The role of the environment has been brought to the forefront of current UK urban policy as a way of enhancing people’s health and quality of life through the provision of accessible, safe, socially and aesthetically enjoyable places. It also underpins UK sustainable development policies (DETR, 2000) which aim to advance change in everyday life and enhance health, particularly in deprived neighborhoods, by improving access to, activities in and frequency of use of outdoor spaces. Based on this agenda, urban settings and their environmental features have been analyzed in terms of their accessibility and effects on quality of life by Sugiyama, Ward Thompson & Alves (2009) with, however, a loose link between personal, social and environmental variables and how that interaction may affect change in behavior. This chapter proposes that the concept of situations - put forward by social and ecological psychologists (Lewin, 1936; Barker, 1968) and symbolic interactionists (Goffman, 1959) - is fundamental to examining everyday places and behaviors that act as a keystone for quality of life.

The proposed conceptual framework relates the concept of situations to people’s interaction with outdoor spaces. It suggests that it is through an involvement with its affordances (Gibson, 1979) that the characteristics of the environment which are psychologically meaningful to ordinary people can be examined. American psychologist James J. Gibson proposed that the affordances of the environment are “what it offers the animal, what it provides or furnishes, either for good or ill” (Gibson, 1979; p. 127) and affordances can be operationalized with Rapoport’s (1990) environmental
classification distinguishing between fixed, semi-fixed and non-fixed features. By centering the observation and analysis on situations, the framework aims to understand how ordinary people use everyday outdoor spaces and to provide a basis for more effective theorizing, research and application in environment-behavior studies.

The first section of this chapter provides the theoretical background to understand the proposed conceptual model; defining the concepts of situation and everyday life. The second section presents the framework, its conceptual components and how it relates to the notion of quality of life. In the third section, the framework is tested with two empirical databases from an ongoing research project, Inclusive Design for Getting Outdoors (www.idgo.ac.uk); examining the mechanism by which outdoor spaces affect older people’s quality of life. The conclusion provides suggestions for future research, as well as for the design of urban outdoor spaces.

### Theoretical backgrounds: Situations in everyday life

The study of situations is the examination of affordances or what is offered by different combinations of features and by which mechanism people pick up and use information to realize their goals. Situations encountered in everyday life are composed of different characteristics and include both physical (e.g. shape, size and color of objects) and non-physical or social aspects (e.g. presence or absence of others along with their activities).

‘Situations’ is a useful concept in explaining how people’s perceptions of the world are constructed in face of different actual environments in the course of their development. At the same time, it helps describe how people function in relation to specific affordances (actual properties of situations).

The roots of the concept of ‘situations’ go back to French existentialist philosopher and writer Jean-Paul Sartre (1905-1980). He believed that perception does not exist in a void but entails a person who perceives and an object to be perceived. In a *Theatre of Situations* (1947 translated by Brandt, 1998), Sartre defines a situation in the context of a theatrical play by means of providing a critique of the spectator and of theatre. He emphasizes the action and choice of individuals as they move away from passivity to critical engagement with the spectacle.
For Sartre, one is free to choose what to be in a given situation: “The situation is an appeal: it surrounds us, offering us solutions which it’s up to us to choose” (Sartre, 1947 translated by Brandt, 1998, p. 43). He refers to the active role of the perceiver by saying that “human reality does not exist first in order to act later; (...), to be is to act, and to cease to act is to cease to exist” (Sartre, cited by Cumming, 1965, p. 264). This chapter proposes to transfer Sartre’s notion of breaking spectators’ passivity during a play to challenging people’s passivity in everyday life.

Building on Sartre, the Situationist International (SI) group proposed in the late nineteen fifties a method for defining and analyzing situations. One of its founders and theorists, Guy Debord, a French Marxist theorist (1931-1994), argued that the construction of situations is a necessary step to create environments that could accommodate people’s desires. He experimented with art, literature and architecture to construct situations, or set up environments, that allowed for emancipatory aesthetic experiences. To construct situations, Debord (1958) recommends to “(...) develop a systematic intervention based on complex factors of two components in perpetual interaction: the material environment of life and the behaviors which that environment gives rise to and which radically transform it.” (Debord, 1958 translated by Knabb, 2006, p.38).

A common point between Sartre and the Situationists is the acknowledgement that situations contribute to shaping person-environment relations. In the realm of environment-behavior studies, theoretical formulations of the role of the situational context have been made by several US researchers, such as Lewin (1936), Barker (1968), Rapoport (1980) and Stokols (1981), among others. Kurt Lewin, a social psychologist (1890-1947), was one of the first in his discipline to study social situations; believing that the totality of an individual’s situation takes account of people and their psychological make-up, along with behavior (be it acting, wishing or thinking). A person behaves differently depending on the tensions between perceptions of the self and of the environment, thus the entire psychological field or life space needs to be taken into account to explain behavior (Lewin, 1946).

Lewin proposes that one can describe the whole situation by differentiating the person (P) and her environment (E) and conceptualizing them as being in constant interdependency $B = f (PE)$ (Lewin, 1936). In this sense, the valence of an object or activity will depend upon the characteristics of the person and upon the perceived nature of the object or activity (Lewin, 1938). As Lewin states “(...) the most important
characteristics of a situation are what is possible and what is not possible for the person in this situation. Each change of the psychological situation of a person means just this—certain events are now “possible” (or “impossible”) which were previously impossible (or “possible”)” (Lewin, 1936, p.14). The concept of valence\(^1\) was further developed by James Gibson who coined the term “affordances” to describe the possibilities of action and focused on the invariant properties of objects to study perception.

Lewin’s psychological field theory was used to structure conceptual models explaining the role of supportive environments in determining quality of life, such as the competence-press model of aging brought forward by psychologist M.P. Lawton (Lawton and Nahemow, 1973). His work also influenced the concept of behavior settings put forward by environmental psychologist Roger Barker (1968) to describe situations - a well-defined set of rules placed under a defined tempo - as well as the work of Amos Rapoport (1980), for whom human interaction with others, artifacts and environments underpins, or constitutes, ordinary activity. Rapoport defines everyday life as part of a system of activities and settings which can be dismantled in fixed, semi-fixed and non-fixed components or features. The examination of people, as they relate to these different “environmental cues”, offers researchers and designers a good clue as to what influences choice and effective behavior.

In the work of environmental psychologist Dan Stokols, situations constitute the key concept linking groups and places (Stokols, 1981). For Stokols, the conditions that generate functional or dysfunctional changes in group organization or personal wellbeing need to be examined by taking into account socio-cultural meanings among members of a setting.

This chapter follows up with this line of theorizing and proposes to reinvigorate the notion of situations in the context of the study of older people’s interactions with outdoor spaces: How are situations defined? How can they be compared? Which ones are most influential on quality of life? I suggest that one of the missing links in research addressing the benefits of interaction with outdoor spaces is the description, classification and investigation of behaviors as they happen in everyday situations.

\(^1\) Original German term for valences is Aufforderungscharakter.
The importance of situations in individuals’ development and quality of life is made apparent in their use of everyday places; those settings where daily activities happen. Michael Jacobsen, a Danish sociologist argues that looking at everyday life means taking notice of two elements—the ‘everyday’ and ‘life’ by asking obnoxious questions, such as “where it is lived, how it is lived, why it is lived, with whom it is lived, when it is lived, and so on...” (Jacobsen, 2009; p.11). It consists of addressing what is repetitive and routinized and asking the question “quality of what life?”. At the same time, it involves evaluating what these events add to in terms of positive or negative affordances by asking “what quality of life?” as proposed by Dutch sociologist Ruut Veenhoven (1999). Quality is thus evaluated both in terms of a person’s life as it unfolds in everyday pursuits and in terms of what is encountered in the environment. The quality of one’s life may be assessed by examining the interplay of everyday events and how they support past, present and future projects through associated affordances.

The concept of everyday life, as developed in sociology by Georg Simmel (1858-1918; Simmel, 1908) and later on by French sociologists and writers including Henri Lefebvre (1901-1991; Lefebvre, 1987), Michel de Certeau (1925-1986), and Georges Perec (1936-1982), may be combined with that of situations. How, when and why one decides to engage in particular activities over others, and what purpose this serves in their everyday life, then becomes a necessary question (Scott, 2009). The theoretical integration of “situations” and “everyday life” can be further articulated with the concept of “personal projects” put forward by personality psychologist, Brian Little. Personal projects “are extended sets of personally salient action in context” (Little, 2010, p.166) and, as such, they involve both attributes of persons and environments.

Investigating personal projects involves asking people about their activities, how they carry them out and what and who may facilitate or impede this action. Everyday settings and activities that seem at first sight to bear no direct relation to one another provide, in fact, an ecological context for goal-oriented action (Little et al, 2007; Little, 1999; Wallenius, 1999). The agglomeration of these small doings, with their different tempos, is manifested physically and has a spatial and temporal dimension too. This defines what is called here ‘situations’.
A conceptual framework for studying everyday activities in outdoor spaces

This section presents a conceptual framework with which to study everyday activities in outdoor spaces and their contribution to people’s quality of life. Quality of life is expressed in terms of psychological and physical health where cultural and organizational factors also affect the resulting fit, or lack of fit, of the person-environment relationship (Lawton, 1991). When environmental psychologists Steve Kaplan and Rachel Kaplan (2009) describe restorative environments, they stress those factors that bring out the best in people and draw attention to the fact that people behave differently in distinct situations. A confusing, unfamiliar and inaccessible environment may induce stress or make people feel uncomfortable, whereas an aesthetically pleasing and safe environment will be more conducive to relaxation and likely to evoke a positive effect.

Designing environments that bring out the best in people requires knowledge of the situations in which they function in everyday life. Richard Price, an American psychologist specializing in organizational studies and his colleagues, calls this “effective prevention”; “identifying situations that are potential generators of adjustment and effective behaviors in daily places, such as work places, home, neighborhood, and street” (Price et al, 1988). Bronfenbrenner (1979), a US developmental psychologist (1917-2005), emphasizes the possibility of changing people’s behavior by changing crucial aspects of the environment. These authors all stress the importance of an exhaustive knowledge about situations as a basis for effective interventions and for the making of physically, socially and culturally adapted environments to serve people’s needs and qualifications.

What are key features of everyday settings and how do they contribute to defining different situations? As argued in the previous section, a way to describe and classify everyday situations is to use the concept of ‘affordances’; the possibilities of interaction provided by an environment which either facilitate or impede the pursuit of personal projects and consequent quality of life. A “situation” is thus composed of activities that depend on the actualization of affordances through fixed, non-fixed and semi-fixed elements. The investigation of banal daily activities, such as crossing streets, getting from one’s house to the nearest park, and so on, may reveal possibilities and constraints which are either promoting or restricting people’s well-being.
US environmental psychologists Kaplan and Kaplan (1989) found that people’s access and exposure to natural environments may provide restoration from stressful daily conditions (Kaplan, 1995). Open and green spaces may also foster regulation of emotions and restoration in everyday favorite places (Grahn & Stigsdotter, 2010; Korpela et al., 2008; Korpela & Ylén, 2009). When common outdoor spaces are shared, they may contribute to the feeling of belonging to a neighborhood and to social interaction with neighbors (Kuo et al., 1998). However, while Finnish environmental psychologists Kyttä (2002) and Horelli (2004; 2006) have used the concept of affordances to examine outdoor child-friendly environments, the concept has - to date - not been applied to the study of those used by older people.

Figure 1: Conceptual model to examine everyday life situations in outdoor spaces

Based on the premise that patterns of activities are dependent on one’s goals, socio-cultural context and the available information embodied in the context of the activity, the proposed framework is composed of the following analytical steps (Figure 1). First, “people” in this framework are characterized by personal variables, taking into account: socio-cultural factors (e.g. cultural backgrounds, education, socio-economic status); socio-demographic characteristics (e.g. age, gender); functional capability (e.g. level of mobility), and motives and needs (e.g. need for autonomy and control,
personal projects). Collectively, these characteristics contribute to how people interpret and respond to a “situation,” which, in the proposed framework, corresponds to an everyday life activity that requires given actions at a given time in a given place. The activities are purpose-oriented and influenced by personal characteristics and goals, while the situation takes place in an outdoor physical setting; the latter characterized by its ‘affordances’ (Gibson, 1979) and operationalized with Rapoport’s (1980) fixed (e.g. pavement of streets), non-fixed (people and their activities in the street) and semi-fixed (e.g., street furniture) features in mind. These features reflect the understanding that the affordances of any situation involve both psychological and non-psychological aspects and that their interplay will facilitate or restrict action; thereby impacting on the psychological wellbeing and physical health aspects of quality of life.

Which features of a situation in an outdoor space are more likely to activate adaptive processes in terms of social, cognitive and affective responses? To be able to answer this question, it is necessary to examine everyday activities; more specifically the type of activity, the way it is pursued, how it links with the activities of both the person involved and other people and its symbolic aspects (Rapoport, 1990). By describing and examining everydayness, one is able to determine the properties of a present situation to make a diagnosis and to ‘test the present’ (Lewin, 1943) in terms of its quality. Quality of life in this framework has a direct connection with people’s present life situations and is operationalized as both mental and physical health, thereby reflecting the multidimensional view proposed by the World Health Organization (WHO) which states that quality of life involves physical, psychological, socio-cultural and environmental dimensions.

Situations that will bring out the best in people and contribute to their quality of life are those that offer affordances for adaptive behavior. Seizing opportunities in everyday places to achieve this state of equilibrium can only be done in a social context, hence the need to consider, not simply situations, but social situations. Examining people’s associations with outdoor spaces, such as a streetscape, and asking everyday users about their personal projects in these places constitute an effective way of identifying what features (fixed, semi-fixed and non-fixed) are relevant and how they influence purpose in these environments. Investigating how people behave in relation to each other in public areas is important because the realization of everyday activities is in itself a social enterprise.
Testing the conceptual framework: Older people in outdoor settings

In this section, the role of everyday situations in the context of outdoor spaces is illustrated using the empirical work conducted by the Inclusive Design for Getting Outdoors (I’DGO) research consortium. The aim of I’DGO, which was established in 2003, is to examine the mechanisms through which patterns of outdoor activities affect the quality of life of older people in the UK. The project’s multi-methods approach makes it possible to examine situations encountered in outdoor spaces and to assess which and what kinds of features (fixed, semi-fixed and non-fixed) contribute most to people’s quality of life. Findings from two databases will be used: the first, a qualitative survey of environmental support with regards to outdoor pursuits as personal projects; and the second, an evaluation of residential streets as used before and after Home Zone-type interventions, along with their effect on well-being.

Outdoor pursuits as personal projects

During the first phase of I’DGO, which ran from 2003 to 2006, the Personal Projects method was useful in describing and analyzing situations from an individual’s point of view, as well as to consider a person’s motives, goals and preferences (Wallenius, 1999). The self-generated activities a person was doing (Little, 1983) were examined by asking the following questions: what, where, with whom, for what purpose and with what appreciation? This led to four types of information concerning: the activity itself (e.g. walking, shopping, gardening); the place where it was conducted (e.g. garden, street), the specific way of doing it (e.g. walking in the local park, shopping in a market, gardening in one’s private garden); and the role of the environment in either constraining or facilitating it (e.g. well maintained paths facilitate walking).

In the Personal Projects questionnaire, older participants were asked to list five of their outdoor personal projects, name where they were conducted, evaluate how difficult the environment made it for them to carry out these projects and self-assess how important the projects were to them. The data was first analyzed by running a content analysis and categorizing each personal project according to the five following categories: projects involving contact with nature (e.g. gardening); projects involving contact with people (e.g. attending meetings and visiting people); other types of projects or those involving hobbies or physical exercise (e.g. going to the museum and walking to get fit); utilitarian projects (e.g. going shopping) and projects which involved “just going for a walk”.

Linear regression analyses were also performed on the personal projects data with life satisfaction as the dependent variable. In block 1 were the potentially confounding variables - age, gender, activities of daily living - and in block 2 were the personal projects. We found a contribution of nature-related personal projects in this model. Partial correlations analyses were also performed between life satisfaction and project type for ratings on environmental support and importance after maintaining functional capability, gender and age as constant variables. The only projects for which environmental support appeared significant were recreational and utilitarian types of projects and the only project type for which environmental importance was significant had to do with nature. The results show that the role of the environment is weighed when utilitarian activities such as shopping, going to the post office or going to the dentist are in play as well as when activities have to do with physical exercise, such as swimming, going to the gym and walking to keep fit. The role of the environment is also prominent in activities associated with trips for leisure pursuits, such as going to the museum or to the library. However, when looking at the ‘importance’ of the environment, nature-related pursuits were the only personal project type found significant in its association with life satisfaction.

The Personal Projects method allowed us to understand the outdoor activities people usually do and the extent to which different project types (e.g. recreational, utilitarian or nature-related) were affected by the environment. Familiarity and regular use of outdoor spaces, as well as the purpose or motivations for action, were found to be most influenced by functional and utilitarian patterns of work and daily errands, as well as by the leisure activities older people undertook.

Observing situations in residential streets

The second database used to test the proposed model relates to a Home Zone Study carried out during Phase 2 of the Inclusive Design for Getting Outdoors research project (I’DGO TOO). The aim of this study was to compare people’s behavior and patterns of activities before and after an environmental intervention on selected residential streets in the UK. The study, which began in 2007, examined whether and how modifications to the residential street environment based on a pedestrian-friendly, ‘shared circulation space’ approach to urban planning - as used in Home Zone (Woonerf) projects, for example - contributed to older people’s health, quality of life and frequency of going outdoors. Data was collected through behavioral mapping, interviews, activity diaries and accelerometers.
Behavioral mapping allowed for systematic descriptions of daily activity patterns, as well as of the environmental features that offer social affordances and promote the use of outdoor spaces in residential streets. Interviews with older people in these residential streets allowed us to measure preferences, use of outdoor spaces, quality of life and health. The objective of conducting systematic observations was to map people’s interaction with street features and evaluate how they contributed to social interaction and activity patterns. A street audit (Millington et al., 2009) tool for recording environmental details (e.g. type of buildings, type of views, cleanliness, path material and location) was used in combination with behavioral mapping, field notes and photographs to record how fixed (e.g. trees, vegetation), semi-fixed (e.g. street furniture) and non-fixed (e.g., other people and their activities) environmental features were associated with different behaviors. Behavioral observations on the residential streets were conducted by pairs of researchers who recorded people’s apparent age, gender, mobility status, type of social interaction, location, physical activity and type of companionship; data were translated into a GIS.

The findings from this study were analyzed according to Rapoport (1990)’s activity system, with pedestrian patterns of activities assessed by addressing the relationship between people and people (non-fixed features) and people and things (semi- and non-fixed features). The findings show that streets are mainly passing-through places with walking being the main form of physical activity. Locations with ‘a lot’ of natural elements (as opposed to ‘some’ or ‘none’) tended to have a higher proportion of people interacting socially, with no relationship to the actual number of people observed. This supports the argument proposed by other researchers that “greener outdoor spaces receive greater use” (Kuo & Sullivan, 2001 p. 361) and that greenness is associated with pedestrian movement (Foltête & Piombini, 2007) and local social interaction (Sugiyama, Leslie, Giles-Corti & Owen, 2008). From these findings, it appears that natural elements may offer affordances for informal social interaction.

As for the interviews with older residents, they were conducted in two time periods: in 2008 before the environmental interventions took place; and in 2010 after the environmental changes were made. Each “Home Zone” street was matched with a “Non-Home Zone” street (where some environmental change occurred, but not of Home Zone type) to examine the impact of the Home Zone projects on older people’s quality of life. The main dependent variables were quality of life (measured by EUROQoL; the EuroQol Group, 1990), health (measured by CASP-19, Hyde et al., 2003) and frequency of going outdoors (set of eight items asking about activities in winter
and summer, such as walking to get to places or for recreation).

When comparing data from the 2008 and 2010 periods, quality of life was found to have decreased in both “Home Zone streets” and “non-Home Zone” streets after the intervention\(^2\). However, time spent outdoors significantly increased for the Home Zone streets while frequency of going outdoors was significantly less for the Home Zone streets compared to the control streets. The small-scale of the Home Zone interventions, which were mostly centered on changing the angle of the parking spaces, adding planters or stone pillars, may not have been sufficient to produce major effects on people’s patterns of activities, as they may not have been tied up with what is relevant or “desired” for people to pursue their daily activities in these streets.

Combined with interviews, the behavioral observations made it possible to examine the interpersonal dimensions of everyday situations. We found that interactions with other persons in outdoor spaces are more likely to be associated with provision of certain environmental features, such as open and green spaces. Our structured observations, organized into a descriptive database, helped identify what features - either fixed or non-fixed - were related to daily patterns of outdoor activities and were also useful for identifying which modified features in each street (if any) had produced an impact on behavior. These findings may help inform the design of streets spaces in the UK by showing which features make most difference to people’s everyday lives and which ones are associated with higher frequency of social interaction.

### Conclusion

The previous examples point to the relevance of analyzing environmental features, personal projects and social interaction in the context of outdoor spaces and their implications for quality of life. Even though quality of life is a complex concept which requires different forms of measurement (Lawton, 1991; Baltes, 1987), analyzing objective properties, personal goals and patterns of activities - and their relation to others - is a starting point from which to build an integrative model for organizing and understanding everyday situations in outdoor spaces.

\(^2\) Please, note that we are still collecting data for the Home Zone part of the I’DGO study and that the findings presented here are preliminary and the data interpretation not conclusive.
One consistent finding in our analyses is the importance of interaction with others and the association of natural features (i.e. open and green spaces) with a higher frequency of social contact. Nature-related personal projects also attest to the importance of the environment in contributing to life satisfaction. A small sample size, and the fact that we are still collecting data for the Home Zone part of the I’DGO project, prevent us, at this point, from drawing further conclusions.

One hypothesis, based on preliminary analyses, is that environmental changes to the street environment (e.g. addition of planters) may not have afforded what was necessary to enhance action, in this case, higher patterns of outdoor activities and frequency of going outdoors. The question for further research may be what a planter (or any other feature, such as a bus stop, for example) can add/facilitate or restrain/impede in terms of daily experiences. The suggestion resulting from the proposed conceptual model is that design to affect everyday life needs to be viewed through the ‘affordances language’ and to take into account the person’s whole situation.

The advantage of using the notions of situations and affordances as leading concepts to examine outdoor behavior and activities is that they are sensitive to personal and environmental factors, thus reflecting the shifting context of human action in everyday places. They address goals, not as static units, but as entities which change throughout one’s life as the result of a range of personal factors in combination with the demands or opportunities (i.e. affordances) offered by the environment. These concepts can also be analyzed in terms of significant variables, such as age-related changes and the role of interpersonal contact, as well as in terms of what senses are involved in perceiving outdoor spaces. The role of design - be it of street environments, objects or related technologies - also deserves further specification in this conceptual model.

The point of view stressed here is that, in choosing concepts and applying research methods to environment and behavior problems, we need to use a pragmatic criterion (Weisman, 1998) and look at how the different variables in a person’s environment are related to each other and to the person herself. The conceptual model presented here thus deserves revision as empirical work and research on everyday outdoor situations and their affordances progresses. The concept of situation also makes it possible to challenge some of the theoretical and political presuppositions that inform the practices and strategies of contemporary urban design. It calls for the development of original methodologies to engage and empower people and view them as designers of their everyday lives.
According to the proposed conceptual model, good design refers to the expansion of one’s repertoire of actions and to the possibilities for accommodating change and choice. The concept of situation, as combined with that of affordances, focuses our attention on “being-in-situation” and the lived experience (de Beauvoir, 1963) as a way to better understand the role of outdoor spaces in everyday life. One of the points currently stressed in environment-behavior literature is the need to encourage people to use outdoor spaces to achieve both psychological and health benefits. The proposed conceptual model may be useful to guide further studies on this subject.
References


