

OPEN NEIGHBORHOODS, SENSE OF COMMUNITY, AND INSTAGRAM USE: DISENTANGLING MODERN LOCAL COMMUNITY EXPERIENCE THROUGH A MULTILEVEL PATH ANALYSIS WITH A MULTIPLE INFORMANT APPROACH

FLORA GATTI FORTUNA PROCENTESE UNIVERSITY OF NAPOLI FEDERICO II

This paper aims at deepening local community experience in a multilevel perspective, through addressing the intertwinement between neighborhood shared representations, its members' sense of community (SoC), and their social media community-related use. The latter is deepened as a potential way to face the dissonance rising from feeling tied to a community when it does not return social representations about itself. As community representations impact its members' lives yet are shaped by their behaviors in turn, this study focuses on the interactions between individual and community levels. Three hundred and eighty Italian Instagram users from 33 neighborhoods were involved; a multiple informant methodology was used to detect community shared representations. What emerges suggests contrasting evidences about modern local community experience. Indeed, the nonindependence among community members was quite low, yet community representations about some of its social and environmental features proved to moderate the relationship between SoC and the considered community-related Instagram practice.

Keywords: Multilevel modeling; Instagram; Neighborhoods; Sense of community; Social capital. Correspondence concerning this article should be addressed to Flora Gatti, Department of Humanities, University of Napoli Federico II, via Porta di Massa 1, 80133 Napoli (NA), Italy. Email: flora.gatti@unina.it

Local community (i.e., city or neighborhood) experience refers at the same time to places and spaces and to the psycho-social, symbolic, and cultural dimensions giving them meaning to community members' (Levine & Perkins, 1987; Macintyre et al., 2002; Mannarini et al., 2006; Sarason, 1974; Vick & Perkins, 2013). Community social and environmental features play a role in shaping shared meanings and representations (March & Olsen, 1989; Wiesenfeld, 1996), how community members behave (Lewin, 1951; March & Olsen, 1989), and their strategies safeguarding the community and their tie to it (Bridge, 2002; Sarason, 1974; van Oorschot et al., 2006). Thus, being members of a community implies feeling reciprocally bonded, with thoughts and behaviors affected by the same local surroundings (March & Olsen, 1989; Pretty et al., 2003); together, each member contributes in shaping and maintaining shared representations about it too (Lewin, 1951; Pretty et al., 2003; Wiesenfeld, 1996), within a reciprocal interdependence. Nevertheless, few studies deepened community-related dimensions across different levels (e.g., Perkins & Long, 2002) or community objective features impact on individual dimensions (e.g., Mannarini et al., 2018; van den Berg & Timmermans, 2015), making the intertwinement of individual and community dimensions in local community experience a still underexplored field. Specifically, the interaction between

community shared representations about itself and individual community-related feelings has been rarely assumed as the observation summit (e.g., Long & Perkins, 2007), even though it could allow a more complex understanding of social phenomena and individual behaviors (Lewin, 1951).

This study represents a first step in addressing this gap through deepening the relationships between community shared representations, its members' tie to it, and their social media community-related uses — i.e., those allowing a re-connection to local communities through mobile devices features. Indeed, as social media uses are based on individuals' needs and goals (McQuail et al., 1972; Wei & Lo, 2006) and impact community experience fostering interactions among neighbors (Procentese & Gatti, 2019a, 2020; Van De Wiele & Tong, 2014) and allowing to attach and share representations about news, events, and places (Lee, Bakar, et al., 2015; Lee, Lee, et al., 2015; Oh et al., 2016), community-related ones have recently been hypothesized as alternative, maybe adaptive, paths to improve the social experience bounded to local communities (Procentese & Gatti, 2019a). Thus, Instagram use to look for photos about social places and gatherings in one's neighborhood will be addressed as a way for individuals feeling bonded to their community to re-connect to its social meanings when its perceived features hinder this, that is, when shared representations about it return a spatial and relational closure.

This study considers at the same time the interaction of individual (Level 1) and community (Level 2) levels and the intersection between online and offline environments, which seem both timely topics worth studying. A multilevel perspective will be adopted as the most adequate to shed new light on these dimensions through testing cross-level interactions, consistently with the acknowledgment that "it is the interaction among needs, individual differences, and social context that predicts use" of social media (Lucas & Sherry, 2004, p. 503). It considers that individuals are nested in their neighborhood communities, whose features and shared representations about them are shaped by and shape its members' behaviors (Bronfenbrenner, 1979; Lewin, 1951; March & Olsen, 1989; Pretty et al., 2003; Wiesenfeld, 1996). Thus, individuals living in the same neighborhood are not totally independent (Hox, 2010) and not considering this would lead to misrepresented results (Snijders & Bosker, 2011). Neighborhoods have been chosen as the contextual level of analysis because in most Italian cities they represent psychologically relevant daily local communities (Bonnes et al., 1990; Mannarini et al., 2006).

AGGREGATIVE FUNCTIONS OF LOCAL COMMUNITIES

As community refers to several intertwined dimensions, when referring to its places representations about their availableness (i.e., the tangible aspect), and safety and socialization opportunities within them (i.e., respectively, emotive and relational aspects) should all be considered (Francis et al., 2012; Maas et al., 2009; Ziersch et al., 2005): interactions among neighbors impact the perception about the neighborhood (Bridge, 2002; Perkins & Taylor, 1996; Wood & Christian, 2011) and are in turn influenced by them (Gehl, 2006; Wood et al., 2012). Well-kept and usable spaces represent settings for social gatherings, community discussions, and serendipitous interactions among neighbors (Gehl, 2006), signaling they are safe places to be attended and community members are hearty and warm (Wood & Christian, 2011). They sustain reciprocal proximity and acknowledgment, trust and support exchanges, as well as shared meanings and visions (Bridge, 2002; Francis et al., 2012; Granovetter, 1977; Sugiyama et al., 2008). Over time, they glue local social networks, sustaining neighborhood friendliness and its members' sense of community (Dempsey, 2009; Francis et al., 2012; Leyden, 2003; Putnam, 2000; Talen, 2000; Wood et al., 2010). Conversely, low quality or foreclosed spaces are only used for necessary activities (Gehl, 2006), with a loss of

social meanings and functions. Due to the lack of shared places and experiences, citizens perceive each other as strangers rather than members of the same community (Carli, 2000). Higher insecurity (Perkins & Taylor, 1996; Wood & Christian, 2011; Wood et al., 2012), and lower socialization opportunities, community-spiritedness, friendliness, acknowledgment, support, and trust (Bridge, 2002; Di Napoli et al., 2019) follow. Thus, with reference to mesolevel social structures (Perkins & Long, 2002; van Oorschot et al., 2006; Wood et al., 2012), community spaces represent venues for social capital (Wood et al., 2012), that is, the social connections among community members characterized by trust, friendliness, reciprocity, support, public-spiritedness, and shared values and social norms (Cohen & Prusak, 2002; Putnam, 1993). Specifically, high quality spaces foster an open social capital, based on weak ties, broader trust, and acknowledgment, while low quality ones sustain a closed social capital, focused on primary relationships and exclusive trust (Putnam, 2000).

The latter seems a closer portrait of modern communities, where recent global phenomena have led to a gradual privatization and instrumentalization of spaces and sociability, weakening the social meanings usually attributed to public spaces and common activities (Arcidiacono & Di Napoli, 2010; Crang, 2000; Procentese & Gatti, 2019a, 2020) and making them spatially and relationally closed. Referring to Italian neighborhoods, these changes are witnessed by the most recent Italian National Institute of Statistics (ISTAT, 2018) report about this topic showing that individuals daily spend little time interacting with people living in their neighborhood but not being their relatives or friends. Consistently, as feeling tied to a community while it returns negative and nonsocially connoted representations about itself could produce cognitive dissonance experiences — i.e., uncomfortable feelings about one's cognitions, believes, and/or behaviors being inconsistent among them (Festinger, 1962) — questioning about these community changes and the detection of new strategies aimed at boosting its social dimensions seems worthwhile.

SENSE OF COMMUNITY AND INSTAGRAM

The bond that ties individuals to their local communities has been conceptualized as sense of community (SoC; McMillan & Chavis, 1986). Through associating with shared symbols, identity aspects and resources, sense of belonging and closeness (McMillan, 1996; McMillan & Chavis, 1986; Sarason, 1974), SoC is bounded to and expressed through the relationships with community members and within common spaces (Clemente et al., 2016; Puddifoot, 2003; Sarason, 1974). Indeed, common places and leisure activities represent categories contributing to it and to community members' social identities (Mao et al., 2016; Twigger-Ross et al., 2016).

Its strong association with community positive representations and meanings (Mannarini et al., 2006; Mannarini & Fedi, 2009; Ziersch et al., 2005) suggests that the higher their SoC the more individuals adopt strategies to boost positive representations about the community when it is not sustaining them itself, to avoid dissonance experiences. Consistently, as social media uses are led by individuals' needs and goals (McQuail et al., 1972; Wei & Lo, 2006) and SoC is actively safeguarded according to the constraints coming from the community (Prezza & Costantini, 1998; Sarason, 1974), Instagram use to look for photos about social places and gatherings in one's neighborhood is supposed as a strategy adopted by individuals feeling tied to their neighborhood to boost social representations about it when more traditional paths toward them seem not feasible — i.e., when it returns spatial and relational closure. Indeed, Instagram proved to be a self-definition and self-expression tool (Highfield, 2015; Marcus, 2015), as its contents convey elements of identities and daily lives (Lee, Bakar, et al., 2015; Lee, Lee, et al., 2015). As photos are

TPM Vol. 27, No. 3, September 2020 313-329 – Special Issue © 2020 Cises



Gatti, F., & Procentese, F.
Disentangling local community experience

powerful means to convey individual and social meanings (Purcell, 2007; Sonn et al., 2015), its key features (hashtagging, geotagging, and following) foster reflexive relationships between people and places and new ways of experiencing the latter (Oh et al., 2016) through allowing locational information and meanings attribution and sharing. This hypothesis follows:

H1: SoC positively associates to this Instagram practice.

Since this practice is supposed as a different way to contact positive social representations about one's community (Zasina, 2018) when other paths seem not feasible, the hindering role of neighborhood representations about spatial and relational closure is here hypothesized. Indeed, the need to find alternative ways to contact these meanings could be lower, if people feeling tied to their community could access shared representations about it as a social entity (Procentese & Gatti, 2019a, 2020). Consistently, this multilevel hypothesis is added:

H2: community representations about neighborhood friendliness (H2a), socialization opportunities (H2b), availableness of social places (H2c), support (H2d), trust (H2e), and safety (H2f) will impact negatively the relationship between SoC and this Instagram practice, that is, their association will become stronger as the representations about spatial and relational openness decreases.

METHOD

Participants and Procedures

The questionnaire was shared in Italian Instagram users Facebook groups (weareigersit, InstagramItalia), in some high school classes, and through an Instagram account (@insta.gramandthecity). Participants were 380 Italian Instagram users, who received no compensation. An explanation about confidentiality and anonymity issues, wherein participants had to express their informed consent, introduced the questionnaire. For underaged participants, informed consent was asked to their parents.

Respondents were aged between 15 and 64 (M = 21.29; SD = 5.99); about 90% of them was aged between 15 and 27, matching ISTAT data (2018) about Italian social media users with social aims. They lived in 33 different neighborhoods in Naples, Rome, and their surroundings, as these areas were among those with fewer interactions among neighbors according to the most recent ISTAT report (2018); the average neighborhood group size is 11.51. Respondents had been living in their neighborhood for 17.99 years on average (SD = 7.59). Among them, 62.9% was female; 43.4% had a secondary school diploma, 31.6% had a high school diploma, 20% had a degree, and 5% had a post degree title.

As of average Instagram use, 81.6% used it more often than once a day, 10.5% once a day, 2.6% five-six times a week, 2.6% two-three times a week, and 2.6% once a week or less. About their motives toward it, on a 5-points Likert scale (1 = Never, 5 = Often) the average frequency was 3.31 (SD = 1.24) for the considered Instagram practice and 3.04 (SD = 0.82) for "other" motives — i.e., surveillance/knowledge about others, documentation, coolness, and creativity, detected by Sheldon's and Bryant's (2016) scale.

Measures

The questionnaire included a socio-demographic section and these specific measures. Individual dimensions

Instagram use to look for photos about social places and gatherings. Six items (e.g., "I use a geotag to look for photos about clubs or other social places in my neighborhood") were created referring to respondents' neighborhood. Participants had to rate on a 5-points Likert scale (1 = Never, 5 = Often) how often they used Instagram as stated in each item.

Sense of community (SoC). The Brief Sense of Community Scale (Peterson et al., 2008; eight items, e.g., "I belong in this neighborhood") was used to assess SoC core dimensions (McMillan & Chavis, 1986). Respondents had to rate their agreement on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree) referring to their neighborhood.

Neighborhood. Respondents were asked to indicate the neighborhood where they lived. When this answer was missing, they were excluded from the analyses due to the impossibility to determine where they should have been nested.

Neighborhood dimensions

Socialization opportunities. Three items (e.g., "In this neighborhood, it is hard to meet new people") on a 5-points Likert scale ($1 = Strongly\ disagree$, $5 = Strongly\ agree$) were used to detect respondents' representations about socialization opportunities in their neighborhood.

Availableness of social places. Eight items were selected from Wood's and colleagues' (2012) ones about community places adequacy, as they referred to social places (e.g., "Parks and open spaces"); respondents had to rate their availableness in their neighborhood on a 5-points Likert scale ($1 = Not \ available$, $5 = Totally \ available$).

Friendliness, safety, and trust. Wood's and colleagues' (2012) items about suburb friendliness (three items, e.g., "People who live here usually say hello to each other"), safety (six items, e.g., "I feel safe in this neighborhood using parks and facilities"), and trust (three items, e.g., "I can trust most of the people living in my neighborhood") were adapted to neighborhood contexts; respondents had to rate their agreement on a 5-points Likert scale (1 = Strongly disagree, 5 = Strongly agree).

Supportive climate. The support among community members dimension (five items, e.g., "Helping the newcomers fitting in") of the Sense of Responsible Togetherness Scale (Procentese & Gatti, 2019b; $\alpha = .94$) was used to detect neighbors' reciprocal helpful behavior, mutual understanding, and open exchanges of ideas. Respondents had to rate how often the described circumstances happened in their neighborhood on a 4-points Likert scale (1 = Never, 4 = Always).

Data Analyses

Being Instagram use and socialization opportunities new scales, exploratory factor analyses (EFA) with principal axis factoring were run first. The sphericity was checked using Bartlett's test and the adequacy of sampling using the Kaiser-Meyer-Olkin (KMO) measure. Then, confirmatory factor analyses (CFA) with structural equation modeling (SEM) were used to test the expected factor structures for the scales. To evaluate each model fit, the comparative fit index (CFI) and the standardized root mean square residual (SRMR) were observed (MacCallum & Austin, 2000). For CFI, values equal to or greater than .90 and .95 indicate respectively good or excellent fit; for SRMR, values equal to or smaller than .06 and .08 indicate respectively good or reasonable fit (Hu & Bentler, 1999). The reliability was checked through Cronbach's alphas.

To test H1, a regression model using ordinary least squares (OLS) path analysis was run, with SoC as the independent variable and Instagram use as the dependent one. The presence of outliers and/or influential cases was checked through leverage values and Cook's D (Cousineau & Chartier, 2010).

To address all H2s, a multilevel path analysis was run following a stepwise procedure (Hox, 2010), including individual (Level 1, n = 380) and neighborhood (Level 2, n = 33; Maas & Hox, 2005) levels. As the interest lied in community representations about neighborhood features, a multiple informant approach was used to detect them without reducing them to individual perceptions (Lanz et al., 2018; van Bruggen et al., 2002). Intraclass correlation coefficient (ICC) and design effects (DEFF) were observed as inter-rater agreement indices (Lanz et al., 2018). Level 2 scores were obtained by averaging the answers of the respondents from the same community. Due to the focus on cross-level interactions, neighborhood level variables were grand mean centered, while the individual level predictor was group mean centered following Enders and Tofighi (2007). First, a baseline model (M1) was run with no predictors to test whether the outcome variable (Instagram use) showed differences across neighborhoods. Then, the individual level predictor (SoC) was included to test its effect in addition to the clustering one (M2). The third model (M3) tested whether the effect of the individual level predictor on the outcome differed across neighborhoods i.e., its slope variations across them. The fourth model (M4) added neighborhood level predictors (neighborhood safety, friendliness, socialization opportunities, availableness of social places, trust, supportive climate) direct effects on the outcome too. Then, neighborhood representations moderation effects were tested through cross-level interactions (M5), adding interaction terms between the individual predictor and neighborhood ones.

The significant interactions were plotted to show the relationship between SoC and Instagram use for neighborhoods characterized by representations of low (one Level 2 standard deviation below the mean), medium, or high (one Level 2 standard deviation above the mean) levels of each feature.

RESULTS

For both Instagram use and socialization opportunities, sphericity (respectively, χ^2 (15) = 1242.83, p < .001, and χ^2 (3) = 193.07, p < .001) and adequacy of sampling (respectively, KMO = .884 and .583) were good; a one-factor structure emerged from EFAs, with all loadings higher than .30.

CFA confirmed the expected structures for all the measures. For Cronbach's alphas, fit indices, and Level 1 and 2 descriptive statistics and correlations, see Table 1. Even though Level 2 variables showed low ICCs, they all reported DEFFs higher than 2 (Muthen & Satorra, 1995); thus, also due to the theoretical model underlying the study (Nezlek, 2008), multilevel analyses were performed despite of the low agreement among neighborhood members. Indeed, ignoring neighborhood clustering could lead to biased results even though the nonindependence was quite low (Snijders & Bosker, 2011).

SoC was a significant predictor of Instagram use, B = 0.30, SE = 0.03, p < .001, supporting H1. There were no outliers and/or influential cases affecting the analyses, with the leverage value always lower than .02 and Cook's D having 0 and .06 as lowest and highest values. The model explained 17.1% of the outcome variance.

Multilevel models are summarized in Table 2. The baseline model (M1) showed that the mean score for the considered Instagram practice randomly varied across neighborhoods. Nevertheless, the low ICC and DEFF confirmed that only a small part of its variance was explained by neighborhood clustering.

TABLE 1 Summary of reliability coefficients, fit indices, Levels 1 and 2 descriptive statistics, and correlations for all the measures

Variables	α	CFI	SRMR	ICC	DEFF	M	SD		1	2	3	4	5	6	7	8
							Level 1	Level 2	1		3	4	3	U	,	
Instagram use to look for social places and gatherings in the neighborhood	.88	.90	.06	-	-	2.17ª	1.04	-	-	.416 ***	.129	.163 ***	.133	.006	.049	.172 ***
2. Sense of community (SoC)	.91	.97	.04	-	-	3.36 ^b	1.43	-	.416 ***	-	.385	.357 ***	.198 ***	.155	.361 ***	.269 ***
3. Availableness of social places in the neighborhood	.85	.91	.06	.14	2.47	2.68ª	0.86	0.39	.196 ***	.478 ***	-	.658 ***	.247 ***	.160 **	.693 ***	.250 ***
4. Socialization opportunities in the neighborhood	.75	.99	.02	.15	2.58	2.87ª	1.02	0.48	.266 ***	.465 ***	.414 ***	-	.215 ***	014	.522 ***	.257 ***
5. Trust among neighbors	.73	.99	.02	.13	2.37	2.37ª	0.84	0.27	.256 ***	.408 ***	.221	.207	-	.320 ***	.184 ***	.429 ***
6. Neighborhood friendliness	.81	.98	.03	.10	2.05	3.42 ^a	0.96	0.37	.161 **	.447 ***	.293	.263 ***	.342 ***	-	.051	.079
7. Neighborhood safety	.89	.92	.04	.14	2.47	3.35 ^a	0.94	0.44	.091	.425 ***	.473 ***	.273	.282	.291 ***	-	.185 ***
8. Supportive climate	.85	.90	.07	.17	2.79	2.44 ^c	0.70	0.22	.321	.415 ***	.111	.201	.294 ***	.247 ***	.094	-

Note. n = 380. CFI = comparative fit index; SRMR = standardized root mean square residual; α = Cronbach's alpha; ICC = intraclass correlation coefficient; DEFF = design effect; M = mean; SD = standard deviation. Individual-level correlation coefficients are below the diagonal, while neighborhood mean-aggregated ones are above it. Neighborhood level values for sense of community and Instagram use to look for social places and gatherings in the neighborhood are not included because they are only individual level variables.

a 1-5 range scale; b 1-7 range scale; c 1-4 range scale.

^{***} p < .001 (2-tailed). ** p < .01 (2-tailed). * p < .05 (2-tailed).

TABLE 2 Multilevel modeling results

	M1 <i>B (SE)</i>	M2 <i>B</i> (<i>SE</i>)	M3 <i>B</i> (<i>SE</i>)	M4 <i>B</i> (<i>SE</i>)	M5 <i>B (SE)</i>
Fixed effects	_ (~_/	_ (~_/	_ (~_/	_ (~_/	_ (=)
Individual level					
SoC		0.31*** (0.03)	0.31*** (0.03)	0.31*** (0.03)	0.31*** (0.03)
Neighborhood level		0.51 (0.05)	0.51 (0.05)	0.51 (0.05)	0.51 (0.05)
Availableness of social places				0.26 (0.23)	0.27 (0.23)
Socialization opportunities				0.22 (0.16)	0.22 (0.16)
Trust				0.24 (0.30)	0.24 (0.30)
Friendliness				-0.03 (0.18)	-0.03 (0.18)
Safety				-0.28 (0.18)	-0.28 (0.18)
Supportive climate				0.64* (0.28)	0.63* (0.28)
Cross-level interactions				0.01 (0.20)	0.00 (0.20)
Availableness of social places × SoC					0.12 (0.11)
Socialization opportunities × SoC					0.14* (0.07)
Trust × SoC					0.34** (0.14)
Friendliness × SoC					-0.10 (0.09)
Safety × SoC					-0.21* (0.10)
Supportive climate × SoC					-0.30* (0.15)
Intercept	2.14*** (0.08)	2.14*** (0.08)	2.14*** (0.08)	2.13*** (0.06)	2.13*** (0.06)
Random effects	2.11 (0.00)	2.11 (0.00)	2.11 (0.00)	2.13 (0.00)	2.13 (0.00)
Intercept at neighborhood level	0.08* (0.04)	0.09** (0.04)	0.09** (0.04)	0.04* (0.02)	0.04* (0.02)
Slope at neighborhood level	0.00 (0.01)	0.0) (0.01)	0.001 (0.001)	0.01 (0.02)	0.001 (0.002)
Residual within variance	1.01*** (0.09)	0.85*** (0.08)	0.85*** (0.07)	0.84*** (0.07)	0.82*** (0.07)
		(1117)	. ,	. ,	
ICC	.07	.09	.09	.12	.12
DEFF	1.80	1.94	1.94	2.26	2.26

Note. n = 380. M1 = baseline model; M2 = random intercept-only model; M3 = random slope model; M4 = random intercept-only model with Level 2 predictors; M5 = random intercept and slope model with cross-level interactions; SE = standard error; SoC = sense of community; ICC = intraclass correlation coefficient; DEFF = design effect.

^{***} p < .001 (2-tailed). ** p < .01 (2-tailed). * p < .05 (2-tailed).

However, as the study specifically aimed at testingthe impact of community shared representations on the relationship between SoC and Instagram use, multilevel analyses were carried on (Nezlek, 2008). The random intercept-only model (M2) confirmed that the individual level predictor, SoC, effect was significant, consistently with the previous model; the intercept significant random variance across neighborhoods showed that the outcome still randomly varied across them. Conversely, in the random slope model (M3) the nonsignificant slope random variance indicated that the relationship between SoC and Instagram use did not randomly vary in strength across neighborhoods; the intercept random variance was still significant. In the fourth model (M4), only the supportive climate showed a significant effect on Instagram use; in the final model (M5) only some cross-level interactions were significant, and not all their coefficients were negative. Thus, H2 was only partially confirmed. As of the previous models, when including Level 2 predictors the intercept randomly varied across neighborhoods, while the slope did not.

The plots showed that the higher the perceived safety and supportive climate in the neighborhood, the faster this Instagram use decreased as users' SoC increased (see Figures 1 and 2); conversely, the higher the perceived trust and socialization opportunities in it, the faster this Instagram use increased as users' SoC did (see Figures 3 and 4).

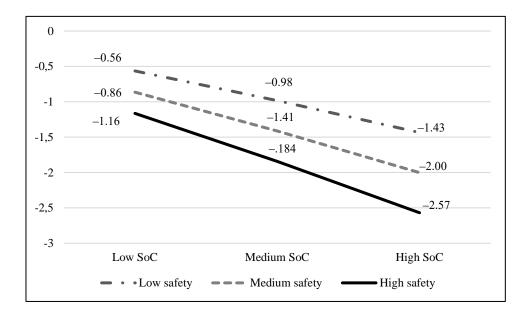


FIGURE 1 Interaction effect of neighborhood safety and SoC on Instagram use. *Note*. Level 1: n = 380; Level 2: n = 33. Low = M - 1SD; Medium = M; High = M + 1SD. M = mean; SD = standard deviation.

DISCUSSION

The present study was aimed at shedding new light on modern local community experience. It focused on citizens' neighborhood-related social media uses as community-rooted practices to be deepened addressing the intertwinement between individual and community levels and the raising intersection of offline and online environments and behaviors.



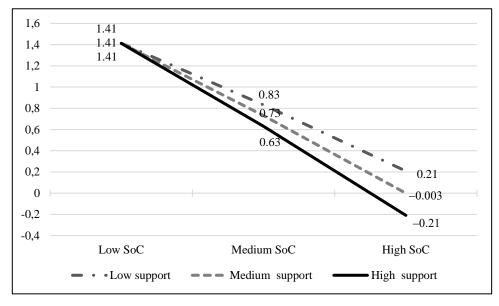


FIGURE 2 Interaction effect of neighborhood supportive climate and SoC on Instagram use. *Note*. Level 1: n = 380; Level 2: n = 33.

Low = M - 1SD; Medium = M; High = M + 1SD. M = mean; SD = standard deviation.

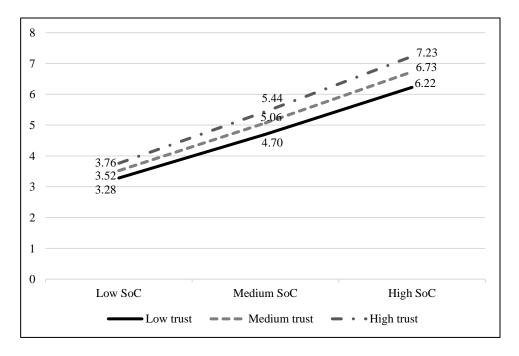


FIGURE 3 Interaction effect of trust among neighbors and SoC on Instagram use. *Note*. Level 1: n = 380; Level 2: n = 33. Low = M - 1SD; Medium = M; High = M + 1SD. M = mean; SD = standard deviation.

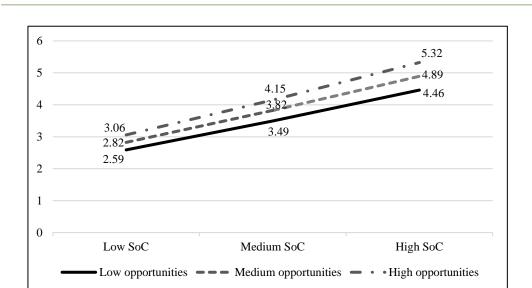


FIGURE 4 Interaction effect of socialization opportunities in the neighborhood and SoC on Instagram use. Note. Level 1: n = 380; Level 2: n = 33. Low = M - 1SD; Medium = M; High = M + 1SD. M = mean; SD = standard deviation.

A multilevel perspective with a multiple informant approach was chosen as the most suitable to the theoretical framework. Nevertheless, all Level 2 variables reported quite low ICCs and DEFFs, indicating that the nonindependence among neighborhood members was low. As far as unexpected, this result raises questions about modern neighborhoods as relevant communities to refer to; the need to think about their role in individual daily lives makes its way. At least two hypotheses arise. Firstly, neighborhoods could have lost their role as shared daily landmarks, meaning that talking about their community shared representations could no longer be appropriate: being everyone focused on their issues more than on common ones (Doolittle & Faul, 2013; Procentese, De Carlo, & Gatti, 2019; Procentese, Gatti, & Falanga, 2019), and being communities characterized by private spaces and loose social ties (Arcidiacono & Di Napoli, 2010; Crang, 2000; Procentese & Gatti, 2019a, 2020), citizens may experience the surroundings mainly through their personal experience and direct relationships rather than also relying on shared representations about the ties among neighbors and with places. Secondly, as the advances in technology and transportation have diffused daily activities around the city and/or across several cities (Francis et al., 2012), the need for a shift from neighborhoods to cities as of psychologically relevant daily local communities should be considered too. This could also represent an explanation for the lack of random variance in relationship between SoC and Instagram use across neighborhoods: indeed, the respondents are from neighborhoods in a few, close, Italian cities, thus are more likely to share similar representations, cultures, and practices due to spatial spillover issues (e.g., Capello, 2009; Jylhä & Jokela, 1990).

However, community representations about neighborhood features proved they still impact its members' lives, consistently with previous theorizations (Lewin, 1951; March & Olsen, 1989; Wiesenfeld, 1996). Partially mismatching the hypotheses, the results suggest that this Instagram use could represent an alternative path toward one's neighborhood social meanings for citizens feeling tied to it when shared representations return that social opportunities could be available within it but are going lost — i.e., when citizens represent their neighborhood as offering socialization opportunities but unsafe to be attended, and their neighbors as trustworthy even though a supportive climate does not exist yet. Specifically referring to



environmental issues, the quantity of common spaces confirmed to be less relevant than their qualities to community members (Francis et al., 2012; Maas et al., 2009; Wood et al., 2012; Ziersch et al., 2005): indeed, representations about places availableness showed no impact on the resorting to this Instagram practice by users feeling tied to their neighborhood, while those about their positive relational (socialization opportunities) and negative emotional (unsafety) aspects fostered it, showing opposite impacts. The representations about local social capital showed mixed impacts too: when they returned lower supportiveness and higher trust Instagram use increased as SoC increased, while those about neighborhood friendliness showed no impact. Altogether, the resorting to alternative paths toward local social meanings seems bounded not to community representations about its total closure, as it had been hypothesized, but rather to conflicting representations about it having some premises to be open and some features keeping it partially closed; this seems also suggested by the not-hypothesized finding about this Instagram practice being more likely to happen in supportive neighborhoods.

These discordant findings highlight the complexities bounded to deepening modern local community experience: while the results about community representations suggest a looser interdependence among community members, the ones about their role in community members' behaviors may rather mean that the latter are still somehow interdependent as influenced by the shared representations about environmental and social contexts, consistently with previous theorizations (Lewin, 1951; March & Olsen, 1989; Wiesenfeld, 1996). This suggests that community members could represent their community context relying on their direct experiences more than on shared representations and meanings about it — which would explain the low agreement among them — but community individual-centered representations about its social and spatial environment still impact how they experience it. Along with new questions about local communities' meanings and relevance to their members' lives, these results also offer some hints in disentangling the role of community representations in shaping community experience and social media community-related practices. As this should be the first study adopting a multilevel approach toward these topics, its results may better define the recent claim about social media neighborhood-related practices as alternative paths satisfying needs born in modern local communities (Procentese & Gatti, 2019a), suggesting their relationship with a mixed context producing conflicting representations. These seem to push community members to think up to new ways to overcome their inconsistencies and stem this closure trend before it becomes total, while the latter could rather foster the abandonment of local social networks and common activities with decreased ties to the community (Bonaiuto et al., 2003; Scopelliti & Giuliani, 2004). Consistently, these practices could be framed as an attempt to break the perception of insecurity and lack of supportiveness, fighting that negative spiral brought about by the lack of interactions and social meanings, and the subsequent broken window effect (Wilson & Kelling, 1982). Indeed, photos and hashtags about social places and common activities return representations about community social interactions, safeguarding the feeling about that community being a social entity (Francis et al., 2012; Puddifoot, 2003; Talen, 2000; Zasina, 2018) which constitutes a basis for SoC too (McMillan, 1996; McMillan & Chavis, 1986). Thus, Instagram seems to contribute to users' self-in-community (Pretty at al., 2003) expression and maintenance too, through keeping in touch with social representations about the community (Oh et al., 2016).

As SoC is safeguarded through positive and social representations about one's community according to its features and constraints (Bridge, 2002; Long & Perkins, 2007; Sarason, 1974; van Oorschot et al., 2006), the present results suggest that while local communities become more spatially and relationally closed their members' community-related behaviors and reciprocal interdependence are undergoing a deep transformation too, and new ways to relate to them are arising. What should be meant as psychologically

relevant daily local community nowadays and which role social media community-related practices play in modern local community experience deserve greater attention. The intertwinement among these themes should not be underestimated as the latter are introducing new ways of interaction, meaning attribution, and representations sharing which could also impact local community relevance. Thus, new perspectives arise for the development of research-informed tools and strategies aimed at decreasing the constraints individuals perceive in experiencing their communities as social entities (Procentese & Gatti, 2019a), taking advantage of new technologies but also restoring the social role of common spaces and activities (Dempsey, 2009; Francis et al., 2012; Leyden, 2003; Talen, 2000).

Limitations and Future Directions

While opening new perspectives, this study has some limitations too. First, the low ICCs and DEFFs of neighborhood-level variables should be deepened: along with several possible explanations, neighborhood groups being sometimes small should be acknowledged too (James et al., 1984; Lindell et al., 1999). Future studies should involve wider samples or respondents from farther neighborhoods, or even consider city rather than neighborhood communities, to achieve a better understanding about them. As of Instagram use ICC and DEFF, a wider understanding of this practice could be achieved considering the role of further individual dimensions, even though its significant variance across neighborhoods suggests not to put aside community dimensions again.

Moreover, snowball sampling procedures produced a nonrepresentative sample and implied a self-selection bias; nevertheless, they allowed to reach heterogeneous Instagram users groups, beyond student samples and researchers' local communities, providing more validity to the results.

Finally, as this Instagram practice is quite new, its impact requires further deepening. Specifically, longitudinal studies could shed further light on its relationships with community representations, according with the notion of a virtuous circle between local features and community social meanings (Putnam, 2000).

REFERENCES

- Arcidiacono, C., & Di Napoli, I. (2010). Crisi dei giovani e sfiducia nei contesti locali di appartenenza. Un approccio di psicologia ecologica [Crisis of young people and mistrust in the local contexts of belonging. An ecological psychology approach]. In E. Schafroth, C. Schwarzer & D. Conte (Eds.), *Krise als chance aus historischer und aktueller perspektive* (pp. 235-250). Athena Verlag.

 Bonaiuto, M., Fornara, F., & Bonnes, M. (2003). Indexes of perceived residential environment quality and
- Bonaiuto, M., Fornara, F., & Bonnes, M. (2003). Indexes of perceived residential environment quality and neighbourhood attachment in urban environments: A confirmation study on the city of Rome. *Landscape and Urban Planning*, 65(1-2), 41-52. doi:10.1016/S0169-2046(02)00236-0
- Bonnes, M., Mannetti, L., Secchiaroli, G., & Tanucci, G. (1990). The city as a multi-place system: An analysis of people-urban environment transactions. *Journal of Environmental Psychology*, 10(1), 37-65. doi:10.1016/S0272-4944(05)80023-4
- Bridge, G. (2002). The neighbourhood and social networks. *CNR Paper 4*. School of Policy Studies, Centre for Neighbourhood Research, Bristol University.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.
- Capello, R. (2009). Spatial spillovers and regional growth: a cognitive approach. *European Planning Studies*, 17(5), 639-658. doi:10.1080/09654310902778045
- Carli, R. (2000). Introduzione [Introduction]. In F. Di Maria (Ed.), *Psicologia della convivenza. Soggettività e socialità* (pp. 9-18). Franco Angeli.

- Clemente, M., Arcidiacono, M., Giovene di Girasole, E., & Procentese, F. (2016). Trans-disciplinary approach to maritime-urban regeneration in the case study "Friends of Molo San Vincenzo". In S. Santos Cruz, F. Brandãu Alves, & P. Pinho (Eds.), Book of Proceedings Joint Conference Citta 8th Conference (Vol. 2, pp. 701-718). Clàssica-Artes Grafica.
- Cohen, D., & Prusak, L. (2002). In good company: How social capital makes organizations work. Harvard Business School Press.
- Cousineau, D., & Chartier, S. (2010). Outliers detection and treatment: A review. *International Journal of* Psychological Research, 3(1), 58-67. http://dx.doi.org/10.21500/20112084.844
- Crang, M. (2000). Public space, urban space and electronic space: would the real city please stand up? Urban Studies, 37(2), 301-317. doi:10.1080/0042098002203
- Dempsey, N. (2009). Are good-quality environments socially cohesive? Measuring quality and cohesion in urban neighborhoods. Town Planning Review, 80(3), 315-345. doi:10.3828/tpr.80.3.5
- Di Napoli, I., Dolce, P., & Arcidiacono, C. (2019). Community trust: A social indicator related to community Engagement. Social Indicators Research, 145(2), 551-579. doi:10.1007/s11205-019-02114-y
- Doolittle, A., & Faul, A. C. (2013). Civic engagement scale: A validation study. Sage Open, 3(3). doi:10.1177/2158244013495542
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. Psychological Methods, 12(2), 121-138. doi:10.1037/1082-989X.12.2.121
- Festinger, L. (1962). A theory of cognitive dissonance (Vol. 2). Stanford University Press. Francis, J., Giles-Corti, B., Wood, L., & Knuiman, M. (2012). Creating sense of community: The role of public space. Journal of Environmental Psychology, 32(4), 401-409. doi:10.1016/j.jenvp.2012.07.002
- Gehl, J. (2006). Life between buildings: Using public space. The Danish Architectural Press.
- Granovetter, M. S. (1977). The strength of weak ties. In S. Leinhard (Ed.), Social networks: A Developing Paradigm (pp. 347-367). Academic Press.
- Highfield, T. (2015). Depicting social television on Instagram: Visual social media, participation, and audience experiences of #sbseurovision. Paper presented at the International Communication Association conference. San Juan, Puerto Rico.
- Hox, J. J. (2010). Multilevel analysis: Techniques and applications. Routledge.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1-55. doi:10.1080/10705519909540118
- Italian National Institute of Statistics. (2018). Rapporto annuale 2018. La situazione del Paese [Annual report 2018. The situation in the country].
 - Retrieved from https://www.istat.it/storage/rapporto-annuale/2018/Rapportoannuale2018.pdf
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. Journal of Applied Psychology, 69(1), 85-98. doi:10.1037/0021-9010.69.1.85
- Jylhä, M., & Jokela, J. (1990). Individual experiences as cultural-a cross-cultural study on loneliness among the elderly. Ageing & Society, 10(3), 295-315. doi:10.1017/S0144686X00008308
- Lanz, M., Sorgente, A., & Tagliabue, S. (2018). Inter-rater agreement indices for multiple informant methodology. Marriage & Family Review, 54(2), 148-182. doi:10.1080/01494929.2017.1340919
- Lee, C. S., Bakar, N. A. B. A., Dahri, R. B. M., & Sin, S. C. J. (2015, December). Instagram this! Sharing photos on Instagram. In R. Allen, J. Hunter, & M. Zeng (Eds), Digital Libraries: Providing Quality Information. ICADL 2015. Lecture Notes in Computer Science (Vol. 9469, pp. 132-141). Springer. doi:10.1007/978-3-319-27974-9_13
- Lee, E., Lee, J. A., Moon, J. H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. Cyberpsychology, behavior, and social networking, 18(9), 552-556. doi:10.1089/cyber.2015.0157
- Levine, M., & Perkins, D. V. (1987). Principles of community psychology. Oxford University Press.
- Lewin, K. (1951). Field theory in social science: selected theoretical papers. Harpers.
- Leyden, K. (2003). Social capital and the built environment: The importance of walkable neighborhoods. American Journal of Public Health, 93(9), 1546-1551.
- doi:10.2105/AJPH.93.9.1546 Lindell, M. K., Brandt, C. J., & Whitney, D. J. (1999). A revised index of interrater agreement for multiitem ratings of a single target. Applied Psychological Measurement, 23(2), 127-135. doi:10.1177/01466219922031257

- Long, D. A., & Perkins, D. D. (2007). Community social and place predictors of sense of community: A multilevel and longitudinal analysis. *Journal of Community Psychology*, 35(5), 563-581. doi:10.1002/jcop.20165
- Lucas, K., & Sherry, J. L. (2004). Sex differences in video game play: A communication-based explanation. *Communication Research*, 31(5), 499-523. doi:10.1177/0093650204267930
- Maas, C. J., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology*, 1(3), 86-92. doi:10.1027/1614-2241.1.3.86
- Maas, J., Van Dillen, S. M., Verheij, R. A., & Groenewegen, P. P. (2009). Social contacts as a possible mechanism behind the relation between green space and health. *Health & Place*, 15(2), 586-595. doi:10.1016/j.healthplace.2008.09.006
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, *51*(1), 201-226. doi:10.1146/annurev.psych.51.1.201
- Macintyre, S., Ellaway, Â., & Cummins, S. (2002). Place effects on health: How can we conceptualise, operationalise and measure them? *Social Science & Medicine*, 55(1), 125-139. doi:10.1016/S0277-9536(01)00214-3
- Mannarini, T., & Fedi, A. (2009). Multiple senses of community: The experience and meaning of community. *Journal of Community Psychology*, *37*(2), 211-227. doi:10.1002/jcop.20289
- Mannarini, T., Talò, C., Ntzani, E., Kritikou, M., Majem, L. S., Salvatore, S., Warner, L. M., & Brandi, M. L. (2018). Sense of community and the perception of the socio-physical environment: A comparison between urban centers of different sizes across Europe. *Social Indicators Research*, *137*(3), 965-977. doi:10.1007/s11205-017-1647-8
- Mannarini, T., Tartaglia, S., Fedi, A., & Greganti, K. (2006). Image of neighborhood, self-image and sense of community. *Journal of Environmental Psychology*, 26(3), 202-214. doi:10.1016/j.jenvp.2006.07.008
- Mao, Y., Roberts, S., Pagliaro, S., Csikszentmihalyi, M., & Bonaiuto, M. (2016). Optimal experience and optimal identity: A multinational study of the associations between flow and social identity. *Frontiers in Psychology*, 7, 67. doi:10.3389/fpsyg.2016.00067
- March, G., & Olsen, J. P. (1989). *Rediscovering Institutions: The Organizational Basis of Politics*. Free Press. Marcus, S. R. (2015). *Picturing' ourselves into being: Assessing identity, sociality and visuality on Instagram*. Paper presented at the International Communication Association Conference. San Juan, Puerto Rico.
- McMillan, D. W. (1996). Sense of community. *Journal of Community Psychology*, 24(4), 315-325. doi:10.1002/(SICI)1520-6629(199610)24:4<315::AID-JCOP2>3.0.CO;2-T
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6-23. doi:10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I
- McQuail, D., Blumler, J. G., & Brown, J. R. (1972). The television audience: A revised perspective. In D. McQuail (Ed.), *Sociology of mass communications* (pp. 135-165). Penguin.
- Muthen, B. O., & Satorra, A. (1995). Complex sample data in structural equation modeling. Sociological Methodology, 25, 267-316. doi:10.2307/271070
- Nezlek, J. B. (2008). An introduction to multilevel modeling for social and personality psychology. *Social and Personality Psychology Compass*, 2(2), 842-860. doi:10.1111/j.1751-9004.2007.00059.x
- Oh, C., Lee, T., Kim, Y., Park, S., & Suh, B. (2016). Understanding participatory hashtag practices on Instagram: A case study of weekend hashtag project. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 1280-1287). Association for Computing Machinery. http://dx.doi.org/10.1145/2851581.2892369
- Perkins, D. D., & Long, D. A. (2002). Neighborhood sense of community and social capital. In A. T. Fisher, C. C. Sonn, & B. J. Bishop (Eds.), *Psychological sense of community* (pp. 291-318). Springer.
- Perkins, D. D., & Taylor, R. B. (1996). Ecological assessments of community disorder: Their relationship to fear of crime and theoretical implications. *American Journal of Community Psychology*, 24(1), 63-107. doi:10.1007/978-1-4615-0565-5_6
- Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community. *Journal of Community Psychology*, *36*(1), 61-73. doi:10.1002/jcop.20217
- Pretty, G. H., Chipuer, H. M., & Bramston, P. (2003). Sense of place amongst adolescents and adults in two rural Australian towns: The discriminating features of place attachment, sense of community and place dependence in relation to place identity. *Journal of Environmental Psychology*, 23(3), 273-287. doi:10.1016/S0272-4944(02)00079-8

- Prezza, M., & Costantini, S. (1998). Sense of community and life satisfaction: Investigation in three different territorial contexts. *Journal of Community & Applied Social Psychology*, 8(3), 181-194. doi:10.1002/(SICI)1099-1298(199805/06)8:3<181::AID-CASP436>3.0.CO;2-4
- Procentese, F., & Gatti, F. (2019a). People-nearby applications and local communities: Questioning about individuals' loneliness and social motivations towards people-nearby applications. *Journal of Community Psychology*, 47(5), 1282-1294. doi:10.1002/jcop.22175
- Procentese, F., & Gatti, F. (2019b). Senso di convivenza responsabile: Quale ruolo nella relazione tra partecipazione e benessere sociale? [Sense of responsible togetherness: Which role within the relationship between social participation and well-being?]. *Psicologia Sociale*, 14(3), 405-426. doi:10.1482/94942
- Procentese, F., & Gatti, F. (2020). From gayborhoods to people-nearby applications: Sexual minorities and social relationships. *Psicologia Sociale*, *15*(1), 129-147. doi:10.1482/96298
- Procentese, F., De Carlo, F., & Gatti, F. (2019). Civic egagement within the local community and sense of responsible togetherness. *TPM Testing, Psychometrics, Methodology in Applied Psychology*, 26(4), 513-525.
 - doi:10.4473/TPM26.4.2
- Procentese, F., Gatti, F., & Falanga, A. (2019). Sense of responsible togetherness, sense of community and participation: Looking at the relationships in a university campus. *Human Affairs*, 29(2), 247-263. doi:10.1515/humaff-2019-0020
- Puddifoot, J. E. (2003). Exploring "personal" and "shared" sense of community identity in Durham City, England. *Journal of Community Psychology*, 31(1), 87-106. doi:10.1002/jcop.10039
- Purcell, R. (2007). Images for change: Community development, community arts and photography. Community Development Journal, 44(1), 111-122. doi:10.1093/cdj/bsm031
- Putnam, R. (1993). Making democracy work: Civic traditions in modern Italy. Princeton University Press.
- Putnam, R. (2000) Bowling alone: The collapse and revival of American community. Simon and Schuster.
- Sarason, S.B. (1974). The psychological sense of community: Prospects for a community psychology. Jossey-Bass.
- Scopelliti, M., & Giuliani, M. V. (2004). Choosing restorative environments across the lifespan: A matter of place experience. *Journal of Environmental Psychology*, 24, 423-437. doi:10.1016/j.jenvp.2004.11.002
- Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89-97. doi:10.1016/j.chb.2015.12.059
- Snijders, T. A., & Bosker, R. J. (2011). Multilevel analysis: An introduction to basic and advanced multilevel modeling. Sage.
- Sonn, C. C., Quayle, A. F., & Kasat, P. (2015). Picturing the wheatbelt: Exploring and expressing place identity through photography. *American Journal of Community Psychology*, 55(1), 89-101. doi:10.1007/s10464-014-9686-7
- Sugiyama, T., Leslie, E., Giles-Corti, B., & Owen, N. (2008). Associations of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships? *Journal of Epidemiology & Community Health*, 62(5), e9-e9. http://dx.doi.org/10.1136/jech.2007.064287
- Talen, E. (2000). Measuring the public realm: A preliminary assessment of the link between public space and sense of community. *Journal of Architectural and Planning Research*, 17(4), 344-360.
- Twigger-Ross, C., Bonaiuto, M., & Breakwell, G. (2016). Identity theories and environmental psychology. In M. Bonnes, T. Lee, & M. Bonaiuto (Eds.), *Psychological theories for environmental issues* (pp. 203-233). Routledge.
- van Bruggen, G. H., Lilien, G. L., & Kacker, M. (2002). Informants in organizational marketing research: Why use multiple informants and how to aggregate responses. *Journal of Marketing Research*, 39(4), 469-478.
 - doi:10.1509/jmkr.39.4.469.19117
- Van De Wiele, C., & Tong, S. T. (2014). Breaking boundaries: The uses & gratifications of Grindr. *Proceedings of the 2014 ACM international joint conference on pervasive and ubiquitous computing* (pp. 619-630). Association for Computing Machinery. doi:10.1145/2632048.2636070
- van den Berg, P., & Timmermans, H. (2015). A multilevel path analysis of social networks and social interaction in the neighbourhood. *Region*, 2(1), 55-66. doi:10.18335/region.v2i1.32

TPM Vol. 27, No. 3, September 2020 313-329 – Special Issue © 2020 Cises



Gatti, F., & Procentese, F.
Disentangling local community experience

- van Oorschot, W., Arts, W., & Gelissen, J. (2006). Social capital in Europe: Measurement and social and regional distribution of a multifaceted phenomenon. *Acta Sociologica*, 49(2), 149-167. doi:10.1177/0001699306064770
- Vick, J. W., & Perkins, D. D. (2013). Building community: Comparing resident satisfaction, sense of community, and neighboring in a New Urban and a suburban neighborhood. In K. Besel & V. Andreescu (Eds.), Back to the future: New urbanism and the rise of neotraditionalism in urban planning. University Press of America.
- Wei, R., & Lo, V. H. (2006). Staying connected while on the move: Cell phone use and social connectedness. New Media & Society, 8(1), 53-72. doi:10.1177/1461444806059870
- Wiesenfeld, E. (1996). The concept of "we": A community social psychology myth? *Journal of Community Psychology*, 24(4), 337-346. doi:10.1002/(SICI)1520-6629(199610)24:4<337::AID-JCOP4>3.0.CO;2-R
- Wilson, J. Q., & Kelling, G. L. (1982). Broken windows. Atlantic Monthly, 249(3), 29-38.
- Wood, L., & Christian, H. (2011). Dog walking as a catalyst for strengthening the social fabric of the community. In R. A. Johnson, A. M. Beck, & S. McCune (Eds.), *The Health Benefits of Dog Walking for Pets and People* (pp. 51-74). Purdue University Press.
- Wood, L., Frank, L. D., & Giles-Corti, B. (2010). Sense of community and its relationship with walking and neighborhood design. *Social Science & Medicine*, 70(9), 1381-1390. doi:10.1016/j.socscimed.2010.01.021
- Wood, L., Giles-Corti, B., & Bulsara, M. (2012). Streets apart: Does social capital vary with neighborhood design? *Urban Studies Research*, 2012, 1-11. http://dx.doi.org/10.1155/2012/507503
- Zasina, J. (2018). The Instagram image of the city. Insights from Lodz, Poland. *Bulletin of Geography. Socio-economic Series*, 42(42), 213-225. doi:10.2478/bog-2018-0040
- Ziersch, A. M., Baum, F. E., MacDougall, C., & Putland, C. (2005). Neighbourhood life and social capital: The implications for health. *Social Science & Medicine*, 60(1), 71-86. doi:10.1016/j.socscimed.2004.04.027