Chapter 5

Community Participation in People with Disabilities

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Additional information is available at the end of the chapter

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Abstract

Despite the fact that participation is an important building and a valuable target, the conceptualization, identification and measurement methods vary widely. This chapter tried to gain an insider's perspective from the obstacles that summarize what meaning participation means, how to characterize it, and what prevents and supports participation. Participation is seen as a right and a responsibility attributed to and attributed to both the person and the community. Participation does not take place in a vacuum; the environment dynamically influences participation. The effects of this conceptual framework are discussed for change at the level of evaluation, research and systems to support the participation of the people with disability.

Keywords: participation, disability, occupation, function and quality of life

1. Introduction

Being disabled is defined as being out of "normal" as a biological sense, while in social sense, it is defined as the social and cultural obstruction of the individual's ability to live independently and easily in society [1]. Therefore, appropriate sociocultural environment is essential to enable disabled people to develop their skills and gain a place in social life. For example, the parent of person of a disability does not have an interest in him because he does not trust him or herself and shows an extreme protectionist attitude [2].

In order to enable individuals with disabilities to find jobs, marry, spend their leisure time, and continue their education and vocational training in the society they live in, relations with various social institutions, social status gains and integration with society are important factors [3]. Community participation activities are those that relate to organizing behaviors that arise during interaction with others in a particular social system: family, peers, or friends [4, 5].

The quality of life, which is defined as the way people perceive health as a result of the constraints of social and professional life, is also negatively affected [6–8]. In addition, the limitation of daily life activities due to functional disabilities also affects the community participation negatively [9]. It should not be forgotten that the physical, psychosocial and economic level of the people with disabilities affects the quality of life and there is a relationship in which the degree of dependence of the person is inversely related to the quality of life [10] (**Picture 1**).

Adolph Mayer, the author of occupational therapy "People organize themselves to participate in activities throughout their lifetime and use their time" [11]. Participation from the perspective of occupational therapy is to be a part of everyday life. Participation is the main goal of occupational therapy. The World Health Organization (WHO) also focuses on participation as an important goal for all the people. The World Health Organization has defined areas of participation as knowledge learning and practice, general tasks and desires, communication, movement, self-care, interpersonal interaction, home and work habits, community life, social life and citizenship [12].

The nature, quality and/or duration of participation are personality and, even if it has the same health status, two different people cannot be compared at all. Participation examines the situation in the social environment rather than activity. The main problem of participation is the limitations bring to life of certain health problems and environment [13]. Community participation is sufficient for the individual to participate in the activities in his/her field. There are those who say that social skills are participation of everyday life, but according to the experts, social participation is more complicated than communication [14].

Picture 1. Health and well-being negatively affected of the inappropriate environment.

2. Philosophy of occupational therapy and community participation

The philosophy of a profession is based on three components; first, the metaphysical component "What is human nature?" deals with the question. Second, etymology component "nature of human science, the starting point and the boundaries of" dealing with "How do we know everything?, How do we know what we know?" search for answers to their questions. Third, value teaching component, two types of questions One is "what is beautiful or valuable" which is related to esthetics, and the other is "what are the standards or rules of correct behavior" related to ethics? [15].

Occupational therapy is a scientific discipline that uses purposeful and meaningful activities therapeutically. Activity is the essence of being good. Meaningful activity is used to develop the capacity for internal motivation. Human life is in a continuous adaptation process. Adaptation is the change in the functions and directs the person to survive and develop. Biological, psychological, and environmental factors can disrupt adaptation in the life cycle. Decrease in function occurs when adaptation is impaired. Meaningful activity helps the adaptive process to regenerate [16].

The main goal of occupational therapy is to ensure that people participate in daily life activities and improves their performance. Occupational therapy provides a client-centered approach to health and well-being. At the same time, occupational therapy focuses on increasing the competence of people by organizing people, activities, the environment or some or all of them in order to increase social participation [16].

The handling of occupational therapy in all directions of humankind is called *holistic approach*. Holistic approach emphasizes the organic and functional relationship between whole and parts. This approach assumes the person as a whole as biological, psychological, sociocultural and spiritual [17].

Occupational therapy sees man as an active being. Man can determine and control his own behavior and even change it at will. Moreover, there is constant interaction between the human and environment. To survive, everyone has to do certain activities for himself or someone else, such as feeding himself or someone else [18].

According to occupational therapy, every person has the ability to be adaptive. Adaptation is the change in function for survival and self-renewal [11]. Occupational therapy also increases activity adaptation [19]. When Gail Fidler and Jay Fidler describe adequacy, they say that "adapting, the ability to cope with problems in daily life and fulfill roles depends on the richness of one's relationships with both people and the environment" [20]. Adaptation depends on the person. The role of the occupational therapist in this process is to regulate the environment in order to facilitate the emergence of a specific adaptive response [21].

Occupational therapy aims to increase the quality of life of people whose functional ability is limited or impaired. To this end, it helps to improve performance independence in any area of the person: Strengthening the person's body for the necessary roles, improving the coordination for activities, improving the hobbies to make the person happy, or improving the social skills of the person to increase their participation in these aims. Thus, the meaning and value of the activity and the quality of life will increase [17].

Occupational therapy is based on the philosophy of humanism, which sees the applicants as human rather than as an object. The humanistic point of view is the basic approach of this profession. Today, this approach is called person-centered approach. The therapist understands the importance of the person, family, and other individuals in his/her life in the treatment approach. The person has an active role both in the treatment modalities and in defining the goals and preferences for the treatment [17].

3. International classification of functioning, disability and health-ICF and community participation

International classification of functioning, disability and health (ICF) is a system that forms a standard language for defining health and health-related situations for the measurement, classification and conceptualization of disability and functioning [13].

In the past, the disability began at the place where the health had ended and anyone with any kind of heart was seen as second class. This way of thinking has evolved to support and improve the collective participation of the person with a disability who changes over time. ICF is a measure of the functioning of the individual in society, regardless of the cause of the disorder [22].

In the ICF classification, factors affecting the health status of a person are stated to be body functions and structures, activity, participation and environment. The consequences of these factors are functional and structural disorders, activity and participation limitations [23].

ICF reveals body function and structure, activity, participation, and personal and environmental factors. The content of occupational therapy is performance components, activity performance, participation and environmental factors [24].

ICF can be used for evaluation, intervention, and in service. The occupational therapist examines body functions and structures so performance components, to evaluate the primary target according to the individual. It interferes with functional impairment by focusing on the occupational performance. If malfunctions are encountered, it affects the person's participation and quality of life. Therapists should be familiar with these principles and should use them when planning services [24].

The language and content of ICF and Occupational therapy Frame of Reference are very similar. The frame is based on the ICF. This is particularly evident when the classification system in the ICF and the classification of the body functions in the frame are compared. The relationship between the activity areas of the frame and the activity participation areas of the ICF is indirect but overlaps with each other. Moreover, the ICF includes activities and areas of participation that can be compared to the performance capabilities listed in the frame. Most of the performance abilities in the frame have parallel codes in ICF [25].

The mobility field in the ICF is parallel to the motor skills. The communication/interaction skills and social interaction skills in the frame and the communication, interpersonal interaction and relationships in the ICF are parallel. Finally, the activity and performance areas of the framework and the ICF's activities and areas of participation are similar [25].

4. Occupational therapy models for evaluation of participation

Models provide people with a sense of how they choose their activities and their experiences with them. It also specifies the problems of the people's activities and the rational solutions that can be brought to them [26].

- Occupational therapy' applications lead the occupational therapists to ask the following questions:

1. How can the physical and cognitive disorders of people's daily activities be minimized?
2. How can people's despair and sensitivity be understood when they are accustomed to their lives and lose the capacities they need? And how to get more control over their lives? [12].

- Purpose and structure of models;

A model involves a dynamic knowledge development process. A model is a way of thinking about applications, always reviewing and developing them [26].

4.1. Model of human occupation (MOHO)

This model was developed from Reilly's activity behavior model. This model focuses on function and activity. It guides in restructuring the activity, because this model focuses on person's roles and habits and determines the person's perspective and will. Person is seen as a dynamic system influenced by the physical and social environment. This model provides information on the occupational therapist's performance capacity [12].

Main elements of this model;

- The roles and habits of the person (habituation)
- Volition for activities and tasks (volition)
- Performance and environmental (performance capacity) (**Figure 1**)

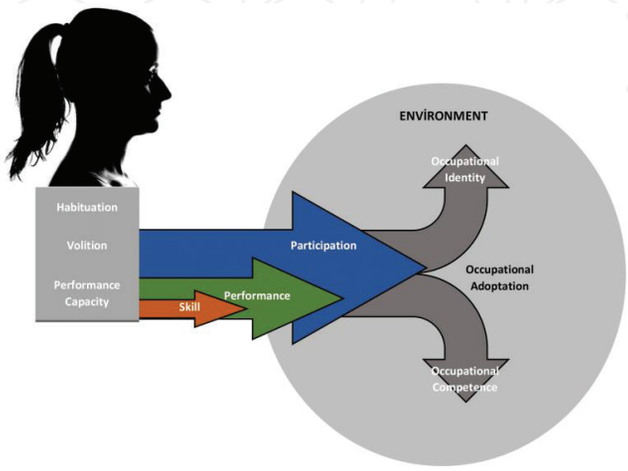

Figure 1. Model of human occupation scheme.

Habituation: Habits arise when organizing behavior in repetitive patterns keeps pace with the social world. Repeated movements in special cases constitute a habit pattern. The habit pattern grows with time and strengthens the organization and communication habits of the person with daily, weekly and seasonal routines [27]. Every person has one or more roles, and they have to do with those roles. Sometimes a person is a worker, sometimes a parent. This role guides other people's anticipations and how the natural person of the social system should behave. The roles are shaped by behavior. The person can reflect on their role activities, movements or clothing style [30–32].

Volition: The volition of the person for activities and duties depends the activity of the person, the importance of the activity for the person, and the satisfaction from this activity. Motivation is shaped by one's previous experiences and is closely linked to the future. It also influences motivation, causes, values and interest [27].

1. Personal reasons reflect the importance of the activity to the person and the capacity of the person. The person uses capacity in relation to cultural observations and demands of the environment. Because people think about doing the activity when they are confident in their physical, social and mental abilities. Some people are talented in sports, music, while others are successful in human relationships. After all, people shape their activities using their environment and capacities [27].
2. The choice of activity is also influenced by the values. Values consist of beliefs and concepts of well right importance as defined by society [29] and are felt by the individual as necessity. This obligation turns into a sense of belonging and social righteousness for the person when he or she acts according to the value of the person [27].
3. Activity brings together the fulfillment and satisfaction of interest [30]. Each individual has different interests, depending on the opportunities for dealing with the activity and the mood [27].

Performance capacity: It is influenced by body systems (such as musculoskeletal system, cardio-pulmonary system, neurological system), mental and cognitive abilities (such as memory and planning abilities) [27].

MOHO also emphasizes how to use the body to maintain daily performance and how to benefit from body experiences [27].

4.2. Ecology of human performance model (EHP)

The ecology of human performance model assumes that environmental factors and/or natural phenomena such as physical, temporal, social and cultural influence the performance of the person [33]. The structure of this model includes human, environment and performance variables and the interaction between them. This model defines the person as a three-dimensional model we have observed in his environment of him. The client-cantered approach defines the activities and tasks of the person. This model helps the therapist to develop special strategies for overcome the barriers that limit the performance of the person.

The main elements of this model are as follows:

- Activities and tasks of the person in the living environment
- Understanding the social, cultural and physical environment and its impact on the performance of the patient [28].

This model has expanded the range of interventions by addressing the environment. This model offers five intervention approaches: restoration, adaptation, replacement, prevention, and creation. Restoration intervention indicates changing the skills and abilities of the person. Adaptation and change are for the conditions and tasks. Prevention and creation strategies can focus on person, circumstances or relative but must be used before the problem arises. These forms of intervention remove the therapist from focusing solely on the individual and reveal a wide range of situations in which the environment can affect participation [4] (**Picture 2**).

The difference between other models and EHP is the use of terminology. In this model, authors preferred to use the term "task" rather than activity. The first reason is to work and collaborate with other disciplines. Second, the task word is more common on the day-to-day basis. In this model, there are three main structures: person, task and environment [28].

The *person* is in a dynamic and specific environment. So it is not possible to understand a person without knowing the environment of the person. The person affects the environment, and the environment also affects the person. The activity performance of the person determines the interaction between the person and the environment, environmental stimuli and the obstacles in the environment [28].

In the EHP model, the *task* is a series of behaviors. When tasks are combined, the person participates in the activity they want to achieve. The task is to determine the specific behavior required for successful participation. The person's skill, ability and interest will be combined with the characteristics of the participation and conditions to determine which task to use [34].

Picture 2. A leisure activity of a woman in adaptive environment.

There are two aspects of the environment in terms of time and environment. The temporal orientation is due to social and cultural connections. It is chronological. And it is maintained at every stage of development, affected by the phases of life and disability. The environmental aspect influences the performance of the physical environment (accessibility to unmanned environmental conditions), the social environment (the individual's accessibility to meaningful expectations), and the cultural environment (dressing, life patterns, beliefs, behavioral standards). As a result, the ecology model provides a way for the individual to understand their natural affairs, activity performance and environment. Finally, according to this model, the performance of a person depends on the person (ability, skill and motivation) and the environment (support and obstacle) [34].

4.3. Person-environment-occupation (PEO)

This model assesses the person, environment, activity, and interaction with each other. This is one's own daily life. Developers of this model have indicated that activity performance cannot be separated from environmental influences, temporal factors, physical and psychological characteristics of a person. They also define that in this model, environments, tasks, activities, and roles change constantly. They clearly stated the importance of focusing on the client's goals and creating a partnership that would help him/her to give his rehabilitation responsibility to the patient [12].

The main elements of this model are;

- Choosing the person's choices and goals for the activity
- Physical and psychological characteristics of the person
- Social, cultural, physical and institutional environmental factors affecting performance
- Time orientation and stages of life [12].

In this model, *human* beings are considered as part of every role and change. The importance, duration and meaning of these roles are very different according to environment and time. The human mind is a whole with a composition of body and spirituality. Human's qualities are physical, cognitive, emotional, and life experiences [29].

In this model, the *environment* is equally balanced in terms of cultural, social, physical, institutional, political and economical. It is the environment where environmental behaviors are practiced and provides personal information about what to do with expectations. These components may be supporting or limiting activity performance. With this model, it is also important how the individual perceives the environment [29] (**Figure 2**).

Activity encompasses all self-care, producers and leisure activities. These represent the activities that one is engaged in for life [29]. When the activity is analyzed, the characteristics of the tasks, the duration of the activity, the complexity, and the need are examined [34].

Activity performance occurs at the intersection of these three conglomerates and is dynamic, and the performance experience varies according to the variation of these three components.

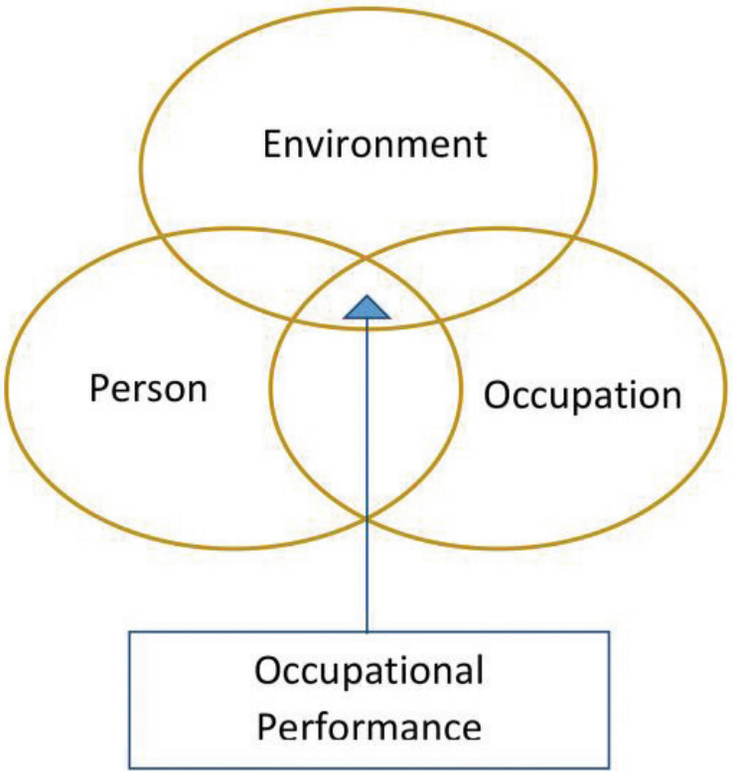

Figure 2. Person-environment-occupation scheme.

The change of these three components in the PEO model over time determines the area of activity performance. If the closeness of these components is appropriate, the performance of the activity is optimal. Therefore, the basis of occupational therapy intervention is the adjustment of the activity performance of the changes in these components [29] (**Figure 3**).

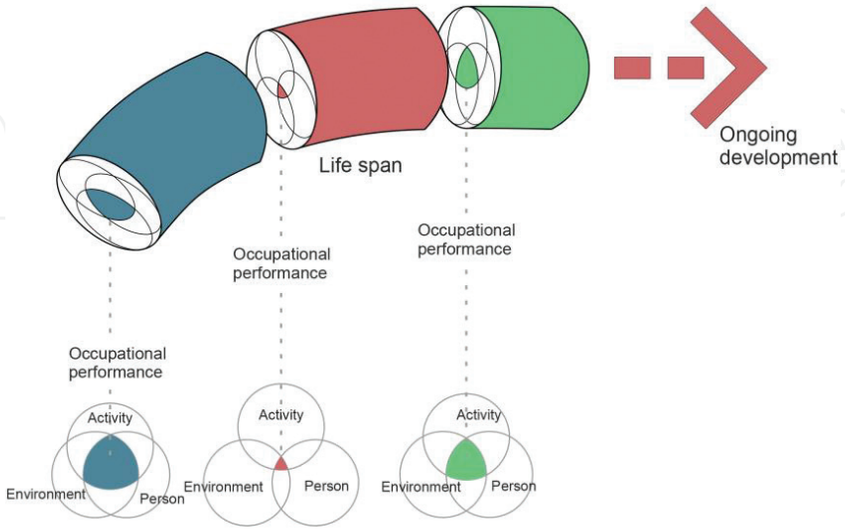

Figure 3. Development of person-environment-occupation in life span.

4.4. Person-environment-occupation-performance (PEOP) model

The person-environment-occupation-performance model acknowledges that the activity performance of a person cannot be separated from the client-centered and environmental effects. This model uses internal factors (psychological, cognitive, physiological, and neurobehavioral) and environmental factors (physical, cultural, social, social policies, and attitudes) to perform important activities, roles and tasks for the person and to understand the capacity of the person [12] (**Figure 4**, **Picture 3**).

In addition, one's own image, abilities, self-understanding and motivation are assessed in a dynamic partnership with the therapist [perhaps family and cat, others involved in his/her life]. This approach requires the therapist to determine the person's roles, duties and activities. This model predicts intervention by meaningful activities during health or recovery [12].

The main elements of this model are as follows:

- Activities, tasks and roles are important for people, organization and society. His image is his activity.
- Inner factors supporting performance are psychological, cognitive, physiological and neurobehavioral factors.
- External factors that support or hinder the occupational performance are the physical, cultural, social environment, social policies and attitudes [12].

4.5. Canadian model of occupational performance (CMOP)

It is known as the model that sets the basis of client-centered treatment. This model defines the relationship between person, person's environment and occupation, and intervention. Spiritually, the innate essence of man is the center of this model [12].

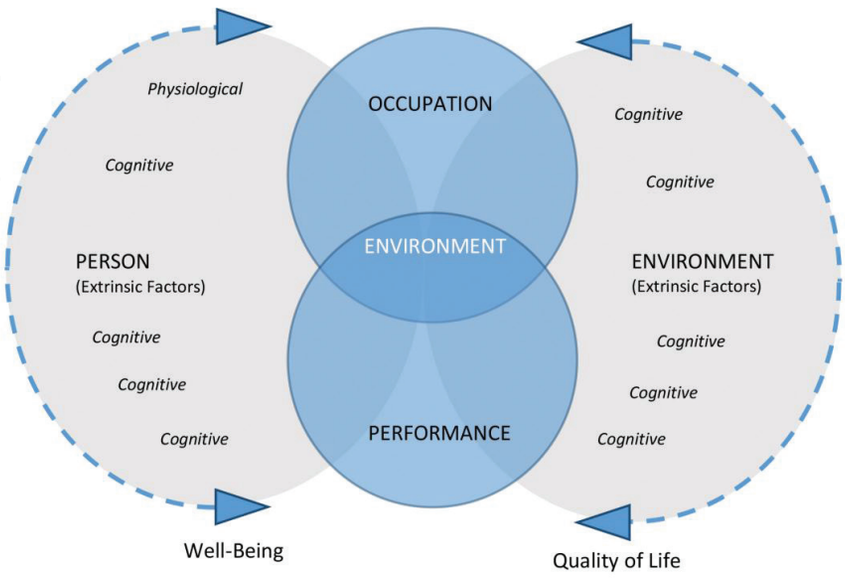

Figure 4. Person-environment-occupation-performance (PEOP) model scheme.

Picture 3. Environment: the determinates of participation for people with disabilities.

The main elements of this model are as follows:

- Occupation that is important to the person (self-care, production, leisure)
- Internal resources of the person (physical, cognitive, emotional)
- The environment of the person (physical, institutional, social, cultural)
- Spiritual factors (internal structure) [12]

This model has two focal points: The first is the treatment process and the client-centered practice that expresses the relationship between the treatment and the person. The second is the occupational performance which is done for self-care, enjoyment of life, participation in social and economic life, organize and satisfy them with respect to age, culturally appropriate and meaningful work [35].

This model includes factors that affect occupational performance and beliefs that affect the conceptualization of occupational therapy. Values and beliefs influence person's environment, health and client-centered practices [35].

Examples of values related to the activity are as follows:

- Activity is meaningful to life.
- It is necessary for health and well-being.
- Organize behaviors.
- Change over time and evolve.
- It shapes the environment and is shaped by the environment.
- Has a therapeutic effect [35].

5. Factors affecting community participation

5.1. Personal factors

When these structures deteriorate, it is very important to intervene and evaluate the intervention. Performance constructs include *habits, roles, and routines*. *Habits* are the models and talents that will engage the individual on a daily basis. Habits tend to automate and are usually automated at the subconscious level. This saves energy and allows us to focus on higher-level tasks. Habits can be useful for individual support. Occupational therapists conFigure it to intervene [36].

Routines are things that an individual usually does in a regular order. Routines bring order sensibility and an individual or a group forms the framework for their daily lives. Studies have shown that routines are made at certain times of the day and somehow provide daily rhythm or biological rhythm according to the individual's biological clock. Routines are also shaped by society and culture at the same time. When children return from school, doing homework is a routine shaped by society and culture [36].

Both habits and routines provide daily activities for the individual. Habits and routines help an individual to have a certain lifestyle. Lifestyles are a sign of health and well-being. Individuals with routine preventive measures, habits, and daily walking or non-smoking routines will have a healthier lifestyle. The occupational therapists should be aware of the work of their patients and the meaning of these things in relation to the patient [14].

5.2. Performance skills

It defines certain abilities and features that the person typically combines to complete a functional ability. These include sensory, motor, emotional, cognitive, and communication/interaction skills [14].

The main examples are as follows:

- **Motor and praxis skills***:* The ability of an individual to interact with his environment and occupation, or with the objects in the environment [14].
- *Posture:* The ability to achieve a steep position even if the balance and balance of the individual is disturbed. This ability includes body trunk stabilization, alignment of the individual's body in a vertical position, and bringing the body to a safe and controlled position after completing the activity [36].
- *Mobility*: Ability of the individual to act to complete an occupation or activity. This ability includes walking on rough surfaces without stumbling, using foot tools or ancillary tools such as walking sticks, walkers or wheelchairs. If the individual is able to walk, the ability can also include situations such as being able to successfully reach the object with arms or with an apparatus and to tilt the body according to the task [36].
- *Coordination:* The capacity to use more than one extremity in relation to the task or activity. This ability includes the use of two or more limbs to stabilize or manipulate the object. The

individual must use small muscle groups for controlled movements such as object manipulation, speed or hand skill [36].

- *Strength and effort:* Move the objects against gravity as if it were the sum of muscle power used to counteract the movement or in the case of lifting an object standing on the ground. The individual must use the grip strength necessary to hold objects tight and adjust their speed, magnitude [36].
- *Energy* is to sustain and maintain certain durability and speed throughout the entire task without showing any signs of fatigue [36].
- **Process skills:** Individuals use skills to make the necessary movements to complete their daily life skills [14].
- *Energy:* The ability to focus on the workflow that continues over a period of time. This skill includes that the person adjusts his/her own speed and maintains attention throughout the mission [36].
- *Knowledge:* It is enough to research, acquire, and use knowledge for the task. This is the skill of the individual to select, use and protect the tools and materials related to the task. The individual has to learn more by asking questions or reading the guidelines to effectively complete the task [36].
- *Temporal organization*: The ability to plan, organize, and applicant stages of a task in turn. This capability includes initiating and continuing the task in succession and stopping or pause the activity when required [36].
- O*rganizing space and objects:* It is the ability to organize the duration of the occupation or the task. This skill encompasses the ability of the individual to research tools for successful occupational performance, the ability to gather the tools needed for the task, and the ability to place tools in a logical and orderly manner. When the task is over, the individual must clean the work area and put the tools he uses in appropriate storage locations. This skill is also an ability to overcome an obstacle and also means that the individual moves his body or wheelchair around any object [36].
- *Adaptation*: The skill of the individual to learn something from his mistakes during his performance. This is the skill of recognizing the problem and the ability to adapt or change the movements of the individual to the situation of the task-related objects during or before the problem. This skill also requires that the individual comply with the work environment before or during the problem [36].
- **Sensory perceptual skills:** The ability to describe, interpret and respond to sensory information. These skills also require the individual to remember perceptual events. Sensory information can be interpreted in many ways, including auditory, visual, tactile, smelling, tasting, proprioceptive, and vestibular [36]:
- *Body position:* This is capable of bringing the individual's body to a proper position for a movement.
- *Hearing*: The ability to receive and recognize the auditory information.

- *Visualizing:* The ability to use visuals to interpret information.
- *Locating:* This ability comes into play when the individual begins to use sensory information to relocate objects. This ability is about stereognosis.
- *Timing*: The individual is able to self-adjust for a motor task or activity.
- *Discerning*: Using sensory ability to describe the differences between objects. An example is that an individual can tell the difference in temperature between foods.
- **Emotional regulation skills:** The ability to use movements or behaviors to express feelings when interacting with individuals or groups, or to deal with them [36]:
- *Responding*: It is the ability to understand and react to others' feelings.
- *Persisting*: Despite the difficulties, it is the capacity to continue the tasks.
- *Controlling*: Controlling feelings or anger about other individuals.
- *Recovering*: The individual is used when he is disappointed or when his feelings are hurt.
- *Displaying*: To have the ability to express appropriate feelings about a situation or experience.
- *Utilizing:* The ability to use some skills and techniques to resist emotional situations.

Cognitive skills: To use ideas or behaviors to design an activity or task [36]:

- *Judging*: the task is the ability to decide what is important or necessary for completion. An example is when an individual decides not to prioritize jobs that run the length of time.
- *Selecting*: Ability to select appropriate tools for a specific task.
- *Organizing*: Having the ability to complete the activity in the given order and time.
- *Prioritizing*: The ability to define the steps and solutions needed to complete a task.
- *Creating*: Can participate in fun activities.
- *Multitasking:* At the same time, the ability to do multiple jobs.

Communication/social skills: It is enough to explain the needs and ideas of the individual to others in a social environment and in an acceptable way [14].

- *Physicality*: The ability to use the individual's body or body language for communication. This skill involves physically touching others, bringing your body into a position or turning it into a direction in relation to eye contact and others.
- *Information exchange*: Ability to inform others and get information from them. This skill includes explicit self-expression, asking for information, and being able to include a meaningful word. Thus, the individual can communicate his/her feelings in the direction of information they share.
- *Relations*: Ability to continue relationships. This skill requires that the individual has the ability to interact with other people, to connect with people who have ordinary interests, or to have the ability to catch relationships at a certain level with everyday interactions [36].

5.3. Performance areas

Different living spaces were defined in the social participation of the individual. These include activities of daily living (ADL), instrumental activities of daily activities (IADL), work, education, play and leisure. The occupational therapist should take into account the person's role, social support, and occupational performance in different time and space [37].

The activities of the individual affect the activity of the roles in determining the role of his life. Christiansen and Baum have defined roles as "expected responsibilities and privileges in society" [34]. For example, in a reading activity, a mother reads a book for a 5-year-old child and has different activities to read a report. while she is in a job. That is, both the content and the printing scales of the material to be read will be different. While reading a book requires reading, a voice reading a report does not require it [38].

Activities can be divided into smaller tasks. For example, the account payment activity includes a series of tasks such as calling a waiter, requesting an account, reading the amount, putting the required amount in the account box. One uses the abilities and skills when doing these tasks. The skills required for these tasks include good motor skills, visual perception, selection, and oral motor function [38].

Activities of daily living (ADL): ADL skills include self-care, functional mobility, communication, and management of pharmaceutical and health routines. While defining activities of daily living, different terms can be used, such as simple daily life activities and personal daily life activities. Despite the different definitions of the ADL definition, it is people take care of yourself. ADL is an example of bathing, bowel control, dressing, eating, functional mobility, personal care, sexual activity, and toilet cleaning. Bathing activity, for example, is the acquisition and use of bathroom accessories such as soap, towels. The essence of this activity is to transfer into and out of the bath or bath with the ability to get the proper bath position and adjust the safe water temperature. Dressing activity includes the ability to dress up and choose clothes according to time, season and activity in our mind. Eating activity is the ability to graze, chew, and swallow food. Functional mobility is the ability to move from one position to another or from one place to another. Personal care activity is the provision and use of tools for the care of skin, ear, eye and nails. It is also necessary for this activity to scan the person's hair, use a toothbrush and toothpaste for mouth cleaning, toilet hygiene activities, in-and-out transfer, preparation of toilets, and post-toilet cleaning activities [37, 38]

Instrumental activities of daily living (IADL): Lawton and Brody have described "secondary tasks necessary for independent living in the community" as instrumental activities of daily living. IADL, consist of money management, telephone use, medication use, travel, shopping, food preparation, laundry and housework. It is recognized that IADL is important for the quality of life and well-being of the disabled individual. But there is no consensus about what activities are needed for independent community life. Barer and Nouri classify leisure activities (gardening and other hobbies) as transportation (use of transportation vehicles, walking on the street, getting in and out of the car and driving), home activities (laundry jobs, food preparation and housework) [37].

The application of IADL is complex multi-step activities. It requires the use of special tools such as telephones. Practices can occur inside and outside the house. Independent practice requires mental, physical and social skills such as decision-making, problem solving, initiation and sequencing. The evaluation of IADL is especially important for those who are prepared to return to community life. In addition, this assessment provides meaningful information about a person's cognitive status. In persons with cognitive impairment, disturbances are observed in IADLs, especially in telephone use, transportation, drug use, and money management [37].

Work/school activities: Job-based activities are the focus of one's life. Work-related activities are an important way to demonstrate the "adequacy" of an individual. The occupation as an employee depends on a successful interaction with the interpersonal, environment and business. The job evaluation of the person leads the therapist to specific tasks in the business area. The assessments in this area are used as an important source of information for the state. The best person to do the same job analysis as the job analysis can be identified [37].

Assessing the child, adolescent or young adult's ability to provide education is important [22]. It provides information about the child's participation in school activities, occupational performance and supports the child uses [37].

Leisure activities/play: Leisure activities are non-essential activities that are freely chosen, mostly occurring in nature, and providing individual satisfaction, relaxation, recreation and self-expression. Individuals are delightful and rewarded with inner rewards. Individuals with experience in leisure activities believe that events are on their control and will result in free choices of the outcome of the activity. These events and characteristics affect the person's ability to make choices. It has also been shown that participation in leisure has a positive impact on health [37].

The play is the first activity in childhood and youth. The play is a versatile phenomenon. The play improves internal motivation while providing relaxation and entertainment. Factors such as what players do, how players like the selected game activity, how the players' approach to the activities are, how the players play the games, and how the game supports the play are important [37].

5.4. Environmental conditions

In previous years, it was thought that the person with a disability had a disability in daily activities, participation in education, play and work, and these problems were related to the person. Later, awareness of environmental factors has also led to difficulties experienced by people with disabilities [39, 40].

First, the focus was on the physical and structural environment, and a lot of effort was spent on ramps, elevators, etc. on the pavements. The people with disabilities began to participate more in collecting [37].

Environmental conditions include three major factors:

1. Physical conditions (structural, natural and technological environment),
2. Social support,
3. Social conditions (socio-economic, cultural and political environment) [37].

Physical conditions: Physical conditions are classified in the building (man-made environment), technology (auxiliary devices, fixtures and software) and natural environment categories used by ICF [13].

1. There are two simple approaches to modifying the *building environment*. The first is the regulation or addition; the second is the addition of environmental products such as displacement or fixing devices. Reorganization of the building, the addition of a building to the home or community area, or the reshaping of the natural area may be expensive but necessary. On the other hand, the arrangement of the furniture in the rooms can be achieved with less cost. The second approach focuses on regulating whether the toilet or bath can be raised or lowered. Thus, one can make the right decision about his abilities and practice the task successfully. Connell and Sanford found that persons with disabilities who modified their homes had moderate difficulty or independence in activities of daily living. Gitlin and colleagues found a decrease in the rates of functional dependence and attachment to careers with house modification. Mann and colleagues reported that in the old age, the use of assistive technology and increased environmental regulation has reduced spending on personal care and health care [37].
2. Another important method of regulating the environment is the provision of *assistive technology and products*. Products consist of modifications for adaptive software or environmental control. Assistive technology is defined as systems and products that improve the functional capacity of people with disabilities. This technology is designed for environmental barriers that prevent someone from achieving maximum occupational performance. Sitting and moving devices provide connectivity to the community. A wide variety of assistive devices and systems are available, such as computer interface systems, communication enhancing devices, adaptive driving devices and environmental control units. Vehicles with high technology may cost more. These are not covered by health insurance nowadays, and the person may stop using the assistive device due to reasons such as the person does not want using or being embarrassed. These factors may have an impact on the individual's independence [37].
3. Usually, the properties of the *natural environment* cannot be changed. For example, the Taurus Mountains in the Mediterranean, snow and ice in Agrı city, temperature and humidity in Antalya. The characteristics of the natural environment such as climate, atmospheric pressure, and population density can affect the performance of the disabled individual. Although these features cannot be modified, modifications can be made. There are also legal regulations for improving the performance of the activity. For example, providing air conditioning for risky individuals in extreme temperatures or providing access to parking spaces and lifts makes a difference between activity and disability. Where the natural environment for the handicapped cannot be changed, information becomes the most important thing. A map can provide information about the area, rest areas, or alternative methods [37].

Support, relevance and effectiveness of occupation: The use of social support as both formal (programs and services) and informal (family and friends) is a strategy used to compensate for environmental barriers. In a therapeutic perspective, social support for people with disabilities is often defined by their care, their love, and their ability to trust others. Social support is a

concept that includes practical support, informative support and emotional support. *Practical support* is a physical support. Supporting transfers, preparing meals, or taking them to a doctor are examples of practical support. This type of support may be informal (if given by a family member or loved one) or formal (if given by a paid caregiver or someone interested in personal care). *Informative support* is generally considered to be advice or guidance. For example, an individual can be referred to as advice or information to teach ways of saving energy or to take supplies for the bathroom. Family or friends, as well as professionals or peers, provide this kind of information. Emotional support generally includes feelings of belonging or respect. Despite the fact that the professionals provide this kind of support, *emotional support* is a role that falls on the family and peers to become a group member or morale in difficult times [37].

Social support can improve physical fitness, harmony between person and environment. For example, the activity of eating in the life of an individual who temporarily uses a wheelchair for mobility may be disrupted. The person may not be able to move enough in the kitchen due to the narrow space in the kitchen, the lack of space for return, unreachable cabinets, and environmental obstacles such as not being able to see what is being cooked in the kitchen. By increasing the surface area, it can be a strategy to change the area of motion by removing furniture, cabinets, and an angled mirror over the oven to create more space. Teaching to use a microwave oven set at a level that can reach the person is also an alternative. A third solution would be to use a home-cooked meal service (official practical support). The fourth alternative might be to inform the family or friends of the individual and provide assistance (unofficial practical support) to the disabled individual during the preparation and preparation of food [37].

The effect of socio-economic and political direction on environment and occupation: *Culture* is values, norms, beliefs, traditions, behaviors and perceptions shared by a group or society. Culture can be related to people, organization, community, and community level. Individually, the culture can determine the level of independence of the individual's wishes. For example, the exchange of an elder's clothes can be accepted for the culture. The culture is also influential in home modifications. In Turkey, for example, when entering the house, the shoes are removed and the house is one step higher than the area from which the shoe is removed. This tradition creates difficulties for the wheelchair user to enter the home [37].

Policies that provide funding for programs that help people with disabilities, services, may play a role in whether there is funding. In the United States and some European countries, individuals with disabilities regulate home modifications. Insurance schemes in these countries cover home caregivers, home health benefits, and regulations that will increase the freedoms of people with disabilities. Many practical programs and attitude changes affecting the environment have been carried out to a large extent as a result of legislation. These laws shape the programs and policies affecting participation, as well as profoundly affecting the professional productivity of people with disabilities [37].

The Turkish Institute of Statistics has established the "Turkey Disability Survey" in order to solve the problems of people with disabilities in Turkey and disability issues. According to the results of the research, it is seen that the proportion of the disabled population is 12.29% of the total population. Accordingly, there are approximately 8.5 million people with disabilities in our country. The most disadvantaged part of the society, the disabled, health, education,

employment, care, rehabilitation, accessibility and so on. It is important that many socio-cultural and economic problems are resolved. With this in mind, Law No. 5378 on the Amendment of Decrees on Disability and Some Laws and Decrees on the Law has entered into force on 07.07.2005. On December 3, 2008, the Assembly approved the United Nations Convention on the Rights of Persons with Disabilities, which is World Disability Day. Thus, the right of all disabled citizens to live equal, free and dignified is guaranteed [41].

Persons with disabilities are less likely to receive education and work than healthy people. The cost of non-income disability is twice as expensive as the disability. In this case, even laws cannot save from the obstacle of social exclusion. In a survey conducted, it was reported that the employer did not have the courage to give obstructive employment and some of them refused to do business [37] (**Picture 4**).

Beliefs about disabled people also affect the occupational performance. Laws, policies and beliefs, shape society and beliefs are the most influential external factor in the lives of the disabilities. In the past, there were practices that discriminated in the workforce, in public participation, and in education. Negative beliefs against disability affected participation in all phases of life. Protecting and increasing the reputation of the disabled will be provided by changing social attitudes, lifting social barriers and legal approaches [37].

5.5. Quality of life and community participation

Aristotle, who defines happiness as a virtuous activity of the soul, states the concept of quality of life. Happiness is said to be for a short time, a feeling of goodness temporarily felt by daily affairs. There may be many areas to describe the quality of life. These are cultural, psychological, social, religious, economic, political, temporal and philosophical fields. The quality of life is a dynamic perception because it changes with people and the environment [42].

Picture 4. Sports affects participation as a work and leisure activities.

World Health Organization (WHO) has defined the quality of life as "Positive perception of person's aims, expectations, standards and values related to it and its life in culture." This definition clearly shows that occupational therapists believe that the quality of life will increase in meaningful connection with the person, family and society and occupation. That is, meaningful community participation is associated with good quality of life [42].

Occupation and quality of life: A meaningful activity is directly associated with a good quality of life. Because the activity encourages the person, at the same time, it changes and strengthens the character of the person. Constrained activity also limits the potential for activity remaining for the individual. People are prevented from participating in necessary activities and contributing to the meaning of life with the reasons of disability and occupational deprivation. The effect of occupational deprivation includes feelings of loneliness, emotional distance from one's self and others, and despairs that will distract the person from the quality of life. As a result, meaningful occupation significantly affects person's quality of life [42].

Not long ago, many people with disabilities encountered great obstacles to meaningful occupation and there were limited occupational available to them. These constraints in activism stemmed from the prejudices of the society about superstitions, disaggregation in institutions and the capacity and potential of people with disabilities. Such barriers have significantly reduced the chances of eliminating the abilities, and self-potential of disabilities. In today's society, many people with disabilities are still faced with such occupational obstacles that lower quality of life. For this reason, the search for quality of life may present additional difficulties, especially in the area of occupational. Therefore, occupational therapists pay particular attention to the quality of life for the handicapped [42, 43].

6. Evaluating of community participation

We understand the forms of community involvement by gathering experiences of our clients' occupations that make up their daily lives. Community participation, as defined, is a versatile and contextual phenomenon. These basic attributes of community participation imply that there is more than one way to determine whether our customers are involved (i.e., whether they are multi-dimensional) and that our clients' participation may actually vary depending on what they are doing and where they are doing it. It happens (i.e., it depends on the content). For this reason, it is best to gather useful information about how our different clients are involved among all relevant occupations and settings.

The assessment approaches addressed in this chapter support the use of a top-down and customer-focused approach to our clients' professional performance needs. When using a bottom-up approach, it first focuses on getting the client's community participation profile by defining what the customer wants to do, what to do, or what to expect. And then they organize services that deal with distortions, functional limitations, and contextual factors that limit levels of participation in the context of a particular activity. While the assessments in this section will enable us to systematically acquire the community participation profiles of our customers, we do not concentrate on the subset of activities that have the most restrictions on their participation.

Many of these measures have been developed over the past decade and have provided ideas for thinking and measuring lifelong involvement of people with disabilities. These measures differ in terms of their completeness, how they are implemented, how long they are completed, the intended population of the target population, and their intended purposes. In this section, we will consider the participation assessments developed for young children, children and adolescents, adults and older adults. The table below gives an overview of what each assessor can do to help you collect information as you start the assessment process with your clients [42, 43] **[Tables 1, 2]**.

The Preschooler Activity Card Sort	(Berg & LaVesser, 2006) [44]
The Asset-Based Context Matrix (ABCM)	(Wilson, Mott, & Batman, 2004) [45]
The Assessment of Preschool Children's Participation (APCP) scale	(Law, King, Petrenchik, Kertoy, & Anaby, 2012) [46]
The Routines-Based Interview (RBI)	(McWilliam, Casey, & Sims, 2009) [47]
The Children's Participation Questionnaire (CPQ)	(Rosenberg, Jarus, & Bart, 2010) [48]
Children's Assessment of Participation and Enjoyment (CAPE)	(King et al., 2006) [49, 50]
The School Function Assessment (SFA)	(Coster, Deeney, Haltiwanger, & Haley, 1998) [51]
The Pediatric Activity Card Sort (PACS)	(Mandich, Polatajko, Miller, & Baum, 2004) [52]
The Child and Adolescent Scale of Participation (CASP)	(Bedell, 2009) [53]

Table 1. Selected Participation Measures for Young Children.

The Meaningful Activity Participation Assessment (MAPA) [54]	
The Participation and Environment Measure for Children and Youth (PEM-CY)	(Coster, Law, & Bedell, 2010) [55]
The Engagement in Meaningful Activity Scale (EMAS)	(Goldberg, Brintnell, and Goldberg, 2002) [56]
The Activity Card Sort (ACS)	(Baum & Edwards, 2008) [57]
The Community Integration Questionnaire (CIQ)	(Corrigan & Deming, 1995; Sander et al., 2007; Willer, Rosenthal, Kreutzer, Gordon, & Rempel, 1993) [58, 59]
The Craig Handicap Assessment and Reporting Technique (CHART)	(Whiteneck, Charlifue, Gerhart, Overholser, & Richardson, 1992) [60]

Table 2. Selected Participation Measures for Adults and Older Adults.

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