
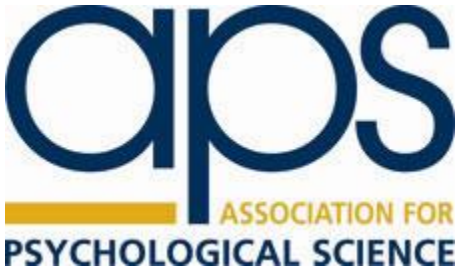

The Psychology of Home Environments: A Call for Research on Residential Space
Author(s): Lindsay T. Graham, Samuel D. Gosling and Christopher K. Travis
Source: *Perspectives on Psychological Science*, Vol. 10, No. 3 (MAY 2015), pp. 346-356
Published by: Sage Publications, Inc. on behalf of Association for Psychological Science
Stable URL: https://www.jstor.org/stable/44290084
Accessed: 26-06-2022 10:32 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms

Sage Publications, Inc., Association for Psychological Science are collaborating with JSTOR to digitize, preserve and extend access to *Perspectives on Psychological Science*

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

aps ASSOCIATION FOR PSYCHOLOGICAL SCIENCE

Perspectives on Psychological Science
2015, Vol. 10(3) 346–356
© The Author(s) 2015
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1745691615576761
pps.sagepub.com
SAGE

The Psychology of Home Environments: A Call for Research on Residential Space

Lindsay T. Graham[1], Samuel D. Gosling[1,2], and Christopher K. Travis[3]

[1]University of Texas at Austin; [2]University of Melbourne, Victoria, Australia; and [3]Sentient Architecture, Round Top, TX

Abstract

Homes are important: People devote much of their thought, time, and resources to selecting, modifying, and decorating their living spaces, and they may be devastated when their homes must be sold or are destroyed. Yet the empirical psychological literature says virtually nothing about the roles that homes might play in people's lives. We argue that homes provide an informative context for a wide variety of studies examining how social, developmental, cognitive, and other psychological processes play out in a consequential real-world setting. The topic of homes is also well suited to collaborations with a diverse array of disciplines ranging from architecture and engineering to sociology and law. We illustrate the potential insights to be gained from studying homes with an exploratory study that maps the psychological ambiances (e.g., romance, comfort, togetherness) that people desire in their homes; we identify six broad ambiance dimensions (restoration, kinship, storage, stimulation, intimacy, productivity) that show mean differences across rooms. We connect these findings to existing work on situation selection in emotion regulation. These ideas provide only an initial foray into the domain of residential space, but they hint at the productive roles that homes and other spaces could play in psychological theorizing and research.

Keywords

home, personal living spaces, environment, impressions, architecture, ambiance, emotion regulation

In 2012, the home decor market was estimated to be grossing as much as $65.2 billion per year in the United States alone (Bosari, 2012). In the same year, *Better Homes and Gardens* had a circulation in the United States of over 7.5 million. TV programs on homes are enormously popular, too. HGTV (Home and Garden Television), an entire TV channel (and Web site) devoted to buying, selling, and fixing up homes, attracted over 70 million monthly viewers in the first quarter of 2013, with shows like *Renovation Raiders* regularly drawing audiences above 6 million (HGTV, 2013). These and many other examples suggest that people care a great deal about their home spaces. In light of all the attention, energy, and resources that people put into their homes, one might expect the home to be a prime domain of psychological research. However, little empirical attention has been directed to residential spaces.

Despite this neglect by empirical researchers, theorists and practitioners have long emphasized the psychological significance of homes (Hayward, 1975). Theorists ranging from Carl Jung (e.g., 1963) to Clare Cooper-Marcus (e.g., 1995) have proposed that of all places, the home has a particularly powerful symbolic and psychological significance. That is, the home is more than a place in which an individual resides but rather a unique place where a person's past, present, and future selves are reflected and come to life. On the basis of a series of interviews with home owners, Cooper-Marcus (1995) argued that the home is a place that reflects the character and identity of those who dwell within it.

Empirical research in environmental psychology has provided support for the special role of home in peoples' minds, identifying the characteristics that distinguish the idea of "home" from merely a place of residence (Smith, 1994a). Qualities such as community, privacy, self-expression, personal identity, and warmth are used to describe

Corresponding Author:
Lindsay T. Graham, Department of Psychology, University of Texas at Austin, 1 University Station A8000, Austin, TX 78712
E-mail: lindsaytgraham@gmail.com

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

homes but not mere residences (Altman, 1981; Dovey, 1985; Smith, 1994a). What might be driving these feelings, and how might the desired feelings affect the physical qualities of a space?

Some architectural practitioners have speculated about the motives that may drive how a home's appearance is shaped. Israel (2003) argued that individuals' home environments are reconstructions of past spaces in which those people felt safe and secure. According to this view, a person may, for example, unconsciously incorporate features into a space that evoke qualities from a well-loved grandmother's home. The motives behind these decisions may be propelled not by conscious tastes and preferences but rather by the emotional connections promoted by these elements.

Gosling has proposed that manipulating one's space can serve three broad functions (Gosling, Gifford, & McCunn, 2013; Gosling, Ko, Mannarelli, & Morris, 2002). First, features of a space can influence the activities likely to be performed in that space—thanks to the physical features of kitchens, bedrooms, living rooms, and garages, these spaces are particularly well suited to cooking, sleeping, entertaining guests, and parking, respectively. The layout and other physical features of the space can influence the activities (e.g., reading a book) or social interactions (e.g., chatting with friends) that take place in the space, which in turn may affect cognitive and emotional states of the occupants (e.g., a sense of creativity or relaxation). In addition, ambient features (e.g., lighting levels, temperature, humidity, noise, music, color, layout, shape of the space) can influence an occupant's mood, concentration, and productivity (Gao et al., 2007; Gifford, 2007; Jasnoski, 1992; Küller, Ballal, Laike, Mikellides, & Tonello, 2006). Too much sunlight penetration, for example, can reduce office workers' levels of relaxation (Boubekri, Hull, & Boyer, 1991).

Second, the items in a space and their arrangement can be used to convey impressions to others; thus, for example, occupants can convey the importance that they place on family by displaying photos of their relatives or can communicate their political orientation via symbols and icons. In one study comparing the living spaces of politically liberal and conservative occupants in the United States, liberals occupied spaces with indicators of diverse interests in art, literature, travel, and other cultures (e.g., art supplies, books, world maps, and cultural memorabilia brought back from vacation), whereas the conservative occupants tended to have decor that was relatively conventional (e.g., sports paraphernalia, flags of various types, and American flags in particular; Carney, Jost, Gosling, & Potter, 2008).

Third, features of the space can affect what people think about and how they feel when in that space; for example, mementos may evoke fond memories of other times, places, and people. The presence of personal and cultural artifacts (e.g., art, photos, furniture) can influence levels of well-being and feelings of social support (Gifford, 2007). For instance, people may use photos of loved ones and other "social snacks" (tangible reminders of connections to others) to fend off feelings of loneliness and social isolation (Gardner, Pickett, & Knowles, 2005).

Such findings hint at the potential gains to be made from studying home environments. In the present article, we aim to draw attention to the topic of home as a potentially important domain of psychological inquiry. We do so by sketching out some potential areas of inquiry and focus on one of these areas to illustrate the kinds of insights that can result from such work.

A Home for Empirical Research

Homes have long held great significance for individuals and in cultural life more broadly (Bryson, 2010; Worsley, 2011). As a result, the topic of home has attracted attention from many disciplines across the arts and sciences, such as sociology, anthropology, geography, history, architecture, and philosophy (Mallett, 2004). In her extensive review of research on the meaning and experience of home, Mallet noted that the concept of home has been variously associated with the concepts of house, family, haven, self, gender, and journeying (i.e., serving as a destination from which or to which one travels). What is striking about these conceptual connections to home is that they are all, to varying degrees, rooted in psychological processes. For example, scholars equating home with the physical structure of the house have noted how the designs of houses can constrain and facilitate the social interactions and the power dynamics that are played out in a home. Scholars focusing on the role of the home as a haven draw heavily on the psychological states of relaxation, comfort, and a sense of security. And researchers who emphasize the idea of family focus on the role of home in providing the setting for early social and cognitive development.

Such links underscore the potential value of homes in providing the context for a wide variety of empirical studies within the field of psychology. In addition, the links point to opportunities for psychology to contribute to and learn from other fields. In fact, many psychology subdisciplines already touch on topics that are relevant to homes, even if they do not currently examine the topics directly in homes or examine their relevance to homes. We argue that homes are worth studying because they are consequential real-world settings in which basic psychological processes are regularly played out. Thus, homes represent a context both for research within psychology and for collaboration with other disciplines.

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

Potential research within psychology

Here we consider how a number of topics already studied in psychology might be enriched by contextualizing them within the home.

Romantic relationships. Consider romantic relationships, which are often played out in the context of homes but are typically studied via context-free questionnaires or in lab studies. To examine these relationships in context, researchers could investigate the spaces in which couples cohabit. Research might reveal how home spaces reflect relationship dynamics or how home design influences interpersonal processes that, in turn, influence the development and longevity of romantic relationships. For example, how does the layout of a space interfere with or promote couples' individual needs for intimacy and independence? And does their choice of decor reflect status and role dynamics in the relationship? The point at which couples first move in together might be a particularly illuminating period because newly cohabiting couples must psychologically negotiate the transition from living alone to sharing a space with someone else. At that point, does it matter to a relationship whether Person A moves into Person B's home or whether they start afresh with a new one?

Emotion and emotion regulation. Researchers interested in emotion and emotion regulation also often examine these states via decontextualized surveys or in lab studies. But such work needs to be augmented by studies of how these processes play out in the real world. The home serves as a useful context in which to examine these processes because it is a domain that is stable, yet malleable and in which individuals spend a great deal of time. Questions can be asked about topics such as how people use their everyday domestic social interactions with others to create and maintain desired emotional states. Do people shape their domestic spaces to facilitate avenues of emotional expression (e.g., by sharing gossip on the porch) or as a means of escape (e.g., by disappearing into a "man cave" or playing in the living room with the kids)? How does the home facilitate the consumption of other forms of emotion-regulating entertainment, such as music, television, art, and literature?

Identity. Homes also provide a consequential real-world context in which to study processes of identity expression and identity development. How are home spaces used in the service of identity negotiation? It seems likely that the physical characteristics of a person's space might provide a barometer of his or her ongoing process of identity development, especially perhaps in age groups occupied with the task of molding their identity (Erikson, 1968; McAdams, 2001). Furthermore, the home might provide clues to critical turning points in the occupants' lives with respect to identity and development. Thus, longitudinal and cross-sectional studies could reveal markers of the psychological transitions associated with major life changes (e.g., puberty, living alone for the first time, getting married, getting divorced, having children), such as new parents' creation of a "toy room" as a space for imaginative play (Stevenson & Prout, 2013).

Development. Presumably children, young adults, middle-aged adults, and older individuals use, perceive, and relate to their home environments in different ways. Therefore, developmental psychologists can use homes as a context for examining the real-world factors that promote social and cognitive development throughout the life span. In the cognitive developmental domain, homes may provide developmental psychologists with a new context for observing the onset of dementia and other late adult cognitive disorders. Such data may be helpful in determining the environmental features that aid cognitive development in children and promote efficient cognitive function in older adults. This information could be useful beyond the home context, in designing schools and elder care facilities.

Cross-cultural psychology. Anthropologists, historians, and sociologists have long recognized that homes provide an informative window through which to examine cultural differences in daily living. Cross-cultural psychologists can also use the layout of and behavioral traces in home spaces as indicators of key cultural practices, values, and behaviors. For example, how does the design and decoration of spaces reflect conceptions of privacy and the practice of gender segregation in Qatari homes (Sobh & Belk, 2011)?

Previous psychological research on homes

Some psychologists have already recognized the unique insights that home environments offer, particularly in the context of understanding family processes, gender roles (Blair & Lichter, 1991; Devlin, 1994; Smith, 1994b; Starrels, 1994), and child development (Evans, 2006). For example, the home environment has been used to view how the physical layout of a space can affect daily mood and cortisol levels (Saxbe & Repetti, 2010) and how occupants psychologically experience their homes (Molony, McDonald, & Palmisano-Mills, 2007). Research has also examined how life stressors that occur outside of the home (e.g., job stress) can affect behaviors within the

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

home (Ilies et al., 2007; Judge & Ilies, 2004; Repetti, Wang, & Saxbe, 2009; Saxbe & Repetti, 2008; Wang & Repetti, 2013; Wang, Repetti, & Campos, 2011) and how behaviors in the home (e.g., division of household labor, leisure time) can affect social relationships (Arnold & Lang, 2007; Bianchi, Milkie, Sayer, & Robinson, 2000; Coltrane, 2000; Klumb, Hoppmann, & Staats, 2006; Lee & Waite, 2005) and mental states (Judge, Ilies, & Scott, 2006; Saxbe, Repetti, & Graesch, 2011).

Past psychological research on homes has tended to focus on two broad classes of environmental features. The first class consists of conditions inside the living spaces themselves. For instance, the degree to which homes are chaotic and crowded has been a major topic in research on how home environments affect the development of children's temperament and behaviors. Research suggests that, compared with children in less chaotic and less crowded homes, children living in chaotic, crowded homes tend to perform less effectively cognitively and academically (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005; Goux & Maurin, 2005; Hanscombe, Haworth, Davis, Jaffee, & Plomin, 2011) and tend to experience more health risks and exposure to environmental toxins and disease (Baker, Taylor, Henderson, & The ALSPAC Study Team, 1998; Leventhal & Newman, 2010; Mann, Wadsworth, & Colley, 1992). Chaos and crowding in the home have also been associated with negative emotion in infants (Bridgett, Burt, Laake, & Oddi, 2013) and the expression of disruptive behaviors in children (Evans et al., 2005; Hanscombe et al., 2011; Jaffee, Hanscombe, Haworth, Davis, & Plomin, 2012).

A second class of home features refer to broader factors such as the home's geographic location and the frequency with which people move to a new home. This latter characteristic—known as residential mobility—has been tied to a broad range of outcomes, including academic performance, emotional and social issues (Leventhal & Newman, 2010), psychological values (Flouri, 2009), and early mortality (Oishi, 2010; Oishi & Schimmack, 2010).

Much of the past work on home environments has used direct-observation methods (by researchers or via video recordings), daily telephone interviewing, daily surveying, or daily diary methods (Saxbe & Repetti, 2010) to examine, among other things, the importance of place in predicting and shaping behaviors and emotions. The advent of new technologies (e.g., automatic sensing from smartphones and other devices; Miller, 2012) holds great promise for reduced intrusiveness and greater fidelity than past methods. In fact, some researchers have already used forms of automated assessment to explore behaviors that often occur in home spaces. For example, the electronically activated recorder has been used to naturalistically observe conflict that occurs within the home environment to complement self-report and cortisol data collection from children and parents (Slatcher & Robles, 2012).

Potential connections to other disciplines

Homes also provide opportunities for psychologists to build connections to other disciplines.

Architecture, design, and engineering. Architecture is the field tasked with building the spaces in which humans live, so it should have a particularly strong interest in learning from psychologists, the experts in human behavior. For example, analyses of the ways people perceive and use their home environments can help architects design spaces that are suited to individuals' real patterns of daily living, not just the clients' or architects' idealized versions of how home life will be played out. Perceptual psychologists can help architects understand the effects on humans of ambient features, such as sound, light, and odor, as they have done in institutional contexts, such as hospitals and office spaces (Gifford, 2007; Gosling et al., 2013).

Psychological knowledge of home environments can be used by designers, architects, and health-care professionals to design spaces that facilitate healthy and well-adjusted living. Cross-disciplinary collaborations could generate architectural interventions that promote healthy lifestyle behaviors (e.g., eating well, exercising, engaging in good mental health practices). For example, health psychologists could examine the effects of creating easily accessible workout spaces in people's homes or designing spaces to promote psychological reflection and relaxation.

More directly, engineers can incorporate psychologists' knowledge of daily behaviors, attitudes, values, and perceptual abilities into building designs. One team of investigators undertook a review of the changing sensory abilities associated with dementia and presented a series of modifications to the home—many of them quite straightforward—designed to improve the lives of people with this condition (van Hoof, Kort, Duijnstee, Rutten, & Hensen, 2010). For example, they recommend that ventilation systems be developed that counter the negative effects of odors but that also take into account dementia patients' particular susceptibility to noise-related distress.

Sociology. Sociologists are concerned primarily with the effects of broad social factors such as gender, race, and social class on human welfare. The mechanisms through which these factors exert their influence are likely to be partly psychological and often play out in domestic contexts. For example, traditional gender roles are intimately

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

associated with domestic tasks undertaken in the home (e.g., cooking, cleaning, caring for children, fixing broken items, mowing the lawn).

Law. American law gives special status and protection to homes. Privacy rights are extended to homes; the tax code gives breaks for home ownership; and when those protections seem to be violated, citizens can become upset. For example, there was a huge outcry when the Supreme Court approved of a city taking and razing a home for the purpose of economic development of a neighborhood (*Kelo v. City of New London*, 2005; Nadler & Diamond, 2008). A leading legal theory suggests that to fully enjoy the status of "personhood," people must have control over some property (Barros, 2009; Blumenthal, 2009; Radin, 1982; Stern, 2009). The purported justifications for these various protections include psychological ones.

Mapping Desired Psychological Ambiances in the Home: An Illustrative Study

To illustrate the potential value of research in this domain, we next focus on one area—exploring the landscape of spatial ambiances in the home. Specifically, we conducted an exploratory investigation of whether there is any systematicity to the ambiances that individuals want to evoke in the physical spaces of the home and, if there is, what those ambiances are. This topic is instructive because it reveals clear connections between the psychology of home and existing work in psychology (in this case, emotion regulation).

Some of the most basic questions regarding the psychology of home focus on understanding the psychological functions (e.g., relaxing, focusing on work, socializing) served by homes and the different spaces within them. The most relevant literature to this topic is the work on restorative environments, which shows that certain environments, such as natural rather than built environment, can improve mood, improve focus, and relieve stress (Sternberg, 2009; van den Berg & Custers, 2011; van den Berg, Koole, & van der Wulp, 2003). But even this research does not focus on home spaces and devotes little attention to identifying the ambiances that individuals want to elicit. For instance, little is known about such basic questions as what ambiances are most commonly sought or whether the ambiances people want to elicit vary systematically across different areas of a home.

Therefore, we undertook a preliminary study to map out the desired psychological ambiances of a home. Specifically, we administered a specially designed new survey (the Inventory of Desired Ambiances in the Ideal Home [IDAIH]) to 200 participants via Amazon's Mechanical Turk Web site (see Supplemental Material available online for details on the methods and instrument development). The IDAIH consisted of a list of 18 rooms or spaces one might find in a home (e.g., entryway, kitchen, living room, garage, backyard). We focused on "ideal homes" rather than individuals' current homes for two reasons. First, the concept of ideal home allowed us to avoid differences among people in the practical and financial obstacles to building or choosing a space that fully realizes one's psychological goals. Second, we could ask everyone about the same set of rooms, rather than being constrained by the idiosyncratic configurations of rooms that would result from focusing on a large number of real spaces. Thus, our design was based on the supposition that people could meaningfully report on the ambiances they would like to evoke in their ideal spaces even though we understood that most or all of the individuals responding would not have had all 18 spaces in their own homes.

The instructions of the IDAIH were as follows: "As you enter each of the following spaces, what are the most important emotions or perceptions you would like to evoke within yourself and others?" For each of the 18 rooms or spaces, individuals were instructed to select two ambiances from a list of 29 options (e.g., organization, privacy, productivity, rejuvenation, romance, safety, tranquility, wealth). There was also a write-in option for cases where the listed states were not sufficient. For a list of the 29 options, see Table S1 in the Supplemental Material.

The most frequently selected ambiances across all rooms were *inviting* (95% of participants listed it as their first choice for at least one space), *organization* (85%), and *relaxation* (70%). The distributions of ambiances varied substantially across the rooms. For example, *inviting* was listed so often because about half of all participants listed it as one of the top desired ambiances for the entryway (54.0%), front porch (48.5%), or guest room (47.0%), but it appeared much less frequently in the other rooms. Therefore, we next examined the frequency with which the ambiances were selected for each of the 18 rooms separately.

There was generally strong consensus regarding the ambiances appropriate for each room. The top five ambiances chosen for each room accounted for an average of 65.8% (SD = 11.0%) of the nominations for that room; these findings suggest both that people do have a sense about which ambiances they desire in each room and that these ambiance and room preferences are shared by others in the sample. As shown in Figure 1 (which organizes the findings in terms of a generalized blueprint plan of a home), the five most frequently selected ambiances varied across rooms, and some rooms elicited greater consensus among participants than did other rooms. For example, as noted earlier, there was strong consensus among

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

participants regarding which ambiances were most desired in the ideal entryway, with half the participants (54.0%) choosing *inviting* as their first choice. After *inviting*, there was a sharp drop-off for the next most popular ambiances of *sophistication* (5.0%), *family* (5.0%), *quiet* (4.5%), and *cozy* (3.5%). This strong preference for one ambiance matches the predominant practical function of entryways (i.e., entering the home). Conversely, the kitchen was characterized by less consensus, with the top five ambiances distributed more evenly, with *organization* (17.5%) being the most popular, followed by *family* (12.5%), *productivity* (11.0%), *abundance* (11.0%), and *togetherness* (8.5%). This variety of desired ambiances reflects the varied practical and social functions that kitchens tend to serve. This pattern also hints at individual differences that may be responsible for this variation. For example, extroverts may desire spaces conducive to interacting with others (e.g., spaces evoking a sense of family), whereas those high on conscientiousness may desire spaces that promote a sense of organization.

To determine whether the 29 ambiances of the IDAIH reflected a broader underlying structure of residential-environmental preferences, we subjected participants' ratings to a principal components analysis (PCA), examining the preferences across rooms (see Supplemental Material for details of procedures used to determine the dimensions and the full content of the dimensions). A six-factor solution was retained, accounting for 72.3% of the variance. We labeled the factors Restoration, Kinship, Storage, Stimulation, Intimacy, and Productivity (see Fig. 1 and Supplemental Material; the factors are listed in the order in which they emerged in the PCA).

As a whole, the results demonstrate that individuals desire a broad range of specific ambiances in their ideal living spaces. On average, each participant selected 16.0 (SD = 3.2) of the 29 different ambiances for their ideal homes. The ambiances also differed systematically across spaces. For example, many participants wanted a romantic bedroom, but none of them wanted a romantic garage. These links between ambiances and environments point to the idea that, in addition to having various physical qualities that help or hinder pragmatic tasks, spaces also have psychological qualities that almost certainly affect how the spaces are used, how the occupants feel, and what they think about.

Of course, this preliminary study provides only a first glimpse into the psychological ambiances people would like to create in their ideal homes. Naturally, such survey-based findings about ideal spaces need to be followed up with studies of what people really do to their own spaces or whether their responses instead reflect naive theories about themselves and others. Questions are also raised about the extent to which the ambiances are directed to the occupants themselves versus visitors; for example, one might expect other-directed ambiances in the more public spaces and self-directed ambiances in the more private spaces (Gosling et al., 2002). And how are ambiances affected by such factors as income, gender, culture, age, and class, whether the space is owned or rented, or whether the occupants are living alone or with others?

Despite these unanswered questions, the findings do make two important contributions. First, they serve as a springboard for beginning to understand how psychological processes may be played out in the home. Second, and more broadly, with little existing empirical work in this domain, the present work illustrates the richness of home environments as a venue for psychological research, with implications that extend to other spatial units. In the remaining sections of this article, we expand on these two contributions.

Connecting home psychology to the broader field

Broadly speaking, there are two main ways to change one's environment. First, changes can be brought about by manipulating features of the space itself, sometimes temporarily (e.g., playing some soothing music) and sometimes more permanently (e.g., changing the flooring in one's living room). Second, changes can be brought about by moving to a new environment with preexisting features likely to facilitate a desired state; again, sometimes these actions are temporary (e.g., going to the beach to relax), and sometimes they are more permanent (e.g., moving to a neighborhood with similarly minded occupants; Bishop, 2009; Florida, 2008; McPherson, Smith-Lovin, & Cook, 2001; Motyl, Iyer, Oishi, Trawalter, & Nosek, 2014). It is important to recognize that psychological processes underlie these forms of manipulation and selection (Buss, 1987; Rentfrow, Gosling, & Potter, 2008). Specifically, personality (e.g., traits, values) and other individual differences (e.g., age, gender, health) dictate psychological and physical parameters that are better suited to some spaces than to others; thus, extroverts are better suited than introverts are to places that facilitate lively socializing. In spaces like the kitchen, where a varied (but limited) set of ambiances were desired, different people may use the same space to meet different needs.

The current data do not permit analyses of which variables determine whether a person would prefer to evoke a sense of, say, abundance rather than togetherness in their kitchen. However, existing theories provide some guidance regarding which variables are likely to be relevant to the choices individuals make as they manipulate and select their physical spaces. Interactionist approaches in environmental and personality research emphasize the role of individuals in selecting, manipulating, and evoking situations and environments to match their personalities, goals, attitudes, and values (Buss, 1987). The emotion-regulation literature posits similar kinds of

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

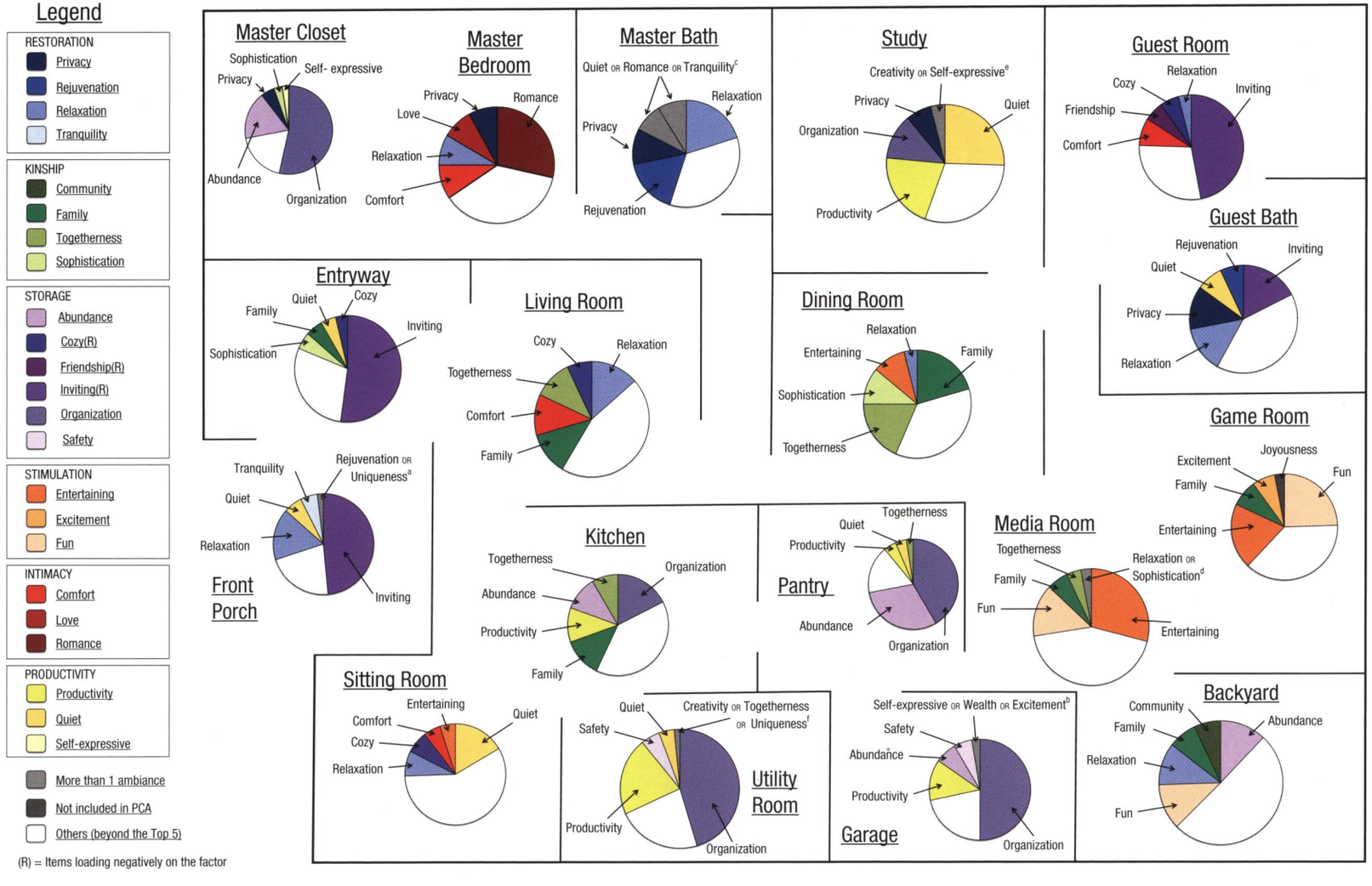

Fig. 1. Example blueprint plan depicting top five ambiances desired in each room or space of the home. Each pie chart depicts the five most frequently selected ambiances in each room. In six cases (i.e., front porch, garage, master bath, media room, study, and utility room), more than one ambiance tied for fourth or fifth most frequently selected ambiance; these cases are shaded light gray. Note that each gray slice represents not the composite of those tied ambiances but rather the percentage of one of each of the ambiances. [a]*Rejuvenation* and *uniqueness* were tied as the fifth most frequently selected ambiance. [b]*Excitement, self-expressive*, and *wealth* were tied as the fifth most frequently selected ambiance. [c]*Quiet, romance*, and *tranquility* were tied as the fourth most frequently selected ambiance. [d]*Relaxation* and *sophistication* were tied as the fifth most frequently selected ambiance. [e]*Creativity* and *self-expressive* were tied as the fifth most frequently selected ambiance. [f]*Creativity*, *togetherness*, and *uniqueness* were tied as the fifth most frequently selected ambiance. Table S2 in the Supplemental Material presents the data on which this figure is based. Factors are listed in the order in which they emerged from the principal components analysis (PCA), but the items are listed alphabetically within each factor.

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

processes in which individuals are thought to select and modify their situations to initiate, avoid, maintain, reduce, or enhance core emotional states (e.g., Gross, 1998; Gross & Thompson, 2007; Koole, 2009).

Despite these clear parallels between interactionist perspectives in environmental psychology and theories of emotion regulation, the topic of physical space has been largely ignored in contemporary research on emotion and emotion regulation. The *Handbook of Emotion Regulation* (Gross, 2007) has no chapter on the topic, and the terms *space*, *environment*, and *ambiance* are not even listed in the index. A keyword search in PsycINFO of the journals *Emotion*, *Cognition and Emotion*, *Journal of Personality and Social Psychology*, *Personality and Social Psychology Bulletin*, and *Personality and Social Psychology Review* for articles that combined "emotion regulation" (or "emotional regulation") with either "ambiance," "space," "environment," "design," "decorate," or "decoration" yielded zero articles. Even combining these environmental terms with the much broader keyword of "emotion" yielded only four articles, none of which focused on how physical spaces affect emotions.

Yet the present work supports the idea that physical spaces may be a particularly pervasive and powerful mechanism for regulating emotions because spaces are flexible and stable. Spaces are flexible in the sense that one can do a lot of different things to one's space in terms of the way it is organized, decorated, and furnished with objects. As a result, emotional regulation in spaces may operate through visual (e.g., via items of decor), auditory (e.g., via music played on the stereo), tactile (e.g., via the materials used in furniture), olfactory (e.g., via fragrances emitted by candles), ambient (e.g., via the temperature and humidity), and social (e.g., by arranging a space to induce social interactions) channels. With so many channels and so many options in each channel, the items designed to regulate emotions can be finely tuned to evoke a varied palette of ambiances, such as those illustrated in our study. At the same time, elements of physical space are also relatively stable. As a result, spaces can exert a persistent and predictable effect on emotions, again making spaces a potentially powerful and precise form of emotion regulation. Therefore, homes provide an excellent domain in which to examine emotion-regulation processes because only a limited number of individuals occupy the spaces, the environments are quite stable, and occupants spend a great deal of time in them.

Stepping outside the home: A broader psychology of physical spaces

The present work examined just one level of spatial scale (i.e., the rooms of a home). It is likely that the mechanisms discussed here also operate at both smaller and larger scales. Even within a single room, different parts of the space will be experienced differently. Standing by the edge of the room looking through the window is likely to have different effects on thoughts and emotions than sitting on the sofa in full view of the art on the walls and mementos above the fireplace. At a broader scale, physical situation selection can be expressed in terms of the type of venue one visits (e.g., a bar versus a café or a café chain versus an independent café) and the type of neighborhood, city, or region in which one resides (Bishop, 2009; Florida, 2008; Motyl et al., 2014; Rentfrow et al., 2008). Recent theoretical and empirical work taking a socioecological perspective emphasizes precisely this mutual dynamic interplay between individuals and the social, cultural, and physical contexts they inhabit (Gebauer et al., 2014; Oishi & Graham, 2010).

In addition to the theoretical questions raised by examining the relationships individuals have with their environments, the findings potentially offer insights into how these ideas could be applied in "real-world" settings. Essentially, when architects and designers design a building, they are aiming to facilitate a particular function, which usually has a psychological component to it. For example, the purpose of a hospital room is to facilitate healing, so it may help for that space to promote feelings of restoration, regeneration, rejuvenation, and health; at the same time, the space must be designed to allow the people who work there to do their jobs efficiently. Therefore, a fuller understanding of how physical features influence the psychological states experienced in a space and the activities that occur within the space can inform how spaces are designed to help achieve a desired outcome. This knowledge could be applied to all kinds of spaces ranging from broad institutions, such as hospitals and universities, to more personal spaces like homes and offices.

The current study provides just one illustration of the psychological richness of home environments. It shows how empirical research on homes can inform existing theories in psychology and other fields concerned with human behavior and the built environment. In doing so, we hope that the present article will serve as an impetus for researchers to explore the processes underlying the psychology of home and the other spaces that provide the physical contexts for human activity.

Acknowledgments

We thank Mario Alvarado, Erica Baranski, Nikki Brown, Parker Crouch, Lanie Crow, Justine Curry, Catherine Faig, Mareike Janiak, Karl Jun, Kelly Lee, Mary Mason, Michael Mathieu, Constance Seré, and Ashley Vivlamore for their help with collection of these data. We also thank Oliver John, Jennifer Beer, Jason Farrell, and Jamie Fratkin for their helpful comments during the writing of this article.

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

Additional supporting information may be found at http://pps.sagepub.com/content/by/supplemental-data

References

Altman, I. (1981). *The environment and social behavior.* Monterey, CA: Brooks/Cole.

Arnold, J. E., & Lang, U. (2007). The changing landscape of home: Trends in home-based leisure and storage among working American families. *Journal of Family and Economic Issues, 28,* 23–48.

Baker, D., Taylor, H., Henderson, J., & The ALSPAC Study Team. (1998). Inequality in infant morbidity: Causes and consequences in England in the 1990s. *Journal of Epidemiology & Community Health, 52,* 451–458.

Barros, D. B. (2009). Legal questions for the psychology of home. *Tulane Law Review, 83,* 645–660.

Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces, 79,* 191–228.

Bishop, B. (2009). *The big sort: Why the clustering of like-minded America is tearing us apart.* Boston, MA: Mariner Books.

Blair, S. L., & Lichter, D. T. (1991). Measuring the division of household labor: Gender segregation of housework among American couples. *Journal of Family Issues, 12,* 91–113.

Blumenthal, J. A. (2009). "To be human": A psychological perspective on property law. *Tulane Law Review, 83,* 609–644.

Bosari, J. (2012, October 24). Growth of the home décor market shows no signs of slowing down. *Forbes.* Retrieved from http://www.forbes.com/sites/moneywise-women/2012/10/24/growth-of-the-home-decor-market-shows-no-signs-of-slowing-down/

Boubekri, M., Hull, R. B., & Boyer, L. L. (1991). Impact of window size and sunlight penetration on office workers' mood and satisfaction: A novel way of assessing sunlight. *Environment & Behavior, 23,* 474–493.

Bridgett, D. J., Burt, N. M., Laake, L. M., & Oddi, K. B. (2013). Maternal self-regulation, relationship adjustment, and chaos: Contributions to infant negative emotionality. *Infant Behavior & Development, 36,* 534–547.

Bryson, B. (2010). *At home: A short history of private life.* New York, NY: Anchor Books.

Buss, D. M. (1987). Selection, evocation, and manipulation. *Journal of Personality and Social Psychology, 53,* 1214–1221.

Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology, 29,* 807–840.

Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and Family, 62,* 1208–1233.

Cooper-Marcus, C. (1995). *House as a mirror of self: Exploring the deeper meaning of home.* Berkeley, CA: Conari Press.

Devlin, A. S. (1994). Gender roles and housing preferences. *Journal of Environmental Psychology, 14,* 225–235.

Dovey, K. (1985). Home and homelessness. In I. Altman & C. Werner (Eds.), *Home environments* (pp. 33–64). New York, NY: Plenum Press.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York, NY: W. W. Norton.

Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57,* 423–451.

Evans, G. W., Gonnella, C., Marcynyszyn, L. A., Gentile, L., & Salpekar, N. (2005). The role of chaos in poverty socioemotional adjustment. *Psychological Science, 16,* 560–565.

Florida, R. (2008). *Who's your city?* New York, NY: Basic Books.

Flouri, E. (2009). Strong families, tidy homes, and children's values in adult life: Are "chaotic," "crowded," and "unstable" homes really so bad? *Journal of Behavioral Development, 33,* 496–503.

Gao, X., Xin, J. H., Sato, T., Hansuebsai, A., Scalzo, M., Kajiwara, K., . . . Billger, M. (2007). Analysis of cross-cultural color emotion. *Color Research and Application, 32,* 223–229.

Gardner, W. L., Pickett, C. L., & Knowles, M. (2005). Social snacking and shielding: Using social symbols, selves, and surrogates in the service of belonging needs. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 227–241). New York, NY: Psychology Press.

Gebauer, J. E., Bleidorn, W., Gosling, S. D., Rentfrow, P. J., Lamb, M. E., & Potter, J. (2014). Cross-cultural variations in Big Five relations with religiosity: A socio-cultural motives perspective. *Journal of Personality and Social Psychology, 107,* 1064–1091.

Gifford, R. (2007). *Environmental psychology: Principles and practice* (4th ed.). Colville, WA: Optimal Books.

Gosling, S. D., Gifford, R., & McCunn, L. (2013). The selection, creation, and perception of interior spaces: An environmental psychology approach. In G. Brooker & L. Weinthal (Eds.), *The handbook of interior design* (pp. 278–290). Oxford, England: Berg.

Gosling, S. D., Ko, S. J., Mannarelli, T., & Morris, M. E. (2002). A room with a cue: Judgments of personality based on offices and bedrooms. *Journal of Personality and Social Psychology, 82,* 379–398.

Goux, D., & Maurin, E. (2005). The effect of overcrowded housing on children's performance at school. *Journal of Public Economics, 89,* 797–819.

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2,* 271–299.

Gross, J. J. (2007). *Handbook of emotion regulation.* New York, NY: Guilford Press.

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3–24). New York, NY: Guilford Press.

Hanscombe, K. B., Haworth, C. M. A., Davis, O. S. P., Jaffee, S. R., & Plomin, R. (2011). Chaotic homes and school

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

achievement: A twin study. *Journal of Child Psychology and Psychiatry, 52*, 1212–1220.
Hayward, D. G. (1975). Home as an environmental and psychological concept. *Landscape, 20*, 2–9.
HGTV. (2013, December 6). *Viewership statistics*. Retrieved from http://www.hgtvadsales.com/AboutUs/research.pdf
Ilies, R., Schwind, K. M., Wagner, D. T., Johnson, M. D., DeRue, D. S., & Ilgen, D. R. (2007). When can employees have a family life?: The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology, 92*, 1368–1379.
Israel, T. (2003). *Some place like home: Using design psychology to create ideal places*. New York, NY: Wiley-Academy.
Jaffee, S. R., Hanscombe, K. B., Haworth, C. M. A., Davis, O. S. P., & Plomin, R. (2012). Chaotic homes and children's disruptive behavior: A longitudinal cross-lagged twin study. *Psychological Science, 23*, 643–650.
Jasnoski, M. B. (1992). The physical environment affects quality of life based upon environmental sensitivity. *Journal of Applied Developmental Psychology, 13*, 139–142.
Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: A study of their relationship at work and at home. *Journal of Applied Psychology, 89*, 661–673.
Judge, T. A., Ilies, R., & Scott, B. (2006). Work-family conflict and emotions: Effects at work and at home. *Personnel Psychology, 59*, 779–814.
Jung, C. G. (1963). *Memories, dreams, reflections*. New York, NY: Vintage Books.
Kelo v. City of New London, 545 U.S. 469 (2005).
Klumb, P., Hoppmann, C., & Staats, M. (2006). Division of labor in German dual-earner families: Testing equity theoretical hypotheses. *Journal of Marriage and Family, 68*, 870–882.
Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion, 23*, 4–41.
Küller, R., Ballal, S., Laike, T., Mikellides, B., & Tonello, G. (2006). The impact of light and colour on psychological mood: A cross-cultural study of indoor work environments. *Ergonomics, 49*, 1496–1507.
Lee, Y.-S., & Waite, L. J. (2005). Husbands' and wives' time spent on housework: A comparison of measures. *Journal of Marriage and Family, 67*, 328–336.
Leventhal, T., & Newman, S. (2010). Housing and child development. *Children and Youth Services Review, 32*, 1165–1174.
Mallett, S. (2004). Understanding home: A critical review of the literature. *Sociological Review, 52*, 62–89.
Mann, S. L., Wadsworth, M. E., & Colley, J. R. (1992). Accumulation of factors influencing respiratory illness in members of a national birth cohort and their offspring. *Journal of Epidemiology & Community Health, 46*, 286–292.
McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology, 5*, 100–122.
McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*, 415–444.
Miller, G. (2012). The smartphone psychology manifesto. *Perspectives on Psychological Science, 7*, 221–237.
Molony, S. L., McDonald, D. D., & Palmisano-Mills, C. (2007). Psychometric testing of an instrument to measure the experience of home. *Research in Nursing & Health, 30*, 518–530.
Motyl, M., Iyer, R., Oishi, S., Trawalter, S., & Nosek, B. A. (2014). How moral migration geographically segregates and polarizes groups. *Journal of Experimental Social Psychology, 51*, 1–14.
Nadler, J., & Diamond, S. S. (2008). Eminent domain and the psychology of property rights: Proposed use, subjective attachment, and taker identity. *Journal of Empirical Legal Studies, 5*, 713–749.
Oishi, S. (2010). The psychology of residential mobility: Implications for the self, social relationships, and well-being. *Perspectives on Psychological Science, 5*, 5–21.
Oishi, S., & Graham, J. (2010). Social ecology: The lost and found in psychological sciences. *Perspectives on Psychological Science, 5*, 365–377.
Oishi, S., & Schimmack, U. (2010). Residential mobility, well-being, and mortality. *Journal of Personality and Social Psychology, 98*, 980–994.
Radin, M. J. (1982). Property and personhood. *Stanford Law Review, 34*, 957–1016.
Rentfrow, P. J., Gosling, S. D., & Potter, J. (2008). The geography of personality: A theory of emergence, persistence, and exploration of regional variation in basic traits. *Perspectives on Psychological Science, 3*, 339–369.
Repetti, R. L., Wang, S., & Saxbe, D. (2009). Bringing it all back home: How outside stressors shape families' everyday lives. *Current Directions in Psychological Science, 18*, 106–111.
Saxbe, D. E., & Repetti, R. L. (2008). Taking the temperature of family life: Preliminary results from an observational study. In A. Newhall-Marcus, D. Halpern, & S. Tan (Eds.), *Changing realities of work and family* (pp. 175–193). New York, NY: Wiley-Blackwell.
Saxbe, D. E., & Repetti, R. L. (2010). No place like home: Home tours correlate with daily patterns of mood and cortisol. *Personality and Social Psychology Bulletin, 36*, 71–81.
Saxbe, D. E., Repetti, R. L., & Graesch, A. P. (2011). Time spent in housework and leisure: Links with parent's physiological recovery from work. *Journal of Family Psychology, 25*, 271–281.
Slatcher, R. B., & Robles, T. F. (2012). Preschoolers' conflict at home and diurnal cortisol patterns. *Health Psychology, 31*, 834–838.
Smith, S. G. (1994a). The essential qualities of a home. *Journal of Environmental Psychology, 14*, 21–30.
Smith, S. G. (1994b). The psychological construction of home life. *Journal of Environmental Psychology, 14*, 125–136.
Sobh, R., & Belk, R. W. (2011). Privacy and gendered spaces in Arab Gulf homes. *Home Cultures, 8*, 317–340.
Starrels, M. E. (1994). Husbands' involvement in female gender-typed household chores. *Sex Roles, 31*, 473–491.
Stern, S. M. (2009). Residential protectionism and the legal mythology of home. *Michigan Law Review, 107*, 1093–1144.
Sternberg, E. M. (2009). *Healing spaces: The science of place and well-being*. Boston, MA: Belknap Press.
Stevenson, O., & Prout, A. (2013). Space for play? Families' strategies for organizing domestic space in homes with young children. *Home Cultures, 10*, 135–157.
van den Berg, A. E., & Custers, M. G. (2011). Gardening promotes neuroendocrine and affective restoration from

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms

stress. *Journal of Health Psychology*, *16*, 3–11. doi:10.1177/1359105310365577

van den Berg, A. E., Koole, S. L., & van der Wulp, N. Y. (2003). Environment preference and restoration: (How) are they related? *Journal of Environmental Psychology*, *23*, 135–146. doi:10.1016/S0272-4944(02)00111-1

van Hoof, J., Kort, H. S. M., Duijnstee, M. S. H., Rutten, P. G. S., & Hensen, J. L. M. (2010). The indoor environment and the integrated design of homes for older people with dementia. *Building and Environment*, *45*, 1244–1261.

Wang, S., & Repetti, R. L. (2013). After the workday ends: How jobs impact family relationships. In A. L. Vangelisti (Ed.), *Handbook of family communication* (2nd ed., pp. 409–423). New York, NY: Routledge.

Wang, S., Repetti, R. L., & Campos, B. (2011). Job stress and family social behavior: The moderating role of neuroticism. *Journal of Occupational Health Psychology*, *16*, 441–456.

Worsley, L. (2011). *If walls could talk: An intimate history of the home*. New York, NY: Walker and Company.

This content downloaded from 49.204.115.198 on Sun, 26 Jun 2022 10:32:14 UTC
All use subject to https://about.jstor.org/terms