

# DESIGN FOR CONTENTED LIFE: A PROPOSED FRAMEWORK

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#### Abstract

This paper addresses design contribution to the happiness of individuals leading to a contented life. A framework for design for contented life is introduced. It includes four main components: engaging, pleasure, personal fulfilment and belongingness. Each represents an ingredient of design for happiness. We suggest that design that includes these ingredients is design that promotes contented life. The intention to support human life is the explicit, central design objective of design for contented life. The need for contemporary design for contented life approach arises. Some research challenges are presented to indicate directions for more research. In light of the framework, these research directions should serve as inspiration for designers and design researchers in their work towards design for contented life.

Keywords: Design for contented life, Design methods, Design contented life framework

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# **1** INTRODUCTION

The materialist point of view suggests a direct and significant relationship between happiness and material wealth. However, post-materialist perspectives give higher importance and priority to the fulfilment of personal objectives. The change in focus from material to more personal values aligns with the findings of psychologists who study human prosperity (Seligman, 2011). Many studies have indicated that it is not available resources that make people happy but rather how such resources are used (Eid and Larsen, 2008). Thus, emotions should be taken into consideration when designing for contented life as emotions influence people's evaluations of their lives.

An interior design, for example, is an internal environment where we conduct many activities that can promote joy and personal achievement. If its design addresses meaningful objectives, then it will contribute to an individual's happiness: It is not the material value but what we do with design that can make us happy. Design can enable and inspire engagement in meaningful and fulfilling activities.

Recently, research in the domains of psychology, philosophy, economics, and politics has shown an increasing interest in studying happiness, which is a cornerstone of living a contented life. Such focus on human happiness has now reached design research. The relevant question is not whether design contributes to happiness but how it does so. How can design effectively contribute to increasing happiness and support people in their efforts to lead contented lives? Such a question indicates the need for a fresh perspective on the way design contributes to people's quality of life, and how it addresses the destructive side effects of unsustainable consumption. In design research, discussions have begun about emerging new approaches that, while various, all aim to study quality of life and to address human needs in a constructive and sustainable way. Because all domains of design contribute to human lives in one way or another, the term "design for contented life" is used throughout this paper as a term that refers to all forms of design in which attention is on the aspects of design that lead to individuals' achieving contented lives. The interior environment is discussed for two reasons: The first is the significant amount of time we spend in interior environments, and the second is that interior environments contain many forms of design, such as product design, fabric design, and graphic design. Different initiatives focus on various components of contented life. While such focus stimulates productive discussion, it also leads to more challenges in comparing design efforts because in many cases, researchers do not explicitly declare which ingredient they may have focused on. This can make it difficult to identify where ideas contradict, overlap, or complement each other. Therefore, it is suggested that the design fields need a clear and applicable framework that defines specific elements relevant to design for contented life. This paper proposes a design framework for contented life that addresses such a life's four principal components.

The paper begins by discussing happiness and contentedness, then design and emotion, followed by the interior environment of contented life. It then proceeds to introduce the framework and its four elements, which combined result in a design for contented lives and human prosperity. Finally, a theoretical and methodological discussion will address aspects of this research. The overall purpose of this paper and framework is to be of help to designers who want to design explicitly for happiness and contentedness.

### 2 HAPPINESS AND CONTENTED LIFE

The concept of happiness is as old as humanity. The ancient Greeks considered happiness to be an essential component of a good life. A life well lived is one that leads to contentedness. Recently, the literature on happiness within the field of positive psychology has increased as scholars have noted that people want to become happier (Mehl and Conner, 2013). Researchers have noted that an individual's level of happiness is predicted by the tendency to be exposed to good emotions more frequently than to bad ones (Schimmack and Diener, 1997). However, intensity of feeling does not correlate with happiness. This definition of happiness suggests that it is a trait rather than an emotional state (Lyubomirsky, 2008). On the other hand, because happiness is indicated by the frequency rather than the intensity of good emotions, designing for happiness goes beyond mere entertainment that might put a short-lived smile on a person's face.

Happiness is the degree to which one judges the overall quality of one's own life favorably. Several scholars have proposed that this life satisfaction is best considered as a sophisticated phenomenon. Contented life might be seen as the experience of joy in combination with a sense that one's life is good and worthwhile. Contented life might also be regarded as one's multi-level evaluation of one's

own life, including judgments of life satisfaction as well as evaluations of emotions (Eid and Diener, 2004).

Nowadays, people are encouraged to place a higher value on themselves (Uchida et al., 2004) because self-worth is considered a prerequisite for proper adjustment. Generally, happiness correlates strongly with self-esteem, which supports the idea that a society that promotes self-esteem also supports happiness. Today's individualistic societies offer people the social and political freedom to pursue their dreams in a way that is unprecedented throughout the course of human history (Kesebir and Diener, 2008). This relatively new freedom promotes happiness. On the other hand, psychologists have argued that humans also need a particular level of wealth to support their happiness (Headey and Wooden, 2004). However, there are also suggestions that today's society can also make people less happy. It seems as if contemporary individuals have fewer social relationships than previous generations (Twenge and Campbell, 2009). Because belongingness is a fundamental human need, the problem is that the value of collectivism has been replaced by the value of selfishness (Lyubomirsky, 2008). In comparison to commonly shared belief systems, a self-centered approach does a poor job in creating meaningfulness. One of the most fundamental human needs is to be able to use their skills to contribute to the community. Consequently, in a society where the unemployment rate is high, more people are at risk of not achieving their basic needs in terms of using their skills, having a purpose in life, and being relevant to their communities (Ryan and Deci, 2000).

It seems that today's society provides many elements of a happy life but also presents several challenges in terms of obtaining high-quality social relationships and a sense of purpose, which in turn makes achieving contented life more challenging.

## **3 DESIGN AND EMOTION**

Emotion is not only a set of reaction patterns but also a process that includes cognitive activities and subjective feeling states (Scherer, 1984). Many studies on design and emotion have focused on the relationships between users and design. Norman (2004) introduced the concept of "three levels of design" in his book, Emotional Design: Why We Love (or Hate) Everyday Things. Norman divided designs into three levels according to the responses of the user to the design outcome: the visceral level, behavioral level, and reflective level. The visceral level refers to users' first impression of the design outcome and their emotional response to it. The behavioral level refers to users' consumptive actions based on the emotions raised by the design outcomes. The reflective level refers to users' reflection on the consumption experience. Norman's work describes how designs provide emotional experiences to users. Hakatie and Ryynänen (2006) further verified that the three levels could be linked to the attributes of different designs. Such links revealed that users derive emotional messages and experiences from the visceral and behavioral levels.

The recent focus on emotion and experiences carries a humanistic tone, which implies that user emotions should be integrated into the design domain to satisfy users. Design should be done with an intention to improve users' quality of life, which would eventually lead to their contented lives (McDonagh and Lebbon, 2000). Emotions have a strong influence on our general experience of life because emotions are related to people's evaluations of their lives. This argument is also parallel to the argument on the significance of meaningful experiential relationships between users and design outcomes (Kurtgözü, 2003).

However, Kurtgözü underlines the danger of focusing on user passions by adding superficial shiny elements to designs. Such shiny elements may result in pleasant moments in the early stages of the user/design outcome relationship. However, the question that remains to be addressed in the design and emotion domain is to what extent these pleasant moments transform into meaningful and evocative relationships that promote contented life in the long term.

### 4 INTERIOR ENVIRONMENTS AND CONTENTED LIFE

Interior environments can support emotional connection. That is, all environments affect their occupants, but some seem to support a sense of happiness and contentedness. Regardless of its style, people sense when they have entered a healthy environment. There are interior environments where every space is unusual, exciting, or even inspirational. These spaces are experienced as a sense of harmony, contentedness, and enthusiasm. The quality of the light and freshness of the air are invisible but extremely influential to people's physical, emotional, and spiritual well-being (Craven, 2003).

As society's needs have changed and architecture has evolved, the emotional potential of interiors has gotten overshadowed by the need for convenience and modern amenities. Over the past several decades, many of changes in building design have led away from ways in which to embrace natural light and air. Instead, building design is often centered around modern conveniences and systems that encourage people to use artificial means of lighting, heating, and cooling. These modern systems appear to make our environment more comfortable; however, people have begun to be troubled by ailments related to these systems (Wernick, 2008). Our modern conveniences concern many scientists, who suspect that chronic exposure to electromagnetic waves from things such as personal computers, mobile phones, and television is linked with health problems and quality of life (Craven, 2003).

Research has shown that sensory responses allow people to experience their surroundings and let others know if they are comfortable, which in turn affects their happiness. Some researchers contend that an established connection to nature is integral to feelings of happiness and joy. However, people often become detached from their subjective responses to the physical sensations of the environment when they are surrounded by mechanical ventilation and artificial lighting. Buildings can be designed with natural light and ventilation that emulates comfortable conditions that vary based on the local climate (Wernick, 2008). For example, in modern buildings, there is a tendency to specify bright lighting without taking into consideration the fact that natural light also includes shading from overcast skies. This shading provides vibrant feedback, thus allowing people to feel as if they are alive and actually experiencing their surroundings. By feeling a broad range of natural conditions, people could return to happiness and joy simply by opening a window to make themselves more comfortable (Wernick, 2008).

Integrating the natural elements of lighting, heating, and cooling into design has been fundamental since vernacular building. However, most designers have stopped studying nature and how to coordinate it with modern design (Wernick, 2008). Frank Lloyd Wright once said, "Study nature, love nature, stay close to nature. It will never fail you" (Craven, 2003). It is logical to assume that Frank Lloyd Wright also embraced nature as a means to human happiness. Nature switches on people's spontaneity, which is a much easier state to be in. The challenge is to create an interesting space that makes people feel relaxed and safe at the same time (Lindahl, 2005). Thus, contented life may be linked to nature's ability to connect us with our subconscious creativity.

Many researchers have investigated people's reactions to their built environment and put forth ideas about the environments' connections to their sense of happiness, and by extension, their contented lives. Interior environment can facilitate happiness. When people arrange items such as paintings, chairs, and tables, they are using these material forms to communicate what they need and what they currently lack (De Botton, 2006). Structured space has long been known to have influence on people's life satisfaction through its dynamic relationship to human personality. One's interior environment, and specifically, personalization of one's own space, is a component of happiness. Beautification of one's space would be fruitless if the instinctive feelings to beautify these surroundings were not providing some degree of pleasure (Wernick, 2008). Adaptation is an important consideration in contented life. Studies show that architectural features such as the position of stairways, the direction a house faces, and decorative frills decide the pattern of people's lives. People even adapt to environments that don't function properly. Poor physical environments or psychologically inappropriate physical conditions result in elevated symptoms of anxiety, depression, high blood pressure, and sleeplessness. Because people spend the majority of their time indoors, a designer is responsible for creating structures and objects that nurture human bodies, minds, and emotions (Lindahl, 2005).

Designers are responsible for contributing to people's lives beyond solving their pragmatic problems (Morelli, 2007). A person's reactions to their environment are essential to living a contented life. If researchers can prove that certain built forms have a particular effect on happiness, it is crucial that researchers identify these forms and document them for future designers. If it is known that human behavior tends to deteriorate under the stress of inappropriate habitats, researchers should identify typologies and features that will create positive feelings for occupants of the built environment (Wernick, 2008). By asking people about their perceptions of their residential living environments, much could be learned. This, in turn, could assist designers in understanding residential issues that may be important to attend to in future projects.

## 5 DESIGN FOR CONTENTED LIFE: THE FRAMEWORK

According to the Positive Psychology Center at the University of Pennsylvania, positive psychology is the scientific study of the strengths that enable individuals and communities to thrive. The field is founded on the belief that people want to lead meaningful and fulfilling lives, to cultivate what is best within themselves, and to enhance their experiences of love, work, and play (Seligman and Csikszentmihalyi, 2000). Positive psychologists focus on making life worth living and studying the conditions that enhance human well-being. Their aim is to address the full spectrum of human experience rather than to deny the distressing aspects of life (Gable and Haid, 2005).

The design framework for contented life represents a proposal that is based on positive psychology and can serve as the basis for an approach to design for human contentedness. The design for contented life framework combines four essential components, as shown in Figure 1. These four cornerstones represent the elements of design for contented life: design for engagement, pleasure, personal fulfilment, and belongingness. Each element independently stimulates contented life; design for contented life sits in the center, where all four elements intersect. This intersection is where people prosper. To prosper, besides having positive emotions, an individual must engage and have a sense of life purpose (Seligman 2011). Accordingly, design for contented life goes beyond mere pleasure. Although pleasure is an essential component of contented life, it takes more than pleasure to prosper. Therefore, design for contented life takes all four elements into consideration. It is not necessary to address all components to the same degree; a designer can focus on only one of them; however, at all times, it is important to take into consideration that the design solution will not impose any negative effects on the other three components. The four proposed contented life components guide the whole design process, which requires the designer to have a vision of how the innovative design will evoke positive affect and how it will stimulate and enable people in acheiving their personal objectives.

Each of the four design elements can individually contribute to a person's contented life, but all four are needed for a person to prosper. Prosperity has been defined as optimal human functioning and living to its fullest potential (Ryan and Deci, 2001). To prosper requires balance. If we only pursue pleasure, to the exclusion of purpose and meaning, we may become hedonists and be unable to live true contented life. Similarly, just focusing on future aspirations without experiencing momentary pleasure might make a person unhappy (Eid and Larsen, 2008). People who prosper have a deeper sense of purpose, yet they also experience frequent positive emotions. Overall, design for contented life encompasses all relevant aspects of people's lives.

One can use the framework, which is based on classifications by psychologists and philosophers, to explain how existing designs stimulate happiness on all levels. The framework should be evident in decisions made throughout the design process and then in the assessment of the resulting design. This particular point of view suggests tailored design approaches because, at best, the existing approaches address only parts of the framework. Therefore, an integrated approach is still needed (Pohlmeyer, 2012). Although the components might be partly overlapping, they are conceptually different and hence indicate different design aspects. The paper argues that the four elements embody the essential elements of design for contented life. They represent all life domains. Although the essential components are universal, their effects are personal and depend on the context of life circumstances.



Figure 1: Design for Contented Life – The Framework

### 5.1 Design for engagement

Contemporary life provides us with the opportunity to live a relatively comfortable and effortless life with increasing amounts of spare time. The drawback is that it tends to make people passive because they are able to sit and watch the lives of others in media, read about the lives of others in magazines, and follow the lives of others on social media. Many happiness researchers suggest that a happy person is an active participant who positively contributes to the lives of others. The importance of engaging and doing has been discussed by many researchers of happiness. Experiences tend to be associated with one's active participation, while products are associated with ownership, which is mostly passive (Rosenzweig and Gilovich, 2012).

Design for engagement means designing for doing rather than having. It encourages participation rather than simply observation. This might constitute a challenge because people tend to associate vacations with happiness (Mogilner et al., 2012) and usually associate work with displeasure. However, even though passivity seems to feel good in the moment, its long-term side effect is decreased happiness. For this reason, it is essential to focus on supporting active lifestyles. Design that promotes regular physical exercise, for example, has a clear positive effect on happiness. Supporting active lifestyles is crucial because people appreciate designs that make them active rather than passive, especially over the longer term.

Designs that promote skill acquisition satisfy this element. Mastering a skill means the capacity to perform certain tasks in such a manner as to reach a specific objective. Contribution to society results in a feeling that an individual's skills are necessary for others. Designs that support learning by increasing people's knowledge or by enabling them to master a skill positively contribute to an individual's happiness. Thus, being able to use one's skills to positively contribute to society is an important component of a contented life (Ryan and Deci, 2000). That an increasing number of people lack this remarkable ability represents a valuable opportunity for designers, who can develop the skills to enable this capacity in others.

### 5.2 Design for pleasure

The second component is based on producing designs that promote enjoyment of the moment. Contented life is achieved by increasing a person's momentary pleasures. It is all about the here and now, being free of problems, having fun, and being relaxed. Design can evoke positive feelings or reduce negative feelings and as such, it can be a direct source of pleasure or facilitate pleasurable activities. Various approaches have been suggested that would enable designers to address particular user experiences. Jordan introduced an influential pleasure-based approach, which discusses different pleasure types that people may seek: physical, social, psychological, and ideological (Jordan, 2000).

## 5.3 Design for personal fulfillment

The third element addresses happiness that comes from a sense of personal meaning. This component focuses on a person's objectives and aspirations in relation to one's life achievements. Personal fulfilment can be derived from an awareness of one's previous achievements or from a sense of progress toward a future objective. With this in mind, designers can provide resources that people may use to attain those objectives. A design can also serve to remind users of their current objectives or symbolize the achievement of past objectives.

Nussbaum proposed the capability approach, which is an economic approach to personal fulfilment. Instead of judging prosperity based on resource indicators, this approach looks at what one is able to do with such resources. It is based on the idea that to live a contented life, one needs the freedom to pursue one's personal objectives. The approach, therefore, focuses on promoting fundamental capabilities that enable individuals to pursue their contented lives (Nussbaum, 2000). Design to promote belongingness

The fourth component suggests that design for happiness should promote a sense of belonging with other people and help to build social relationships. Belongingness is defined as being a part of group. Individualism is based on the idea that happiness is best promoted by emphasizing an individual's uniqueness and gaining personal material benefits. Some researchers suggest that people today do not share common values, which takes away the sense of a shared identity. Thus, the contemporary person needs to continually build and maintain his or her identity by, for example, consuming particular brands or products (Ashour, 2014). To this end, designers should allow consumers to individualize.

However, humans are more collective by nature than they tend to be in modern environments. People are deeply programmed to grow in environments where they are members of groups. Furthermore, people actively pursue to be liked by other people, even if it means to compromise their own personal preferences to a certain extent (Mead et al., 2011; Baumeister, 2005). Interestingly, when people adjust their behavior for other people, they seem happier. Empirical studies have shown that serving others increases happiness. Caprariello and Reis (2013) showed in a recent study that non-material experiences make people happier because they can be shared with others, whereas material possessions tend to revolve around an individual's solitary use. The advantage of experience over material possessions relies on the tendency of experiences to be shared. To enhance sharing, design should encourage people to use products together instead of individually.

Because belongingness is an essential component of contented life, designers should focus on design concepts that promote social relationships and increase an individual's sense of belonging. Such designs are desirable because social relationships promote activity that helps to create and deepen relationships.

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## 6 CHALLENGES FACING RESEARCH ON DESIGN FOR CONTENTED LIFE

The field of design for contented life continues to evolve. However, the current picture remains fragmented, and there are challenges in design research that still need to be addressed. Two important challenges will be discussed in this section. These significant methodological techniques are recommended for design researchers when they study design for contented life.

#### 6.1 Empirical evidence and objective assessment

To objectively show how design affects contented life, empirical evidence is required. Traditionally, empirical research on contentment has excluded design; it has been limited to connecting happiness and material wealth (Headey and Wooden, 2004). The available data offers only small insights into the objective impact design can have. The contributions of design to contented life are not related to monetary value; rather, design's value lies in what can be done with it, what it promotes, or what it represents (Pohlmeyer, 2012). Empirical findings on these topics are lacking, and empirical evidence is needed to investigate the impact of existing and future design solutions. In addition to correlation results, more studies are needed to examine the impact of different designs.

To study how design affects contented life, objective assessment tools are also necessary. Such tools should provide validated assessment methods that evaluate the influence of design on different components of contented life. One difficulty might lie in the indirect link between design and contented life. If design facilitates or represents meaningful experiences, the link would be direct between the experience itself and contented life while not direct between the design and contented life. It is hence a question of attribution and whether users are actually aware of the implications of design on their lives. This calls for controlled studies in which contented life is assessed before and after dealing with a particular design element. From a practical perspective, empirical evidence of the consequences of design on contented life would provide the most valuable feedback for better understanding.

### 6.2 Approach to design for contented life

The process of designing for contented life is different from ordinary designing, which is problemfocused. Hence, the design field needs to develop innovative approaches that focus on enabling people to prosper and creating long-term effects on people's lives. Approaches that are applicable to different domains of design need to be developed. Contented life is a sophisticated concept with plenty of components and influencing factors (Seligman, 2011). As such, each component might require a different design approach. Therefore, it is necessary to understand the fundamental process as well as the distinctions between different design domains and how to organize different design processes to optimize the end results. Design researchers have begun to apply sociological theories to the design process (Reckwitz, 2002).

Hands-on methods should also be developed. Such methods equip designers most profoundly in the early stages of the design process, i.e., in strategic planning, problem definition, and conceptual design. Finally, design-specific research methods are needed to understand the happiness of individuals and to translate such understanding into designs (Brey et al., 2014). Obviously, a user-centered approach is crucial to design for contented life because the user is the only one truly able to assess his contented life. Therefore, user-focused research methods that include both subjective perceptions and objective measurements are required.

## 7 CONCLUSION

Design for contented life is design for human prosperity in all its multi-faceted complexity. The design discussion related to prosperity and contented life is influenced by disciplines outside of design, such

as positive psychology. Emotions influence one's perception of life quality. In the field of design, theories are often expected to take the form of frameworks based on research in the human sciences. In this field, there is also a need for further studies that include empirical evidence and objective assessment tools.

This paper has introduced a framework for contented life, which combines four main components. As such, different approaches with various emphases should be formulated for designing for contented life. Besides promoting enjoyable activities, design can offer tangible representations of personal purpose, it can direct one's intentions toward desirable objectives, and it can stimulate human engagement in meaningful activities.

Because built environments affect people so profoundly, designers have a responsibility to contribute to people's lives beyond merely solving problems. After all, life is more than a pragmatic problem to be solved, and people are more than a collection of unfulfilled needs. In addition to needs, people have values, personal strengths, and talents; they can experience hope, show gratitude, and be optimistic.

People who lead contented lives are more energetic, sociable, cooperative, and open-minded. They are liked by other people and have richer social support networks in general. Furthermore, they show more flexibility in their thinking, are more productive, and are more creative in their jobs. They are better negotiators and leaders and are more resilient in the face of problems. These are the consequences of happiness, and it is these consequences that design for contented life aspires to bring about. In this view, design for contented life does not deny the place of negative emotions; in fact, experiences of failure enhance life's richness. Therefore, the aim is not to create designs that make people always feel good and never feel bad. Instead, the aim is to design in such a way that enables people to fully experience all dimensions of life, including hardship, adversity, and opportunity.

Design for contented life is a call for new innovative design, design which may expand into uncharted territory. This type of design assumes that is possible to develop design approaches that support human prosperity; it is rooted in theory but at the same time applicable by designers. Ideally, such approaches would facilitate design for long-term contented life.

#### REFERENCES

- Ashour, A. F. (2014) Globalization consequences: The role of design in defining local identity, HISTART14, Istanbul, October 2014, Istanbul: DAKAM, pp.81–90.
- Baumeister, R. F. (2005) The Cultural Animal: Human Nature, Meaning, and Social Life. New York: Oxford University Press.

Brey, P., Briggle, A., and Spence, E. (2014) The Good Life in a Technological Age. New York: Routledge.

Caprariello P. A., and Reis, H. T. (2013) To do, to have, or to share: Valuing experience over material possession depending on the involvement of others. Journal of Personality & Social Psychology, Vol. 104, No.2, pp.199–215.

- Craven, Jackie. (2003) The Healthy Home. Massachusetts: Rockport Publishers.
- De Botton, A. (2006) Architecture of Happiness. New York: Pantheon Books.
- Eid, M. and Larsen, R. J. (2008) The Science of Subjective Well-being. New York: Guilford Press.
- Gable, S. L., and Haid, J. (2005) What (and why) is positive psychology? Review of General Psychology, Vol. 9, No.2, pp. 103–110.
- Hakatie, A. and Ryynänen, T. (2006) Product attributes and the model of emotional design: How do the product development engineers perceive product features? Proceedings of the 5th International Conference on Design and Emotion, http://www.designandemotion.org/ accessed on January 25, 2011.
- Headey, B. and Wooden, M. (2004) The effects of wealth and income on subjective well-being and ill-being. The Economic Record, The Economic Society of Australia, Vol. 80, No.s1, pp. S24–S33.
- Jordan, P. W. (2000) Designing Pleasurable Products. London: Taylor & Francis.
- Kesebir, P. and Diener, E. (2008) In pursuit of happiness: Empirical answers to philosophical questions. Perspectives on Psychological Science, Vol. 3, No.2, pp.117–125.
- Kurtgözü, A. E. (2003) From function to emotion: A critical essay on the history of design arguments. The Design Journal, Vol. 6, No.2, pp. 49–59.
- Lindahl, J.C. (2005) On My Swedish Island: Discover the Secrets of Scandinavian Well-being. New York: Penguin Group Inc.
- Lyubomirsky, S. (2008). The How of Happiness. New York: Penguin press.
- Mcdonagh-Philp, D. and Lebbon, C. (2000) The emotional domain in product design, The Design Journal, Vol. 3, No.1, pp. 31–43.

- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D. and Vohs, K. D. (2011) Social exclusion causes people to spend and consume strategically in the service of affiliation. Journal of Consumer Research, Vol. 37, No.5, pp. 902–920.
- Mehl, M. R. and Conner, T. (2013) Handbook of Research Methods for Studying Daily Life. New York, NY: The Guilford Press.
- Mogilner, C., Aaker, J. and Kamvar, S. D. (2012) How happiness affects choices. Journal of Consumer Research, Vol. 39, No.2, pp. 429–444.
- Morelli, N. (2007) Social innovation & new industrial contexts: Can designers "industrialize" socially responsible solutions. Design Issues, Vol. 23, No.4, pp. 3–21.
- Norman, D. A. (2004) Emotional Design: Why we Love (or Hate) Everyday Things. New York: Basic Books.
- Nussbaum, M. C. (2000) Woman & Human Development: The Capabilities Approach. Cambridge: Cambridge University Press.
- Pohlmeyer, A. E. (2012). Design for happiness. Interfaces, Vol. 92, pp. 8-12.
- Reckwitz, A. (2002) Toward theory of social practice: A development in culturalist theorizing. European Journal of Social Theory, Vol. 5, No.2, pp. 243–263.
- Rosenzweig, E. and Gilovich, T. (2012) Buyer's remorse or missed opportunity? Differential regrets for material and experiential purchases. Journal of Personality and Social Psychology, Vol. 102, No.2, pp. 215–223.
- Ryan, R. M. and Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development and well being. American Psychologist, Vol. 55, No.1, pp. 68–78.
- Ryan, R. M. and Deci, E. L. (2001) On happiness and human potentials: A review of research on hedonic and eudaimonic well being. Annual Review of Psychology, Vol. 52, No.1, pp. 141–166.
- Scherer, K. R. (1984) On the nature and function of emotion: A component process approach. In: Scherer, K. R.
  & P. Ekman (eds.), Approaches to emotion. Hillsdale, NJ: Lawrence Erlbaum, pp. 293–317.
- Schimmack, U. and Diener, E. (1997). Affect intensity: Separating intensity & frequency in repeatedly measured affect. Journal of Personality & Social Psychology, Vol. 73, No.6, pp. 1313–1329.
- Seligman, M. E. P. (2011) Flourish: A Visionary New Understanding of Happiness and Well-being. New York: Free Press.
- Seligman, M. E. P. and Csikszentmihalyi, M. (2000) Positive psychology: An introduction. American Psychological Association, Vol. 55, No.1, pp. 5–14
- Twenge, J. M. and Campbell, W. K. (2009) The Narcissism Epidemic: Living the Age of Entitlement. New York: Free Press.
- Uchida, Y., Norasakkunkit, V. and Kitayama, S. (2004). Cultural constructions of happiness: Theory and empirical evidence. Journal of Happiness Studies, Vol. 5, No.3, pp. 223–239.
- Wernick, J. (2008) Building Happiness: Architecture to Make You Smile. London: Black Dog.