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The importance of public familiarity for sense of belonging in Brisbane neighborhoods

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ABSTRACT

A large proportion of neighborhood social life occurs in communal places and takes the form of brief encounters with fellow residents who are personally unknown but visually recognizable and familiar. Public familiarity is effortless to maintain but is not socially benign. In this study, we draw on a survey of 1,000 Australian residents to assess the benefits of familiarity and examine the mediating role of public familiarity in the association between neighborhood use and sense of belonging and attachment. Our results demonstrate that public familiarity partially mediates the association between neighborhood use and sense of belonging. Public familiarity is associated with stronger feelings of comfort and a higher likelihood of helping others in an emergency. We suggest that designing neighborhood places to facilitate public familiarity, by installing features that encourage lingering, is a low-cost approach to enhancing community connection and belonging which may help to prevent loneliness.

KEYWORDS

Public familiarity; belonging; neighborhood; place attachment

Introduction

Neighborhood social ties have long been considered as primary anchors of attachment and belonging (Guest & Wierzbicki, 1999; Guest et al., 2006; Sampson, 1988; Zahnow & Tsai, 2019). Studies demonstrate the benefits of strong, weak, and acquaintance ties to family, friends, and neighbors, for both individual and community wellbeing (Lewicka, 2005; Ross & Jang, 2000). Yet, interactions with neighbors and friends comprise only a small proportion of our everyday social environment. Indeed, a large proportion of neighborhood social life involves encounters between individuals who are personally unknown but visually recognizable as fellow residents or familiar strangers (Milgram, 1972; Simmel, 1903/1997). Public places in the neighborhood provide unique opportunities for people to share space with others while undertaking everyday activities and engage in social life without effort or the obligation of reciprocity (Richaud, 2016). This form of social relation—known as *public familiarity*—refers to visual encounters and short greetings that when repeated over time can facilitate sense of belonging and generate dormant social connections that can be activated in times of need (Blokland & Nast, 2014; Blokland & Schultze, 2017; Henning & Lieberg, 1996; Völker et al., 2007). Public familiarity emerges from light-touch social encounters. It is a form of social connection based on recognition and repeated propinquity that does not require personal knowledge of the other individual.

Every day, in the course of regular activities, individuals typically visit a variety of neighborhood places (such as a local greenspace and a neighborhood shopping plaza) where they come into contact with an unknown, but likely large number of people. Some of these people are fellow regulars and

become familiar over time. Simply seeing and hearing others in neighborhood places can facilitate diffusing social norms and developing shared understandings of behavioral expectations (Gehl, 1987). Neighborhood places also provide opportunities for individuals to observe each other participating in the same activities which can facilitate tolerance, attachment, and sense of belonging (Cattell et al., 2008).

Sense of belonging emerges at places where individuals feel a sense of comfort that is derived from understanding the social codes, knowing what to expect from others and knowing that one's own presence is accepted (Blokland & Nast, 2014; Goffman, 1963). Oldenburg (1989) suggests that by becoming a *regular* at places, one also learns to identify with them and doing so encourages a sense of belonging with other frequent visitors. During everyday activities at regularly visited neighborhood places, sense of belonging may develop through familiarity with people and place norms. In this regard, belonging is centered around an individual's comfort zone and the community of belonging is defined by repeated corporeal proximity rather than strong social ties (Cattell et al., 2008; Goffman, 1963). Sense of belonging is important because studies show that it is correlated with psychological comfort and feelings of security (Oldenburg, 1989). Individuals who report a stronger sense of belonging also report better physical and mental health (Allen et al., 2021; Baldwin & Keefer, 2020), greater social integration (Rollero & De Piccoli, 2010), and higher perceptions of social support (Farrell et al., 2004; Young et al., 2004).

In the context of increased levels of social isolation and loneliness, the importance of understanding the antecedents of belonging has never been greater. Moreover, urbanization and densification are elevating the importance of communal places such as greenspaces and plazas as private yards and gardens become smaller. In this study, we draw on survey data from a representative sample of 1,000 Australians to examine the extent to which public familiarity mediates the association between the use of neighborhood places and a sense of attachment and belonging. We extend on previous studies by Blokland and Nast (2014, 2017) and Link et al. (2021) that demonstrate (1) a connection between neighborhood use and public familiarity, and (2) public familiarity and belonging, to investigate whether public familiarity is a requirement to achieve sense of belonging through neighborhood use because it is the mediator or whether public familiarity offers an additional benefit to neighborhood use for generating belonging. While Link's et al. (2021) research with residents in Chile shows a direct, significant, and positive influence of both neighborhood use and public familiarity on belonging, it does not investigate potential indirect effects.

Background literature

Neighborhood environments comprise relations borne through spatial propinquity rather than social nearness. While social ties and bonds with adjacent neighbors have been thoroughly studied at the aggregate and individual level, the extent to which social interactions in communal and "semi-public" places, that is places beyond the residential home or workplace, contribute to neighborhood social environments is less understood (Coleman, 1990; Granovetter, 1983; Putnam, 2000). At the aggregate level, scholars have highlighted the role of communal places and third places (Oldenburg, 1989), also referred to "social conduits" (Wickes et al., 2018) as symbols of community and sites of social engagement, belonging, and attachment. Studies in this area tend to examine the association between the presence and density of third places at the neighborhood level and aggregate level social outcomes (Gómez-Varo et al., 2022; Lane et al., 2020; Rhubarb et al., 2022; Valle Pilia & Ramírez Fonseca, 2024) or focus on how interactions and encounters are experienced within a specific type of communal or third place by individuals (Aksel & Graham, 2013). From these two bodies of research, we know that neighborhoods with greater availability of places enable physical and visible proximity and build social cohesion and trust (Corcoran et al., 2018). We also know that living in closer proximity to parks and greenspaces is associated with enhanced place attachment and that individuals who perceive that there are more communal places in their neighborhoods report higher levels of belonging (Blokland & Nast, 2014; Blokland & Schultze, 2017). Méndez et al. (2020) suggest that residents in affluent



neighborhoods tend to express higher social cohesion, attachment, and belonging because the resources and conditions available to them facilitate spending time together in neighborhood places. Their findings highlight the interconnected and mutually reinforcing relationship between neighborhood resources, social cohesion, and belonging, suggesting that while use of neighborhood places and public familiarity may influence sense of belonging, the opposite could also be true (Link et al., 2021). That is, when residents have a stronger sense of belonging and feel more attached to their neighbors, they may be motivated to socially interact in neighborhood places.

The extent to which individual use of neighborhood places, and face-to-face encounters therein, precedes or results from feelings of attachment and belonging is unclear. Some scholars suggest that the direction of the relationship and indeed the value of interactions in public places depends on socio-structural neighborhood conditions (Méndez et al., 2020).

Familiar strangers in neighborhood places

Everyday urban centers are inundated with individuals conducting their daily routines. Previously, scholars have drawn attention to the capacity for urban dwelling to bring together *familiar strangers* who are spatially proximate but may remain socially distant (Ahmed, 2002; Amin, 2008). While a stranger refers to “someone who has not been knowingly encountered before” (Cooper, 2007, p. 205), a familiar stranger denotes “an individual who is recognized from regular activities, but with whom one does not interact or communicate” (Jackson et al., 2017, p. 9).

Urban scholars have drawn attention to the way in which city dwellers manage fleeting interactions through single glances and quick impressions (Simmel, 1903/1997), and encounters with familiar strangers through civil inattention (Goffman, 1963). From Goffman’s perspective, civil inattention demonstrated by the familiar stranger is a form of *doing* urban civility; that is, recognizing, learning, and adopting the social norms that enable society to operate. Others have problematized this form of social interaction as maintaining the “status quo.” Similarly, Simmel (1903/1997) spoke of the familiar stranger, a person in the public realm who is categorically familiar but remained personally unknown, as providing a sense of comfort in the city where the density of interactions could lead to sensory overload. Both Goffman (1963) and Simmel (1903/1997) reference city center interactions where social life is dense and the achievement of comfort, perceived safety, and social order in the public realm can reasonably be defined as sociality.

Like cities, urban neighborhoods comprise communal places that bring together residents and visitors during their everyday routines (Link et al., 2021). While often depicted as messy and thrown-together, everyday routines in urban neighborhoods, including those at neighborhood places are structured and repeated over time (Massey, 2005). The principles of time geography highlight how the tethering of routine activities to particular places at scheduled times constrains daily mobility in a way that facilitates repetitive *bundling* of individuals at certain places at particular times of the day (Hägerstrand, 1970; Kwan, 2000; Schwanen & Wang, 2014; Thrift, 1977). Given the smaller spatial scale and the repeated nature of daily routines in urban neighborhoods, social encounters within neighborhood places can involve familiar strangers who are not only categorically familiar but are individually recognizable to each other. Milgram’s (1970) familiar stranger is someone who is visually recognizable, cannot be replaced by another, and may engage in visual or nodding relationships to acknowledge their reciprocal recognition. Also referred to as “invisible ties” or “nodding relationships,” these anonymous, albeit recognizable social connections “become known over time and are no longer interchangeable” (Felder, 2020, pp. 7–8). These recurring encounters at neighborhood places generate meaningful links while preserving comfortable social distance.

Social connections with familiar strangers that develop in the course of everyday life reflect Lofland’s quasi-primary and intimate-secondary relations (Lofland, 1998, p. 56). While brief, these encounters can be meaningful and emotionally infused because they are experienced as parochial and familiar, even when they occur in public places. Thus, public familiarity emerges from intersecting spatial practices and overlapping timetables, centered around neighborhood spaces, that bring

together regulars who over time become visually recognizable to each other. Public familiarity is effortless to maintain but is not socially benign (Glover, 2021; Glover et al., 2022; Link et al., 2021). Reciprocated acknowledgment through visual encounters with recognized others can instill ingroup status and sense of belonging (Felder, 2020; Link et al., 2021). In a study of residents in two diverse Berlin neighborhoods, Blokland and Nast (2014, 2017) found that greater public familiarity was related to higher levels of comfort and sense of belonging. Similarly, in their study of sense of belonging among residents in Santiago Chile, Link et al. (2021) found that it was public familiarity, not local ties that was most significantly associated with sense of belonging.

While there is a tendency to associate neighborhood social relations with direct networks of social bonds and bridging ties, an individual's local social environment extends to include indirect relations in neighborhood places. These social relations include the short greetings and visual interactions that serve as conduits for flows of influence, information, and provide a reference for one's own behavior. While social encounters in neighborhood places make up a substantial proportion of the everyday social reality, limited empirical research has extended Blokland's investigation of public familiarity (for exception see Link et al., 2021). Further, the indirect relationship between use of neighborhood places, public familiarity, and belonging remains underexplored.

Data and methods

In this study, we draw on survey data collected online and via telephone from a randomly selected, representative sample of Australian adults (aged 18 years and over) residing in to examine the mediating role of public familiarity in the association between neighborhood use and sense of belonging and attachment. The survey contained questions about place attachment and belonging in the local neighborhood and was distributed to residents in Australian capital cities and outer city suburbs. The survey prompted participants to consider their *local suburb* when responding to questions about their neighborhood. Specific questions on the survey asked participants to report how frequently they use parks, shops, public spaces, and go walking on streets in their local neighborhood. Participants were also asked to report the extent to which they recognized (and said "hello" to) people they did not know by name at those places.

The survey was conducted by the Social Research Centre (<https://srcentre.com.au/our-research#life-in-aus>). Data were collected between 15 and 28 March 2022. A total of 1,400 active panel members were invited to participate in the survey, 1,015 (72.5%) completed the survey, 26.6% of SRC panel members were unable to be contacted, and 0.9% refused. The survey took an average of 5.7 minutes to self-complete online and 21.5 minutes to complete over the phone. The specific variables used in this study are outlined in detail below. This study was approved by the University of Queensland Ethics Review Board.

The final analytic sample used in this study comprises 929 (91.5% of the original 1,015) individuals who provided a full complement of responses on items related to income, belonging and place attachment, and patterns of place visitation. The final sample retains accurate representation of the Australian adult population except for age. In the final sample used in the study, 14.98% of the participants are aged 18–34 years compared to 20.6% of persons aged 18–34 years in the Australian population in the 2021 census. Sampling across states and territories was conducted relative to the contribution of the state population to the total Australian population to ensure relative weight of state representation. All data and models are available upon request.

The Social Research Centre's Life in Australia™ panel

The Social Research Centre's Life in Australia™ panel was established in 2016 and is the only nationally representative survey panel currently active in Australia. Original members were recruited using a dual-frame random digit dialing (RDD) sample design with a 30/70 split between the landline RDD sample frame and mobile phone RDD sample frame. Respondents

provided their contact details so that they could take part in surveys on a regular basis. The panel was refreshed annually between 2018 and 2021 with a proportion of members being retired each year and new members recruited. This recruitment used a combination of methodologies: the G-NAF (Geocoded National Address File) and the push-to-web, and the mobile RDD sample frame. Life in Australia™ includes people with and without internet access. Those without internet access or those who are not comfortable completing surveys over the internet are able to complete surveys by telephone. Life in Australia™ members receive a small incentive for joining the panel and another incentive for each survey they complete (value of A\$10).

Dependent variables

Public familiarity

Public familiarity is the mean score of nine items on the survey where participants were asked to report how frequently—on a scale of one to five (never, rarely, sometimes, often, always)—they had unplanned interactions with people they recognized but did not know by name at the following places in their local neighborhood: (1) shops, (2) cafes, (3) parks, (4) schools, (5) community centers, (6) restaurants, (7) pubs, (8) transit stations, (9) footpaths and streets.

Belonging and attachment

We measure belonging and place attachment using five items adapted from the abbreviated place attachment scale (Boley et al., 2021; Williams & Vaske, 2003). On a scale of one to five (strongly disagree-strongly agree) participants were asked to rate their agreement with the following five statements: (1) this is the ideal neighborhood for me, (2) I feel like I belong in this neighborhood, (3) it would be hard for me to leave this neighborhood, (4) I believe my neighbors would help me in an emergency, (5) living in this neighborhood gives me a sense of community. The scale has a Cronbach's alpha reliability score of 0.88.

Independent variables

Neighborhood use

Neighborhood use is the summative scale computed from nine variables that asked participants whether they visited the following nine types of places in their neighborhood in the last 12 months: (1) shops, (2) cafes, (3) parks, (4) schools, (5) community centers, (6) restaurants, (7) pubs, (8) transit stations, (9) footpaths, and streets.

Perceived barriers and facilitators to neighborhood use

Research indicates that neighborhood use is influenced by perceived availability and attractiveness of places for socialization in the local neighborhood. To measure perceived place availability, we ask respondents how strongly they agree with four statements: (1) there are shops, cafes or services within a walkable distance in my neighborhood; (2) there are places in my neighborhood where people might say “hello” and chat informally; (3) there are well-maintained walkways on most of the streets in my neighborhood; (4) my neighborhood has free or low-cost places to meet friends or interact with others. Responses are on a 5-point Likert scale ranging from strongly disagree to strongly agree. This scale has a Cronbach's alpha reliability score of 0.728. We also include items to capture barriers to neighborhood use. Perceived neighborhood crime can dissuade use of neighborhood places by reducing one's sense of safety. We measure perceived crime as a mean score computed from responses to seven items that ask respondents how frequently in the last 12 months the following events have occurred in their neighborhood: (1) a violent argument or fight; (2) a robbery or mugging; (3) a burglary or break in; (4) a motor vehicle theft; (5) graffiti or vandalism; (6) drug use; (7) young people getting into

trouble with police. Response options are on a scale of 1 to 5 and include never; rarely; sometimes; often; always; and daily.

Sociodemographic characteristics

In model 2, we include variables to capture socio-demographic characteristics that are noted in the literature to influence individual routine activities, social interactions, and place attachment (Altman & Low, 1992). These include sex at birth (0 = man; 1 = woman), marital status (0 = married; 1 = not married); children (0 = no; 1 = yes); household income and language spoken at home (0 = English only; 1 = non-English speaking at home); presence of dependent children (0 = no, 1 = yes) and age (1 = 18–24 years; 2 = 25–34 years; 3 = 35–44 years; 4 = 45–54 years; 5 = 55–64 years; 6 = 65–74 years; 7 = 75 years and above). We include years lived at residential address as a continuous variable. Age is also treated as a continuous variable given that it comprises seven categories (Johnson & Creech, 1983; Norman, 2010)

Inner vs. outer city

We also include a variable to control for the location of the residence within the city. Outer city suburbs, compared to city central locations, tend to have lower population density and provide fewer neighborhood resources and/or less time to use neighborhood places due to lifestyle differences such as longer commutes (Valle Pilia & Ramírez Fonseca, 2024).

Analytic strategy

The overarching aim of our study was to better understand the benefits of public familiarity. To achieve this aim, we first explored respondents' perceived benefits of public familiarity, directly by using descriptive statistics and student t-tests. Second, we examined the indirect, mediating effect of public familiarity on the association between use of neighborhood places and sense of attachment and belonging, using structural equation modeling. Based on Confirmatory Factor Analysis (CFA), the factor loadings for items measuring attachment and belonging and perceived place availability were significant ($p < .001$). We treated attachment and belonging and perceived place availability as latent variables and all other variables as observed in the Structural Equation Models (SEM). Tests of indirect paths were conducted using 2000-replication bootstrap (MacKinnon et al., 2004).

In model 1, we report the results of regression paths between our key variables of interest. In model 2, we adjust for the effects of sex at birth, age, years at residential address, household income, language, marital status, and the number of children. We report the unstandardized coefficients of the control variables in discussion and the tables but not in the figures. To assess model fit, we report the chi-square statistic (χ^2) along with the comparative fit index (CFI), Tucker—Lewis index (TLI), root mean square error of approximation (RMSEA), and standard root-mean-squared residual (SRMR). As Hu and Bentler (1999) suggested, we use cutoff criteria of >0.95 for CFI and TLI, <0.06 for RMSEA, and <0.08 for SRMR. Tests for multicollinearity revealed variance inflation scores (VIFs) were below 2.0. Given the cross-sectional nature of the data we also tested a model with the opposite directionality (Table A1). However, there was no evidence that neighborhood use mediated the association between place attachment as the predictor and public familiarity as the outcome. The AIC and BIC of the model were also higher, suggested a poorer model fit. Sample descriptive statistics for all variables are outlined in Table 1 and Figure 2. The results of the SEMs are presented in Tables 2 and 3.

Results

To assess the benefits of public familiarity as perceived by individuals, participants in the survey were asked to report the extent to which they agreed with the following two statements: Seeing people I recognize at places (like regular workers or other people who usually go there) makes me feel more

**Table 1.** Descriptive statistics life in Australia survey ($N = 929$).

Variables	Mean (SD)/% (n)	Min	Max
Public familiarity	2.88 (0.79)	1	5
Belonging and attachment scale	3.64 (0.78)	1	5
Neighborhood use	5.88 (1.65)	1	9
Place availability	3.86 (0.74)	1	5
Perceived crime	2.08 (0.85)	1	6
<i>Social demographic characteristics</i>			
Sex:			
Man	44.43% (413)		
Woman	55.57% (516)		
Age:			
18–24	4.63% (43)		
25–34	10.95% (102)		
35–44	15.00% (139)		
45–54	15.00% (139)		
55–64	20.69% (195)		
65–74	22.66% (211)		
75 and above years	11.23% (102)		
Language spoken at home:			
English	83.85% (836)		
Language other than English (LOTE)	16.15% (161)		
Home ownership status			
Own	73.52% (683)		
Rent	26.48% (246)		
Children in the household			
No	74.48% (692)		
Yes	25.52% (237)		
Marital status			
No	23.25% (216)		
Yes	76.75% (713)		
Household income (median reported)	\$65,000-\$77,999 per year (\$1,250-\$1,499 per week)		
Years at residential address	13.7 (13.5)	0.08	72.5
Location of residence			
Inner city	69.21% (643)		
Outer city	30.79% (286)		

Source: Authors.

Table 2. Model 1 estimated direct, indirect and total effects on public familiarity and belonging and attachment.

From	To		
	Neighborhood use	Public familiarity	Belonging & Attachment
Public familiarity	Direct		0.31 (0.03)***
	Indirect		
	Total		0.31 (0.03)***
Neighborhood use	Direct	0.04 (0.02)*	0.51 (0.07)***
	Indirect		0.01 (0.01)*
	Total	0.04 (0.02)*	0.01 (0.02)
Place availability	Direct	0.94 (0.11)***	0.26 (0.09)**
	Indirect		0.04 (0.02)*
	Total	0.94 (0.11)***	0.30 (0.06)***

2,000-replication in bootstrap. * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 929$. Coefficients (bootstrapped standard errors).

Source: Authors.

comfortable; (2) If someone I recognize (because I see them often, even if I don't personally know them well) was in trouble I would be more likely to help them out compared to someone I have never seen before (Figure 1).

Student t-tests revealed that individuals aged over 55 years and homeowners were significantly more likely to recognize others in the neighborhood than younger individuals and renters. A total of 65.63% of participants agreed or strongly agreed that seeing others they recognize makes them feel

Table 3. Structural equation model estimating the indirect, direct and total effects of neighborhood use on belonging and attachment.

From		To		
		Neighborhood use	Public familiarity	Belonging & Attachment
Public familiarity	Direct			0.26 (0.03)***
	Indirect			
	Total			0.25 (0.03)***
Neighborhood use	Direct		0.07 (0.02)***	0.03 (0.02)
	Indirect			0.02 (0.01)**
	Total		0.07 (0.02)***	0.04 (0.02)*
Place availability	Direct	0.92 (0.11)***	0.24 (0.06)***	0.48 (0.07)***
	Indirect		0.06 (0.02)**	0.10 (0.02)***
	Total	0.92 (0.11)***	0.30 (0.06)***	0.58 (0.08)***
Perceived crime	Direct	0.13 (0.06)*	0.02 (0.03)	-0.18 (0.03)***
	Indirect		0.01 (0.005)	0.01 (0.01)
	Total	0.13 (0.06)*	0.03 (0.03)	-0.17 (0.03)***
Sex	Direct	-0.11 (0.11)	0.07 (0.05)	0.03 (0.05)
	Indirect		-0.007 (0.007)	0.02 (0.02)
	Total	-0.11 (0.11)	0.06 (0.05)	0.04 (0.05)
Age	Direct	-0.02 (0.04)	0.09 (0.02)***	0.06 (0.02)**
	Indirect		-0.001 (0.003)	0.02 (0.07)**
	Total	-0.02 (0.04)	0.09 (0.02)***	0.08 (0.02)***
Unmarried	Direct	0.05 (0.13)	0.02 (0.06)	-0.12 (0.06)*
	Indirect		0.003 (0.009)	0.008 (0.02)
	Total	0.05 (0.13)	0.03 (0.06)	-0.11 (0.06)
Non-English speaking	Direct	0.007 (0.13)	0.05 (0.07)	-0.08 (0.07)
	Indirect		0.0004 (0.01)	0.01 (0.02)
	Total	0.007 (0.13)	0.05 (0.07)	-0.07 (0.07)
Years at address	Direct	-0.004 (0.005)	0.003 (0.002)	0.004 (0.002)*
	Indirect		-0.0002 (0.0003)	0.001 (0.001)
	Total	-0.004 (0.005)	0.003 (0.002)	0.004 (0.002)*
Renting	Direct	0.05 (0.12)	-0.16 (0.06)*	-0.16 (0.06)**
	Indirect		0.003 (0.008)	-0.04 (0.02)*
	Total	0.05 (0.12)	-0.16 (0.06)*	-0.19 (0.06)**
Children	Direct	0.57 (0.16)***	0.19 (0.06)**	0.05 (0.06)
	Indirect		0.04 (0.01)**	0.07 (0.02)***
	Total	0.57 (0.16)***	0.23 (0.07)**	0.13 (0.06)*
Household income	Direct	0.04 (0.01)*	-0.01 (0.007)	0.005 (0.007)
	Indirect		0.002 (0.001)*	-0.001 (0.002)
	Total	0.04 (0.01)*	0.94 (0.11)***	-0.001 (0.007)
Outer city	Direct	-0.30 (0.12)	0.34 (0.05)***	0.02 (0.05)
	Indirect		-0.02 (0.01)*	0.07 (0.02)***
	Total	-0.29 (0.12)	0.32 (0.007)**	0.09 (0.05)

2,000-replication in bootstrap. * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 929$. Coefficients (bootstrapped standard errors).

Source: Authors.

more comfortable. Agreement with the statement was significantly stronger for females and homeowners compared to males and renters.

A total of 51.53% of the sample agreed or strongly agreed with the statement “If someone I recognize (because I see them often, even if I don’t personally know them well) was in trouble I would be more likely to help them out compared to someone I have never seen before.” Student t-tests revealed that younger individuals ($M = 3.45$, $SD = 0.04$) were more likely to agree with this statement than individuals over 55 years ($M = 3.32$, $SD = 0.04$) $t(1011) = 2.14$, $p = .03$. Males ($M = 3.46$, $SD = 0.04$) and non-English speaking ($M = 3.54$, $SD = 0.07$) individuals were also more likely to agree than were females ($M = 3.32$, $SD = 0.04$) $t(1007) = 2.42$, $p = .02$, and English speakers, respectively ($M = 3.34$, $SD = 0.03$) $t(1010) = 2.34$, $p = .02$.

At the neighborhood level, average belonging and attachment was moderately high among the sample ($M = 3.64$, $SD = 0.78$). On average, individuals visited 5.8 types of places in their neighborhood in the last 12 months and experienced interactions with people they did not personally know (public familiarity) sometimes or often ($M = 2.88$, $SD = 0.79$).

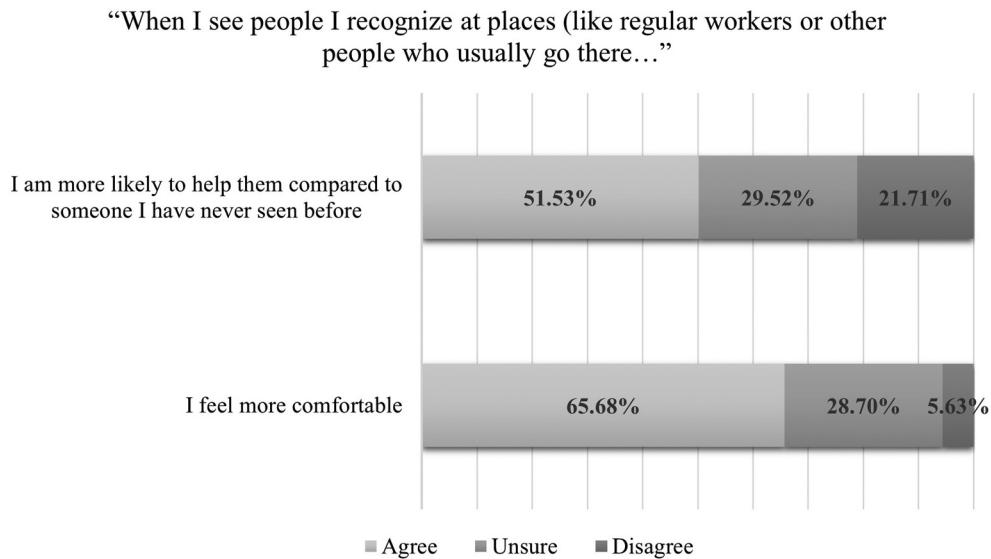


Figure 1. Participants' responses to survey questions measuring benefits of familiarity. Source: Authors.

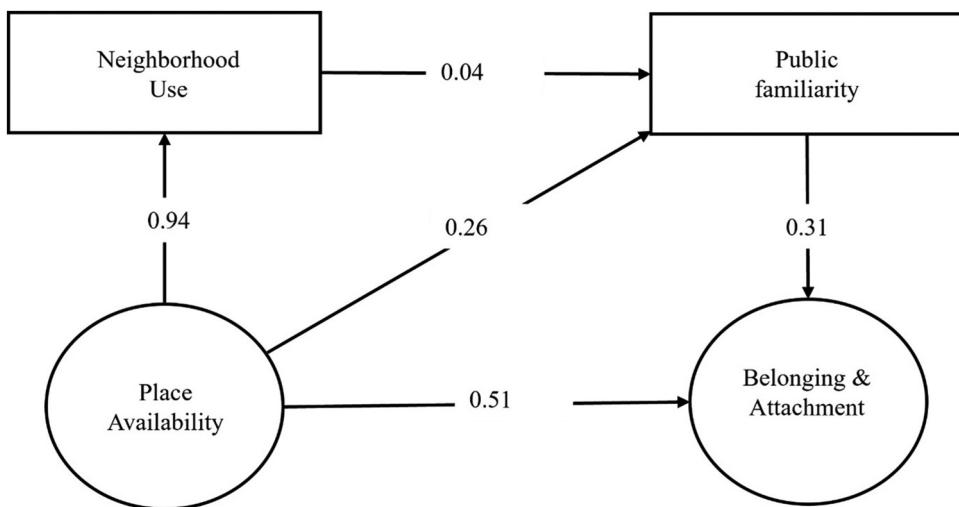


Figure 2. Results for the direct associations for the estimated path model without controls. Source: Authors.

Fit indices for model 1 indicated a reasonable fit between our model and the data ($\chi^2 [40] = 335.48$, $p < .001$, CFI = 0.93, TLI = 0.91, RMSEA = 0.08, SRMR = 0.055). After we added the socio-demographic variables, the fit between the model and the data improved ($\chi^2 [96] = 481.40$, $p < .001$, CFI = 0.91, TLI = 0.87, RMSEA = 0.06, SRMR = 0.04). Figures 2 and 3 show the estimated direct, indirect, and total effects of neighborhood use and public familiarity on belonging and place attachment. The results for the direct associations suggest that public familiarity ($B = 0.26$, $p < .001$) and perceived place availability ($B = 0.48$, $p < .001$) are positively and significantly associated with belonging and place attachment, as are age ($B = 0.06$, $p < .01$) and years lived at residential address ($B = 0.004$, $p < .05$). Alternatively, perceived crime ($B = -0.18$, $p < .001$) and renting ($B = -0.16$, $p < .01$) have a negative association with sense of belonging and attachment to the neighborhood.

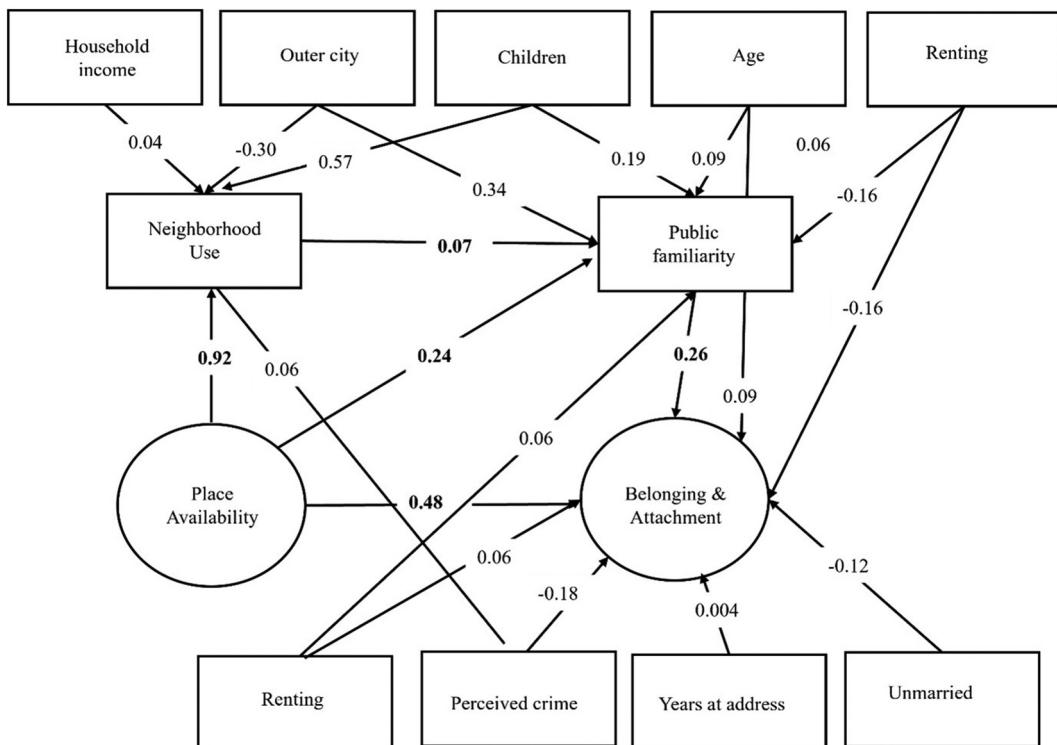


Figure 3. Results for the direct associations for the estimated path model with controls. All significant ($p < .05$) direct associations are represented in the diagram. Source: Authors.

Neighborhood use ($B = 0.07, p < .001$) and perceived place availability ($B = 0.24, p < .001$) have a direct, significant, and positive association with public familiarity as does age ($B = 0.09, p < .001$). Individuals who have dependent children in the household ($B = 0.19, p < .01$) and those who live in outer city suburbs ($B = 0.34, p < .001$) report higher public familiarity than those without children and residents of inner-city neighborhoods, respectively. The results of the bootstrapped indirect associations showed that neighborhood use was indirectly and positively associated with belonging and attachment via public familiarity ($B = 0.02, p < .01$) and perceived place availability ($B = 0.10, p < .001$). Of the total effect of neighborhood use on belonging and attachment, 50% was indirect through public familiarity. The direct effect of neighborhood use on belonging and attachment was not statistically significant ($p > .05$).

Our models suggest there is a significant *direct* association between both neighborhood use and public familiarity (path a) ($B = 0.07, SE = 0.02, p < .001$) and an *indirect* association between neighborhood use and belonging and attachment via public familiarity ($B = 0.04, SE = 0.01, p < .01$). The results also demonstrate a direct and significant path between public familiarity and belonging and attachment (path b) ($B = 0.26, SE = 0.03, p < .001$) (Figure 3).

Discussion

Relations of recognition can transform the world of urban strangers into familiar social territories. These “comfort zones” (Blokland & Nast, 2014), where individuals know the social codes and what to expect from others, emerge during routine daily activities at neighborhood places and along routes where individuals repeatedly spend their time. While social ties require effort to maintain, invisible ties of familiarity and recognition in the comfort zone are free from binding obligations of reciprocity



(Richaud, 2016). Therefore, public familiarity can allow residents to stockpile potential social capital to facilitate access to neighbors who will help if needed and provides light touch social contact that can mitigate loneliness (Ottoni et al., 2022) and facilitate sense of belonging (Blokland & Schultze, 2017; Link et al., 2021). In this study, we examined the mediating role of public familiarity in the association between neighborhood use and sense of belonging and attachment. We extended on previous work by Blokland and Nast (2014) that focused on neighborhood use and public familiarity and separately examined the link between public familiarity and belonging in two diverse neighborhoods in Berlin (see also Link et al., 2021). Our results draw attention to three key findings.

First, our findings demonstrate the potential benefits of familiarity for comfort and sociality. Over 65% of individuals in our study stated that seeing people they visually recognize makes them feel more comfortable in public places. Over half of our participants said they would be more likely to help a familiar stranger compared to someone they had never seen before. Following his original observations of individuals at train stations, Milgram (1970) anecdotally surmised that familiarity would incur these benefits. Our findings provide support for the idea that visual recognition of another individual has the capacity to facilitate a sense of comfort. This recognition is also associated with a social connection that incurs some expectation of reciprocity but is coupled with an implicit understanding that this is obligatory only in the case of an emergency.

Second, we found that neighborhood use is positively associated with both public familiarity and sense of belonging and attachment. This finding aligns with results from Blokland's study of Berlin neighborhoods and Link's study in Chilean neighborhoods where they found that greater neighborhood use correlates with higher public familiarity. Individuals generate social spaces during the course of their everyday activities and may develop a sense of belonging through their daily practices. Blokland and Nast (2014) use the term *comfort zone* to refer to this space that emerges during the time in between scheduled activities when people engage in passing encounters that form absent (Granovetter, 1973), and invisible ties (Felder, 2020) that are important for belonging. Passing each other and acknowledging each other in Goffman's sense is vital to the development of belonging as it signals to individuals from diverse backgrounds that their presence is accepted (Blokland & Nast, 2014; Blokland & Schultze, 2017; Soenen, 2006). Ottoni et al. (2022) found that sense of belonging and connection was facilitated through visual connection with fellow residents during the COVID-19 pandemic (see also Glover et al., 2022). They found that simply passing and seeing each other from a distance on the street could help to mitigate loneliness among elderly Canadian residents during times of social distancing (Ottoni et al., 2022). Public familiarity aligns with Lofland's concept of quasi-primary relations, and our findings resonate with her articulation of their role in the parochial realm. Lofland (1998) draws attention to the importance of these transitory social encounters, particularly those that are experienced along routinized paths or within familiar locales. She suggests that person-to-person and person-to-place connections established through light touch sociality and emotional affinity with familiar places can transform public settings into parochial experiences where individuals feel a sense of control, connection and intimacy with others (Humphreys & Liao, 2013; Lofland, 1998). Our findings suggest support for this perspective.

Third, we demonstrated that the association between neighborhood use and attachment and belonging may be partially mediated by public familiarity. That is, people who spend more time in local public places may feel a greater sense of belonging partially because they become familiar with other locals through fleeting interactions. This suggests that simply being in communal places in the neighborhood has direct benefits for attachment and belonging, even in the absence of public familiarity. However, public familiarity could offer additional benefits that go above and beyond neighborhood use alone. It is worthwhile noting that the significant influence of public familiarity on belonging remained significant after we controlled for residential mobility. This particular finding is important in the context of Blokland's et al. (2022) most recent work which draws attention to increasingly mobile lifestyles and the complicated association between residential mobility and public familiarity. This finding demonstrates that fleeting, impersonal interactions with familiar others in communal places are meaningful and could offer potential for mitigating the effects of modern life on

the deterioration of strong social ties that were the foundation of traditional residential communities. This form of sociality performed during times in between scheduled activities can be incorporated into everyday life and does not require additional effort. Public campaigns to raise awareness of the importance of social encounters should encourage individuals to acknowledge fellow passersby and offer a greeting.

Finally, we note that individual characteristics are also important for both public familiarity and belonging. While not the focus of this study, one result in particular requires mention. The influence of children on attachment and belonging was fully mediated through public familiarity. Blokland and Nast (2014) argue that children and dogs are “contact assets.” She suggests that individuals with children and/or dogs use neighborhood places in a way that enhances their capacity to develop public familiarity. Supervising children at a playground or walking the dog increases the likelihood of repeatedly encountering others doing the same thing, at the same time which in turn enhances public familiarity (Blokland & Nast, 2014). While Blokland and Nast (2014) did not find empirical evidence to support this hypothesis in her study of two Berlin neighborhoods, our results demonstrate that in the case of children, there is evidence to support this link. We suggest investigating the role of contact assets in generating public familiarity across different situational contexts.

From a practical policy perspective, there are several implications that emerge from the empirical findings of the current study. Supporting community-led programs and public events seeking to encourage regular and active participation of community in shaping and maintaining neighborhood places, such as community gardens, public art projects, would likely exert a positive impact on enhancing and sustaining public familiarity. Policies that support regular use of neighborhood places can help foster a sense of belonging and attachment while developing a social conduit that acts to bring people together from diverse backgrounds (Wickes et al., 2018). From an urban planning and design perspective, considering mixed use developments that embed walkable local amenities, such as neighborhood playgrounds and dog parks acting to promote regular social interaction, would likely increase opportunities to activate contact assets in neighborhood settings.

Limitations and future directions

Our findings add to the literature on neighborhood social relations and the current understanding of public familiarity. However, we note that the models draw on cross-sectional data collected at a single time point. Thus, we do not attempt to draw causal inferences. Rather, our intent is to utilize these analyses to draw attention to public familiarity and the potential benefits of familiarity for sense of belonging and attachment. Future research should seek to collect longitudinal data that can better unpack the sequence through which neighborhood use, public familiarity, and belonging are connected and may mutually reinforce each other over time. We suggest that better understanding how neighborhood use and public familiarity are associated with public health benefits, such as a heightened sense of belonging, we can inform urban design and neighborhood interventions to support wellbeing. By designing neighborhood places that funnel pedestrian traffic through walkways and encourage lingering with the careful placement of benches, shade, and public art displays, it may be possible to create the necessary pre-conditions from which public familiarity can emerge to confer benefits for both individuals and communities.

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Appendix

Table A1. Structural equation model testing the opposite directionality: Indirect effects of place attachment on place familiarity through use of places.

From	To	
	Neighborhood use	Public familiarity
Belonging & Attachment	Direct	0.07 (0.09)
	Indirect	0.002 (0.003)
	Total	0.07 (0.09)
Neighborhood use	Direct	0.39 (0.04)***
	Indirect	0.04 (0.04)*
	Total	0.04 (0.02)*
Place availability	Direct	0.91 (0.13)***
	Indirect	0.03 (0.07)
	Total	0.03 (0.02)*

2,000-replication in bootstrap. * $p < .05$; ** $p < .01$; *** $p < .001$, $N = 929$. coefficients (bootstrapped standard errors). Source: Authors.