The experienced psychological benefits of place attachment

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ABSTRACT

Place attachment, the cognitive-emotional bond that forms between individuals and their important settings, is a common human experience with implications for their well-being. It has often been described and defined, but few studies have examined the range of psychological benefits it provides. This study investigated the experienced psychological benefits of place attachment by content analyzing community members' descriptions of places to which they consider themselves attached. Using an inductive approach, their responses were coded for themes of reported psychological benefits. Thirteen categories of benefits were revealed: memories, belonging, relaxation, positive emotions, activity support, comfort-security, personal growth, freedom, entertainment, connection to nature, practical benefits, privacy, and aesthetics. Variations in the reported benefits were explored as a function of place type, geographical scale, and demographic characteristics. This study provides heuristic insights into the experienced psychological benefits of place attachment.

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1. The experienced psychological benefits of place attachment

Place attachment, the cognitive-emotional bond to a meaningful setting (e.g., Low & Altman, 1992), is a common phenomenon that has been observed across cultures, place types, and eras (Lewicka, 2011; Low, 1992; Lutwack, 1984; Mazumdar & Mazumdar, 2004). Although much of the research on it has focused on describing and defining the multidimensional nature of place attachment (e.g., Low & Altman, 1992; Scannell & Gifford, 2010a), and distinguishing it from related constructs such as place identity (e.g., Rollero & De Piccoli, 2010b), a number of studies have begun to identify its antecedents (e.g., Bonaiuto, Aiello, Perugini, Bonnes, & Ercolani, 1999; Brown, Perkins, & Brown, 2003; Jorgensen & Stedman, 2001; Kamalipour, Yeganeh, & Alalhesabi, 2012) and outcomes (e.g., Devine-Wright, 2009; Kyle, Graefe, Manning, & Bacon, 2004).

An accumulating body of evidence demonstrates that one of these outcomes is well being (e.g., Eyles & Williams, 2008; Rollero & De Piccoli, 2010a). However, the question of the ways in which person-place bonds benefit individuals psychologically, remains underexplored. This is surprising because place attachment is central to many aspects of life; as Relph (1976) contends, "to be

human is to live in a world that is filled with significant places: to be human is to have and to know your place" (p. 1). If forming emotional connections to places is part of human nature, we must ask, for what purpose? Uncovering the psychological benefits afforded by person-place bonds can help to answer this question.

1.1. Place attachment and well-being

In general, place attachment bonds, while intact, are positively associated with quality of life (Harris, Werner, Brown, & Ingebritsen, 1995), life satisfaction (Billig, Kohn, & Levav, 2006), and various other dimensions of well-being (e.g., Rollero & De Piccoli, 2010a). The connection between place attachment and well-being has been more commonly investigated at the neighborhood, community, and city scales (e.g., Brehm, Eisenhauer, & Krannich, 2004; Theodori, 2001) than at other scales, and a number of studies have focused on this relation among older adults in particular (Gilleard, Hyde, & Higgs, 2007; Lager, van Hoven, & Meijering, 2012; Wiles et al., 2009).

When disrupted, place attachment can have negative implications for well-being; separation from one's significant place, such as through forced or voluntary relocation, can be devastating (e.g., Scannell, Cox, Fletcher, & Heykoop, 2016). Fried's (1963) classic study found that immigrants who were displaced from their West End Boston neighborhood mourned their lost homes. Others have similarly found that broken or "stretched" place bonds are associated with physical health problems, lower grades, sadness, longing,

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alienation, and disorientation (Fullilove, 1996; Hornsey & Gallois, 1998). These studies support the idea that proximity to one's place of attachment is important, but they say little to describe the ways in which the bond may benefit well-being.

1.2. Benefits of place attachment

Although the broader question about the suite of psychological benefits gained from place attachment has not yet (to our knowledge) been addressed, some focused explorations have begun to reveal some of its particular psychological benefits. For example, place attachment can create belongingness by symbolically connecting individuals to their ancestors or cultures (e.g., Billig, 2006; Hay, 1998; Low, 1992; Mazumdar & Mazumdar, 2004), or by reinforcing social ties and community membership (Fried, 1963; Hidalgo & Hernández, 2001; Kyle, Mowen, & Tarrant, 2004). In turn, belongingness to a place can strengthen social capital, resulting in group-wide benefits, such as more effective community action (e.g., Manzo & Perkins, 2006; Perkins & Long, 2002). A place of attachment can also provide the important benefit of memory support; it connects us to past events and people (e.g., Cooper Marcus, 1992; Twigger-Ross & Uzzell, 1996), and hosts recurring traditions (e.g., Low & Altman, 1992). Another demonstrated benefit of place attachment is that it can provide emotional and cognitive restoration and escape from daily stressors (e.g., Hartig, Kaiser, & Bowler, 2001; Hartig, Mang, & Evans, 1991; Kaplan, 1995; Korpela & Hartig, 1996). For example, children often use favorite places for stress reduction (Korpela, Hartig, Kaiser, & Fuhrer, 2001; Korpela, Kytta, & Hartig, 2002). Other studies suggest that attachment to recreation areas (Kaltenborn, 1997) and neighborhood places (e.g., Jorgensen, Hitchmough, & Dunnett, 2007) serves to alleviate stress. Some authors have demonstrated that one's place of attachment can also facilitate goal attainment (e.g., Kyle, Mowen, et al., 2004; Shumaker & Taylor, 1983). When the sociophysical features of the place match the individual's needs and goals, place attachment is more likely; some have termed this congruent transaction "place dependence" (Moore & Graefe, 1994).

Past research therefore supports the idea that place attachment can provide a number of psychological benefits. However, these investigations were narrow in scope, often focusing on one specific place type or benefit, and did not explicitly aim to uncover the full range of benefits associated with place attachment. This study broadens the frame of inquiry to include multiple benefits across place types, and explores participants' perspectives of benefits without a priori hypothesizing.

Furthermore, this work builds on previous attempts to delineate the multidimensionality of place attachment. Scannell and Gifford's (2010a) framework of place attachment definitions structured these into three dimensions, describing the *person's* use of individually or collectively derived place meanings, the *place's* geographical scale and physical characteristics, and the *psychological processes* that comprise the bond, such as affect, cognition, and behavior. Given the growing, but still limited body of work, we propose that this latter dimension needs expanding, by identifying the range of psychological benefits that person-place bonds may offer. We also recognize the importance of exploring how the benefits interact with the place dimension, to determine which benefits are most common for places of various types and scales.

1.3. Demographic differences and place attachment

Despite its near ubiquity, place attachment is thought to vary in strength and kind according to several demographic factors (e.g., see Lewicka, 2011). For example, stronger place attachment is reported among those who have spent more time in a place or who own it (e.g., Brown et al., 2003; Mesch & Manor, 1998). Gender and age have also been investigated, but they show complex or inconsistent relations with place attachment (Bolan, 1997; Lewicka, 2005; Tartaglia, 2006). Because of these interactions, the psychological benefits afforded by places of attachment are examined according to demographic factors.

1.4. Type of place and geographical scale

Place attachment has been observed in a wide variety of place types, such as homes, natural areas, sacred or culturally significant sites, cities, streets, islands, recreation spaces, second homes, and other places (e.g., Droseltis & Vignoles, 2010; Mazumdar & Mazumdar, 2004). However, as Lewicka (2011) has noted, the majority of place attachment research has focused on neighbourhoods, and relatively few studies have compared it across place type. Therefore, the present study also explores how the benefits of place attachment vary by place type.

Scale plays a major role in influencing how one perceives, understands, and behaves in a space (Freundschuh, 2000; Montello, 1993), and thus determining the contents of mental representations of spaces and experience of a given space. Given this, it would be expected that the experience of place attachment might also vary according to scale. Some studies that have compared the effects of geographical scale on place attachment have revealed differences in the strength of place attachment at different scales; it generally appears stronger for homes and cities than for neighborhoods (e.g., Hidalgo & Hernández, 2001; Laczko, 2005; Lewicka, 2008). These variations may relate to differing psychological benefits associated with each scale. However, studies that do consider place attachments at varying scales often include arbitrary or crude categorizations of scale, such as "neighborhood."

Finer categorizations proposed by geographers are informative. In particular, Freundschuh and Egenhofer (1997) reviewed 15 prominent theoretical models of geographical space, and synthesized them into a typology of space that describes individuals' spatial experiences. Specifically, the typology categorizes a space according to its degree of manipulability (i.e., holding, turning, or moving objects), the level of locomotion required to experience the space, and the constraints of size upon the spatial experience. The resultant typology describes the six types of spaces expected to form the basis of spatial experience (further described in the method section). Given this, the present study examines whether the psychological benefits of place attachment vary with geographical scale.

1.5. Research objectives

The primary objective of the present study was to explore the self-reported psychological benefits of place attachment using a content analysis. A secondary objective was to examine the variations of these experienced psychological benefits according to demographic characteristics, the type of place of attachment and its geographical scale.

2. Method

2.1. Recruitment

A diverse sample of participants was recruited through Mechanical Turk (MTurk), a website hosted by Amazon.com that allows individuals from any country to either post or complete tasks online for small amounts of money. In general, investigations have concluded that MTurk is a promising method of recruiting participants for behavioral research (Buhrmester, Kwang, & Gosling,

2011; Goodman, Cryder, & Cheema, 2013; Paolacci, Chandler, & Ipeirotis, 2010; Rand, 2011). Participants received $1 for completing the 20—30-min survey, which is above-average compensation rate for psychology studies of this length posted on MTurk (Shapiro, Chandler, & Mueller, 2013).

2.2. Participants

Participants were 97 Canadian residents (43 males, 49 females, 5 unspecified) whose ages ranged from 18 to 53 years, ($Mdn = 27$, $SD = 8.47$). This sample size is larger than many place attachment studies that have content-analysed participant-generated (i.e., as opposed to media or other archival) data (e.g., Eacott & Sonn, 2006; Peters, Elands, & Buijs, 2010; Rogan, O'Connor, & Horwitz, 2005), and was considered appropriate given the exploratory nature of the research. Participants represented various ethnic backgrounds (e.g., Caucasian, Asian, Indo Canadian, Hispanic, First Nations, Mixed, Croatian, Assyrian), occupations (e.g., janitor, call centre worker, librarian, engineer, retail, government worker), and level of education, ranging from high school diploma (24.2%) to PhD (3.3%). Some participants were students (19%) or unemployed (11%). Participants reported that they had lived in their current area from 4 months to 59 years ($Mdn = 10.00$, $SD = 11.27$); 49.5% rented their current residence, 35.0% owned, and 15,5% had other arrangements (e.g., lived with family) or did not specify. The sample was younger, more sociodemographically diverse, and more highly educated than the general population, which is similar to other MTurk-derived samples (e.g., Paolacci et al., 2010). Key demographic variables are presented in Tables 1 and 2.

2.3. Measures

2.3.1. Place attachment description

Participants were provided with a brief definition of place attachment and then asked to list one place to which they consider themselves especially attached (if any). Place attachment was defined for participants as "feeling especially connected to a place that is meaningful to you." However, the concept of "place" was not defined for participants, to avoid the problem inherent in some research in which the "home" or "neighborhood" is the assumed place of attachment (e.g., Cresswell, 2009), and therefore to allow for a broader selection of important places. Participants who did not have a place of attachment ($n = 3$) were asked to state this, and explain why.

The participants then wrote their responses to four open-ended questions: (1) *Describe this place in detail. Where is it? What is it like?* (2) *Why do you feel attached to this place? Please provide one or two reasons.* (3) *When you are not at this place, what makes you want to go there? Please give one or two reasons. If you don't want to go there, please explain why.* (4) *What psychological and other benefits do you experience from being connected to this place? Please provide two or three benefits.*

Table 2
Descriptive statistics for continuous demographic variables.

Variable	n	Min	Max	M	SD
Age	89	18	53	28.83	8.47
Length of Residence (years)	92	0.30	59	14.29	11.27
Number of housemates	90	0	12	1.98	1.73

2.3.2. Demographic information

Participants reported their age, gender, occupation, current city or region of residence, length of residence, housing tenure (i.e., rent or own), number of others in their residence, highest educational level attained, and ethnicity.

2.3.3. Geographical scale

The geographical scale of the place of attachment was determined using Freundschuh and Egenhofer's (1997) taxonomy of spaces, which categorizes a given space according to its degree of manipulability (i.e., can be held, turned, or moved), level of locomotion required to experience the space, and the constraints of size upon the spatial experience. The taxonomy includes six types of space. *Manipulable object space* is small space or objects that can be manipulated, and therefore does not require locomotion to experience. This could include a chair or a desk. *Non-manipulable object space* is larger space or objects that are not as easily manipulable, and that typically require some locomotion to fully experience. This type of space is larger than one's body but smaller than a house. For example, a room in a house, an office, or a coffee shop might be considered non-manipulable object space. *Environmental space* is larger, requiring locomotion and involving route knowledge. This could include the inside of a building, a neighborhood, or a park. *Geographic spaces* are very large spaces that often cannot be fully perceived through locomotion such as large cities, regions or countries. *Panoramic space* is a space that can be viewed from a single vantage point. It can vary in size, but does not require locomotion. Finally, *map space* is a large space that has been downscaled and represented through symbols.

2.4. Pretest

The questions were pretested for clarity using the cognitive interviewing method (Beatty & Willis, 2007; Forsyth & Lessler, 1991), which aims to identify how each item is comprehended, and whether terms or wording cause any confusion among participants. A small sample of five people participated in the pretest interviews. They were varied in their demographic characteristics (i.e., gender, age, occupation, and ethnic background), and described different types of places of attachment (i.e., a city, a farm house, a cabin on a lake, an apartment, and a house). These pre-test participants were asked to freely describe what they were thinking about as they were answering questions, including what they interpreted the question to mean, whether they perceived any problems with it, and how they generated their responses. An

Table 1
Demographic frequencies.

Variable		n	Percent
Gender	Male	43	44.3
	Female	49	50.5
	Unspecified	5	5.2
Housing tenure	Rent	48	49.5
	Own	34	35.0
	Other	2	2.1
	Unspecified	13	13.4

iterative approach was used, in which the study instructions, definition of place attachment, demographic information, several unrelated questionnaires, and the four key questions were revised following each interview. Following the five interviews, the questionnaire was finalized and made available online.

2.5. Procedure

After signing up for the study via MTurk, the main study participants read the Letter of Information for implied consent that outlined details of participation based on the *Tri-Council Policy Statement on the Ethical Conduct for Research Involving Humans*. They were then directed to the survey website, where they wrote about their place of attachment. They also completed several closed-ended questionnaires which were included to investigate a separate research question, and thus were not further analysed for the present study. Finally, participants were thanked for their participation and were compensated via the MTurk system. The survey was open on the internet for approximately 30 days, but 95% of the data was received within the first two weeks of data collection; the rest of the data was received in the final two weeks.

2.6. Content analysis

In content analysis, quantitative coding schemes are applied to subjective material, such as personal accounts, media, or responses to interview questions; third-party coders analyze these documents for particular codes and themes (Smith, 2007). This approach was taken because it provides detailed information useful for exploratory research and theory development. Content analysis is also considered more reliable than other types of qualitative analyses, given its use of a detailed coding scheme, and the opportunity for data to be coded by multiple raters (Smith, 2007). Furthermore, this qualitative descriptive approach is intentionally categorical, less interpretive than some other methods, and produces "a complete and valued end-product in itself" (Sandelowski, 2000, p. 335).

Coding occurred in two rounds. The first involved an inductive approach (e.g., Thomas, 2003), in which two research assistants coded the written responses for evident benefits of place attachment using the QSR NVivo9© software. These coders were PhD students in psychology who were unfamiliar with attachment theories, which helped to ensure that the emergent benefits were guided by the data rather than by pre-existing expectations. They were trained and provided with a manual with instructions and examples of coding from three questionnaires obtained from the pretest.

Responses could be coded into more than one category if the coder viewed it as fulfilling more than one benefit. For example, a response such as "this place evokes memories of time spent together with my family" could be coded into the categories of "place memories" and "connection to family." After familiarizing themselves with the manual, the coders then independently coded three new responses, after which their codes were discussed and disagreements were explored. They then coded another round of three responses, which were again discussed.

Following this training session, the data were then independently coded by each coder, who identified apparent psychological benefits afforded to the participant by their place attachment bond. The coders reviewed the themes after the first 10 and 20 participants to discuss disagreements, and to refine the emerging structure of categories. Themes were merged into larger categories where appropriate. Once complete, the lists from each coder were compared and commonly listed benefits were retained; the coders agreed on a new label for each retained category.

A second round of coding was performed by two undergraduate psychology research assistants, who were also unfamiliar with attachment theories. After a training session to learn the coding scheme that had been previously created, they independently coded the data, determining whether each benefit was present or absent for each participant. They used open coding to determine the type of each place of attachment. They also coded each response to identify the geographical scale of each place of attachment, using Freundschuh and Egenhofer's (1997) classification system.

2.7. Experienced benefits of place attachment

As mentioned, the participants' responses to five questions about their places of attachment were coded into themes, in two phases of coding. The initial coding was done independently by each coder, whose lists were merged into one. Because of training and discussions, the lists were highly convergent. Specifically, 11 categories overlapped between coders and four were unique, resulting in a total of 15 categories of experienced benefits: activities, aesthetics, belonging, comfort (psychological and physical), connection to nature, freedom, entertainment, memories, positive emotions, practical needs, privacy, relaxation, personal growth, stability, and value-expressive. A coding scheme was then prepared for the second phase of the coding; the 15 categories were described in detail and supplemented with examples. Only themes that were thought to represent distinct categories were retained; specifically, coders deemed that the "value-expressive" and "stability" were coded infrequently and in all cases they could adequately be captured by other categories (i.e., "belonging" and "memories", respectively), reducing the total to 13 categories.

In the second phase of the coding, two new coders judged whether each of the categories were present or absent in each participant's description of their place of attachment. Cohen's (1960) kappa was calculated to assess interrater reliability for codings of each category, and it revealed substantial agreement (ranging from $\kappa = 0.71\text{-}0.96$; Table 3) for all categories except "physical comfort," which showed lower, but still adequate, agreement, $\kappa = 0.49$ (Landis & Koch, 1977). Following this, the coders added additional notes to the coding scheme. Then, considering these revisions, they individually re-coded all variables that had been inconsistently coded. Remaining disagreements were resolved through discussion, except for a few ($n = 8$) which were left as missing data.

Fig. 1 displays the resulting 13 experienced benefits of place attachment, and the frequencies for each category are presented in alphabetical order in Table 3, each of which is described in detail below. The number of benefits expressed per participant ranged from zero to eight ($M = 3.73$, $SD = 1.65$).

2.7.1. Memories

The most commonly experienced benefit of place attachment, mentioned by 69% of participants, is that it supports memories. Many participants described their place of attachment as being able to connect them to the past, or evoke memories, as was expressed in comments such as:

> Although I have not been to this place in a while, I went frequently as a kid. I can still picture all of it in my mind; the memories are very vivid. I made a lot of friends there, I also caught my first fish there.

Through memory, the place of attachment can also serve to symbolize past and present traditions, thereby helping to situate the individual in time. One person wrote:

Table 3
Place Attachment benefits by gender, age and tenure of residence.

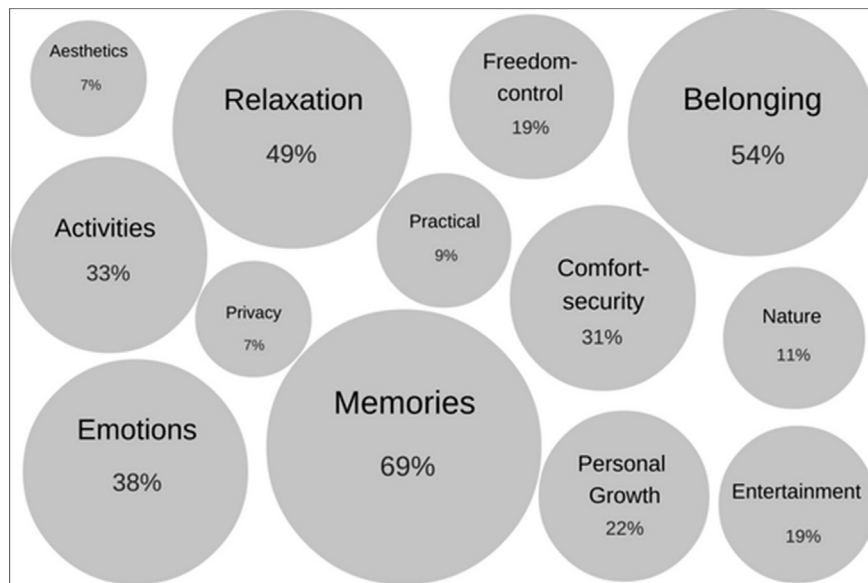| Benefit	κ	n	%	% females	% males	% young adults	% adults	% renters	% owners
Activities	0.71	32	33.33	36.4	31	34.9	33.3	39.6	26.5
Aesthetics	0.71	7	7.29	13.6	2.4	9.3	6.8	8.3	6.1
Belonging	0.81	52	54.17	52.3	42.9	48.8	57.8	50.0	61.8
Comfort-security	0.84	30	31.25	28.3	38.1	27.9	37.8	33.3	35.3
Physical comfort	0.49	10	10.42	4.3	16.7	7	13.3	8.3	11.8
Psychological comfort	0.96	20	20.83	19.6	21.4	18.6	22.2	22.9	20.6
Connection to nature	0.78	11	11.46	17.4	7.1	14.0	11.1	16.7	5.9
Freedom	0.85	18	18.75	22.7	19	25.6	15.6	16.7	23.5
Entertainment	0.83	18	18.75	23.9	14.3	14.0	24.4	14.6	23.5
Memories	0.80	66	68.75	80.4	59.5	67.4	73.3	70.8	73.5
Positive emotions	0.77	36	37.50	41.3	38.1	44.2	35.6	43.8	38.2
Practical (amenities)	0.94	9	9.38	13	7.1	4.7	15.6	12.5	8.8
Privacy	0.85	7	7.29	10.9	4.8	11.6	4.4	4.2	14.7
Relaxation	0.79	47	48.96	58.7	47.6	51.2	55.6	45.8	64.7
Personal growth	0.82	21	21.88	26.1	21.4	20.9	26.7	25.0	26.5
Other: No PA	1.00	3	3.13	0	2.4	0	2.2	2.1	0
Other: Does not want to go there	0.84	8	8.33	8.7	9.5	9.3	8.9	10.4	8.8

Fig. 1. Thirteen experienced psychological benefits of place attachment, and the percentages of participants who mentioned each given benefit at least once.

I feel attached to this place because I have been going to the cottage several times a year, every year for as long as I can remember. I have many childhood memories, as well as more recent memories of events that happened there.

Memory can go further than the recent past, by representing one's lineage or ancestry. The place connects the person to the past through their family's history. One participant's attachment to a region in Northern Iraq demonstrated use of place to connect to the past cognitively (through nostalgia), historically (by situating his own story in a political event), and ancestrally:

It creates nostalgia for me personally because it is a place I grew up in. It is full of mountains and land which seem to go on forever. It was my home. This was before the Iraqi Christians were persecuted and had to immigrate elsewhere. All my ancestors had lived there and have history there. It makes me feel as though that's where I belong — everyone is very welcoming.

In this example, ancestral ties link the two benefits of belonging and memories.

2.7.2. Belonging

The second-most commonly mentioned benefit of place attachment was belonging, which was evident in 54% of responses. This benefit included feelings of "at homeness," belonging, feeling loved, having roots in a place, fitting in, or connecting with others. This was evident in one participant's description of her aunt's house:

It always gives me a feeling of belonging, much more than my own home because I moved houses several times as a child. It helps me stay connected with my extended family, some I don't usually see except for several times a year at this place.

For this participant, the presence of family and the provision of stability offered by the place created the sense of belonging. Some participants described belongingness as a sense of origin, and family roots. Responses such as "it reminds me of my own roots," or "this is where my family is from," were sometimes cited as the

source of the attachment. Belongingness was also associated with notions of feeling "at home," and having a "hometown." This was evident in one participant's explanation of her attachment to her hometown: "I like having a place to call 'home.' This is why my town is special to me. It gives me belonging."

Sometimes, the connection to the physical place promoted belongingness, but at other times the place provided belongingness because of its interpersonal dimension, as was evident in one participant's description of her attachment to her lakeside cottage:

> I have some wonderful memories that I've made over the years there with my husband. I can see our future when we're there. It makes me feel a stronger connection to my husband because of the time we get to spend together up there with no other responsibilities.

2.7.3. Relaxation

The third-most commonly mentioned benefit of place attachment was stress-relief and relaxation, mentioned by 49% of participants. One participant emphasized this about his attachment to his two-storey house:

> Every day after work I head home and relax. I feel most comfortable at home. This is where I always go to relax so I think of it as a relaxing place. I think this is why I always want to go back. I feel relaxed and my stress goes away. I could be in the worst mood but as soon as I get home it simmers and fades quickly.

In this case, relaxation included comfort and restoration from stress and negative affect. Thus, the place-as-relaxation benefit encapsulates the ability of place to help individuals achieve restoration from depleted emotional, attentional, or psychophysiological states.

2.7.4. Positive emotions

Over a third of participants (38%) specifically mentioned experiencing positive emotions as a benefit of being attached to their place, such as happiness, joy, hope, and pride. Overall, expressions of happiness were most frequent (e.g., "When I'm in Courtenay I feel at ease, at peace, and happy. The world seems OK again when I'm there;" and "I feel joy and happiness as I escape to the place I love with the people I love"). Interestingly, a few participants (5%) expressed negative or ambivalent emotions associated with their place of attachment, because of lost friends, changes in place appearance or ownership or painful memories, supporting the notion that place attachment is not only beneficial, but also has a "shadow side" (Chawla, 1992). Although worth mentioning, these were not expressed in terms of psychological benefits, and so a separate category for negative emotions, or the "shadow side of place attachment" was not included.

2.7.5. Activity support

Place attachment can support the ability to engage in activities or work. This benefit was mentioned by 33% of participants. Unlike entertainment, which involves the presence of exciting activities in a place (see below), the "activities" category is more an interdependent person-place benefit, referring to the ability of a place to support one's hobbies, interests, work, or skills. One participant observed that "the benefit of being connected to this place psychologically is that it gives me the opportunity to write expressively in a comfortable place I feel safe in." Another participant described his attachment to a comic book and record store "I was able to get a

lot of material related to my growing interest in art, animation, and comics starting in my early teens." These examples highlight how place attachment can provide a goal-supportive benefit that is by virtue of a good fit between the individual's interests and the attributes of the place.

2.7.6. Comfort and security

Another important benefit was comfort-security, mentioned by 31% of participants. Of those responses, one-third specifically referred to physical comfort, such as food, nourishment, climate, and physical safety. Physical comfort was evident in one participant's description of her attachment to Calgary:

> The climate is mild in the summer and cold and snowy in the winter; it is not humid. It is a big city but it doesn't feel big and isn't crowded compared to similarly-sized cities. There are very few insects aside from mosquitoes, and there are lots of outdoor and indoor spaces to enjoy year-round, alone or surrounded by people.

However, two-thirds of the time, comfort was expressed in psychological terms, whereby the place provides a sense of security, allowing the individual to feel at ease. References to the place as "safe and secure," "sanctuary," and "safe haven," were coded as part of this subcategory. This was evident in one participant's description of his attachment to Singapore, where he experiences "inner security." A few of the participants who referred to comfort (i.e., $n = 4$) did not provide enough information for coders to determine whether it was psychological or physical comfort (e.g., "it is my house that I [grew] up in and is the safest place on the earth").

2.7.7. Personal growth

A number of participants (22%) recognized that their places of attachment supported their personal growth or self-improvement. In part, this occurred when the places were used for introspection, resulting in insight or self-reflection. The introspection was also used for self-regulation, where goal progress is assessed through a comparison of distance to the desired goal; This was evident for one participant, who explained that her place "helps me to see how close or far away I am from the path I want to be on in life."

For others, personal-growth was afforded by the activities performed in the place, as one participant described about his attachment to the gym: "When I am at the gym I typically feel like I am improving myself so I think psychologically that makes me proud of myself." Personal-growth was often expressed in terms of a sense of accomplishment, improved self-esteem, or an appreciation for things learned about oneself.

2.7.8. Freedom

Places of attachment were cited as providing freedom, control, and autonomy by 19% of participants. When in the place, participants reported feeling a sense of doing as they pleased and making their own decisions. For some, the place represented the first step of adult independence: "It was the first time I lived in a place that was all my own. I was officially an adult living away from my parents." Freedom was also expressed in terms of an escape from daily routine: "It offers me freedom from life around me. It basically takes me out of my general rut of things and lets me enjoy everything around me."

2.7.9. Entertainment

Another benefit of place attachment is the ability of the place to provide a pleasing level of stimulation and interest, which we termed "entertainment." This refers to attributes inherent in the

place that compellingly engage the individual in some way. Participants who experienced place attachment-based entertainment (i.e., 19%) lauded their place for providing novelty, curiosity, excitement, diversity, activities, exploration, exhilaration, or opportunities for learning. One participant described a flea market:

> [It] used to be in a very old building on the river in Fergus. On weekends [it] would come alive with vendors that sold everything from clothes to food to any kind of hobby you could think of. It was so much fun as a child because they not only had many hobby shops that I was interested in, but it was a maze for little kids to get lost in.

The bond was rooted in the excitement and fun offered by the place, and the congruence between the activities of the place and the interests of the participant when he was a child. Another participant described benefiting from the entertaining aspects of a favorite park in Montreal:

> I like the idea that a lot of different kinds of people use and enjoy the park. […] A variety of people go there – sometimes musicians are practicing or playing with their friends, sometimes circus performers are practicing their acts. Sometimes there's just a lot of people walking their dogs.

This category of benefits demonstrates that places of attachment are not solely functioning as familiar safe havens, but that they can provide novelty, activity, interest, or excitement. Of note, the types of places that involve entertainment were more often vacation destinations, cities, commercial venues, parks, or countries, rather than residential environments.

2.7.10. Connection to nature

Not surprisingly, some of the places of attachment featured nature or greenery, but beyond this as a physical description, 11.5% of participants explicitly expressed that their place of attachment fulfilled their need to be connected to nature. For example, one person noted, "When I'm not there, I want to go back for the wilderness - I like to go back to places I've hiked and remember things I've seen." For some participants, wildlife encounters were especially important, as one man explained:

> I had some friends there, but the most important reason I 'feel attached' to Pemberton was the close proximity to wilderness. I am quite a loner, and a 5 minute walk from my door and I was in old growth forest. I would see all kinds of animals – deer, moose, bear, eagles, cougars. You name it. I watched them as a child/ teen.

Some participants who expressed benefits of being connected to nature simultaneously benefited from relaxation (e.g., "I want to go there and see the trees and the creek and feel that peaceful relaxing feeling I used to feel every time I'd go there"), while others linked nature to their identity (e.g., "I grew up in nature, and seeing this place every day makes me feel more like myself"). Some, however, focused on connection to nature without reference to other types of benefits, such as one participant who described her attachment to her uncle's cottage in Ontario:

> It is a full acre of [a] beautiful Canadian landscape. Streams, bridges, frogs, dragonflies. Everything you could ever need. A stream that runs right next to the cottage where further upstream you may drink fresh water straight out of the ground. A most beautiful place to be. I wish I could live there.

2.7.11. Practical benefits

Participants sometimes referred to the ability of their place to meet practical needs, such as obtaining food, services, or other resources. This benefit was mentioned by 9% of participants, who provided responses such as "[my place] has many amenities and everything I need. It is easy to get around town from the location," and "I grew up in Calgary and like all the amenities (a wide selection of stores and good public transit)."

2.7.12. Privacy

Places of attachment sometimes enabled individuals to obtain privacy, solitude, isolation, or "peace and quiet," and this class of benefits was mentioned by 7% of participants. One participant described an office which was "kind of isolated from the rest of my home. I feel attached to this place because it is a quiet place (usually) where others in my family rarely disturb me." An attachment to the Pilbara desert region in Western Australia was similarly valued because of the opportunity for privacy: "You feel very secluded, hidden, and solitary."

2.7.13. Aesthetics

Many participants described their places as beautiful, but some individuals (i.e., 7%) more explicitly recognized the aesthetic value of their place as a key benefit from the attachment. These people appreciated being privy to the beautiful view, scenery, or visual character of their place. That places of attachment met an aesthetic need may partly be related to other benefits, such as connection to nature, relaxation, comfort, or positive emotions. However, the experience of visual beauty may serve its own intrinsic benefit. One participant "enjoy[s] the pleasing aesthetics and power imagery of the lion" monument in Toronto to which he is attached, and another participant similarly cited the aesthetic value of her attachment to a valley near Vancouver: "It's beautiful. I've never seen anything like it."

2.7.14. No place attachment

Three participants indicated that they had no place to which they considered themselves attached. One of them expressed an intentional value for non-attachment:

> I don't need to draw on people places and things to receive a sence [sic] of comfort about myself. I guess i am comfortable werever [sic] i am. There was a time that i felt attachment to many things/places. I guess once i realised it was all related to my feeling insecure i eventually, over the course of many years, let them go.

The other two viewed attachment solely in interpersonal terms: "There's no place that is especially meaningful to me. People make places special, not the place," and "When I think of attachment I think of people. I have no special places that I particularly like to be or that I can think about that have any real meaning to me as places seem to come and go."

2.8. Demographic differences in benefits of place attachment

The frequencies of each experienced benefit were examined by gender, age, and housing tenure (renting or owning) (Table 3). Females mentioned a greater number of benefits ($M = 4.29, SD = 1.47$) than did males, ($M = 3.38$, $SD = 1.50$), $t(85) = -2.85$, $p = 0.01$. However, memory support was the only benefit that differed significantly by gender; this theme was mentioned more often among females (80.4%) than males (59.5%), $\chi^2 = 4.61$, $p = 0.03$.

Age did not appear to play a role in the types (or total numbers) of place attachment benefits mentioned; mean ages were similar among those who mentioned (versus did not mention) each benefit.

Renters and owners also expressed similar numbers of benefits overall. A higher proportion of owners cited belonging, freedom, entertainment, privacy, and relaxation as benefits of their place of attachment, and more renters mentioned activities, aesthetics, psychological comfort, connection to nature, positive emotions and practical benefits of their places. However, chi-square tests revealed that these benefits did not differ significantly according to housing tenure.

2.9. Interrater reliability for coding of geographical scale

Two trained raters coded written responses according to Freundschuh and Egenhofer's (1997) taxonomy to assess the geographical scale of the place. The percent of overall agreement was 92.9%, and once adjusted for chance agreement, kappa indicated that the interrater reliability was excellent, κ = 0.90 (Cohen, 1960).

Agreement could not be reached for determining the place scale of four responses which were lacking sufficient description, and so these participants were excluded from scale-related analyses, leaving 91 valid participants. The frequencies of each category are presented in Table 4. Interestingly, environmental space was the most common type of place (54.7%), including places such as a three-storey house, a church, a lakeside trail, a lagoon, a hotel, and a flea market. Geographic space was the second-most frequent scale of place attachments (27.4%), and examples included countries (e.g., Canada, Great Britain) cities (e.g., Houston, Texas, Paris) and regions (e.g., Pilbara desert, Australia). Non-manipulable object space, mentioned by 11.6% of participants, included places such as a coffee shop, a small cottage, a statue, a front yard, a bedroom, and a home office. Finally, places classified as manipulable object space, such as a desk and a tent were much less common (2.1%), and therefore were not included in further analyses. This left 89 participants for analyses involving scale.

2.10. Geographical scale differences in benefits of place attachment

Because the majority of places were environmental spaces, the majority of self-reported benefits were at this scale, too. Further, memories, belonging, and relaxation were the top three benefits within each scale, although belonging was slightly more common for geographic spaces (69%) than the other two types.

Beyond these top three commonly-reported benefits, some differences in benefits were evident by scale; these are detailed in Table 5. For example, personal growth (46%), activities (46%), privacy (36%), and freedom (27%) were particularly common for places classified as non-manipulable. Not desiring proximity was also more common for places at this scale (18%) than it was to places at the other two scales of interest. In contrast to the other two types of scale, participants attached to non-manipulable places did not report experiencing entertainment, a connection to nature, or

practical benefits from these smaller spaces.

Participants attached to places classified as environmental space reported a range of benefits, but they were more likely to report deriving positive emotions (48%), comfort-security (37%), entertainment (25%) and connectedness to nature (15%) from places at this scale compared to the others. Aesthetics (6%) was the only benefit less likely to emerge at this scale than the others.

Geographic spaces were more likely to offer belonging (69%), aesthetics (11%) and physical comfort (12%) than were the other two scales. Personal growth (15%), psychological comfort (15%) and freedom (15%) were less common at this scale. Participants did not report experiencing privacy at this scale.

2.11. Place types

To determine the type of place of attachment, two trained raters used a simple inductive coding approach (Thomas, 2003) to generate categories of places from participants' written descriptions. This yielded 14 categories of places, the frequencies of which are presented in Table 6. The diversity of the types of places that serve as place attachment figures is notable, including, for example, houses, cities, natural areas, countries, and commercial spaces.

Houses, including one's current home, childhood home, or the home of someone else, were the most common type of attachment, but were mentioned by less than a quarter of respondents (i.e., 21.9%). "Home" was explicitly mentioned by 33% of participants at least once, and of those, most (53%) referred to residences, but for some (34%) "home" referred to larger scale spaces such as neighborhoods, towns, cities, and regions and occasionally to outdoor areas (6%), vacation places (6%), and single rooms (3%).

Other types of places of attachment included outdoor areas such as parks (16.7%), cities or towns (15.6%), and vacation places, such as a family cottage (12.5%). Other interesting, but less-frequently mentioned places included recreation places, a cemetery, small spaces (e.g., bed, chair), vehicles, and workplaces. As noted earlier, three respondents indicated that they did not have a place of attachment, supporting the idea that place attachment is not salient to everyone.

2.12. Differences in experienced benefits of place attachment by place type

Of the people whose place of attachment was a house (their own or someone else's), memories (71%) and belonging (71%) were commonly mentioned benefits. Houses were more likely than the other place types to provide physical and psychological comfort (76%), as well as practical benefits (14%), but they were less likely than the other place types to support activities, entertainment, and freedom. Similarly, those who had selected cities and towns as their key place of attachment also experienced memory support (80%), and were even more likely to experience belonging (87%) than did those who selected the other place types. Cities and towns did not appear to provide privacy or aesthetics, and they were less likely than other types of places to support a connection to nature.

Those who were attached to outdoor areas were more likely to report relaxation (81%) and activities (56%) as benefits, but were less likely to report belonging, comfort-security, and practical benefits. Finally, participants attached to vacation spots were more likely to experience memory support (92%), connection to nature (33%), entertainment (33%) and privacy (8%) from their place of attachment. The percentages of benefits mentioned by the four most-common place types are listed in Table 7.

Table 4
Frequencies for geographical scale (n = 95).

	Frequency	Percent
Manipulable object space	2	2.1
Non-manipulable object space	11	11.6
Environmental space	52	54.7
Geographic space	26	27.4
Undetermined scale	4	4.2

Table 5
Percentages of Place Attachment Benefits within each Geographical Scale of Place.

Benefits	% Non-manipulable object space	% Environmental space	% Geographic space
Activities	45.5	30.8	34.6
Aesthetics	9.1	5.9	11.5
Belonging	45.5	55.8	69.2
Comfort-security	18.2	36.5	30.8
Physical comfort	9.1	9.6	11.5
Psychological comfort	18.2	25.0	15.4
Connection to nature	0	15.4	11.5
Freedom	27.3	17.3	15.4
Entertainment	0	25.0	23.1
Memories	72.7	73.1	73.1
Positive emotions	18.2	48.1	34.6
Practical benefits (amenities)	0	11.5	11.5
Privacy	36.4	5.8	0
Relaxation	45.5	53.8	50.0
Personal growth	45.5	21.2	15.4
Other: No Place Attachment	–	–	–
Other: Does not want to go there	18.2	9.6	3.8

Table 6
Commonly-mentioned types of places of Attachment.

Type of place	Examples	Frequency	Percent
House	Current home; childhood home; other's home	21	21.9
Outdoor area	Park; beach	16	16.7
City/town	London, England; seaside village in Japan	15	15.6
Vacation place	Cottage; hotel; condo	12	12.5
Community place	Train station; flea market	7	7.3
Country	Canada; India	4	4.2
Workplace	Office; business	4	4.2
No place		4	4.2
Neighborhood	Residential area; a distinct area in a town	3	3.1
Commercial place	Bookstore; coffee shop	3	3.1
Room in a house	Bedroom; home office	2	2.1
Region	Northern Iraq; Pilbara Desert, Australia	2	2.1
Object space	Tent; desk	2	2.1
Place of worship	Church	1	1

Table 7
Percentages of Place Attachment Benefits within each Type of Place.

Function	% Houses	% Outdoor Areas	% Towns and cities	% Vacation places
Activities	4.8	56.3	40.0	16.7
Aesthetics	4.8	12.5	0.0	8.3
Belonging	71.4	37.5	86.7	58.3
Comfort-security	76.2	0.0	33.3	16.7
Physical comfort	19.0	0.0	13.3	8.3
Psychological comfort	52.4	0.0	13.3	16.7
Connection to nature	9.5	25.0	6.7	33.3
Freedom	14.3	18.8	20.0	16.7
Intrigue	0.0	6.3	26.7	33.3
Memories	71.4	62.5	80.0	91.7
Positive emotions	42.9	37.5	40.0	33.3
Practical needs (amenities)	14.3	0.0	6.7	8.3
Privacy	4.8	6.3	0.0	8.3
Relaxation	38.1	81.3	46.7	66.7
Personal growth	19.0	25.0	26.7	16.7

3. Discussion

Despite growing research interest in the benefits of place attachment (López-Mosquera, & Sánchez, 2013; Scannell & Gifford, 2010a; 2016), and related concepts such as landscape values (Brown, 2005; Brown & Raymond, 2007) and motivations for place use (Kyle, Mowen, et al., 2004), research has generally examined concepts in the context of one place type (e.g., parks or neighborhoods) rather than across places, and the range of benefits discussed has been narrow, even in literature reviews (e.g., Scannell &

Gifford, 2010a). While validating some previously uncovered benefits of place attachment, and in some cases elaborating on them, the current study also presents a broader range of self-reported benefits for a variety of place attachment types, and explores how they vary by person and place characteristics.

This work also elaborates on an existing multidimensional framework of place attachment (Scannell & Gifford, 2010a); specifically, it extends our understanding of the psychological process dimension of the person-place-process framework of place attachment by detailing 13 ways in which individuals experience

the psychological benefits of place attachment. In addition, differences in the endorsement of each benefit vary somewhat by demographic characteristics, the type of place, and the geographical scale of the place of attachment, thus furthering our understanding of how two of the dimensions (place and person) may intersect. By detailing which reported place attachment benefits are common and novel, this study offers a more fulsome understanding about how place attachment is experienced by individuals. This work also has heuristic value in generating hypotheses and guiding future research.

3.1. Commonly-reported benefits of place attachment

In this search for the experienced psychological benefits of place attachment, 13 categories were revealed: memories, belonging, relaxation, positive emotions, activity support, comfort/security, personal growth, freedom, entertainment, connection to nature, practical benefits, privacy, and aesthetics. In addition to describing a range of benefits, we determined which are most commonly experienced as part of an individual's person-place bond, which has not previously been established. Common experiences of place attachment benefits, however, do not necessarily align with common areas of focus within place attachment research. In particular, memory support was by far the most commonly-expressed benefit, and yet relatively few studies have examined the role of memory in place attachment (e.g., Cooper Marcus, 1992; Korpela, 1989; Lewicka, 2008; Twigger Ross & Uzzell, 1996). This suggests that memory (and other temporal processes) deserves greater attention among place attachment researchers.

The other three most commonly-mentioned benefits include belonging, relaxation, and positive emotions. While the emergence of these benefits are perhaps not surprising, given that they have received more coverage in previous research (e.g., Hidalgo & Hernández, 2001; Kyle, Mowen, et al., 2004; Korpela, Hartig, Kaiser, & Fuhrer, 2001; Giuliani, 2003; Korpela, Kytta, & Hartig, 2002), present results validate their importance in the functioning of place attachment, and situate their prominence relative to other experienced place attachment benefits. Knowledge of place attachment benefits and their relative commonality may therefore guide the selection of relevant measurement items and the construction of interview guides and prompts, as well as prioritize areas of future investigation.

3.2. Lesser known experienced benefits of place attachment

Although some of these 13 experienced benefits have been considered in previous research, to our knowledge, no earlier work has attempted to generate a comprehensive (albeit non-exhaustive) list for a range of place types. Results also revealed some benefits that have received less attention in the place attachment literature, including personal growth, freedom, entertainment, and aesthetics. For example, although it is well established that places may provide resources necessary for goal pursuit (Stokols & Shumaker, 1981), and can offer an atmosphere appropriate for contemplation and emotion regulation (Korpela, Hartig, Kaiser, & Fuhrer, 2001), the current study is among few which demonstrate that place attachment can provide new challenges and opportunities that fertilize expansion of the self. Considering personal growth as a specific outcome of place attachment may further the understanding of its eudemonic effects, and thus contribute to theory building in this area.

In addition, places of attachment were found to offer freedom in several ways. One is by providing an escape from one's daily routine, such as by visiting vacation places or other distant (yet still meaningful) environments. Trips away can reinforce local bonds

(Case, 1996), but present results suggest that the destinations themselves may also serve important attachment roles, and support the need for escape. Places of attachment may also supply freedom when they allow individuals to exercise agency over their environment. Control is a key determinant of environmental satisfaction that relates to a variety of important personal outcomes including productivity, health and well-being (e.g., Gifford, 2014). Given this, future work should investigate links between control and place attachment in residences and workplaces where building managers aim to maximize occupants' connections to, and investments in, place.

Entertainment was another interesting benefit that has received little attention among place attachment researchers. This includes the ability of the place to provide stimulation, novelty, and learning. Entertainment may reflect person-environment congruency in stimulation preferences, such that individuals are attached to places that support their desired level of stimulation. Entertainment-in-place may also offer slight increases in the typical stimulation one experiences, and such changes are thought to be enjoyable (Wohlwill, 1966). Along these lines, place attachment-related relaxation may reflect congruent or reduced levels of stimulation. Future research connecting place attachment and stimulation theories would be of interest.

Finally, results showed that individuals benefit from places of attachment that provide them with aesthetic pleasure. The importance of aesthetics is thought to relate to an evolved preference for environments where survival is more likely (e.g., Dutton, 2003), although aesthetic appraisals vary among individuals (Gifford, 2014). Aesthetics also speaks to the intrinsic pleasure that can be derived from a place. Environmental psychologists have linked aesthetics to neighborhood and residential satisfaction, as well as judgments of buildings and architecture (e.g., Gifford, 2014). Aesthetics are largely overlooked in the place attachment literature, but one Taiwanese study found that "enjoying beautiful scenery" was a more common reason for returning to several national parks than was valuing nature (Hwang, Lee, & Chen, 2005).

3.3. Demographic differences

The self-reported benefits of place attachment appeared to vary little by age and housing tenure. Although other place attachment researchers have discussed developmental differences in place attachment (e.g., Hay, 1998; Morgan, 2010; Sugihara & Evans, 2000), the present study was limited in the obtained age range of participants (i.e., adults, ages 18–53), and so its results cannot be compared to those of previous works. Future research should explore differences in the psychological benefits of place attachment across the lifespan. Nevertheless, the lack of age differences within our sample suggests that young and middle-aged adults use places to satisfy similar types of needs. This is not to say that the *expression* of place-based need satisfaction is the same for all age groups; developmental differences are still likely. For example, younger and middle-aged adults both use their important places to obtain belonging. However, in younger adults, belonging appears more relevant to peer groups, whereas in middle-aged adults, belonging is derived from cultural place attachment. Without in-depth interviews, these developmental nuances are difficult to identify. Thus, a qualitative approach would be an appropriate follow-up to build theory about developmental differences in the expression of each of these benefits. The emergent list of benefits identified here may help to structure such interviews.

The number or types of self-reported psychological benefits also did not differ according to place ownership. Some studies support the notion that ownership is associated with *stronger* place attachment (e.g., Bolan, 1997; Brown et al., 2003; Mesch & Manor,

1998). However, unlike many studies that focus on one specific place of attachment (e.g., one's residence or neighborhood), participants in this study selected a place of their choosing. Thus, homeowners and non-homeowners alike were able to select places to which they were strongly attached. Thus, these results show that non-homeowners are not necessarily deprived of meaningful place attachments, but that they can access many types of places that meet their psychological needs. This reiterates the utility of allowing participants to select their own place of attachment, and expanding the range of places of inquiry beyond that of the residence.

However, some gender differences emerged: women mentioned more benefits overall than did men, and they were significantly more likely to describe memories associated with their place of attachment. This is broadly consistent with the finding that women report stronger place attachment than do men at three spatial levels (Hidalgo & Hernández, 2001). Perhaps because women have traditionally been restricted in terms of their mobility, they put a greater emphasis and value on the places that they consider to be theirs (e.g., hooks, 2009). Nevertheless, the relation between gender and place attachment is complex, and requires further work to disentangle these discrepant findings.

3.4. Geographical scale differences

Freundschuh and Egenhofer's (1997) typology of geographic space contains six types of space, based on people's experiences. Three of these (non-manipulable object space, environmental space, and geographic space) were present in participants' descriptions of their important places. Manipulable object space was mostly absent, suggesting that place attachment tends to form in places larger than the body. This does not deny that attachments can form to smaller objects that are often embedded in place (e.g., Csikszentmihalyi & Rochberg-Halton, 1981; Belk, 1988), but indicates that individuals generally interpret "place" to be larger, and non-manipulable. Panoramic spaces and map spaces were also absent, suggesting that place attachment requires some locomotion, or at least, must be more than a view or symbolized space.

The three remaining types showed some differences in their profiles of experienced benefits. As compared to the other two scales, non-manipulable object spaces were especially conducive to activities, privacy, personal growth, and freedom. Some activities that are solitary, such as independent work, may benefit from small environments that shield one from distractions. Privacy may be more easily attained in small spaces, particularly when they have some enclosure that disables visual and acoustic invasions (e.g., Gifford, 2014). Similarly, smaller environments may be easier to control, change, and escape from the influence of others. However, size, locomotion, and manipulability characteristics of these places also limited the experience of some benefits, including connection to nature, entertainment, and practical benefits. This suggests that scale can support or constrain the affordances inherent in a given space.

Environmental spaces, more often than the other two scales, involved positive emotions, comfort, entertainment, and connectedness to nature. Parks, rivers, and smaller wilderness areas were often described at this scale, which explains the prevalence of the latter benefit. Entertainment is perhaps less available to smaller, non-manipulable spaces that are less dynamic than environmental spaces. However, the diversity of the types of places that fell within this category makes it difficult to interpret the prevalence of positive emotions and comfort as benefits common to this scale, although this could reflect the interaction of place type — especially home, which is more common at this scale.

Geographic spaces most commonly provided belonging, which

is not surprising given that place identity often develops at urban, regional, and national scales (Bonaiuto, Breakwell, & Cano, 1996; Lalli, 1992). Furthermore, physical comfort was more common to this scale than the other two, and it often referred to weather, which Knez (2005) has linked to place attachment by way of place-congruent continuity. That is, people prefer places with weather similar to that experienced in places of childhood.

In sum, these results extend the understanding of geographical scale by showing that it not only impacts how one perceives, understands, and behaves in a space, but it can also impact the nature of the emotional bond with a given place. Further, these results help extend the understanding of place attachment by underlining that manipulability, locomotion, and size of a place can constrain or support the availability of certain benefits.

3.5. Experienced psychological benefits by type of place

The experienced psychological benefits varied in prevalence among different types of places of attachment. Some of our findings are congruent with previous studies. For example, that cities frequently provide belonging and memory support has been discussed by others (e.g., Lewicka, 2005), in part because cities can provide important information about place identity (Lalli, 1992). In addition, it is established that outdoor places frequently provide relaxation (e.g., Fishwick & Vining, 1992) and support activities, thus reflecting place dependence in which bonds are based on a place's physical and social qualities aligned with the pursuit of certain activities such as sports (Kyle, Graefe, & Manning, 2005). Interestingly, however, outdoor areas did not provide a sense of physical or psychological comfort, possibly reflecting a lack of control over outdoor physical (i.e., weather), and social climates.

Houses were more likely than the other place types to provide physical and psychological comfort, and offer a sense of security, thus supporting the view that for some, home can be a haven. Interestingly, this was not always restricted to an individuals' own home, but sometimes included the homes of friends and family, possibly reflecting that attachment to a place that includes particular people can confer the safe haven benefit of interpersonal attachment (Bowlby, 1969/1982), or perhaps it is due to other factors inherent in some houses such as prospect and refuge features (Appleton, 1975). Nevertheless, it should not be assumed that home is a haven for all; indeed home can evoke painful memories who experienced it as a place of abuse or oppression (Manzo, 2014; Rose, 1993).

The importance of place attachment to vacation places has been acknowledged among researchers from environmental psychology, tourism management, geography, and other fields (e.g., Aronsson, 2004; Kelly & Hosking, 2008; Ram, Björk, & Weidenfeld, 2016; Prayag & Ryan, 2012). However, these studies typically focus on cases studies of a particular place. Current results thus suggest that memory support, relaxation, belonging, entertainment, connecting to nature, and positive emotions are the most prevalent benefits offered by important vacation places in general.

Our comparison of experienced psychological benefits across place types helps elucidate which benefits are unique or common to a range of place types. For example, attachment to homes and cities both provide belonging and memory support, but homes also frequently provide a strong sense of psychological security. This may also indicate why place attachment strength varies between different types of places. In addition, the range of places included helps to indicate the extent to which a benefit can be generalized across variations of places within a given category. For example, a variety of places comprised the "vacation place" category, but more participants with attachment to such a place discussed the importance of entertainment, thus bolstering the notion that

entertainment is central to this type of place attachment.

Because certain types of places are more likely to include certain benefits, one implication is that place attachment visualizations could be used in therapeutic settings that aim to target these benefits (e.g., Scannell & Gifford, 2016). For example, visualizations of outdoor areas or vacation places may be more likely to elicit relaxation than would other places of attachment, although additional quantitative and experimental research is needed to verify the associative and causal links between place attachment type and the various psychological benefits.

3.6. Limitations

Several limitations of this study should be noted. One issue is the online nature of data collection, which may limit the generalizability of results to those with internet access and interest in completing online questionnaires. Nevertheless, this recruitment method yielded a more diverse sample than would be expected from a university subject pool, mail-out survey, or other type of online recruitment (Buhrmester et al., 2011).

Another issue is that asking individuals to reflect on the psychological benefits they derive from place requires them to be aware of such benefits. Arguably, one can benefit from a place attachment bond without being able to express why. Therefore, the proposed benefits of place attachment in this study may have missed some of these unconscious or implicit benefits. As such, the list of benefits remains those that are self-reported and experienced. In general, place attachment research (which largely relies on self-reports and interview data) will benefit as methods are expanded and specifically, as physiological and behavioral measures are introduced. Future work should therefore endeavor to expand the list of benefits to include these objective benefits that do not typically emerge in a self-report.

In addition, this study has delineated a host of experienced psychological benefits, which confirms and expands the scattered psychological benefits alluded to in previous literature. However, the nature of descriptive survey research means that claims about place attachment causing these benefits cannot be made; whether the benefits are antecedents, outcomes, or concomitants of place attachment is unknown. Further research should contribute direction and cause to each of these benefits (c.f., Scannell & Gifford, 2016).

Finally, one may question the comprehensiveness of the list of experienced benefits proposed, given the exploratory nature of the study and the somewhat modest sample size. Although the methods aimed to produce a comprehensive list of benefits, the possibility that some benefits are yet to be uncovered remains. For example, some have posited (albeit with limited evidence) that place attachment furthers our ability to conceive of the world as meaningful and coherent (e.g., Casakin & Kreitler, 2008; Droseltis & Vignoles, 2010), and that it can support various developmental tasks throughout the lifespan (e.g., Hay, 1998; Morgan, 2010). Further research and refinement is therefore needed. Nevertheless, the current study is among the first to examine a broad range of benefits of place attachment simultaneously.

3.7. Future directions

This exploratory study generates a variety of options for future research, some of which have already been described. For now, it offers greater understanding of the experienced benefits of place attachment. Because participants were asked to reflect on ways in which their place bond benefited them personally, we did not receive descriptions of benefits of the bond at other socioecological levels, such as its ability to bolster community engagement or

motivate pro-environmental behavior (e.g., Scannell & Gifford, 2010b). An interesting avenue for future research would be to elicit views on, and investigate place attachment benefits at varying socioecological levels of analysis beyond the personal, such as benefits to family, community, and sociocultural systems.

The present results also serve as a useful starting point for, and should therefore spur additional experimental research on, the processes and causal relations of place attachment. Future work should also develop a quantitative measure of these 13 benefits, which could be factor analysed to evaluate whether they could be better represented by a fewer number of underlying factors. This scale could then be used to assess the relative contribution of each benefit as predictors of strength of place attachment, as well as other outcomes, such as well-being, community engagement, or coping with place loss.

Other work should investigate the psychological benefits of mobility in comparison to those identified for place attachment. Some authors have proposed that place attachment and mobility are conflicting (Gustafson, 2009a), whereas others have argued that the two are complementary, for example that being away can strengthen local ties (e.g., Case, 1996; Lewicka, 2011). An analysis of the common and unique benefits of each mode may help to clarify these dynamics.

4. Conclusion

Given the steadily increasing interest in place attachment, that the range of psychological benefits of the bond has not yet been examined is somewhat surprising. This study is a first step in determining those experienced benefits, and sets the stage for future inquiries. Through a two-phase content analysis, 13 benefits were identified. This provides useful insight into how place attachment bonds interact with psychological functioning. This is not to say that place attachment is required for optimal psychological functioning, or that place attachment bonds all distribute positive effects; as Chawla (1992) explains, place attachment can also have a "shadow side." But the themes identified in the present study portray the positive aspects of person-place functioning, and which will be used to guide future research.

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