

---

# Life Skills in Occupational Therapy

---

Hatice Abaoğlu, Özge Buket Cesim, Sinem Kars and  
Zeynep Çelik

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.68462>

---

## Abstract

Occupational therapy is a health profession that uses the purposeful activities to achieve multiple and complex rehabilitation aims. The main goals of the occupational therapy are to support the reintegration of individuals in daily living skills as well as to increase their independence and autonomy. Interventions of occupational therapists have primarily focused on self-care, productivity, and leisure time activities. Since the life skills includes a wide range of abilities that enable a person to perform personal care and more complicated tasks such as traveling, shopping, community participation etc., occupational therapists provide life skills training programs to meet the needs of the clients. This chapter aims to contribute to the current understanding and practices of life skills from an occupational therapy perspective. The chapter starts with a brief discussion of the importance of life skills in occupational therapy. After this introduction, the first part takes a look at the definition of life skills and identifies core components of life skills. The second part describes assessment and interventions of life skills. The third one gives an overview about school life skills programs for children and adolescents. Finally, the last part explains some life skills programs in people with disadvantages.

**Keywords:** life skills, independent living, occupational therapy, people with disadvantages

---

## 1. Introduction

Today, depending on social, moral, ethical, or religious values, the lifestyles of societies are changing rapidly. Achieving essential life skills is crucial in order to adapt to changing environmental conditions and meet the demands. Life skills contribute to the development of self-efficacy, self-confidence, and self-esteem by helping people to understand and respond different situations [1, 2].

---

Occupational therapy has a key role in the lives of people who deal with disabling or potentially disabling conditions. Occupational therapy interventions are in accordance with the needs, interests, and values that are of importance to the clients. To this end, occupational therapists offer a unique and holistic approach to enhance or enable participation in daily life activities. They use therapeutic activities by identifying client problems, goals, and treatment focus to improve independence in life skills and to promote quality of life [3, 4].

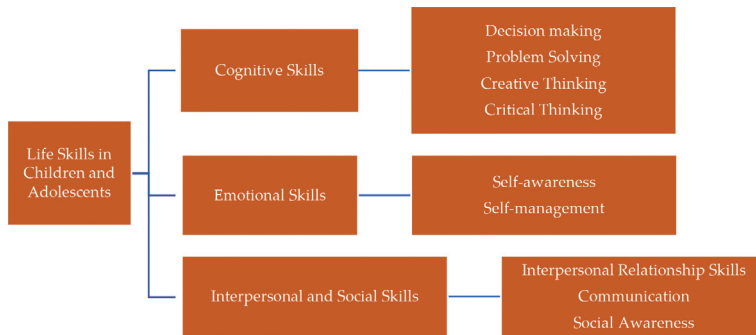
In occupational therapy field, a skill is defined as a performance component acquired through training and practice. Skills contribute people to function as part of the community in which they belong [5]. Occupational therapists assist the clients to create individualized goals through life skills training. These goals include achieving skills such as banking/budgeting, shopping, meal preparation and planning, coping with stress, community access, assertiveness, and self-advocating. As life skills educators, occupational therapists use a client-centered approach to assess occupational performance areas and associated environmental factors. Life skills training can be given in the client's home or in various community areas, such as banks, markets, streets, as individual trainings, or group workshops that provide opportunities for the clients to learn from each other where appropriate [6].

## 2. Life skills and core components

Life skills are those abilities that help to deal with challenges in life and to promote physical, mental, and emotional well-being and competence. There are a wide range of life skills and definitions are usually broad and generic. Life skills can be cognitive, behavioral, emotional, personal, interpersonal, or social. As such, the term "life skills" is often not precisely defined. According to World Health Organization (WHO), life skills are defined as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life." The five main life skills areas defined by WHO Department of Mental Health are decision-making and problem-solving; creative thinking and critical thinking; communication and interpersonal skills; self-awareness and empathy; and coping with emotions and stress. UNICEF defines life skills as "psychosocial and interpersonal skills that help people make informed decisions, communicate effectively, and develop the coping and self-management skills needed for a healthy and productive life" [7, 8].

These definitions are meant to apply on various topic related to health in general population. Life skills include knowledge, behavior, attitudes, and values that are desirable and necessary for life roles. If we consider explanation of life skills, we could say that life skills may be different across cultures. Nevertheless, the research studies and literature of life skills indicate that there are specific life skills. They comprise a set of core skills that improve people's well-being and help them to be active and productive in the community. These skills may generally be classified in three basic dimensions: (a) cognitive skills, (b) emotional skills, and (c) communication and interpersonal skills (**Figure 1**) [9, 10].

Cognitive skills are decision-making, problem-solving, creative thinking, and critical thinking. Decision-making is important for health management through choosing different options



**Figure 1.** Life skill categories for children and adolescents.

about health status. Problem-solving is critical for coping with the problems which may cause stress in daily life. Creative thinking promotes problem-solving and decision-making and helps to provide adaptation and flexibility to daily life. Critical thinking analyses and assesses information such as attitudes and values which affects behavior [10–12].

Emotional skills comprise of self-awareness and self-management. Self-awareness includes self-esteem, self-evaluation, our likes and dislikes, and our weaknesses and strengths. Briefly, self-awareness is about our recognition of ourselves. Self-management includes time management, relaxation, and coping skills about stress and emotions such as anger [10, 11].

Interpersonal and social skills are interpersonal relationship skills, communication, and social awareness. Interpersonal relationship skills may be able to make good relationships with friends and family members which provide mental and social well-being. Communication is important for expression of ourselves verbally or nonverbally in certain situations. Social awareness includes empathy, listening actively, and respecting group differences (**Figure 1**) [10, 11].

### 3. Assessment and interventions of life skills

In general practice, despite the fact that occupational therapists are more focused on rehabilitation and therapy rather than preventing strategies; in life skills training, this tendency decreases. For instance, the occupational therapist works with school aged adolescents in order to enhance their abilities to prevent them from drug, tobacco, and alcohol addiction. Further, occupational therapists provide life skills training for the immigrants that facilitate their coping, management, and employability skills. And of course, occupational therapy practitioners work with disadvantaged people like people with disabilities and drug users to rehabilitate them by improving their participation [13].

Life skills assessment can be done by observation, interviews, questionnaires, checklists, and standardized evaluations. Therapists are able to develop a checklist for certain person to follow the process. They can also apply questionnaires or checklists to screen life skills in a broad

sense. Moreover, it is possible to employ a standardized test to define life skills in detail. The most commonly used standardized assessment instruments by occupational therapy practitioners are shown in **Table 1** [14–17].

Name of the instrument	Validation samples
Activities of Daily Living Situational Test (AST)	Alzheimer disease
Cognitive Performance Test (CPT)	Mild to moderate alzheimer disease
Direct Assessment of Functional Abilities (DAFA)	Demented participants
Direct Assessment of Functional Status (DAFS)	Alzheimer disease
Functional Performance Measure (FPM)	Alzheimer disease
Texas Functional Living Scale (TFLS)	Alzheimer disease
Bay Area Functional Performance Evaluation (BaFPE)	Psychiatric patients; Schizophrenia or depression patients
Kohlman Evaluation of Living Skills (KELS)	Designed for inpatient psychiatric unit, used with older adults
UCSD Performance-based Skills Assessment (UPSA)	Middle-aged schizophrenia patient
Independent Living Scales (ILS)	Independent and dependent adults; mentally retarded adults; TBI; dementia; and chronic psychiatric
Occupational Therapy Evaluation of Performance and Support (OTEPS)	Older adults referred for NP assessment upon admission to a geriatric psychiatry hospital. Sample includes; depression, anxiety, and probable dementia
Performance Test of Activities of Daily Living (PADL)	Consecutive inpatient admissions over age 65
St. George Hospital Memory Disorders Clinic Occupational Therapy Assessment Scale (OTAS)	Psychiatric disturbances, dementia
Activities of Daily Living Test (ADL-T)	Older healthy people
Everyday Problems Test (EPT)	Community-dwelling older healthy people
Observed Tasks of Daily Living (OTDL)	Educated older healthy people
Everyday Functioning Battery (EFB)	HIV+ individuals
Performance Assessment of Self-Care Skills (PASS)	Numerous populations
Beck Dressing Performance Scale (BDPS)	Cognitively impaired adults
Financial Capacity Index (FCI)	Alzheimer disease
Kitchen Task Assessment (KTA)	Alzheimer disease
Medication Management Ability Assessment (MMAA)	Schizophrenia and schizoaffective older than 45
Test of Grocery Shopping Skills (TOGSS)	Schizophrenia and schizoaffective
Time and Change Test (T&C)	Outpatients 75+ years, 36% demented
Drug Regimen Unassisted Grading Scale (DRUGS)	Older community dwelling people
Functional Ability to Take Medications (FATM)	Geriatric clinic inpatients and outpatients
Immersive Virtual Kitchen (IVK)	Traumatic brain injury
Rabideau Kitchen Evaluation Revised (RKE-R)	TBI men ages18–49

Name of the instrument	Validation samples
Medication Management Task (MMT)	HIV+ validation samples HIV+ adherence sample
Refined ADL Assessment Scale (RADL)	Cognitively impaired nursing home residents
Do-Eat	Developmental coordination disorder
School-Assessment of Motor and Process Skills (schoolAMPS)	Typically developing or attention-deficit hyperactivity disorder, learning disability or sensory integrative disorder
Functional Independence Measure for Children (WeeFIM)	Limb deficiency, Down's syndrome, spina bifida, cerebral palsy, extreme prematurity
Children's Assessment of Participation and Enjoyment (CAPE)	6-21 years old children with/without disabilities
School Function Assessment (SFA)	Elementary/ primary school children ages between 5 and 12, physical and/or sensory impairment
School Outcome Measure (SOM)	School aged children (3–18 years)
Children Helping Out: Responsibilities, Expectations, and Supports (CHORES)	6–11 years old children with/without disability
Assessment of LIFE-Habits for Children (LIFE-H)	5–13 years old children with disabilities
Canadian Occupational Performance Measure (COPM)	All ages and disabilities
Goal Attainment Scaling (GAS)	All ages and disabilities
Assessment of Functional Living Skills (AFLS)	2 years and up, developmental delays and autism

**Table 1.** The assessment tools that used commonly in life skills evaluation by occupational therapists.

When assessing life skills, it is important to note that occupational therapy approaches are individual and person centered. Each group and each person has specific characteristics in the mean of occupation. Therefore, the occupational therapy assessment of the life skills is provided individually by employing the practical reference models either for general praxis, such as Model of Human Occupation (MOHO) [18, 19], Person-Environment- Occupation Model (PEO) [20–22], and VdT Model of Creative Ability (MOCA) [23, 24] or the ones that particularly developed for this use, such as Occupational Therapy Life Skills Curriculum Model [13], Life Skills Training Approach [25], and etc.

MOHO provides a framework (or model) for occupational therapist to understand how to use daily activities therapeutically to support people's health. It seeks to explain how meaningful daily activities are motivated, patterned, and performed. MOHO focuses on the occupation in practice; the motivation for occupation; the patterning of occupational behavior/performance into routines and lifestyles; the nature of skilled performance; and the influence of the environment on occupational performance. It has assessments and intervention protocols, that are specific to itself, to support practitioner to understand the volition, habitation, roles, and performance capacity of the individuals. Life skills, in this model, are agent that both affect and are affected by the routines, roles, habits, and the capacity [18].

The fundamental belief of MOCA, which is an occupational therapy model, the motivation controls the action and the action is the manifestation or expression of motivation. According to Vona du Toit, humans develop a variety of skills in a sequential sequence as environmental/social/relationship/occupational demands change and influence them throughout the lifespan. That is why, action is examined by four skills of people. These are personal management, social ability, work ability, and use of free time. The role of the occupational therapist is to identify the client's current level of creative ability and how much independence s/he has at that level. This enables the therapist, team, client and/or carers to understand what the client is motivated for and the extent of his/her skills for doing things that s/he finds meaningful and is motivated toward. With this understanding, intervention can be offered to elicit motivation and participation in order to facilitate growth toward the next (higher) level of ability. In the case of a client with dementia, intervention is provided to maintain level of ability and prevent deterioration for as long as possible [26].

PEO model describes the interaction among person, environment, and occupation for clear understanding of occupational performance. The person component of this model is seen holistically as a combination of mind, body, and spiritual qualities. And also, each person has both learned and initiate skills in order to accomplish in occupational performance. The environment where the individual use their abilities to engage in occupation has four subscales: cultural, socioeconomic, institutional, physical, and social. Last but not the least, the occupation is a composite of activities and tasks that are necessary to function in life [20].

Occupational Therapy Life Skills Curriculum Model is created for promoting the nonpatient population via a unique, nontraditional occupational therapy role focusing on primary prevention, and community health and enhancement. This model includes a program, that is, named leisure skills/career development, for children of ages between 4 and 22. And the program divides the age bands to three: fantasy-exploration stage, tentative choice stage, and final realistic stage. Meantime, there are academic skills and leisure skills program for each of the stages both of them have specific subprograms [13].

After choosing the most appropriate approach for the patient and completing the evaluations, occupational therapists navigate the session to the intervention. The life skills training programs are created in order to increase one's participation in social, intellectual, creative, and physical activities. The life skills training programs can be administered as individually or modular. Programs such as social skills training, emotional skills training, and behavioral skills trainings can be considered as modular because, for example, social skills training generally contains social participation skills, interpersonal skills, assertiveness training, communication skills, etc. The individual trainings typically facilitate development of abilities in the three main component areas of daily living by developing daily organization and time management; personal health including sleep, medication management, healthy eating, and avoiding addictions; self-monitoring; stress management and relaxation techniques; leisure exploration and development; communication and relationships; managing public transport and mobility; conflict resolution skills; managing money; career exploration and planning; study, prevocational, and work readiness training; and vocational reintegration skills. The group trainings, generally, are provided after the need analysis of the group. In the life skills training for schizophrenics, for

example, focus points of training are generally about interpersonal communication, nutrition, time management, etc., while the life skills training programs for homeless are about social action, individual justice, employment, money management, etc. [27–29].

#### **4. Life skills in children and adolescents**

Life skills trainings improve skills to create proficiency for human development and to indigenize appropriate behaviors that provide to deal with the difficulties of daily life in children and adolescents. Life skills also help children and adolescents to improve their psychosocial competence which is important to deal with challenges of daily life, promotion of health, and for well-being. Specially, where the health issues are associated with behaviors which cause inadequacy to cope with personal and social challenges powerfully, developing of psychosocial competence may be an important way to contribute well-being and health. Therefore, teaching of life skills to children and adolescents is one of the core elements to develop psychosocial competence [10].

Life skills training supports constructive behavior about health, relationships, and well-being. Optimally, it is critical to perform this training when the children and adolescents are at young age before adverse behaviors. Trainings of life skills are based on general life skills and their practice in connection with social and health issues. Methods and approaches such as cognitive-behavioral skills training techniques, didactic teaching methods, group discussion, brainstorming, and role play can be used in teaching of life skills [10, 27].

There are many evidence-based life skills programs which provide education about many issues, such as drug abuse prevention or preventing violence which are related with life skills. For example, the life skills training (LST) program which is a primary prevention program for adolescent drug abuse created positive behaviors about alcohol, tobacco, and other drug use. This program included drug resistance skills, self-management, and social skills. Methods which are used in this program were instruction, reinforcement, feedback, practice of the skill, and behavioral homework assignments [30, 31]. Another evidence-based program about life skills is coping skills training for youth with diabetes mellitus which was conducted by Grey and her colleagues. Role play about situations such as managing food choices, giving feedback, using of social problem-solving, and working with small groups are the methods which were used in this training. Results of this training showed that teenagers in the coping skills training program were likely able to cope with diabetes mellitus and other medical situations, and indicated less negative effect of diabetes on quality of life [32]. HIV prevention intervention which is done in Zimbabwe with adolescent female orphans is also an important research. In this intervention, HIV and health knowledge (e.g., condom use) and issues related to culture, gender, sexual, and physical violence were the topics in life skills curriculum of this research. According to the results of this study, participants earned personal hope and value, and effective communication skills [33].

The objective of the life skills education is to help children and adolescents to understand themselves, reach personal satisfaction, live life better, and achieve their goals. This education is essential for the personal and academic development of children and adolescents.

Therefore, considering of the certain strategies for life skills education may affect the impact of the education. These strategies are:

- Doing the education in schools because of the possibility to reach many children and adolescents and long- and short-term evaluation.
- Providing the education at young ages.
- Making the education part of the school curriculum.
- Using tested, evidence-based, well design life skills programs.
- Using an evaluation system for education.
- Determining objective of the education through need analyses.
- Inclusion of both knowledge and social attitudes and values.
- Improvement of all teachers, principals, other staff members about the topic of life skills education.
- Using methods such as role play, feedback about performance, practice of skills instead of just using didactic teaching.
- Starting with skills learning in nonthreatening situations and progressively moving on the practice of skills in high-risk situations.
- Creating the education with a multidisciplinary group such as professionals from schools, public health, and social services.

Apart from these strategies, conducting publicity campaigns to promote support and expectations of life skills education and publishing papers about education may increase the effect of life skills education [10, 34].

Mission of the school is to educate children and adolescents to be healthy, social skilled, responsible, and informed. With the school-based prevention and youth development programs, this mission is undergird [35]. Many teachers experience that many children in schools have poor social and communication skills because of computers and televisions [36]. Therefore, as we mentioned above, it is an important strategy to give life skills educations in schools. There are many life skills education programs for different age groups in many schools around the world. Some of them are: Promoting Alternative Thinking Strategies (PATHS); The School Mental Health Program (SMHP); The Smoking Prevention Program; The GOAL Program; UNESCO and Government of Ghana Life Skills Alcohol and Drug Prevention Program; Life Skills and Positive Prevention Programme; The Life Skills Training (LST) program; The Problem-Solving Program [10, 12, 27, 37–40]. For deeper explanation about the context of educations, you can find an example of school-based life skills education sessions about prevention of cigarette smoking in **Figure 2** [39].

Life skills are like physical skills in the way of learning methods, through modeling and practice. Many of the life skills learned in sport are quotable to other life areas. These skills may include: the abilities to show performance under pressure; communicate; meet challenges; set goals; solve problems; handle failure; work with a group; and receive feedback. Therefore,

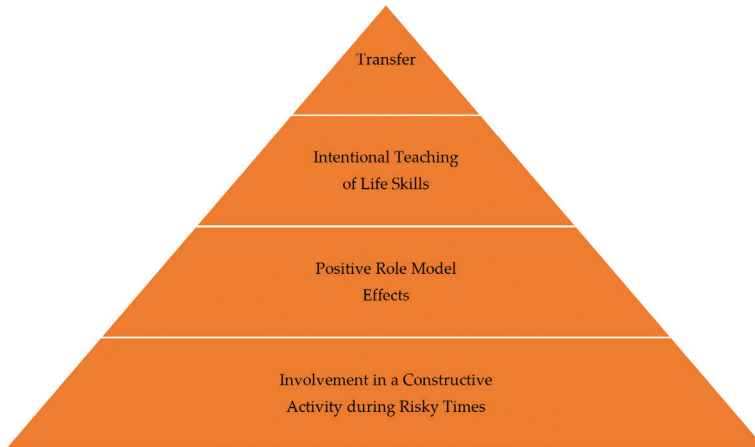




**Figure 2.** School-based life skills education sessions about prevention of cigarette smoking [39].

sport participation which provides psychosocial development may contribute to life skills in children and adolescents [41]. Although there is not enough research focusing the effect of sports on life skills development, there is growing interest about the development of life skills through sport in children and adolescents and sport psychology. Many athletes have begun to understand the importance of using sport psychology strategies and techniques to improve their nonathletic life. One study which is about teaching life skills through sport, mentioned a program which calls Sports United to Promote Education and Recreation (SUPER). The objective of the program was to show participants the importance of physical and mental skills for sport and life and the existence of the effective student-athlete role models. In this program, topics such as similarities and differences of life skills and sport, being a good listener, speaking with the group were taught to the participants who are sport leaders. And these leaders taught students sport skills and life skills related with sport, coached the students to increase their sport performance [42]. Sport-based life skill education is also important on

adolescents' prosocial values. According to a research study which is conducted by Brunelle, Sport-Based Life Skill Program had a positive effect on adolescents' prosocial values such as social responsibility, empathy, social interest, and that the community service experience affected the adolescents' levels of social responsibility and confidence positively. This study suggests that when sport is integrated with life skills and community services, prosocial values are improved in adolescent volunteers. Therefore, sport may serve to develop character and values when combined with life skills programs [43]. Influence of sport on life skills development occurs in different levels (**Figure 3**). According to Gould and Carson, in first level sport may prevent youth from getting into trouble and from involving in risky activities. In second level, role models such as sport coaches may affect positively to their athletes about life skills. Third level is more influential level. Because it includes teaching of life skills by coaches. Through this teaching, participants can transfer these skills to nonsport domains. In fourth level, the coach does not only teach skills for sport but provides and works the athlete to transfer these skills beyond sport [44].



**Figure 3.** Levels of life skills development through sport [44].

## 5. Life skills for disadvantaged groups

Life skills programs enhance skills of vulnerable adolescent and young adult populations. These programs generally include a formal curriculum, along with a combination of group education, peer mentorship, one-to-one support, coaching, and experiential learning [45]. "Coaching" in which therapists guide people to examine their goals and identify changes to their performance [46], is one of these programs. It involves tailored, experience-based support in learning life skills and self-management strategies, and seeks to enhance people's self-efficacy and skill development by providing opportunities to learn new skills, make decisions, experience successes, and take calculated risks [47]. Life skills programs need to be intentionally designed. These programs offer experiential opportunities by providing

new insights, self-realizations, and positive yet realistic views of the future to equip them with knowledge, skills, and confidence, and to motivate them to engage in new life directions [48].

Vulnerable children such as orphans, sexually exploited children, street children, and working children may need for life skills interventions. Although life skills play an important role in determining how children cope with difficult conditions, little is known about life skills interventions with vulnerable young people. Children with low socioeconomic backgrounds have a low self-concept and lack of self-efficacy and life skills. Their belief in their own abilities value is decreased due to the low attendance of school and the difficulties in school life [7, 49].

The term street children refers to a diverse group of young people dislocated from family, school, and community, who tend to work, congregate and/or live in inner city areas. Poverty in developing countries, associated with the collapse of rural economies and migration into overburdened urban environments, is the root cause of the street child phenomenon [50]. Life skills programs are necessary for health promotion and well-being for these groups. Life skills may include to identify health problems and the ways to prevent them, to analyze factors that impact growth and development from adolescence to adulthood, to describe the relationship between health and adolescent choices, to assess factors that influence emotional self-management and relationships with the environment [51].

Another disadvantaged group is individuals with addictions. It is supported by research that life skills training are the most effective approach in school-based drug prevention programs. The life skills training program for adolescent drug use focuses on the social and emotional factors that promote substance use. Separate curricula have been developed for students from different age groups as supportive interventions in schools. The program consists of three main components: drug resistance skills, personal self-management skills, and general social skills [52, 53].

Deaf individuals face many challenges during school years and during the transition to independent living. Research on the life skills in these individuals is very limited. Life skills training should be designed to meet the needs of deaf individuals. In a study, life skills training for vulnerable deaf adults includes money management and consumer awareness, food management, personal appearance and hygiene, health (e.g., knowing the symptoms and treatment of various illnesses), housing (e.g., knowledge of renters rights and obligations), housekeeping, educational planning, transportation, legal knowledge (rights when arrested, function of a lawyer), job seeking skills, job maintenance skills, knowledge of community resources, emergency and safety, interpersonal skills, pregnancy, parenting, and childcare [54].

People with schizophrenia are a disadvantaged group because of stigma. Negative labeling has an impact on public attitudes toward people with schizophrenia. Negative labeling has a strong negative effect on the way people react emotionally to someone with schizophrenia as a result of increasing the preference for social distance. Furthermore, people with schizophrenia have social withdrawal, employment problems, reduced social, or recreational activities. Life skills training for people with schizophrenia may include daily living activities, money management, communication and social skills, home management, community life skills, etc. [55–58].

Life skills training are also important for homeless people. Homeless individuals may experience problems with unemployment, loss of income, lack of social security, inadequate access to social support and health services, disability, substance abuse, or suicide attempts. Because life skills such as managing money, shopping, cooking, running a home, and maintaining social networks are essential for living independently. Some homeless people do not have all of these skills, because they never acquired them or lost them through extended periods of homelessness. The aim of the training is to promote self-sufficiency in homeless people. Life skills can be classified into three broad categories: (1) social skills (e.g., interpersonal skills, avoiding or dealing with neighbor disputes, developing self-confidence and social networks), (2) independent living skills (e.g., managing a household, budgeting, appointment keeping and contacting services, dealing with bills, and correspondence), and (3) core or basic skills (e.g., numeracy, literacy, and information technology). For example, a study is showed that homeless youth may need to personnel hygiene (body odor and sweating), oral health (including bad breath), oily skin and acne, unwanted or oily hair, feminine hygiene, piercing maintenance, budgeting and finance, and soft skills (motivation, self-awareness, and ability to work with others) [59, 60].

In the literature, there are different life skill training programs designed other disadvantaged groups such as criminals and refugees. Disadvantaged individuals face social, economic, and cultural challenges throughout their lives. A disadvantaged group may face multiple challenges. Some difficulties can be overcome or changed more easily than others. Because the difficulties that individuals experience and the ways in which they deal with them are different between the groups, life skills interventions may change from group to group. The ability to overcome difficulties in everyday life depends largely on the development of life skills. Life skills include skills that enable people to cope with their life, difficulties, and changes [61–63].

In summary, there is no definite classification of what psychosocial skills may be at the core of life skills, nor is there any clarity about the relationship of these skills to each other. However, it is seen that the skills defined as life skills are cognitive, emotional and behavioral, even though they are classified by different persons and institutions in different ways. These skills are vital to maintaining a productive and healthy lifestyle, having meaningful and satisfying roles, and promoting well-being. For this reason, it is quite natural that occupational therapy, which aims to promote functional independence of individuals in their daily life skills, includes life skills and related training programs.

## Author details

Hatice Abaoğlu\*, Özge Buket Cesim, Sinem Kars and Zeynep Çelik

\*Address all correspondence to: [haticeabaoglu@hacettepe.edu.tr](mailto:haticeabaoglu@hacettepe.edu.tr)

Faculty of Health Sciences, Occupational Therapy Department, Hacettepe University, Ankara, Turkey

## References

- [1] Chakra A. A life skills approach to adolescent development. *International Journal of Home Science*. 2016;**2**(1):234-238
- [2] Miller EK. Occupational Therapists' Intervention Approaches in Secondary Transition Services for Students with Disabilities. [Doctoral dissertation]. Kentucky: Eastern Kentucky University; 2012.
- [3] Chapparo C, Ranka J. Clinical reasoning in occupational therapy. In: Higgs J, Jones M, editors. *Clinical reasoning in the health professions*. Oxford: Butterworth Heinemann; 2000. p. 128-137.
- [4] American Occupational Therapy Association. Occupational therapy practice framework: Domain and process. *American Journal of Occupational Therapy*. 2014;**68**(Suppl. 1):S1-S48
- [5] Roberts M. Life skills. In: Creek J, Lougher L, editors. *Occupational Therapy and Mental Health*. 4th ed. London: Elsevier Ltd; 2008. pp. 359-381
- [6] Mitchell L, Gunaratne E. Occupational therapists as life skills educators: Experiences at the gage transition to independent living program. *Occupational Therapy Now*. 2007;**9**(3):20
- [7] World Health Organization. *Partners in Life Skills Education*. Geneva, Switzerland: World Health Organization, Department of Mental Health; 1999.
- [8] UNICEF. *Life skills-Based Education in South Asia, A Regional Overview Prepared For: The South Asia Life Skills-Based Education Forum*. Paris: The United Nations Children's Fund (UNICEF); 2005.
- [9] Hanbury C, Malti T. *Monitoring and Evaluating Life Skills for Youth Development*. Switzerland: Jacobs Foundations; 2011.
- [10] Weisen RB, Orley J, Evans V, Jeff Lee T, Sprunger B, Pellaux D. *Life Skills Education in Schools*. Geneva, Switzerland: World Health Organization; 1994.
- [11] World Health Organization. *Preventing Violence by Developing Life Skills in Children and Adolescents*. Geneva: World Health Organization; 2009.
- [12] O'Hearn TC, Gatz M. Going for the goal: Improving youths' problem-solving skills through a school-based intervention. *Journal of Community Psychology*. 2002;**30**(3):281-303
- [13] DeMars PA. An occupational therapy life skills curriculum model for a Native American tribe: A health promotion program based on ethnographic field research. *American Journal of Occupational Therapy*. 1992;**46**(8):727-736
- [14] Moore DJ, Palmer BW, Patterson TL, Jeste DV. A review of performance-based measures of functional living skills. *Journal of Psychiatric Research*. 2007;**41**(1):97-118

- [15] Linde B, Netten J, Otten E, Postema K, Geuze R, Schoemaker M. A systematic review of instruments for assessment of capacity in activities of daily living in children with developmental co-ordination disorder. *Child: Care, Health and Development*. 2015;**41**(1):23-34
- [16] Sakzewski L, Boyd R, Ziviani J. Clinimetric properties of participation measures for 5-to 13-year-old children with cerebral palsy: A systematic review. *Developmental Medicine & Child Neurology*. 2007;**49**(3):232-240
- [17] Partington JWP, Mueller MM. Assessment of Functional Living Skills (AFLS). [Internet]. 2012. Available from: <http://www.wpspublish.com/store/p/2650/assessment-of-functional-living-skills-afls>: WPS unlocking potential
- [18] Kielhofner G, Forsyth K, Kramer J, Melton J, Dobson E. *The Model of Human Occupation*. Wellington: Queen Margaret College; 1988.
- [19] Duncan E. The model of human occupation. *British Journal of Occupational Therapy*. 2010;**73**(11):497-498
- [20] Law M, Cooper B, Strong S, Stewart D, Rigby P, Letts L. The person-environment-occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*. 1996;**63**(1):9-23
- [21] Hamera E, Brown CE. Developing a context-based performance measure for persons with schizophrenia: The test of grocery shopping skills. *American Journal of Occupational Therapy*. 2000;**54**(1):20-25
- [22] Gol D, Jarus T. Effect of a social skills training group on everyday activities of children with attention-deficit-hyperactivity disorder. *Developmental Medicine & Child Neurology*. 2005;**47**(8):539-545
- [23] Jansen M, Casteleijn D. Applying the model of creative ability to patients with diabetic foot problems. *South African Journal of Occupational Therapy*. 2009;**39**(3):26-32
- [24] Williamson B. Creativity, the corporate curriculum and the future: A case study. *Futures*. 2001;**33**(6):541-555
- [25] Wheeler SD, Lane SJ, McMahon BT. Community participation and life satisfaction following intensive, community-based rehabilitation using a life skills training approach. *OTJR: Occupation, Participation and Health*. 2007;**27**(1):13-22
- [26] Sherwood W. An introduction to the Vona du Toit model of creative ability. *Revista electrónica de terapia ocupacional Galicia, TOG*. 2011;**14**:12
- [27] Botvin GJ, Griffin KW. Life skills training: Empirical findings and future directions. *Journal of Primary Prevention*. 2004;**25**(2):211-232
- [28] Mairs H, Bradshaw T. Life skills training in schizophrenia. *British Journal of Occupational Therapy*. 2004; **67**(5):217-224
- [29] Arbesman M, Logsdon DW. Occupational therapy interventions for employment and education for adults with serious mental illness: A systematic review. *American Journal of Occupational Therapy*. 2011;**65**(3):238-246

- [30] Botvin GJ. Preventing Adolescent Drug Abuse through Life Skills Training: Theory, Evidence of Effectiveness. In Crane J, editor. *Social programs that work*. New York, NY: Russell Sage Foundation; 1998. p. 225-257.
- [31] Botvin GJ, Griffin KW, Paul E, Macaulay AP. Preventing tobacco and alcohol use among elementary school students through life skills training. *Journal of Child & Adolescent Substance Abuse*. 2003;**12**(4):1-17
- [32] Grey M, Boland EA, Davidson M, Li J, Tamborlane WV. Coping skills training for youth with diabetes mellitus has long-lasting effects on metabolic control and quality of life. *Journal of Pediatrics*. 2000;**137**(1):107-113
- [33] Dunbar MS, Maternowska MC, Kang MS, Laver SM, Mudekunye-Mahaka I, Padian NS. Findings from SHAZ!: A feasibility study of a microcredit and life-skills HIV prevention intervention to reduce risk among adolescent female orphans in Zimbabwe. *Journal of Prevention and Intervention in the Community*. 2010;**38**(2):147-161
- [34] Singh H, Gera M. Strategies for development of life skills and global competencies. *International Journal of Scientific Research*. 2015;**4**(6):760-763
- [35] Greenberg MT, Weissberg RP, O'Brien MU, Zins JE, Fredericks L, Resnik H, et al. Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *The American Psychologist*. 2003;**58**(6-7):466-474
- [36] Dwivedi KN, Harper P. *Promoting the Emotional Well Being of Children and Adolescents and Preventing Their Mental Ill Health: A Handbook*. London: Jessica Kingsley Publishers; 2004.
- [37] Curtis C, Norgate R. An evaluation of the promoting alternative thinking strategies curriculum at key Stage 1. *Educational Psychology in Practice*. 2007;**23**(1):33-44
- [38] Srikala B, Kishore Kumar K. Empowering adolescents with life skills education in schools – School mental health program: Does it work? *Indian Journal of Psychiatry*. 2010;**52**(4):344-349
- [39] Botvin GJ, Eng A, Williams CL. Preventing the onset of cigarette smoking through life skills training. *Preventive Medicine*. 1980;**9**(1):135-143
- [40] Alvarez J, Cotler S, Jason LA. Developing a problem-solving program in an elementary school setting. *Education*. 1984;**104**(3):281-286
- [41] Papacharisis V, Goudas M, Danish SJ, Theodorakis Y. The effectiveness of teaching a life skills program in a sport context. *Journal of Applied Sport Psychology*. 2005;**17**(3):247-254
- [42] Danish SJ, Nellen VC. New roles for sport psychologists: Teaching life skills through sport to at-risk youth. *Quest*. 1997;**49**(1):100-113
- [43] Brunelle J, Danish SJ, Forneris T. The impact of a sport-based life skill program on adolescent prosocial values. *Applied Developmental Science*. 2007;**11**(1):43-55
- [44] Gould D, Carson S. Life skills development through sport: current status and future directions. *International Review of Sport and Exercise Psychology*. 2008;**1**(1):58-78



- [45] Kingsnorth S, Healy H, Macarthur C. Preparing for adulthood: A systematic review of life skill programs for youth with physical disabilities. *Journal of Adolescent Health*. 2007;**41**(4):323-332
- [46] Graham F, Rodger S, Ziviani J. Effectiveness of occupational performance coaching in improving children's and mothers' performance and mothers' self-competence. *The American Journal of Occupational Therapy*. 2013;**67**:10-18
- [47] Baldwin P, King G, Evans J, McDougall S, Tucker MA, Servais M. Solution-focused coaching in pediatric rehabilitation: An integrated model for practice. *Physical & Occupational Therapy in Pediatrics*. Epub ahead of print. 2013. DOI: 10.3109/01942638.2013.784718
- [48] King G, Batorowicz B, Rigby P, McMain-Klein M, Thompson L, Pinto M. Development of a measure to assess youth self-reported experiences of activity settings (SEAS). *International Journal of Disability, Development and Education*. 2014;**61**(1):44-66
- [49] Weidinger W. Promoting self-competences and life skills of children coming from vulnerable groups: Research-based development of an inclusive education program. *The Fourth European Conference on Education. Official Conference Proceedings*. Switzerland: Zurich University of Teacher Education; 2016.
- [50] Richter LM. Street children: The nature and scope of the problem in southern Africa. *Child Care Worker*. 1988;**6**:11-14
- [51] Swart-Kruger J, Richter LM. AIDS-related knowledge, attitudes and behaviour among South African street youth: Reflections on power, sexuality and the autonomous self. *Social Science & Medicine*. 1997;**45**(6):957-966
- [52] Griffin KW, Botvin GJ. Evidence-based interventions for preventing substance use disorders in adolescents. *Child and adolescent psychiatric clinics of North America*. 2010;**19**(3):505-526.
- [53] Bühler A, Schröder E, Silbereisen RK. The role of life skills promotion in substance abuse prevention: A mediation analysis. *Health Education Research*. 2008;**23**(4):621-632
- [54] Mathews ES. Towards an independent future: Life skills training and vulnerable deaf adults. *Irish Journal of Applied Social Studies*. 2015;**15**(1):1
- [55] Rüsçh N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. *European psychiatry*. 2005;**20**(8):529-539
- [56] Angermeyer MC, Matschinger H. The stigma of mental illness: Effects of labelling on public attitudes towards people with mental disorder. *Acta Psychiatrica Scandinavica*. 2003;**108**(4):304-309
- [57] Tandon R, Jibson M. Negative symptoms of schizophrenia: How to treat them most effectively. *Current Psychiatry Online*. 2002;**1**(9):36-42
- [58] Kopelowicz A, Liberman RP, Zarate R. Recent advances in social skills training for schizophrenia. *Schizophrenia Bulletin*. 2006;**32**(Suppl. 1):12-23



- [59] Thomas Y, Gray M, McGinty S. A systematic review of occupational therapy interventions with homeless people. *Occupational Therapy in Health Care*. 2011;**25**(1):38-53
- [60] Gopalan A, Reddy A, Roman B, Nkonde-Price C, Lee D, Fong HF, Rosenbaum L, Patel M. Developing a life skills curriculum for homeless youth. Philadelphia: Robert Wood Johnson Foundation; 2012.
- [61] Mayer SE. What is a “Disadvantaged Group?” [Internet]. Minneapolis: Effective Communities Project; 2003 [Cited December 5, 2016]. Available from: [http://www.effectivecommunities.com/pdfs/ECP\\_DisadvantagedGroup.pdf](http://www.effectivecommunities.com/pdfs/ECP_DisadvantagedGroup.pdf)
- [62] Yankey T, Biswas UN. Life skills training as an effective intervention strategy to reduce stress among Tibetan refugee adolescents. *Journal of Refugee Studies*. 2012;**25**(4):514-536
- [63] Melton R, Pennell S. Staying out successfully: An evaluation of an in-custody life skills training program. San Diego, CA: San Diego Association of Governments; 1998.

