ISSN: 2469-5793

Rosenblum. J Fam Med Dis Prev 2017, 3:053

DOI: 10.23937/2469-5793/1510053

Volume 3 | Issue 2

Open Access



**REVIEW ARTICLE** 

# Towards Daily Function Homeostasis: A Conceptual Health Framework and Keys for Action

Sara Rosenblum\*

Department of Occupational Therapy, University of Haifa, Israel

\*Corresponding author: Sara Rosenblum, Department of Occupational Therapy, University of Haifa, Faculty of Social Welfare and Health Sciences, The Laboratory of Complex Human Activity and Participation (CHAP), Mount Carmel, Haifa 3498838, Israel, Tel: +972-4-8240474, Fax: +972-4-8249753, E-mail: rosens@research.haifa.ac.il

#### **Abstract**

Homeostasis refers to the organism's internal self-regulation process that plays a major role in maintaining a balanced, harmonic and steady-state condition. The aim of this paper is to present a comprehensive conceptual framework for developing daily functional homeostasis, which illustrates the control, harmony and balance of daily life activities and routines. This framework provides a systematic procedure for revealing the person's true desired self (who I am) by providing reflective key points. These points include environmental and personal factors, life events, past experiences and key points in the context of disease or disability. Dimensions of a person's activities and participation, such as what, where, when, why and how they are performed, can provide new insights stimulating daily functional changes. The analysis facilitated by the framework considers the person's life goals and identifies gaps or conflicts that challenge their achievement. Moreover, utilizing a person's strengths to develop adaptive changes may circumvent existing barriers and lead to improved sense of control, self-fulfillment, life satisfaction, health and well-being.

### Keywords

Homeostasis, Function, Activities and participation, Goals, Well-being

## Introduction

The mythologist Joseph Campbell asked, "Is life a problem to be solved, or a mystery to be lived?". The complexity and multidimensionality of the concept of life as a self-sustaining process that distinguishes living organisms from other objects has been discussed for years and published by authors such as Klemke [1]. Ongoing processes attributed to living organisms include maintaining homeostasis and adaptation to the environment [2]. The term homeostasis derives from the combination of the Greek words "homeo" or constant, and "stasis" or stable, and is defined as remaining stable or staying the same [3]. It relates to physiological mechanisms needed to sustain life by responding and adapting to changing environmental conditions, while investing energy to maintain order [4]. Thus, it refers to the organism's internal self-regulation process that plays a major role in maintaining a constantly balanced, harmonic and steady-state condition [5].

The concept of homeostasis is largely discussed in the literature within the context of biological and physiological processes. However, throughout the life cycle humans need to modify their behavior to adapt to daily activities [6]. Studies that associate the concept of homeostasis to human behavior focus mainly on socio-emotional and psychological behavioural adaptations or adjustments in response to stressful events, e.g., [3,7]. Yet, literature examining implementation of this concept to day-to-day activities in relation to persons' academic, social and leisure and work pursuits is absent. Moreover, no theoretical framework has comprehensively captured the conceptualization of how individuals create or develop daily functional homeostasis as manifested in the control, harmony and balance of their daily life activities and routines.

# **Conceptual Foundations and Purpose of the Daily Function Homeostasis**

The Daily Function Homeostasis (Day-Fun-Home) philosophical framework was founded on the literature and extensive research that focus on human daily functioning throughout the life span. Three main resources lead to the fremawork's core concepts and stucture. The first is the



**Citation:** Rosenblum S (2017) Towards Daily Function Homeostasis: A Conceptual Health Framework and Keys for Action J Fam Med Dis Prev 3:053. doi.org/10.23937/2469-5793/1510053

Received: January 28, 2017; Accepted: April 12, 2017; Published: April 15, 2017

**Copyright:** © 2017 Rosenblum S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

philosophical base of occupational therapy and occupational science [8-11]. Secondly, results of interviews with children, adults and seniors that were conducted by the author and focused on their daily function (e.g., [12-15]. Lastly, results of studies that capture the characteristics of decrease in activity performance, for example handwriting and daily function due to aging [16] or varied pathologies such as Alzheimer's disease [17], Parkinson's disease [18], and depression [19] (http://chap.haifa.ac.il/index.php/handwriting for more details).

The framework's purpose is to allow persons to identify and map out their daily functioning characteristics to improve their awareness and to develop insights into their daily homeostasis.

Several arguments support the need for this framework. First, the idea arises from the International Classification of Functioning Disability and Health (ICF) [20]; the World Health Organization's framework for measuring health and disability, in conjunction with the worldwide movement towards personalized medicine [21]. The ICF classification has extended the concept of health, framing it as a multidimensional construct that encompasses the psychological and social dimensions of people's lives in addition to its biomedical constituents [22]. Pursuant to the ICF daily activities and participation in life situations are central and integral concepts to the person's status within the health-disability and disease continuum [23]. By, considering the ICF concepts together with the social cognitive theory [24], it can be posited that people's self-regulatory skills, such as how they manage their daily functioning, impacts the promotion of their health and prevention of disease.

Indeed, research has revealed reciprocity between unbalanced life-styles, the circadian cycle, hormonal and endocrinal function and the development of emotional and physical diseases (e.g., [25,26]). Subsequently, diseases linked to physiological changes may lead to a decline in daily functional abilities and control, as well as deterioration of disability and quality of life (e.g., [27]). Conversely, poor sense of control and functional disabilities were found to correlate with low socio-emotional status, stress, depression, and illness (e.g., [28]). Thus, the person's balance in managing daily functions and routines is closely tied to their health and well-being. In accordance with the ICF framework, daily occupations are foundational concepts in the Day-Fun-Home. Occupation constitutes the fabric of life itself and includes all the things that people do (activities) and the relationship between what they do and who they are as human beings. Occupations structure a person's existence and are an integral part of the continuous process of developing a unique sense of self and identity across the life span [8,29]. Dysfunction occurs when a person's ability to adapt is challenged to the degree that he or she cannot satisfactorily meet performance demands [30, p. 463]. The nature of peoples occupations, activities and occupational participation are linked to dimensions of health, life meaning, satisfaction and well-being [20,29]. Hence, these concepts serve as the main axis in the Day-Fun-Home framework. There are other health components that are discussed in the literature and are therefore related to daily homeostasis such as food and eating habits [31], sleep, breathing [32], physical activity [33], and relaxation (as opposed to stress) [34]. Although these components need to be considered, they will not be further elaborated in the current manuscript as the focus is the presentation of the key concepts of the framework.

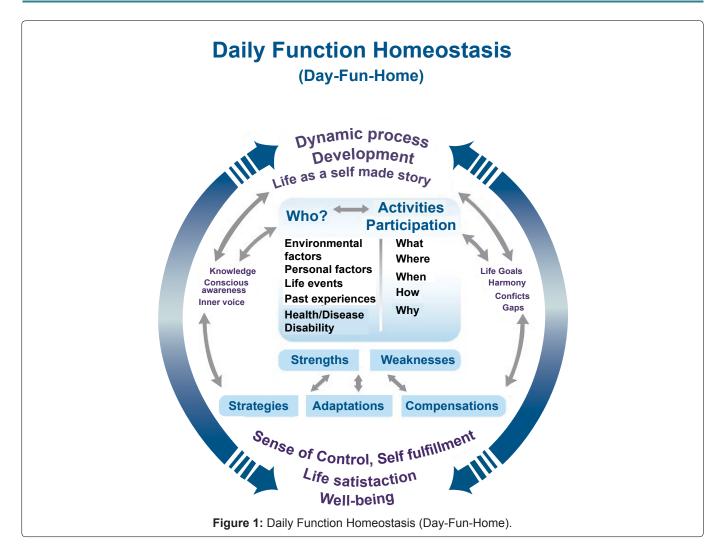
The following discussion delineates the components of the Day-Fun-Home (Figure 1). Key concepts of the framework will be outlined and supported by evidence from the literature.

# A Framework of Daily Function Homeostasis (Day-Fun-Home)

Figure 1 represents a graphic portrayal of the framework. Two primary focus elements of the framework are who the person is and what the person typically does (activities and participation). The core of the Day-Fun-Home is presentation of guided WH question words such as 'who', 'what', 'where', 'when', 'how', and 'why' that are used to request and gather information about the individual and his or her daily activities, in order to thoroughly illustrate a person's functional profile. The questions are encircled by the framework's premises, foundations and processes that enable identification of strengths and weaknesses as an origin for change processes to lead to sense of control, self-fulfilment, life satisfaction and well-being. While describing the frameworks components, the theoretical rationale will be described as perceived in terms of a person's life. Progressively, questions designed to stimulate self-reflection and possible mechanisms for change will be introduced to guide the implementation of the framework. Notably, although each concept will be presented independently, all the concepts and the constructs that they represent are inseparable and undergo continuous dynamic interactions in daily life.

The point of departure of the journey through the Day-Fun-Home (Figure 1) will commence with premise that life is portrayed as a self-made story [35]; representing a continuous dynamic process with the potential to bring about profound enduring changes that can support greater satisfaction and well-being across all facets of life. Contrary to the popular opinion, satisfaction and happiness are not dependent on external events but rather, the daily choices persons make and the strategies they implement to create life reality has the potential to bring about and sustain happiness in their lives [36]. Each person has the inner capacity to construct a unique life story through a lifelong process of interpreting and reinterpreting his or her experiences [35].

Thus as presented in Figure 1, the two elementary components required for the personal analysis process are knowledge and conscious awareness to previous experiences and their meanings (Figure 1). Knowledge, experiences,



self-awareness and guidance impact cognitive processing and serve as tools that may be implemented to promote and express persons' inner voice in striving for meaning in life [37,38]. As in dance, flexibility, change, and movement are crucial elements in the ongoing quest for balance and harmony in life. Consequently, the elementary components of which the individual may be aware will be guided though by means of a series of WH-questions (Figure 1).

#### WHO?

The 'who' construct conveys the person seeking change and encompasses five components and the multi-directional relationships between them.

**Environmental factors:** A person's environment represents a source of opportunities, resources, barriers, demands and constraints and the person's interactions with his environments may either enhance or inhibit his development [39]. Therefore, environmental contexts such as the family and extending distally to friends, communities, institutions and cultures must be considered to fully understand how people function [40,41]. Thus, environmental theories raise several fundamental questions such as, "How did the environment where I was born and where I grew up impact my consequent development?"; "How did my socio-cultural background and the significant people in my life influence my choices and daily occupations?" and

consequently, "Do I wish to continue living in the sphere of these influences, or would a change be beneficial?". Moreover, consideration is warranted as to the physical and human barriers and opportunities within the person's environment. For example, exposure to natural environments may have a mediating effect on human well-being, while a valued mentor may influence one's career or work environment [42]. Other factors include a person's socioeconomic status, place of residence, and the social circles he or she belongs or wishes to belong to.

Further environmental questions may be asked when considering the "environmental press" model [43] that describes the tension between environmental demands and the person's needs, competencies and strengths. Relevant questions that can be asked may be "What are the environmental demands that I must contend with?"; "Am I wish/able to meet them?"; "Are my choices based on my inner desires or are they the product of the values/preferences of other people in my social environment (i.e., family, friends, co-workers)?" Answers to such questions may lead to better insight and constitute a primary stage in improving the "fit" between the person's desires and environmental demands.

**Personal factors:** Human beings possess the innate desire to adapt to and master their environment as part of their search for self-fulfilment [44]. A wide variety of

personal factors may come into play in this context, including age, gender, nationality, religion, marital status, years of education, strengths, skills and abilities as well as personal values, interests, beliefs and roles. Although a person's roles involve various commitments and obligations, they also serve as opportunities for personal growth and development (e.g., [45]). Personal factors such as one's values, interests and beliefs, strengths and weaknesses can increase the significance and meaningfulness of one's preferred activities and thus contribute to life satisfaction [46].

A wider perspective of a person's strengths and abilities can be garnered by considering the premises introduced in the theory of multiple intelligences where each person possesses one or more of the following types of intelligence: logical-mathematical, linguistic, spatial, musical, bodily-kinesthetic, personal and intrapersonal intelligence [47]. Thus, in considering personal factors, reflection on which of the above mentioned types of intelligences typify a persons preferred activities, life choices (i.e., family status, home life, job, leisure pursuits, educational and social status) and lifestyle could be helpful. Reflective questions that may be posed include: "Does my self-perception represent an accurate appraisal of my abilities and weaknesses?"; "Do I make optimal use of my strengths during daily functioning?". Once a person becomes aware of these factors and their significance, strategies can be discussed that may facilitate a transformative process, which in turn can promote self-actualization meaning becoming the person one has the potential and the desire to be [48,49].

For example, the current pace of life often creates stress thus the ability to organize and manage one's time is crucial in adapting to daily demands. Difficulties in this area may negatively impacts life satisfaction and meaningfulness in life [50,51]. Accordingly, identifying this problem and using suitable strategies to improve one's ability to organize daily life tasks can be instrumental in improving daily function homeostasis and well-being.

Life events: People are not always aware of the potential influence of events they experience in their day-to-day functioning. Life experiences shape a person's history and personal narrative [39]. These experiences include major life events such as unemployment, divorce or death of a relative (e.g., [52]), and those related to the nature of the family with whom formative years were spent: "Was my family nurturing, encouraging and wholesome, dysfunctional, or achievement-oriented?"; "Were my siblings flaunted as models of success?", or alternatively, "Did my siblings with chronic disabilities dominated my parents' attention and shaped the family's values and goals?" In addition, experiences such as a youth movement counselling, playing team sports or involvement in a short or long-term volunteering experience may improve one's self-efficacy and lead to interpersonal skills that impact making life choices (e.g. [53]. In contrast, experiences that are viewed as failures or as signs of incompetence may dominate the person's self-perception and limit their engagement in occupations and activities that in fact represent one's inner calling and could satisfy the need for self-actualization.

#### Past experiences-primary emotional responses (PER):

A number of studies have emphasized the importance of the relationship between past experiences, their emotional context and their impact on future actions [54], as people create themselves through memory [55]. Thus, when memories of life events trigger sadness and self-doubt, people often get trapped and negative self-esteem may be related to their sensibility and inability to receive bad feedback [56-58].

Contrarily, positive thinking can broaden persons thinking, fuel psychological resilience, build one's personal resources and seed human flourishing [59]. Also, King, et al. [46] suggest that people can incorporate positive daily life experiences within their personal meaning systems. The author's clinical experiences indicated that such negative or positive feelings play a role in the individual's starting point towards certain daily tasks. Therefore, the Primary Emotional Response (PER) needs to be considered as it influences the individual's internal resources towards performance.

In order to learn more about the issues underlying the person's daily life pursuits and behaviors, the following questions may be posed: "What are my memories that have contributed to making me who I am today?"; "What did I learn from these experiences?"; "How do these experiences reflect on what is important to me?"; "How have these events affected my job, career, or activity choices?". Reflective questions such as these can facilitate the person's awareness of whether certain activities result in feelings of pleasure or self-efficacy; or whether experiences of failure or disappointment have influenced the manner in which decisions regarding occupation, career, actions or lack of action are made. Developing awareness of one's primary emotional responses to specific daily activities linked to past experiences that limited growth can enhance perceived self-efficacy and motivate the person to move forward [24,60].

Health, disease and disability: Traumatic injury, disease and disability and the resulting effects significantly impact a person's overall life experience. The extent of these effects on social relationships and the achievement of life goals vary in the nature, severity and course of the disease or injury and of their dysfunctional manifestations [61]. However, mostly, the onset of disease and trauma results in changes to familiar daily life routines and to the person's and the family's functional performance. For example, as children with chronic developmental disabilities transition into adolescence, they often experience growing isolation as a result of intrinsic and extrinsic factors that limit their integration into their school community [62]. Moreover, such feelings may lead children with disabilities to develop

a passive life style and low levels of participation. Therefore, it is important to go beyond medical diagnoses and clinical assessments when analyzing the person's daily life performance. Focus on how the person and his or her family experience illness and how they have incorporated living with a disability into their daily lifestyles is vital [63]. For example, how can a person with muscular sclerosis be active and continue to participate in social frameworks despite the mobility and fatigue limitations?

Thus, the current framework (Figure 1) focuses on the repercussions of these phenomena, and how they impact activities, participation, and daily function as defined by the ICF [12]. The Day-Fun-Home concepts may increase a person's awareness of the multifaceted consequences of their disease or impairment and stimulate decision making processes [36] and problem-solving strategies to improve their quality of life.

After gaining profound understanding of the five components that respond to the question of *who* the person is, the framework continues to explore activities and participation characteristics (Figure 1).

**Activities and participation:** Bishop Robert South wrote that "action is the highest perfection and drawing forth of the utmost power, vigor, and activity of man's nature" [64].

Human occupation is comprised of aggregated sequences of actions and activities. Most people perform the same basic activities, but the occupations that they desire to do define who they are and make them unique [65,66 p.865]. Occupation is defined as "the principal means through which people develop and express their personal identities" [67 p. 547] while engagement in occupation helps bring meaning and coherence into our lives (e.g., [65,66]. Eakman [6] commented that the subjective quality of experience or meaning associated with engagement in activity may be a key mechanism through which day-to-day action influences personal well-being, such as meaning in life [49,68]. Moreover, occupational dysfunction has been found related to both social participation and to decline in health-related quality of life [69]. However, the question of how to practically 'apply' occupation to improve life satisfaction and well-being prevails. The following sections focus on a discussion of the factors that characterize occupation, and clarify their contribution to daily function, activities and participation.

What?: People perform endless activities throughout their lives. The activities a person chooses to do on a daily, weekly, monthly or yearly basis influence his or her well-being. Activities can be categorized as Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), work, education, leisure, social participation and rest/sleep [70]. Learn about the person's daily routines and rituals helps understand "what" a person does on a daily basis, for example what activities are performed related to work, study, child-care, sports, social/leisure activities?. To generate self-awareness, peo-

ple should consider what activities they currently do or do not and what they have or have not previously done throughout their lives, such as, "What do I enjoy doing most?"; "What must I do, and what do I do because I want to?"; "What activities are pleasurable and satisfying?"; and "What do I wish to do but have not done due to lack of time, sometimes even over a span of years?"

Where?: The concept of "where" complements the environmental factors previously described (Figure 1). It focuses on the context of where activities and occupations are performed. Where relates to the individual's position within space and to the movement through it, through engagement in activities or occupations [71]. As previously said, environment is a significant factor in a person's life path. The Day-Fun-Home describes the influence of the 'space and place' as modified by a person's actions. The concept of 'space and place' includes aspects that are concrete (where things are done, objects locations; [72]) or abstract, static or dynamic. For example, the person's sense of being in place is a complex and dynamic life phenomenon [73,74].

From a broader perspective, space and place refers to the nature of a person's life environments. Specifically, "Are they arranged suitably to simplify their daily activity performance (e.g., in the kitchen, bedroom, supermarket, office or gym)?"; "Do they reside in a place where they can enjoy privacy or is their living space always shared with others?".

At a more abstract level, the significance of a person's personal spaces and places in life can be a fruitful line of inquiry [41]. Reflection upon this aspect of 'where' can be stimulated by questioning the nature of one's spaces and places. For example, "Is my space defined by me or by others?"; "Does the space in which I live limit or challenge me, or am I a prisoner in my own space?"; "To what extent do I act within the settings in which I function to accommodate my changing needs and facilitate a sense of self-agency and meaning in life?"; "Where do I feel I can best actuate my abilities and desires at home, work, and during social and leisure pursuits?" Rowels [41], noted that 'the experience of being in the here and now, our being in place, is a product of where we have been and where we are going' (p. 129). The dimensions of 'where' comprise aspects of the person's past, present and future, all of which should be considered in contemplating how to best achieve a more balanced life.

When?: Our lives are organized both temporally and spatially. Time monitoring is basic to human functioning, while the time-space prism impacts on where, when and what occupations we can do [75-77]. Time is the organizational frame for life and we depend upon times and places to allow us to "be" and "do" our selfhood through our occupations [67,76,78].

Time use is a concept that refers to how people allocate their time in pursuing tasks or life goals throughout

their day, week, month, or even years [67]. To stimulate reflection, one may ask "How much time do I spend doing weekly chores, with my children? How much time to I spend with my spouse?" Further, in terms of wellbeing, "How much time is invested in things that I must do compared to things that I wish to do?" People living in westernized cultures must adapt to an ever-increasing pace of life and feel the need to do more than the existing 24 hours allow. Consequently, consideration of time in prioritizing goals is critical to self-regulation.

Time orchestration or time balance refers to how much time a person invests in work, family, leisure, personal development and sleep. When examining the use of time, one should consider the balance between one's various occupations; does the person find satisfaction in how their life is orchestrated? Finding balance is critical in light of studies that indicate a relationship between the temporal aspects of daily function and human psychology and physiology (e.g., [26,35]).

Thus, the analysis of a person's temporal organization of his/her activities and routines can reveal important insights as to the quality of his/her daily functional homeostasis.

**How?:** The question of *how* relates to the amount of energy or effort people need to invest in the tasks they perform. Daily tasks can be categorized into those performed automatically, and those that require cognitive or intentional resources and effort. The energy resources invested in daily activities vary between persons. These resources depend on factors ranging from previous experiences and skills, to individual factors (i.e., sensory-motor, cognitive, meta-cognitive, inter-personal and emotional social capabilities), as well as environmental considerations (see "environmental press" above). This aspect is particularly relevant for a person coping with a developmental delay or disease as they are faced with varied physical/sensory/cognitive deficits (e.g., Multiple Sclerosis [79]). Furthermore, emotional factors can also influence the effort needed to perform various tasks. In fact, at any phase of life people must choose where, when, and for what their energies should be directed to achieve homeostasis.

Why?: Why refers to the purpose and significance of a given human activity. The performance of meaningful activities is recognized as an essential aspect of psychological wellbeing that has significant implications for mental and physical health [80]. Meaningful activity has been defined as a subjective experience composed of a range of unique, discernable qualities [81,82]. There is ongoing interplay between meaningful activities and meaning in life [81]; and meaning in life has been identified as a critical outcome of a person's engagement in activities [65].

Given the impact of achieving meaning in life to people's overall satisfaction and well-being, it is vital to consider why persons invest in specific activities and occupations. For example, "why do I choose a particular profession?"; "Why do I invest more time working at the cost of spending quality time with my family?"; or "why do I avoid modifying my lifestyle (e.g., physical activities, healthy eating, sleep habits, alcohol consumption) when it poses a risk to my health?" (e.g., [83]). Contemplation of such essential matters through reflecting on the 'whys' of one's life may stimulate a person to alter its course and provide the potential to improve his/her daily functional homeostasis.

The combined understanding achieved as a result of extensively analysing the previous constructs lead to exploration of the life goals (Figure 1).

#### **Life Goals**

Human beings generally organize their days around doing and achieving small milestones or goal-directed activities they feel the need to accomplish, described by Little [84] as 'personal projects'. Alternatively, Daly [85] used the term 'daily travel' to refer to activities that mediate "between the needs of the person, both internal and social, and the sources of their satisfaction, which are distributed in space" [86]. The personal goals people set provide insight into their motivation and resources as well as the meaning and coherence of their lives [87]. The amount of time a person allocates to projects viewed as personally important was found to correlate to satisfaction in life [88]. Furthermore, retrospective research among older adults indicated that daily and long term life goals constitute an important component of autobiographical memory and reflect personal meaning and identity (e.g., [89-91].

In fact, research has supported the relationship between goal-related events and people's moods (e.g., [92]). Daily frustrations related to the inability to accomplish life demands through daily occupation, may lead to feelings of failure and depression in later life (e.g., [93]). Flexibility and the ability to abandon goals that are no longer appropriate and shift one's focus to new goals that lead the person to experience fulfillment is the hallmark of successful self-regulation [87].

Hence, in the search to improve satisfaction and well-being, it is useful to pause and reflect on one's 'daily travel' and contemplate whether one's goals are those that will prove meaningful and fulfilling.

### Harmony, Conflicts and Gaps

Studies have indicated significant relationships between the inability to implement one's inner strengths, ambitions, (actuate 'the real me, see [94], and physiological manifestations such as illness [95].

The Day-Fun-Home (Figure 1) concepts may lead to the understanding of whether the individual's daily functioning is harmonious or whether there are conflicts or gaps that may be addressed. This process of understanding leads outward to the premises that encircle the framework that enables identification of the person's strengths and weaknesses. From these understandings, appropriate assess-

ment and intervention processes can be developed that aim to promote daily functioning that will lead the person to a sense of control, self-fulfillment, life satisfaction and well-being (Figure 1). The process is illustrated by the following case description.

G. is a 48-year-old man who lives in a small rural town. He has lived near his parents since his divorce. He works as an engineer in a nearby town, 5 km away. Although his home is close to his work place (where), it takes him an extensive amount of time to get to work every morning (time). He works at a job that he inherited from his father (personal factors, life events, primary emotional responses). However, in fact, he has long found this job to be unchallenging (how). Therefore, he could benefit by asking himself why he continues doing it and whether his current occupation will satisfy his life goals.

He has always loved to draw (strength) but has not had the time to invest in this activity. Nevertheless, he finds himself creating new ideas in his work place and enjoys this process. Hence, there are creative aspects to his personality that are not sufficiently expressed in his daily life.

The analysis of G's current status with the guidance of an occupational therapist can help him understand his cognitive, metacognitive, sensory motor and socio-emotional strengths and weaknesses towards the development of improved daily functioning. When prompted with relevant questions G's awareness as to the harmony or discord of his daily functioning can be augmented. If conflicts or gaps prevent him from achieving his goals, professional help can be sought to help develop strategies, adaptations and compensations to promote improved function. For example, inadequacies in a G's meta-cognitive abilities may result in his experiencing deficits in temporal or spatial organization. Strategies for improving the planning and organization of G's daily and weekly activities could lead him to modify his schedule and enable him to participate in more creative activities, thus providing him with greater feelings of self-fulfilment. In doing so, he may enjoy a more positive emotional state, enhance his productivity at work, and experience more harmonious family interactions.

Understanding the conflicts and problems that challenge one's well-being and finding appropriate resolutions may decrease the energy needed to perform daily life activities and routines. This process of self-investigation may lead the person to increased feelings of control and self-efficacy, and reinforce the attainment of a higher level of daily functional homeostasis.

# **Conclusions**

The Day-Fun-Home framework (Figure 1) was constructed to provide a holistic guided approach to day-to-day functioning and cultivate subjective well-being. The broad range of issues involved in examining and analysing human functional homeostasis go well beyond those considered in the purview of human physiology.

This framework may be applied to an isolated task, a specific day, a specific period of time or to one's entire life. A dynamic interaction exists between daily experiences, internal regulation and how the person reacts and performs. Dis-regulation leads to dis-homeostasis.

By enhancing one's self-awareness in this manner, a person can build upon his/her inner personal resources with or without guidance, and develop strategies to generate a process of self-actualization, thereby improving one's overall wellbeing.

As human beings possess a strong desire to understand themselves and the world around them [96], supplying them with the tools and information they need to achieve mindful awareness of their experiences may lead persons to undertake a plan of action to achieve a more balanced and meaningful engagement in the dance of life (e.g., [97-99]).

#### References

- Klemke ED (2000) The meaning of life. New York: Oxford University Press.
- von Bertalanffy L (1968) General system theory: Foundations, development, applications. New York, NY: George Braziller Inc.
- McEwen B, Lasley EN (2003) "All stressed out? Here's what to do about it". Consumers' Research Magazine 29: 10-13.
- McEwen BS, Wingfield JC (2010) What is in a name? Integrating homeostasis, allostasis and stress. Horm Behav 57: 105-111.
- 5. Le Moal M (2007) Historical approach and evolution of the stress concept: a personal account. Psychoneuroendocrinology 32: S3-S9.
- Eakman AM (2014) A prospective longitudinal study testing relationships between meaningful activities, basic psychological needs fulfillment and meaning of life. OTJR (Thorofare N J) 34: 93-105.
- Cummins RA (2000) Objective and subjective quality of life: An interactive model. Social Indicators Research 52: 55-72.
- Christiansen CH (1999) The 1999 Eleanor Clarke Slagle Lecture. Defining lives: occupation as identity: an essay on competence, coherence, and the creation of meaning. Am J Occup Ther 53: 547-558.
- 9. Gillen G (2013) A fork in the road: an occupational hazard? Am J Occup Ther 67: 641-652.
- Polatajko HJ (1992) Naming and framing occupational therapy: a lecture dedicated to the life of Nancy B. Can J Occup Ther 59: 189-200.
- 11. Reed KL, Sanderson SN (1999) Concepts of occupational therapy. Lippincott Williams & Wilkins, Baltimore.
- Kirby A, Edwards L, Sugden D, Rosenblum S (2010) The development and standardization of the Adult Developmental Co-ordination Disorders/Dyspraxia Checklist (ADC). Res Dev Disabil 31: 131-139.
- Rosenblum S (2013) Handwriting measures as reflectors of executive functions among adults with Developmental Coordination Disorders (DCD). Front Psychol 4: 357-367.
- 14. Rosenblum S, Goldblatt H, Moin V (2008) The hidden dropout phenomenon among immigrant high-school students:

The case of Ethiopian adolescents in Israel - a pilot study. School Psychology International 29: 105-127.

- Schreuer N, Sachs D, Rosenblum S (2014) Participation in leisure activities: Differences between children with and without physical disabilities. Res Dev Disabil 35: 223-233.
- Rosenblum S, Engel Yeger B, Fogel Y (2013) Age-related changes in executive control and their relationships with handwriting performance features. Human Movement Science 32: 363-376.
- Werner P, Rosenblum S, Bar-On G, Heinik J, Korczyn A (2006) Handwriting process variables discriminating mild Alzheimer's Disease and mild cognitive impairment. J Gerontol B Psychol Sci Soc Sci 61: 228-236.
- Rosenblum S, Samuel M, Zlotnik S, Erikh I, Schlesinger I (2013) Handwriting as an objective tool for Parkinson's disease diagnosis. J Neurol 260: 2357-2361.
- Rosenblum S, Dekel T, Gurevitz I, Werner P, Heinik J (2010) Handwriting process variables among elderly people with mild Major Depressive Disorder: A preliminary study. Aging Clin Exp Res 22: 141-147.
- 20. World Health Organization (WHO) (2001) International classification of functioning, disability, and health. Geneva.
- 21. Scott CT, Caulfield T, Borgelt E, Illes J (2012) Personal medicine--the new banking crisis. Nat Biotechnol 30: 141-147.
- 22. Ronen GM, Rosenbaum P (2013) Life quality outcomes in children and young people with neurological and developmental conditions: concepts, evidence and practice. London: Mac Keith press.
- 23. Law M (2002) Participation in the occupations of everyday life. Am J Occup Ther 56: 640-649.
- 24. Bandura A (1998) Health promotion from the perspective of social cognitive theory. Psychology and Health 13: 623-649.
- Christiansen CH, Matuska KM (2006) Lifestyle balance: A review of concepts and research. Journal of Occupational Science 13: 49-61.
- 26. Pannain S, Van Cauter E (2007) Modulation of endocrine function by sleep-wake homeostasis and circadian rhythmicity. Sleep Medicine Clinics 2: 147-159.
- 27. Leufstadius C, Eklund M (2008) Time use among individuals with persistent mental illness: Identifying risk factors for imbalance in daily activities. Scand J Occup Ther 15: 23-33.
- Segerstrom SC, O'Connor DB (2012) Stress, health and illness: four challenges for the future. Psychol Health 27: 128-140.
- 29. Hammell KW (2004) Dimensions of meaning in the occupations of daily life. Can J Occup Ther 71: 296-305.
- Schultz S (2009) Theory of occupational adaptation. In: Crepeau B, Cohen E, Schell B, Willard and Spackman's Occupational therapy. (11th edn), Lippincott Williams & Wilkins, Philadelphia, USA, 462-475.
- 31. Caplan P (2003) Food, health and identity. Routledge, London, UK.
- 32. Punjabi NM, Shahar E, Redline S, Gottlieb DJ, Givelber R, et al. (2004) Sleep-disordered breathing, glucose intolerance, and insulin resistance the sleep heart health study. Am J Epidemiol 160: 521-530.
- 33. Bize R, Johnson JA, Plotnikoff RC (2007) Physical activity level and health-related quality of life in the general adult population: a systematic review. Prev Med 45: 401-415.

34. Ross A, Thomas S (2010) The health benefits of yoga and exercise: a review of comparison studies. J Altern Complement Med 16: 3-12.

ISSN: 2469-5793

- 35. Bruner J (2004) Life as narrative. Social Research 71: 691-710
- 36. Csikszentmihalyi M (1990) Flow: The psychology of optimal experience. In: Harper, Row, Harpercollins, New York.
- 37. Broadstock M, Michie S (2000) Processes of patient decision making: theoretical and methodological issues. Psychology and Health 15: 191-204.
- Tullett AM, Inzlicht M (2010) The voice of self-control: blocking the inner voice increases impulsive responding. Acta Psychol (Amst) 135: 252-256.
- Brown C (2009) Ecological models in occupational therapy.
  In: Crepeau B, Cohen E, Schell B, Willard and Spackman's Occupational Therapy. (11th edn), Lippincott, Williams &Wilkins, Philadelphia, 435-445.
- 40. Bronfenbrenner U (1979) Contexts of child rearing: Problems and prospects. American Psychologist 34: 844-850.
- 41. Rowles GD (2008) Place in occupational science: A life course perspective on the role of environmental context in the quest for meaning. Journal of Occupational Science 15: 127-135.
- 42. Bratman GN, Hamilton JP, Daily GC (2012) The impacts of nature experience on human cognitive function and mental health. Ann N Y Acad Sci 1249: 118-136.
- 43. Lawton MP (1986) Older people on the move. In: Environment and aging, Center for the Study of Aging, New York, 135-150.
- 44. REILLY M (1962) Occupational therapy can be one of the great ideas of 20th century medicine. Am J Occup Ther 16: 1-9
- 45. Camfield L, Skevington SM (2008) On subjective well-being and quality of life. J Health Psychol 13: 764-775.
- 46. King LA, Hicks JA, Krull JL, Del Gaiso AK (2006) Positive affect and the experience of meaning in life. J Pers Soc Psychol 90: 179-196.
- 47. Gardner H (2006) Multiple intelligences: New horizons. Basic Books, New York.
- 48. Josman N, Rosenblum S (2011) A Meta-cognitive model for children with atypical brain development. In: N Katz, Cognition, occupation, and participation across the life span. (3<sup>rd</sup> edn), Bethesda, 223-247.
- 49. Wilcock AA (2006) An occupational perspective on health. In: Thorofare, Slack Incorporated, (2<sup>nd</sup> edn).
- Farnworth L, Fossey E (2003) Occupational terminology interactive dialogue. Explaining the concepts of time use, tempo and temporality. Journal of Occupational Science 10: 150-153.
- Rosenblum S (2012) Validity and reliability of the Time Organisation and Participation Scale (TOPS). Neuropsychol Rehabil 22: 65-84.
- 52. Cochrane R, Robertson A (1973) The life events inventory: a measure of the relative severity of psycho-social stressors. J Psychosom Res 17: 135-140.
- 53. Lambert L (2003) Leadership capacity for lasting school improvement. Alexandria, VA: ASCD.?
- 54. Ouellette JA, Wood W (1998) Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. Psychological Bulletin 124: 54-74.

- 55. Kotter JP (1996) Leading Change. MA: Harvard Business School Press, Boston.
- Aidman EV (1998) "Analysing global dimensions of self-esteem: Factorial structure and reliability of the Self-Liking/ Self-Competence Scale." Personality and Individual Differences 24: 735-737.
- 57. Aidman EV (1999) Measuring individual differences in implicit self-concept: initial validation of the self-apperception test. Personality and Individual Differences 27: 211-228.
- 58. Meagher BE, Aidman EV (2004) Individual differences in implicit and declared self-esteem as predictors of response to negative performance evaluation: Validating Implicit Association Test as a measure of self-attitudes. International Journal of Testing 4: 19-42.
- Fredrickson BL (2004) The broaden-and-build theory of positive emotions. Philos Trans R Soc Lond B Biol Sci 359: 1367-1378.
- 60. Brott PE (2005) A constructivist look at life roles. The Career Development Quarterly 54: 138-149.
- 61. Spencer EA (1988) Functional restoration: Preliminary concepts and planning. In: H L Hopkins, H D Smith, Willard and Spackman's occupational therapy. (7th edn), PA: JB Lippincott Co, Philadelphia, 435.
- 62. Engel-Yeger B, Jarus T, Anaby D, Law M (2009) Differences in patterns of participation between youths with cerebral palsy and typically developing peers. Am J Occup Ther 63: 96-104.
- Bendixen RM, Kreider CM (2011) Review of occupational therapy research in the practice area of children and youth. Am J Occup Ther 65: 351-359.
- 64. South R (1727) Twelve Sermons Preached upon Several Occasions. (6th edn), J Bettenham, London, UK.
- 65. Hasselkus BR (2011) The meaning of everyday occupation. Thorofare, Slack Incorporated, NJ.
- Hinojosa J, Kramer P (1997) Statement--fundamental concepts of occupational therapy: occupation, purposeful activity, and function. Am J Occup Ther 51: 864-866.
- 67. Christiansen CH (1996) Three perspectives on balance in occupation. In: R Zemke, F Clark, Occupational science: The evolving discipline. PA: FA Davis Company, Philadelphia, USA, 431-451.
- 68. Townsend EA, Polatajko HJ (2007) Advancing an occupational therapy vision for health, well-being, and justice through occupation. ON: CAOT Publications ACE, Ottawa.
- 69. Teraoka M, Kyougoku M (2015) Development of the Final Version of the Classification and Assessment of Occupational Dysfunction Scale. PLoS One 10: e0134695.
- 70. American Occupational Therapy Association (2014) Occupational therapy practice framework: Domain and process. (3<sup>rd</sup> edn), American Journal of Occupational Therapy 68: S1-S48.
- Zemke R (2004) The 2004 Eleanor Clarke Slagle Lecture--Time, space, and the kaleidoscopes of occupation. Am J Occup Ther 58: 608-620.
- 72. Rowles GD (1978) Prisoners of space?: Exploring the geographical experience of older people. CO: Westview Press, Boulder.
- 73. Rowles GD (1991) Beyond performance: being in place as a component of occupational therapy. Am J Occup Ther 45: 265-271.

- 74. Rowles GD (2000) Habituation and being in place. OTJR 20: 52-67.
- 75. Dear M (1996) Time, space and the geography of everyday life of people who are homeless. In: R Zemke, F Clark, Occupational science: The evolving discipline. PA: FA Davis, Philadelphia, 107-114.
- 76. De Boef S, Keele L (2008) Taking time seriously. American Journal of Political Science 52: 184-200.
- 77. Hall E (1981) The silent language. NY: Doubleday, New York.
- 78. Hall E (1983) The dance of life: The other dimension of time. NY: Doubleday, New York.
- Mathiowetz VG, Finlayson ML, Matuska KM, Chen HY, Luo P (2005) Randomized controlled trial of an energy conservation course for persons with multiple sclerosis. Mult Scler 11: 592-601.
- 80. Klinger E (2012) The search for meaning in evolutionary goal-theory perspectives and its clinical implications. In: PTP Wong, The human quest for meaning: Theory, research and applications. NY: Routledge, New York 23-56.
- 81. Eakman AM (2013) The Meaningful Activity Wants and Needs Assessment: A perspective on life balance. Journal of Occupational Science 22: 210-227.
- 82. Hammell KW (2009) Self-care, productivity, and leisure, or dimensions of occupational experience? Rethinking occupational "categories". Can J Occup Ther 76: 107-114.
- 83. Michie S, Ashford S, Sniehotta FF, Dombrowski SU, Bishop A, et al. (2011) A refined taxonomy of behaviour change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. Psychol Health 26: 1479-1498.
- 84. Little BR (1983) Personal projects a rationale and method for investigation. Environment and Behavior 15: 273-309.
- 85. Daly HE (1981) Economics, ethics, and cost-benefit analysis. Human Systems Management 2: 7-12.
- 86. González MC, Hidalgo CA, Barabási AL (2008) Understanding individual human mobility patterns. Nature 453: 779-782.
- 87. King LA, Raspin C (2004) Lost and found possible selves, subjective well-being, and ego development in divorced women. J Pers 72: 603-632.
- 88. Palys TS, Little BR (1983) Perceived life satisfaction and the organization of personal project systems. Journal of Personality and Social Psychology 44: 1221-1230.
- 89. Moffitt KH, Singer JA (1994) Continuity in the Life Story: Self-Defining Memories, Affect, and Approach/Avoidance Personal Strivings. Journal of Personality 62: 21-43.
- 90. Singer JA, Salovey P (1993) The remembered self: Emotion and memory in personality. The Free Press, New York.
- 91. Singer JA, Salovey P (1996) Motivated memory: Self-defining memories, goals, and affect regulation. In: LL Martin, A Tesser, Striving and feeling: Interactions among goals, affect, and self-regulation. NY: Psychology Press, New York, 229-250.
- 92. Suh E, Diener E, Fujita F (1996) Events and subjective well-being: only recent events matter. J Pers Soc Psychol 70: 1091-1102.
- 93. Blagov PS, Singer JA (2004) Four dimensions of self-defining memories (specificity, meaning, content, and affect) and their relationships to self-restraint, distress, and repressive defensiveness. J Pers 72: 481-511.
- 94. Gardner WL, Avolio BJ, Luthans F, May DR, Walumbwa F,

et al. (2005) "Can you see the real me?" A self-bad mseodel of authentic leader and follower development. The Leadership Quarterly 16: 343-372.

- 95. Syme SL (2004) Epidemiology of health and illness: A socio-psycho-physiological perspective. In: S Sutton, A Baum, M Johnston, The Sage handbook of health psychology. Thousand Oaks, CA: Sage, 27-68.
- 96. Steger MF, Kashdan TB (2007) Stability and specificity of meaning in life and life satisfaction over one year. Journal of Happiness Studies 8: 161-179.
- 97. Brown KW, Ryan RM, Creswell JD (2007) Mindfulness: Theoretical foundations and evidence for its salutary effects. Psychological Inquiry 18: 211-237.
- 98. Ghorbani N, Cunningham CJ, Watson PJ (2010) Comparative analysis of integrative self-knowledge, mindfulness, and private self-consciousness in predicting responses to stress in Iran. Int J Psychol 45: 147-154.
- 99. Mantzios M, Wilson JC (2014) Making concrete construals mindful: a novel approach for developing mindfulness and self-compassion to assist weight loss. Psychol Health 29: 422-441.

