g., functioning dimension such as purpose,

autonomy, and growth; Ryff, 1989). Social connections contribute to both: they foster day-to-day positive affect and life satisfaction (hedonic), and also support meaning, belonging, and self-realization (eudaimonic). In this paper, I focus on specific psychological well-being indicators (subjective well-being, loneliness, and relatedness) and social integration indicators (number of local friends, university belonging), which together capture both personal and local dimensions of adjustment.

From an evolutionary perspective, social bonds offered critical survival advantages, including mutual protection, resource sharing, and cooperative child-rearing, which likely shaped the human brain's wiring for social interaction (Dunbar, 1998). Social connectedness has been linked to lower levels of anxiety and depression (Santini et al., 2020), increased immune function (Cohen et al., 1997), and even greater cognitive resilience in aging populations (Seeman et al., 2001). In contrast, chronic social isolation has been shown to predict increased risk for cardiovascular disease, cognitive decline, and premature mortality (Holt-Lunstad et al., 2015), underscoring the profound impact of social relationships on overall health. Given the extensive benefits of social integration, understanding the barriers that inhibit connection is critical to promoting both mental and physical health.

Social connections also play a critical role in buffering against stress and fostering a sense of belonging and meaning in life. For example, Cohen and Wills (1985) proposed the stress-buffering hypothesis, which suggests that social support can protect individuals from the harmful effects of stress by providing emotional, informational, and tangible resources. Recent research has supported this model, demonstrating that strong social ties can enhance resilience in the face of adversity and promote faster recovery from illness (Uchino, 2009). Conversely, loneliness and social isolation have been identified as significant risk factors for a range of negative psychological outcomes, including depression, anxiety, and even suicidal ideation (Hawkey & Cacioppo, 2010). These findings underscore the vital role that social relationships play not just in promoting physical health, but also in maintaining psychological well-being (Cohen & Wills, 1985; Hawkey & Cacioppo, 2010; Uchino, 2009).

Importantly, beyond physical and mental health, social ties are consistently associated with happiness, life satisfaction, and affective well-being. Large-scale cross-national studies show that people with more robust social networks report higher life satisfaction and more frequent positive affect (Diener & Seligman, 2002; Helliwell & Putnam, 2004). Similarly, both the quality and quantity of social connections predict greater day-to-day subjective well-being (Lucas & Dyrenforth, 2006), while relationship satisfaction strongly contributes to overall life satisfaction (Diener & Oishi, 2005). At work, supportive relationships with colleagues are linked to higher job satisfaction and reduced burnout (Chiaburu & Harrison, 2008). These findings highlight that the benefits of social connection extend beyond physical health into the core domains of psychological, social, and occupational well-being.

Indeed, the critical importance of social connection has been highlighted by recent public health initiatives, including the U.S. Surgeon General's declaration of a "loneliness epidemic" (Murthy, 2023), emphasizing the urgent need to address the widespread social disconnection affecting millions of Americans. Understanding the psychological and social barriers to connection, including the effects of stereotypes and self-fulfilling prophecies, is essential to addressing this challenge.

1.2 Influence of stereotypes on social behavior

Stereotypes are widely shared beliefs about the characteristics, behaviors, and social norms of particular groups, and they can shape how individuals perceive and interact with others

(Hamilton & Sherman, 1994). These cognitive shortcuts can simplify social perception but also introduce significant biases, often leading to distorted and overly simplistic views of others (Macrae et al., 1994). Stereotypes can influence behavior through a range of psychological mechanisms, including expectancy effects and the self-fulfilling prophecy (Rosenthal & Jacobson, 1968; Steele & Aronson, 1995). For instance, if newcomers to a region believe that residents are likely to be cold or unwelcoming, they may approach social interactions with hesitation, defensiveness, or lowered expectations, potentially reducing the likelihood of positive social exchanges.

Research on expectancy effects has demonstrated that people’s expectations about others can subtly shape their behavior in ways that elicit confirming responses (Rosenthal & Jacobson, 1968). This phenomenon has been documented in a variety of contexts, including education, workplace dynamics, and interpersonal relationships. For example, teachers who expect certain students to perform well often provide them with more attention, encouragement, and feedback, leading to improved outcomes (Jussim & Harber, 2005). In the context of regional stereotypes, these expectancy effects may lead newcomers to approach social interactions in ways that align with their preconceived notions, potentially reinforcing the very social dynamics they anticipate (Rosenthal & Jacobson, 1968).

Although the present research focuses on the stereotype specific to one geographic location, similar processes can be observed in other settings where social connection and belonging are critical. For instance, international students, migrants, and other newcomers often navigate stereotypes about sociability when entering unfamiliar communities (Yakushko et al., 2008). In higher education contexts, belonging is closely tied to persistence, well-being, and adjustment, with research consistently highlighting the importance of social ties in fostering these outcomes (Borch et al., 2025; Dias-Broens et al., 2024). These findings underscore that stereotypes about local sociability, such as the “Seattle Freeze”, may not only affect day-to-day interactions but also broader outcomes such as social integration and well-being, including a sense of belonging within universities and communities.

1.3 Role of self-fulfilling prophecies in social dynamics

Self-fulfilling prophecies occur when an initially false belief leads to its own confirmation by shaping behavior in a manner that aligns with the original expectation (Merton, 1948). In social contexts, this means that if individuals expect a particular response from others, their own behavior may provoke that response, creating a reinforcing cycle (Madon et al., 2004). This process is particularly relevant in the context of regional cultural stereotypes, where both newcomers and long-term residents may enter interactions with preconceived notions about each other’s openness or sociability.

For example, one such stereotype is known as the “Seattle Freeze”. “Seattle Freeze” is a widely discussed regional stereotype referring to the perceived social aloofness or unfriendliness of Seattle residents, particularly toward newcomers. Commonly characterized by polite but distant interactions, reluctance to initiate friendships, and difficulty forming deeper connections, this stereotype has become a salient feature of the city’s social identity (Smith, 2015; Zimmerman, 2017). Although the term “Seattle Freeze” was popularized in a 2005 *Seattle Times* article by Sommerfeld, the underlying social behavior it describes appears to have deeper historical roots (Seattle Met, 2023). For example, in 1920, the Seattle Chamber of Commerce launched a “Talk to Your Neighbor Day” in response to critiques that locals were socially reserved (Cascade PBS, 2020). Similarly, a 1946 editorial in the *Seattle Daily Times* noted that newcomers often found Seattleites preoccupied with their own concerns (The New Yorker, 2020). Moreover, several

surveys suggest that belief in the "Seattle Freeze" is both widespread and contested among residents. In a *Seattle Met* survey, 38.7% of respondents affirmed that the "Seattle Freeze" is real, 34.6% considered it a myth, and 26.7% were uncertain (Seattle Met, 2017). A separate poll conducted by PEMCO Insurance in 2019 found that over 40% of Washington and Oregon residents said making new friends was not a priority, and nearly half reported disinterest in speaking with strangers in public settings (Seattle Post-Intelligencer, 2019), suggesting that the stereotype reflects, at least partly, real patterns of local behavior. Thus, the Freeze is sustained both by the lived experiences of newcomers and the self-perceptions of residents.

Whether or not such reputations are empirically accurate, their existence can shape interpersonal expectations and behavior. Unlike many group-based stereotypes (e.g., race or gender), which ascribe traits to individuals, the "Seattle Freeze" is distinctive because it is tied to regional identity and norms of sociability. This makes it especially likely to shape casual, everyday interactions with acquaintances and strangers, which are critical for building new ties. As with other regional cultural stereotypes, the "Seattle Freeze" may operate as a social self-fulfilling prophecy: newcomers, anticipating cool or indifferent responses, may act more guarded or less open themselves, which in turn can lead locals to reciprocate with limited engagement. In this way, the stereotype can be sustained not only by those it ostensibly describes, but also by those who believe it. Understanding how these shared beliefs shape social behavior is critical to unraveling the mechanisms by which place-based reputations become self-reinforcing and socially consequential.

1.4 The present research

This paper empirically investigates the impact of regional cultural stereotypes, specifically the "Seattle Freeze", on the formation of social connections. Drawing on the theoretical frameworks of expectancy effects and self-fulfilling prophecies, this research examines how perceptions of regional social norms influence the behavior of people in a given region. In doing so, this work aims to shed light on the broader implications of place-based stereotypes for social integration and community cohesion. Although stereotypes are widely acknowledged to shape interpersonal expectations, little empirical work has directly examined how regional cultural stereotypes influence individuals' willingness to form new social ties: an important gap this paper addresses. To address this, the present research investigates the "Seattle Freeze," a unique regional cultural stereotype about sociability that offers a rare opportunity to examine how place-based reputations shape the formation of social ties. In two studies, correlational and experimental, this research tests the effects of regional cultural stereotypes about its residents on social connection, and examines the following research questions:

1. How prevalent is belief in the "Seattle Freeze" among students?
2. How does endorsement of this stereotype relate to well-being outcomes?
3. Does experimentally activating the "Seattle Freeze" stereotype shape willingness to connect with others?

2. Study 1

Study 1 investigated how prevalent the belief in the "Seattle Freeze" is and examined correlational connections that it has with indicators of individual adjustment. Specifically, in this study, I was interested in investigating global psychological indicators (subjective well-being, loneliness, and relatedness) and local social integration indicators (number of local friends and belonging to the university). I hypothesized that endorsement of the "Seattle Freeze"

phenomenon would predict all of these variables. Specifically, that higher endorsement will be negatively correlated with subjective well-being, relatedness, number of local friends, and university belonging, and positively related to loneliness.

2.1 Method

2.1.1 Transparency and openness

Materials, hypotheses, and designs for both studies were preregistered before data collection. Power analyses that determined the sample size, exclusions, and manipulations for both studies are also reported in the preregistration. Data were analyzed using IBM SPSS Statistics, Version 30.0.0. All data and study materials are available at:

https://osf.io/s3gcn/?view_only=5328f1a428b2449f840f41f9ceafedc9. Pre-registration is available at https://osf.io/jzuwx/?view_only=294b4a99941e47ed83ba8d5ffe75bc3e

2.1.2 Participants

I recruited a total of 285¹ participants from University of Washington (UW) located in Seattle, WA, who participated in exchange for extra credit in psychology classes. Age ranged from 18 to 46 ($M = 20.56$, $SD = 2.78$), with most participants identifying as female (72.1%) and Asian (53.7%) or White (42.5%).

2.1.3 Measures and procedure

Participants completed an online questionnaire that included materials for the current study as well as materials for an unrelated study.

Subjective Well-Being. To measure subjective well-being, a combination of measures was used that included the Life Satisfaction Scale (e.g., "In most ways my life is close to my ideal"; Diener et al., 1984) and positive and negative affect scale using four descriptors each (e.g., "happy," "sad"; Diener et al., 1995). Participants rated these items on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale, yielding high internal consistency ($\alpha = .84$ for life satisfaction, $\alpha = .90$ for positive affect, and $\alpha = .71$ for negative affect). Following standard procedure, subjective well-being (SWB) was calculated by adding life satisfaction and positive affect scores, then subtracting negative affect ($M = 5.63$, $SD = 2.82$; Busseri & Sadava, 2011; Sheldon & Elliot, 1999; Sheldon & Kasser, 2001; Titova & Sheldon, 2022). The distribution of SWB was approximately normal, with skewness (-0.58) and kurtosis (0.52) within acceptable ranges (Curran et al., 1996).

Loneliness. Loneliness was measured using the UCLA Loneliness Scale (Russell et al., 1980), which consists of 20 items rated on a scale from 1 (Never) to 4 (Always). Sample items include: "How often do you feel that you lack companionship?" and "How often do you feel that there is no one you can turn to?". Cronbach's alpha for the scale was .92. The mean of the items was used as the overall scale score ($M = 2.23$, $SD = 0.48$). The distribution of loneliness was approximately normal, with skewness (0.24) and kurtosis (0.12) within acceptable ranges (Curran et al., 1996).

Relatedness. Relatedness was measured using the six items from the Basic Psychological Needs Satisfaction (BPNS) Scale (Chen et al., 2015) related to relatedness, rated on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Sample items included "I feel connected with people who care for me and for whom I care about" and "I feel close and connected with other people who are important to me" ($\alpha = .88$). The mean of the items was used as the overall scale score (M

¹ The initial sample size was 306, but 21 participants were removed due to not passing the attention checks.

= 5.71, $SD = 0.99$). The distribution of relatedness was approximately normal, with skewness (-1.05) and kurtosis (1.71) within acceptable ranges (Curran et al., 1996).

Local Friends. To assess the number of local friends that participants had, they read the following: "Please read the following definition of a friend: "a person who you know well and who you like a lot, but who is usually not a member of your family". According to this definition, how many friends do you have in the Seattle area?" Then, participants reported a number in response to this question. Because this variable was positively skewed (skewness = 2.55, kurtosis = 11.18), I applied a natural log transformation to normalize its distribution. Analyses were conducted on the transformed variable, although descriptive statistics are reported in the original scale for ease of interpretation ($M = 9.61$, $SD = 9.69$).

Belonging. To measure the belonging that participants felt to the university, participants responded to a five-item measure based on a scale by Anderson-Butcher and Conroy (2002) rated on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale. Sample items included: "I feel comfortable at UW", "I feel I am a part of UW, and "I am accepted at UW" ($\alpha = .87$). The mean of the items was used as the overall scale score ($M = 5.29$, $SD = 1.05$). The distribution of belonging was approximately normal, with skewness (-.91) and kurtosis (1.05) within acceptable ranges (Curran et al., 1996).

Seattle Freeze. First, I asked participants if they had heard of the "Seattle Freeze" to gauge their prior knowledge of the phenomenon, with response options of "yes", "no", and "unsure". Then, regardless of their response to the question, participants were provided with a definition of the "Seattle Freeze" and their endorsement of it was measured. Participants saw the following: "The Seattle Freeze is a difficulty with making new friends in the U.S. city of Seattle, Washington, particularly for transplants from other areas. On a scale of 1 (not accurate at all) to 7 (very accurate), how accurate do you think Seattle Freeze is in describing people's attitudes towards making new friends in the Seattle area?" The distribution of the item was approximately normal, with skewness (-.69) and kurtosis (.12) within acceptable ranges (Curran et al., 1996).

2.1.4 Data analysis

To test the main hypotheses, I conducted zero-order Pearson correlation analyses among the key study variables. Prior to running correlations, I examined skewness and kurtosis for each variable. In addition, a series of linear regressions was performed with endorsement of the "Seattle Freeze" as the focal predictor and the social and well-being outcomes as dependent variables. Age and gender were included as covariates in the regression models to account for demographic variation. Statistical significance was evaluated using two-tailed tests with an alpha level of .05.

2.2 Results and discussion

In terms of the knowledge and endorsement of "Seattle Freeze", most participants have heard of this stereotype, with 61.2% saying "yes", 35.3% saying "no", and 3.5% being "unsure". In terms of the accuracy of the stereotype, the most popular answer was "slightly accurate" (36.5%), followed by "accurate" (25.3%) ($M = 4.81$, $SD = 1.33$).

To test the main hypothesis, I conducted a zero-order correlation analysis, the results of which are shown in Table 1. Contrary to the hypothesis, endorsement of the "Seattle Freeze" had no relationship with SWB, loneliness, or relatedness (see Table 1). However, as expected, there was a significant negative relationship with the number of local friends reported by the participants and their feeling of belonging at the university (see Table 1). There were also a number of significant correlations between various well-being variables. Specifically, the number

of friends was positively correlated with SWB, belonging, and relatedness, and negatively correlated with loneliness. SWB was also negatively correlated with loneliness but positively correlated with belonging and relatedness. Loneliness was negatively correlated with both belonging and relatedness, while they positively correlated with each other.

Table 1. Zero-order correlations between the key study variables in Study 1

	1	2	3	4	5
1. Seattle Freeze Endorsement	—				
2. Number of Friends	-.17**	—			
3. SWB ²	-.07	.24***	—		
4. Loneliness	.04	-.30***	-.62***	—	
5. Belonging	-.15*	.20***	.43***	-.45***	—
6. Relatedness	-.01	.26***	.50***	-.68***	.45***

Note. $N = 284-285$. * $p < .05$, ** $p < .01$, *** $p < .001$.

In addition to correlational analysis, I also conducted a series of linear regressions with demographic variables (age and gender) added to the model and endorsement of “Seattle Freeze” as a predictor. The results of the analyses are summarized in Table 2 (below). The model with the number of local friends as a dependent variable was statistically significant, suggesting a negative connection between endorsement of “Seattle Freeze” and the reported number of local friends. The model for SWB was not statistically significant. The model for loneliness was also not significant, although there was a significant effect of gender and age, meaning that women and younger participants were lonelier. The model for belonging at the university was significant, suggesting a robust negative connection between endorsement of “Seattle Freeze” and feeling of belonging. Finally, the model for relatedness was not significant, although there was a significant effect of gender, suggesting that women reported higher feelings of relatedness.

Interestingly, the results suggest that global psychological indicators were not predicted by “Seattle Freeze”, yet both local social integration indicators had a significant connection. This might suggest that the enforcement of this regional stereotype has a connection to local happenings, and not to the overall well-being of the person. For instance, while there was no connection to loneliness or SWB overall, there was a negative connection between endorsement of “Seattle Freeze” and the number of local friends and the sense of belonging to the university, such as those who were more likely to think that “Seattle Freeze” view of Seattleites is more accurate reported less local friends and less feeling of belonging to the local university community.

² Correlations between the Seattle Freeze endorsement and individual components of SWB (Life Satisfaction Scale, Positive Affect, and Negative Affect) were also not significant.

Table 2. Regression analyses predicting global psychological indicators and local social integration indicators from Seattle freeze endorsement in Study 1

Outcome Variable	Predictor	B	SE	β	t	p	R ²	F(df)
Number of Friends	Seattle Freeze	-0.10	0.04	-.14	-2.32	.021	.04	3.09 (3, 281)
	Age	-.01	.02	-.04	-.59	.553		
	Gender	.23	.13	.11	1.80	.073		
SWB	Seattle Freeze	-0.10	0.13	-.05	-0.76	.448	.01	.40 (3, 281)
	Age	.03	.06	.03	.43	.667		
	Gender	-.23	.39	-.04	-.58	.565		
Loneliness	Seattle Freeze	0.15	0.21	.05	0.72	.473	.03	3.18 (3, 281)
	Age	-0.02	0.01	-.13	-2.12	.036		
	Gender	-0.17	0.07	-.16	-2.55	.011		
Belonging	Seattle Freeze	-0.14	0.05	-.19	-3.14	.002	.04	3.92 (3, 281)
	Age	.02	.02	.09	.76	.446		
	Gender	.21	.14	.09	1.53	.128		
Relatedness	Seattle Freeze	-0.01	0.04	-.01	-0.21	.837	.04	3.71 (3, 281)
	Age	.03	.02	.09	1.42	.157		
	Gender	0.42	0.13	.20	3.23	.001		

Note. Gender coded 0 = men, 1 = women.

3. Study 2

Study 1 showed that there is a connection between endorsement of the “Seattle Freeze” stereotype and local social integration indicators. However, the causal direction of this relationship still remains unclear. It is possible that the stereotype endorsement acts as a self-fulfilling prophecy, making newcomers to Seattle less likely to be interested in forming social connections in the area. I tested this hypothesis in Study 2. Specifically, participants were experimentally manipulated to believe that “Seattle Freeze” is real or not (or exposed to a control condition), and then their attitudes towards Seattleites were measured. Because Study 1 demonstrated that stronger endorsement of the “Seattle Freeze” stereotype was associated with having fewer local friends, Study 2 examined whether this relationship would also emerge when the belief in the stereotype was experimentally induced. I hypothesized that participants in the condition that suggests that “Seattle Freeze” is a real phenomenon would report lower levels of belonging, fewer local friends, less warm and less favorable attitudes towards an average Seattleite, and less interest in an event that is designed to introduce out-of-state students to local students from Seattle, compared to participants in the other two conditions³.

³ The hypotheses, design of the study, and analyses were pre-registered:
https://osf.io/d7q8m?view_only=44d81a6c7d80469aa9df507a1d0fc10a

3.1 Method

3.1.1 Participants

I recruited 348⁴ participants from University of Washington, who participated in exchange for extra credit in psychology classes⁵. Age ranged from 18 to 40 ($M = 19.83$, $SD = 2.70$), with the majority of participants identifying as female (73%) and Asian (53.2%) or White (37.9%). Only participants who passed the manipulation check (which asked them what the article that they read was about) and reported that they did not grow up in the Seattle area were included in the study.

3.1.2 Measures and procedure

Participants completed an online questionnaire that included materials for the current study as well as materials for an unrelated study. Participants were presented with an article that was ostensibly published by The Seattle Times, a popular local newspaper. The content of the article corresponded to the condition that participants were assigned to. Specifically, participants were randomly assigned to one of the three conditions: "Seattle Freeze" is real ($n = 111$), "Seattle Freeze" is not real ($n = 113$), and a control article about Seattle architecture ($n = 124$). The control condition was designed to evoke thoughts about Seattle without mentioning the "Seattle Freeze" stereotype.

Local Friends and Belonging. The number of local friends and belonging to the university was measured the same way as in Study 1 (Cronbach's α for belonging measure was .84). The mean of the items was used as the overall scale score for belonging ($M = 5.34$, $SD = 0.98$). The distribution of belonging was approximately normal, with skewness (-.78) and kurtosis (.37) within acceptable ranges (Curran et al., 1996). The local friends variable was again positively skewed (skewness = 2.73, kurtosis = 8.95), so I applied a natural log transformation to normalize its distribution. Analyses were conducted on the transformed variable, although descriptive statistics are reported in the original scale for ease of interpretation ($M = 12.01$, $SD = 15.14$).

Attitudes toward Seattleites. Several measures were used to assess attitudes towards Seattleites. First, participants responded to a feeling thermometer that gauges their feelings towards an average person in Seattle (Alwin, 2007). Participants responded on a scale from 0 (Very cold or unfavorable feeling) to 100 (Very warm or favorable feeling) ($M = 58.14$, $SD = 16.33$). The distribution of feeling thermometer measure was approximately normal, with skewness (-.31) and kurtosis (-.06) within acceptable ranges (Curran et al., 1996). Then, participants responded to a 3-item measure rated on the scale from 1 (Strongly agree) to 7 (Strongly disagree) that included the following items: "Seattleites are friendly", "Seattleites are warm", and "Seattleites are open to making new friends" ($\alpha = .82$). The mean of the items was used as the overall scale score for the measure ($M = 4.14$, $SD = 1.07$). The distribution of was approximately normal, with skewness (-.44) and kurtosis (-.18) within acceptable ranges (Curran et al., 1996). Finally, to measure behavioral intentions, participants read about a new student event that aimed to introduce out-of-state students to local students from the Seattle area and asked about agreement with the following statements: "I think hosting this event is a good idea" and "If I was new to UW, I would attend this event." The items were rated on the same 1 through 7 scale ($\alpha = .69$). The mean of the items was used as the overall scale score for the measure ($M = 5.52$, $SD = 1.15$). The distribution

⁴ The initial sample was 550, but 28 participants were removed because they didn't pass the manipulation check, and 174 were removed because they grew up in the Seattle area.

⁵ None of the participants from the first study took part in the second study.

was approximately normal, with skewness (-.87) and kurtosis (.37) within acceptable ranges (Curran et al., 1996).

3.2 Results and discussion

I conducted a series of one-way ANOVAS to test the hypotheses. Contrary to the first two hypotheses and findings of Study 1, there was no significant difference between the experimental conditions in the number of local friends reported ($F[2,345] = .097, p = .907$) and the feeling of belonging at the university ($F[2,345] = .461, p = .619$). However, supporting the hypothesis, there was a significant difference between groups in attitude as measured by the feeling thermometer, $F[2,343] = 4.10, p = .017, d = .22$ (see Table 3). LSD post-hoc test showing that, as expected, the condition that read about how “Seattle Freeze” is a real phenomenon ($M = 54.60, SD = 15.63$) was different from the control ($M = 59.11, SD = 14.35$) and ‘not real’ condition ($M = 60.45, SD = 18.12$), but they didn’t differ from each other. Additionally, as predicted, there was a significant difference between conditions using the attitude scale measure, $F[2,343] = 4.44, p = .012, d = .23$. LSD post-hoc tests again showed that the attitude reported by participants in the condition that read that “Seattle Freeze” was real ($M = 3.90, SD = 1.09$) was significantly lower than the control ($M = 4.19, SD = 1.12$) and ‘not real’ condition ($M = 4.32, SD = .97$), but the latter two conditions didn’t significantly differ from each other. Finally, there was no significant difference between conditions in the behavioral attitude measure, $F[2,345] = .52, p = .595$.

Table 3. Attitudes toward Seattleites by experimental condition (Study 2)

Measure	Condition	M	SD	F(2, 343)	p	D
Feeling Thermometer	Seattle Freeze Real	54.60 ^a	15.63	4.10	.017	.22
	Seattle Freeze Not Real	60.45 ^b	18.12			
	Control	59.11 ^b	14.35			
Attitude Scale	Seattle Freeze Real	3.90 ^a	1.09	4.44	.012	.23
	Seattle Freeze Not Real	4.32 ^b	0.97			
	Control	4.19 ^b	1.12			

Note. Means that do not share a common superscript letter (*a, b*) differ significantly at $p < .05$ according to LSD post-hoc tests. Higher scores indicate more favorable attitudes toward Seattleites.

4. General discussion

Across two studies, I investigated the psychological and behavioral consequences of regional cultural stereotypes, focusing on the “Seattle Freeze” – the belief that residents of Seattle are socially distant or unwelcoming, especially toward newcomers. Drawing on theories of expectancy effects and self-fulfilling prophecies, I examined whether endorsement of this stereotype predicts lower social integration and more negative interpersonal attitudes, particularly among individuals new to the Seattle area.

In Study 1, I found that endorsement of the “Seattle Freeze” was not significantly associated with global psychological indicators such as subjective well-being, loneliness, or relatedness, consistent with findings that global well-being is often influenced by broader and more stable factors—such as close relationships, personality traits, and overall life circumstances—rather than by specific local experiences (Diener et al., 2018). However, it was negatively associated with two localized indicators of social integration: the number of local friends and sense of belonging at the university that participants were enrolled in. This pattern suggests that individuals can

maintain overall well-being even when their local integration is limited, possibly because they draw social support from preexisting or geographically distant relationships, including family, old friends, or culturally similar peers. It is also important to consider that university belonging, while a reasonable proxy for local integration, may be shaped by multiple influences beyond the broader social climate of Seattle. For instance, belonging could be fostered by connections within student subgroups, such as international communities, or by supportive faculty and campus environments. Thus, the effects found for belonging likely reflect the diversity of belonging sources available in a university context.

Together, these findings suggest that while the belief in the “Seattle Freeze” may not broadly affect global psychological indicators of well-being, it does appear to be associated with diminished local social ties and community identification. This pattern supports the idea that regional stereotypes exert context-specific influence, shaping individuals’ sense of embeddedness in the immediate social environment. Although many correlations in Study 1 were modest or non-significant, these findings are nonetheless informative: they indicate that the “Seattle Freeze” may exert its strongest influence on social connectedness within a local domain rather than on generalized measures of well-being, thereby clarifying the boundary conditions of its psychological impact.

In Study 2, I experimentally manipulated beliefs about the “Seattle Freeze” to test causal effects on attitudes and intentions. While the manipulation was not associated with participants’ reported number of local friends or their sense of university belonging, it did significantly influence affective and evaluative attitudes toward Seattleites. Specifically, participants who read that the “Seattle Freeze” is real reported colder and less favorable feelings toward Seattle residents and rated them as less friendly, warm, and open to new friendships. The absence of association with behavioral intentions and belonging measures may reflect that these constructs develop through repeated social interaction, rather than from brief exposure to stereotype information (Baumeister & Leary, 1995; Walton & Cohen, 2011). In contrast, attitudes are more immediately responsive to cognitive priming or framing effects (Fazio, 2007). These findings provide experimental evidence that exposure to regional stereotypes can negatively bias social attitudes, even in the absence of direct interpersonal experience. Although well-being was not directly measured in Study 2, these attitude shifts conceptually relate to well-being insofar as they influence one’s motivation to connect and perceived social support – two key pathways to happiness and belonging identified in positive psychology research (Diener & Seligman, 2002; Lyubomirsky et al., 2005). Thus, the present findings indirectly link regional stereotypes to factors known to sustain subjective well-being.

Together, these studies offer converging evidence that regional cultural stereotypes, despite their seemingly innocuous or anecdotal nature, can meaningfully shape social perceptions and behaviors. Importantly, these effects may contribute to a self-perpetuating cycle. When individuals believe in the “Seattle Freeze”, they may be less motivated to initiate connections with locals, which, in turn, can reinforce feelings of exclusion and confirm the stereotype’s validity. In this way, beliefs about a region’s social climate can become psychological barriers to integration, especially for newcomers seeking to establish a sense of belonging in a new community.

These findings extend prior work on stereotypes, expectancy effects, and self-fulfilling prophecies by demonstrating that place-based beliefs can have interpersonal and affective consequences. While most research on social stereotypes has focused on group-based categories such as race, gender, or age (e.g., Hamilton & Sherman, 1994; Steele & Aronson, 1995), these findings highlight a novel and underexplored domain: geographically anchored cultural

assumptions. Such stereotypes, like the “Seattle Freeze”, may operate subtly yet pervasively to shape interpersonal dynamics in region-specific ways. Much like traditional social stereotypes, place-based stereotypes can influence social interactions through expectancy-driven mechanisms (Rosenthal & Jacobson, 1968). For example, a newcomer who has heard that Seattleites are cold or unwelcoming may enter interactions guardedly or with low expectations of friendliness, thereby eliciting similar guardedness from locals, and ultimately confirming the initial belief. Over time, these recursive cycles may solidify into a widely held cultural narrative that is resistant to change, even when empirical support is mixed or context-dependent. Importantly, because these beliefs are tied to place rather than person, they may go unchallenged by conventional anti-stereotyping interventions and can persist even in the absence of malice or intent.

Additionally, this research extends prior findings on social expectancies, person-environment fit, and the self-fulfilling nature of stereotypes. Previous studies have shown that individuals' beliefs about the friendliness of others can shape their behavior in ways that either facilitate or hinder social connection (Lemay & Clark, 2008; Shelton & Richeson, 2005). Current research contributes to this literature by demonstrating that regional cultural stereotypes can act as powerful social expectancies, influencing not only how newcomers approach social interaction but also how they interpret the responses of others.

Moreover, this work resonates with theories of person-environment fit (Kristof-Brown et al., 2005), suggesting that perceived social mismatch with a local culture may discourage social engagement and thwart belonging. Although loneliness was not significantly correlated with “Seattle Freeze” endorsement, this may not necessarily indicate an absence of meaningful social consequences. Many individuals maintain strong non-local social networks or experience belonging through other social roles, which may buffer against loneliness even when local ties are weak. Still, improving local social integration remains relevant to combating loneliness and promoting well-being more broadly, as local connections provide unique opportunities for daily interaction and community support. By showing that priming positive social expectations improves perceived warmth and overall attitude, current findings suggest a pathway through which interventions might improve social integration in urban environments. Practically, these insights could inform the design of citywide and university-level programming. Efforts that explicitly challenge regional stereotypes and highlight opportunities for connection may help newcomers reinterpret the local social climate more positively, indirectly supporting belonging and well-being. Such initiatives may reduce barriers to connection and mitigate the effects of loneliness, which has been linked to serious mental and physical health consequences (Holt-Lunstad et al., 2015). More broadly, this work supports emerging efforts in public health and urban psychology to consider the role of collective narratives and perceived social climates in shaping individuals' well-being.

4.1 Limitations and future directions

Despite the contributions of this research, several limitations should be acknowledged. First, both studies relied on self-report data, which may be subject to bias or inaccuracy. Future research could incorporate behavioral or observational measures of social engagement to more directly capture interpersonal outcomes. Second, the sample was composed primarily of college students, most of whom identified as female and Asian or White, limiting the generalizability of the findings to more diverse or older populations. It remains an open question whether similar dynamics operate among long-term residents, different age cohorts, or in other urban contexts.

Also, while Study 2 employed experimental methods, the dependent measures focused on immediate attitudes rather than longer-term social behavior. Future longitudinal or field-based designs could examine whether exposure to regional stereotypes has sustained effects on social connection and integration over time. Additionally, further research might explore how individual differences, such as openness to experience, social anxiety, or need to belong, moderate the influence of regional stereotypes on behavior and well-being.

Finally, although this research centered on the “Seattle Freeze”, analogous stereotypes likely exist in other regions (e.g., New York as aggressive, Los Angeles as superficial), and the broader framework introduced here could be used to examine their effects on social integration across different cultural landscapes (Rentfrow, 2010; Rentfrow et al., 2008).

4.2 Conclusion

The present research contributes to a growing body of work emphasizing the importance of social connection for psychological well-being. By identifying regional cultural stereotypes as a barrier to such connection, this research sheds light on how place-based beliefs can shape local social outcomes. The “Seattle Freeze”, far from being just a catchy phrase, may serve as a self-fulfilling prophecy that subtly undermines the formation of community bonds. Counteracting these stereotypes, through both individual-level interventions and broader cultural messaging, may offer one avenue for fostering more inclusive and socially connected urban environments.

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Author contribution statement

Liudmila Titova: conceptualization, project administration/overview, methodology, data curation, data analysis, writing -original draft, writing -review & editing.

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Data availability statement

All data and study materials are available at
https://osf.io/s3gcn/?view_only=5328f1a428b2449f840f41f9ceafedc9

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