



1-15-2019

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DOI: 10.15453/2168-6408.1511

Recommended Citation

Grajo, Lenin C. and Gutman, Sharon A. (2019) "The Role of Occupational Therapy in Functional Literacy," *The Open Journal of Occupational Therapy*: Vol. 7: Iss. 1, Article 13.

Available at: <https://doi.org/10.15453/2168-6408.1511>

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The Role of Occupational Therapy in Functional Literacy

Abstract

In this Opinions in the Profession article we aim to uniquely articulate the distinct value of and need for functional literacy development in the clients we serve. Functional literacy, as coined in this article, is the ability to interpret common written materials needed to effectively carry out basic daily life skills and participate in meaningful occupations and social roles. We propose three specific strategies through which occupational therapists, across practice settings, developmental stages, and populations, can assume active roles in literacy support as it is embedded in occupation: literacy (a) as a form of occupational justice promotion; (b) as an approach to health facilitation, well-being, and adaptive capacity; and (c) as a means to strengthen social connectedness. As the emerging practice area of functional literacy grows, intervention guidelines will need to be established and assessed for effectiveness with specific populations. We urge occupational therapists to begin to consider functional literacy in all client assessment and intervention services.

Comments

The authors report they have no conflicts of interest to disclose.

Keywords

literacy, occupational therapy, occupational justice, adaptation, health and well-being

Cover Page Footnote

Thank you to the dedicated group of OT practitioners who have been and continue to be involved in the Literacy Community of Practice through AOTA.

Approximately 13% of the United States population have disabilities that impact their ability to participate in daily activities requiring reading skills. These disabilities include acquired brain injury, learning disabilities, ocular impairment (e.g., low vision), and socioeconomically and educationally impoverished populations, such as the homeless (Kraus, Lauer, Coleman, & Houtenville, 2018). Almost all daily occupations (i.e., the everyday activities in which people participate as individuals, families, and communities to occupy time in meaningful and purposeful ways [World Federation of Occupational Therapists, 2012]) require some level of reading skills. For example, meal preparation requires the reading of nutrition labels, food expiration dates, and cooking directions; money management necessitates the reading of bank statements, monthly budgets, and utility and rent bills; health management involves the reading of medical records and medication labels; community living requires the reading of street signage, transportation schedules, and ATM screens; and employment seeking involves the reading of job advertisements and the preparation of resumes.

The inability to access desired occupations in the community as a result of low literacy and the limited accessibility of community resources and infrastructures supporting literacy may lead to occupational deprivation. Occupational deprivation is a form of occupational injustice in which external circumstances, such as social, environmental, political, and geographical factors, preclude engagement in occupations (Durocher, Gibson, & Rappolt, 2013). Sustained occupational deprivation may have lasting effects on health and well-being (Townsend, 2012).

While occupational therapists are not responsible for developing reading abilities, we are responsible for addressing literacy skills that promote occupational participation (Grajo & Candler, 2016). We propose to name and frame literacy in occupational participation as functional literacy. Functional literacy is the ability to interpret common written materials needed to effectively carry out basic daily life skills and participate in meaningful occupations and social roles. Functional literacy is an emerging practice area that addresses how occupational therapists can support literacy as it directly impacts the performance of and participation in daily occupations.

The concept of functional literacy has its roots in functional cognition, which is defined by the American Occupational Therapy Association (AOTA) as the thinking and processing skills needed to accomplish complex everyday activities, such as home, financial, and medication management; work, school, and volunteer activities; and driving and community navigation (AOTA, n.d.). Literacy, as needed in daily occupations, is one component of functional cognition. Functional literacy can be further defined as the ability to decode, process, and use written information needed to perform self-care and to live independently in communities. Functional literacy is needed to navigate the world. Conversely, a lack of functional literacy can lead to occupational deprivation and the inability to function as a productive member of the community.

In this Opinions in the Profession article we aim to uniquely articulate the distinct value of and the need for functional literacy development in the clients we serve. We propose three specific strategies through which occupational therapists, across practice settings, developmental stages, and populations, can assume active roles in literacy support as it is embedded in occupation: (a) literacy as a form of occupational justice promotion; (b) literacy as an approach to health facilitation, well-being, and adaptive capacity; and (c) literacy as a means to strengthen social connectedness.

Theme 1: Functional Literacy as a Means to Promote Occupational Justice

Keefe and Copeland (2011) proposed a broader definition of literacy beyond the singular ability to decode and process letters, symbols, and words. They asserted that literacy is a human right and a

fundamental part of the human experience, one that is critical for human interaction, has the potential to lead to an empowered life, and is a collective responsibility of all individuals in a community. Occupational justice encompasses the idea that all humans have an innate biological and psychological need to be involved in meaningful activity that supports desired social roles and connections to others (Townsend & Wilcock, 2004). In today's highly cerebral and technological Western society, low literacy skills are an impediment to full participation in the most basic levels of human activity and marginalize people to societal fringes where existence is not dependent on some level of literacy, homelessness, unemployment, underemployment, institutionalization, and educational dropout and failure (Lunze & Paasche-Orlow, 2014). When a society neglects the functional literacy needs of all of its members, it engages in occupational injustice by maintaining a caste system in which some members, who are able to obtain literacy skills, have access to knowledge needed for basic life needs while others do not. Occupational injustice yields occupational alienation in which humans who cannot fully participate in society become disconnected and lose meaning (Nilsson & Townsend, 2010).

As occupational therapists, we must ask ourselves if we are truly promoting occupational justice when we fail to address functional literacy embedded in daily occupation. When we identify literacy deficits, but leave them for other professionals to address, often when no other professional is available, are we fully facilitating our clients' optimal participation in independent community living? To truly promote occupational justice, we must assess the barriers to literacy in specific occupations and identify intervention strategies through adaptation, compensation, and remediation. We must use available assistive technology; partner with community infrastructures (e.g., banks, pharmacies, grocery stores, transportation systems); identify family, school, and community resources; and collaborate with colleagues, such as reading specialists, classroom and special education teachers, and speech and language therapists.

Theme 2: Functional Literacy as a Means to Promote Health Facilitation, Well-Being, and Adaptive Capacity

Evidence demonstrates that an inability to process written information that is needed to participate in daily tasks adversely impacts health and well-being. A systematic review of literature reported that patients with low literacy had poorer health outcomes (DeWalt, Berkman, Sheridan, Lohr, & Pignone, 2004). More specifically, adults with lower literacy levels had an increased risk of hospitalization (Baker et al., 2002; Baker, Parker, Williams, & Clark, 1998), an increased risk for diabetes outcomes (Schillinger et al., 2002), and were twice as likely to be depressed (Gazmararian, Baker, Parker, & Blazer, 2000). Another systematic review examined interventions designed to mitigate the effects of low literacy on health outcomes (Berkman et al., 2004). Most interventions in this review attempted to increase health information accessibility for people with low literacy using a variety of modalities, such as pictographs, booklets, and videos. While the interventions analyzed in this systematic review increased participants' knowledge about health outcomes, the studies failed to measure and account for varying literacy levels or to isolate the effects of literacy barriers on community participation. None of the studies were conducted by occupational therapists or directly addressed literacy to improve independent community living skills.

Studies have also correlated low literacy with elevated rates of reactive behavioral problems and conflicted relationships in adults (Tomblin, Zhang, Buckwalter, & Catts, 2000). Poor readers were more likely to act aggressively in situations of distress (Morgan, Farkas, & Wu, 2008; Trzesniewski, Moffitt, Caspi, Taylor, & Maughan, 2006), more likely to report that distractibility and inattention interfered

with problem-solving and decision-making (Goldston et al., 2007; Morgan, Farkas, Tufis, & Sperling, 2008), and were more anxious and depressed than their higher literacy counterparts (Carroll, Maughan, Goodman, & Meltzer, 2005). In one study, poor readers aged 65 years and older were more likely to consider or attempt suicide (Daniel et al., 2006). Because reading and writing can be challenging tasks, children and adolescents' inability to meet academic demands can lead to increasingly frequent feelings of frustration, agitation, withdrawal, and social isolation (Fleming, Harachi, Cortes, Abbott, & Catalano, 2004; Kellam, Mayer, Rebok, & Hawkins, 1998; Lane, Beebe-Frankenberger, Lambros, & Pierson, 2001; Wehby, Falk, Barton-Arwood, Lane, & Cooley, 2003). Such feelings and behaviors commonly place students at risk for depression and social anxiety, substance use, and school dropout (Quiroga, Janosz, Bisset, & Morin, 2013).

One of the foundational principles of Healthy People 2030, a U.S. Department of Health and Human Services (2017) initiative, is the achievement of health and well-being through the elimination of health disparities, the achievement of health equity, and the attainment of health literacy. Occupational therapists can have a critical role in eliminating health disparities by not only facilitating clients' health literacy but also addressing functional literacy. As occupational therapists, we have traditionally supported clients in literacy development by addressing prerequisite skills, such as visual-motor and perceptual skills, fine motor skills, cognitive and executive function skills, and sensory processing skills. Given the impact of literacy challenges on health, well-being, and adaptation, however, our roles cannot end with supporting prerequisite skill development alone. A holistic approach to functional literacy must promote literacy from the perspective of occupational participation and the enhancement of resiliency in the face of literacy challenges.

One example of this practice is the Occupation and Participation Approach to Reading Intervention (Grajo & Candler, 2016), in which occupational therapists work conjointly with clients to develop the literacy strategies of adaptation, compensation, and remediation. Examples of adaptation could include strategies to reduce the amount of screen/page words to enhance visual attention and organization, magnifiers to increase readability, replacing or coding words with pictographs and photos that enhance learning and comprehension, using tactile aids and colored highlighting to increase visual attention to important details, and teaching clients to take structured breaks to reduce cognitive overload. Compensation could include such methods as using mnemonics to assist memory and voice activated technology to interpret unfamiliar words and obtain needed information. Remediation would involve the practice of real-life occupations requiring functional literacy skills, such as check writing, bill paying, ATM machine use, transportation schedule interpretation, meal preparation using package directions, medication label interpretation, and written job application submission. In these activities, occupational therapists must continuously ask, "What strategies and tools does the client use to overcome literacy challenges?" "Are the client's strategies and tools effective?" "How can I facilitate the development of new tools and strategies that may be more effective?"

Theme 3: Functional Literacy as a Means to Promote Social Connection, Social Participation, and Community Belonging

Social participation and feelings of community belonging have long been correlated with greater emotional health, decreased levels of depression, and better health outcomes (Uphoff, Pickett, Cabieses, Small, & Wright, 2013). Papen (2005) asserted that when a social learning perspective is used to promote literacy, that is, when literacy skills are learned in the context of social activities and relationships, both children and adults are better able to master literacy skills and report such skills as

more personally meaningful. A social participation approach to literacy, as embedded in daily social occupations, appears to foster community and personal connectedness (Forts & Luckasson, 2011) and better enable communities to identify and remediate barriers to literacy access (Owens, 2006; Rodgers & Namaganda, 2005).

At a time when social connectedness is navigated widely through in-person and virtual means, functional literacy is now essential to participate in social occupations. Functional literacy is required to send text messages and emails; read and post on social media platforms, such as Twitter, Facebook, and Instagram; send and receive letters and greeting cards; leave notes and reminder post-its for others to complete needed tasks; check and record social events and activities on one's calendar or planner; create a profile on an online dating site; and navigate video conferencing platforms, such as Skype or FaceTime. Today, decreased functional literacy capacity significantly impedes social participation and adversely affects emotional health and well-being (Kamimura, Christensen, Tabler, Ashby, & Olson, 2013).

Occupational therapists must begin to address functional literacy as a co-occupation between clients and their important others. Co-occupations are ones in which an activity is carried out conjointly between two or more people for whom the activity holds meaning (Pierce, 2003). Because many of the occupational experiences of individuals could not occur without the interactive responses of important others, co-occupations are considered to be at the highest level of the sociocultural dimension of occupational participation. Examples of functional literacy as a co-occupation include teaching older adults who are homebound to use video calls, email, and text messages to remain safe in their homes and stay connected with family, friends, and caregivers; guiding adults with mental illness who have conflicted or estranged family relationships to reconnect through emotionally safe forms of literacy, such as letter writing and email; assisting people with substance use disorders to replace dysfunctional behaviors and relationships with internet support groups; helping adults with dementia to use reminiscence writing to preserve memory functions and decrease feelings of alienation; helping young adults with disabilities (such as head injury and spinal cord injury) to increase social connection through online dating sites and chat rooms; and assisting older adults to engage in family activities through the chronicling of family recipes and history that can be passed along to younger generations. Today, many support groups (e.g., cancer survivor groups, Alcoholics' Anonymous, Women Against Domestic Violence) are increasingly held online, and therapists should be prepared to both increase client awareness of such groups and teach the functional literacy skills needed to navigate online platforms for group participation. In another example, occupational therapists who are part of a national community practice for literacy have partnered with local museums to promote access for children and adults who require visual and physical accommodations.

Conclusion

Occupational therapy's distinct value in functional literacy development is not limited to the promotion and development of isolated skills needed for reading, writing, and communication. Functional literacy skills are intimately tied to occupational engagement and role assumption. Such skills are required to participate in the most basic human activities of a modern day, technological society and must be considered in all activity analyses and syntheses. To ignore functional literacy is to fail to address a critical client factor underlying the thin divide between optimal daily function and deterioration. To promote occupational justice, we must begin to address the functional literacy barriers that prevent marginalized groups from fully engaging in societal participation, gaining access to

knowledge needed for basic daily life skills, and achieving a sense of community connectedness and belonging. As therapists, it is our ethical responsibility to support clients to overcome the functional literacy challenges that prevent occupational participation and community belonging. Using the traditional strategies of adaptation, compensation, and remediation, we can promote access to and participation in occupations requiring functional literacy, and in doing so, enhance our clients' health, well-being, and adaptive capacity. As the emerging practice area of functional literacy grows, intervention guidelines will need to be established and assessed for effectiveness with specific populations. At this nascent stage, we invite all therapists to begin to consider functional literacy in all client assessments and intervention services.

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