

The Open Journal of Occupational Therapy

Volume 5 Issue 1 Winter 2017

Article 2

January 2017

The Role of Occupational Therapy in Community-Based Programming: Addressing Childhood Health Promotion

Julie D. Kugel Loma Linda University - USA, jkugel@llu.edu

Heather Javherian-Dysinger Loma Linda University - USA, hjavaherian@llu.edu

Liane Hewitt Loma Linda University - USA, lhewitt@llu.edu

Follow this and additional works at: https://scholarworks.wmich.edu/ojot



Part of the Occupational Therapy Commons

Recommended Citation

Kugel, J. D., Javherian-Dysinger, H., & Hewitt, L. (2017). The Role of Occupational Therapy in Community-Based Programming: Addressing Childhood Health Promotion. The Open Journal of Occupational Therapy, 5(1). https://doi.org/10.15453/2168-6408.1259

This document has been accepted for inclusion in The Open Journal of Occupational Therapy by the editors. Free, open access is provided by ScholarWorks at WMU. For more information, please contact wmuscholarworks@wmich.edu.

The Role of Occupational Therapy in Community-Based Programming: Addressing Childhood Health Promotion

Abstract

Background: Obesity and poor health habits impact youth's health and occupational participation. Occupational therapy's role in preventing and treating obesity continues to emerge in the research literature. This article explores the impact of a community-based program emphasizing health and wellness for female youth.

Methods: Five girls 11 to 13 years of age participated in the healthy occupations program. Before and after the program, the participants engaged in an individual semi-structured interview and completed the Canadian Occupational Performance Measure and the CATCH Kids Club Questionnaire. The youth participated in a focus group midprogram.

Results: The participants were receptive to information regarding healthy behaviors and initiated positive health behavior changes after implementation of a 7-week healthy lifestyle community- based program.

Conclusion: Occupational therapy can collaborate with community partners to provide programming focused on health promotion and prevention as part of the interprofessional approach to preventing and treating childhood obesity and building healthier communities.

Keywords

youth, health promotion, obesity, wellness

Credentials Display

Julie Kugel OTD, OTR/L; Heather Javaherian-Dysinger OTD, OTR/L; Liane Hewitt DrPH, CHES, OTR/L

Copyright transfer agreements are not obtained by The Open Journal of Occupational Therapy (OJOT). Reprint permission for this Applied Research should be obtained from the corresponding author(s). Click here to view our open access statement regarding user rights and distribution of this Applied Research.

DOI: 10.15453/2168-6408.1259

Background

Obesity is a health condition with staggering implications for participation in everyday life (American Occupational Therapy Association [AOTA], 2013a). The Centers for Disease Control and Prevention (CDC, 2015a) define overweight as a body mass index (BMI) in the 85th to the 95th percentile and obesity as a BMI in the 95th percentile and above. The CDC calculates BMI with a formula chart using height, age, weight, and gender (2015a). While the latest data shows a stabilization or decline in obesity at the national level, the overall prevalence remains at 17% for youth (Ogden, Carrol, Kit, & Flegal, 2014). Youth who are overweight face medical complications, including metabolic syndrome, sleep apnea, exercise intolerance, type 2 diabetes, nutritional deficiencies, musculoskeletal and gastrointestinal problems, and a high risk for obesity in adulthood (Ludwig, 2012). Of equal importance is the risk to psychosocial development and mental health (Pizzi & Vroman, 2013). Stress and depression frequently accompany obesity as do anxiety, poor self-esteem, suicidal ideation, eating disorders, emotional lability, and social withdrawal (Ludwig, 2012). Obesity has the potential to significantly limit a child's ability to participate in meaningful occupations, such as play and social and physical activity, which ultimately impacts well-being and quality of life (AOTA, 2013a; Kuczmarski, Reitz, & Pizzi, 2010). This limited occupational engagement may show itself in childhood and, if left untreated, negatively impact well-being across the lifespan.

The benefits of physical activity on overall health are universally understood to include

increased physical health, decreased depression and anxiety, and increased academic performance (CDC, 2015b). However, in 2013, 27% of youth surveyed participated in the recommended 60 min of physical activity per day, 29% attended Physical Education class everyday, and nearly 15% had not participated in any physical activity in the last 7 days (CDC, 2015b). When broken down by gender, only 17.7% of females were physically active for 60 min each day in the survey period. High levels of stress and sleep deprivation, which are commonly reported among youth, can further promote obesity through dysregulation of metabolism and hormone patterns (Ludwig, 2012). Addressing the importance of exercise, sleep hygiene, and stress management is crucial for health promotion in youth.

Children are inherently subjected to the activities, food, and environments provided for them by their families and society; these factors may nurture a healthy lifestyle or create barriers that severely limit health promoting occupations (Cahill & Suarez-Balcazar, 2009; Palmer, 2006). The profession of occupational therapy has a responsibility to identify factors that lead to unnecessary debility and disease and to create community programs and practical solutions based on our knowledge of occupational performance (AOTA, 2013b; Baum & Law, 1998). Occupational therapy practitioners should be advocates for healthy living and be willing to take on positions of leadership in advocating for childhood obesity prevention and treatment at the community level (Kuczmarski et al., 2010). Health promotion and awareness strategies empowering healthy lifestyles

at the individual and population level (AOTA, 2013b) might include a practitioner working with an individual child who is struggling with motor development related to complications with obesity or an after-school group emphasizing health promoting routines and habits (AOTA, 2013a). Occupational therapy practitioners need to seize opportunities in our communities for the prevention of unhealthy conditions, diseases, and injuries (AOTA, 2013b).

A lack of research exploring the direct role of occupational therapy in childhood obesity prevention and treatment in community-based settings impacts the practitioners' ability to provide evidence-based interventions. This qualitative pilot study was designed to provide insight into the daily occupational lives of young girls as well as the challenges and barriers that may limit engagement in health promoting daily occupations. The initial data served as a needs assessment in order to provide a framework for creating a 7-week healthy occupations program. Data was also collected on the effectiveness of the healthy occupation program.

Methods

Study Design

A qualitative phenomenological design was used to gather information about the lived experience of young girls, the importance of daily health choices, and the impact of a specially designed 7-week healthy occupation group. A phenomenological viewpoint focuses solely on

everyday occupations and how individuals experience meaning in ordinary life; it is both a method for conducting research and a philosophy that guides thought (Luborsky & Lysack, 2006). Phenomenology enables the health professional to explore the daily life of an individual; to discover what gives meaning; and to learn what inspires, motivates, and empowers an individual in his or her life experience. Understanding the meaning behind the active participation in daily occupations supports the creation and implementation of community programs that are significant, sustainable, and meaningful.

Participants

Institutional Review Board approval was obtained through Loma Linda University prior to recruitment and data collection. A communitybased after-school club granted the researcher the opportunity to recruit members to participate in this research study and occupation-based healthy lifestyle program. The participants were required to be female, between 11 and 15 years of age, and members of the after-school club. Through purposeful sampling, the study recruited five girls (see Table 1). Each participant was assigned a pseudonym to keep identifying information confidential. Written parental consent as well as the participant's written assent was obtained prior to data collection. Table 1 describes the participants' demographics.

Table 1Participant Information

Participant Psuedonym	Age, Grade, Ethnicity	Self-Identified COPM Goals	Pre, Post COPM Performance/Satisfaction Scores
Cameron	12, 7 th grade, Caucasian	-Walking without getting out of breath -Staying awake in school -Learning to cook	Pre: 7/5, Post: 10/10 Pre: 3/1, Post: 6/9 Pre: 10/10, Post: 10/10
Christina	11, 6 th grade, Asian	-Running for 1 minute -Eating healthier and lose weight -Getting homework done	Pre: 3/1, Post: * Pre: 3/1, Post: * Pre: 6/1, Post *
Jana	12, 7 th grade, Caucasian	-Saving money -Organization at school and home -Dealing with a difficult teacher	Pre: 3/2, Post: 5/3 Pre: 4/3, Post: 5/4 Pre: 2/2, Post: 2/2
Morgan	12, 7 th grade, Caucasian	-Eating fewer sweets -Organization at school and home -Friendships & volunteering	Pre: 5/3, Post: 9/10 Pre: 8/7, Post: 10/10 Pre: 2/1, Post: 9/9
Alexis	11, 6 th grade, Caucasian	-Not eating McDonalds and fast food -Dealing with health problem related to fainting episodes	*participant unable to provide COPM scores

Note. * indicates missing data

Data Collection

The first author spent approximately nine months participating in club activities, observing the after-school program routine, and becoming immersed in the club culture. Prolonged involvement in a research setting helps to establish trust and rapport with the partnering agency staff and participants (Taylor & Kielhofner, 2006). This also provided more accurate insight about and understanding of the group experiences.

Multiple qualitative methods were used to gather data, including interviews, observations, and active engagement with the participants in the afterschool club setting (Lysack, Luborsky, & Dillaway, 2006). During the initial preprogram interviews, each participant completed the Canadian Occupational Performance Measure (COPM) with the assistance of the first author. The COPM (Law et. al., 1998) evaluates self-perceptions related to an individual's ability to perform daily occupations. Each participant independently identified self-

perceived occupational performance problems and then rated her performance and satisfaction on a scale of 1 (low) to 10 (high) before and after the program (see Table 1 for pre/post COPM scores). The participants identified the following top occupational performance areas that they wanted the program to address: (a) be able to walk/run without being out of breath, (b) stay awake in class, (c) eat fewer sweets, (d) be more organized, (e) develop friendships, (f) avoid procrastination and complete homework, (g) eat healthier, and (h) be able to cook. At the completion of the 7-week program and during reassessment of the COPM, many of the identified areas were rated higher in both performance and satisfaction (see Table 1 for COPM scores).

Open-ended interview questions explored daily health choices, routines, and family and school life. In addition, an unstandardized health questionnaire, CATCH Kids Club Questionnaire (National Heart, Lung, and Blood Institute [NIH],

2015), assessed the participants' knowledge of exercise and eating habits. As the participants felt more comfortable with the researcher, more personal topics, such as self-esteem, bullying, personal fears, and family dynamics, were discussed in-depth. The interview process took approximately 3 to 4 hr per participant, including a 1.5 hr focus group interview after the third week of the program that explored the participants' perceptions of the program and how the program could be modified to better meet their needs for the remainder of the group meetings.

Healthy Occupations Program

The preinterviews with the participants enabled the researcher to examine areas of need in regard to the girls' daily activities, roles, and routines. The 7-week healthy occupations program

was then designed with their specific needs in mind. The participants shared that they experienced challenges dealing with peer pressure, self-esteem, frequent insecurities, strategies for eating healthy and exercising, and stress management. Some found that their home and school environments made it especially difficult to maintain healthy eating habits, with several participants referring to junk food as having addictive qualities. The main goal of the research was to design and provide a program based on holistic principles that incorporated physical, spiritual, intellectual, emotional, and social elements into each weekly group session. Table 2 describes the 7-week program that was developed based on the participant interviews and ongoing feedback, such as the midprogram focus group.

 Table 2

 Description of Healthy Occupations Programming

Weekly Topic	Sample Activities		
Week 1: What is an Occupation?	Discussion and writing "healthy" and "unhealthy" occupations on white boards		
	• Expression of favorite occupations through art		
	• Introduction to journaling & writing goals		
	• Healthy snack* (provided at every group session)		
Week 2: True Beauty	 Body positive video and discussion (such as Dove project) of unrealistic images in th media 		
	• Exploring the "Health at Any Size" concept (Berg, 2004, p. 220)		
	Group activity creating art collage defining true beauty		
Week 3: Relax Your Way to Better	Instruction on deep breathing		
Health	Yoga moves for everyday		
	Group discussion of stress management and everyday strategies		
	• Journaling		
Week 4: A Tae Kwon Do Kind of Day	Tae kwon do class		
	 Reinforced concepts of empowerment, self-protection, and self-worth through activity 		
Week 5: Planting Seeds of Health	• Gardening: Small vegetable pots to be taken home and shared with others in the club		
Week 6: Real Food vs. Fake Food	Food pyramid		
	Deciphering food labels		
	Discussion of processed versus whole foods		
	Caffeine and its effect on the body		
	Preparing a healthy snack		
Week 7: Healthy Occupations Woven	Recap of all sessions, emphasizing main points		
into Daily Life	Strategies for choosing health on a daily basis		
	• Exercise: Yoga & tae kwon do		
	Art activity: Making necklaces with messages of hope		
os://scholarworks.wmich.edu/ojot/vol5			

DOI: 10.15453/2168-6408.1259

Data Analysis

Each interview was audio taped and transcribed verbatim. The transcriptions were individually coded with an emphasis on extracting individual units of meaning. The explanatory coding process was completed with careful attention to understanding fundamental conceptualizations of why and how individuals experience what they do (Lysack et al., 2006). The codes from each interview were compiled in a central codebook so that all words and phrases could be grouped together and compared across the study participants at the same time. From this codebook, important information was outlined and categories of meaning emerged. As the categories were analyzed and linked together, a thematic narrative of the participants' experiences emerged. Two researchers completed redundant coding of particular sections of the transcripts for peer debriefing and triangulation of the data; this enabled the clarification of methods, ideas, codes, categories, and themes (Lysack et al., 2006).

Results

Based on the data collection and analysis, two themes emerged. The first theme, A Glance Into Their Lives, gives an in-depth view of the participants' thoughts on health and their personal health goals.

A Glance Into Their Lives

The goal of the initial interviews was to gain information on the lived experience of the middle school girls in order to design meaningful and occupation-based intervention programming. Right away, Christina, 11 years old, shared that her biggest goal was to lose weight:

I want to lose until I'm like ninety-five pounds, around a hundred, because that's how like your like teenagers are usually, because a lot of people at my school are real skinny instead of big, and it makes me embarrassed because everyone is teasing me sometimes. My mom wants me to lose weight, I want to lose weight, everyone makes fun of me so a lot of things happen, so that's, I really want to lose weight.

Despite this desire for weight loss, Christina admitted:

It's hard for me to go on a diet, because I'm like so used to junk food. I can't live without junk food and sugar . . . my body commands junk food, I love junk food. I like that way better than salad.

She also expressed dissatisfaction with her ability to participate in physical education and health classes at school: "I hardly run . . . one minute of running, I get really, really tired, I can't even run for a minute." Further exploration of daily occupations at home and school revealed that she would regularly spend more than 4 hr per day playing computer games and that her favorite drink was "Monsters caffeine drink." When asked how often she drank it, she replied, "whenever I can buy it! My mom buys it for me like every other week and I buy it for myself like every other day."

Cameron, 12 years old, openly shared that stress contributed to her low self-esteem and sometimes self-sabotaging behaviors. She explained that on most days she was bullied about her family and her weight by kids at school. She shared that the sadness she felt when bullied

directly impacted her eating habits: "I'm sad a lot and when I'm sad I eat. I'm crying on the inside but not on the out." She further described some of these eating habits:

> I'm sort of addicted to the caffeine right now because I've already stocked up on energy drinks for the week because I've already got my twenty dollars. I just need my sugary hard candies to get through . . . everything sugary there is just yelling out my name.

Cameron also explained that she wanted not only to learn strategies to change her own habits but also to encourage her parents to buy healthier foods: "I would like to know how to make it so my parents don't put as much take-out on the table. And how . . . to make it so I don't drink as much caffeine and eat that much sugar." Cameron reported that she regularly spent 4 or more hr per day watching TV, and that it was a goal of hers to be able walk without becoming tired so quickly.

The primary concern that 13 year old
Morgan brought up was mental stress: "There's
stress from homework and everything but there's
also stress to be pretty and to like not be fat." She
further explained that she felt she had a lot of
knowledge and understanding of health, "so I pretty
much know everything I need to know about
staying healthy, I just don't want to do it."

Healthy Girls

The key focus of the program was to provide each participant with new skills and strategies for making simple daily choices toward a healthier lifestyle over a 7-week period. The title for this theme was taken from the participants' suggestion

At the end of the 7-week program the participants were asked to describe what they thought about the program. They described the program as "fun, healthy, cool, nice, good learning, and empowering." When asked to expand on these thoughts, Jana shared that "all the stuff we have done is healthy for either our body or our, or our soul . . . just like when we did the yoga it made us feel good and like when we did the smoothies that was healthy eating." She explained that her perception of healthy living had changed throughout the course of the program from a limited viewpoint to a broader scope, including emotional and social health:

Before, I thought it was mostly like physical [personal understanding of healthy living] because that's what I have always been told, but now I know . . . healthy is not listening to people when they say you are ugly . . . it opened my eyes, that way I can see like it's not just what I look like, like I can dig down deep in my soul and figure it out.

Jana, 12 years old, further explored her own perception of health by talking about her feelings of insecurity over her looks and her realization that her own understanding of who she truly was as a person triumphed over all of the external pressures that so frequently plague middle school girls: "It's really opened up my eyes, thinking, because you know how sometimes you just judge a person by its cover and it's kind of opened my eyes to like look deep because some of my friends do pick on people."

Jana also shared the importance of family support in being able to make routine and habit changes. She found that it was difficult sometimes to make good

choices because of barriers at home: "I come home and I have an apple or something but we don't have a whole lot of healthy stuff in the house, so maybe encouraging my mom to get more healthy fruits."

Cameron shared that the one word she would use to describe the program is "cool." She expounded by saying, "I had a lot of fun! It was cool to learn tae kwon do and yoga, it was also cool to learn how to make the smoothies." After the program, Cameron shared that she had begun losing weight, although the focus of the program was not on weight loss but rather on adopting and learning new healthy occupations. Cameron explained,

I have to say I have been a lot more healthy. Uh, recently I have gone down a little bit of weight because you've taught me how to be healthy a lot more than I was. I think another thing was that taking off a lot of the stress, when I'm stressed out I'll want to eat and I have, just by taking a lot of that stress away, I stopped eating that much.

Cameron explained some of the changes that she had begun to make in the 2 months of the program: "well since we have done the program I have been outside a lot more . . . limiting my, uh, TV watching time." When asked if she had been able to influence her parents, Cameron replied, "they still been getting non-healthy food, I've just been ordering healthier . . . I will order like a salad [when going to fast food restaurants]." As for her caffeine and sugar consumption, "my four Amps [caffeinated energy drink] a day have been taken down to one. It makes me feel a lot better."

Morgan shared that she had learned that her own personal attitude had the ability to shape her

daily choices and decisions: "healthiness is your attitude, it's not just what you eat, it's like your brain." She went on to explain that she had been "eating more healthy" since the program started and that she had found the journaling to be a helpful strategy: "it helps you vent like stuff that you're thinking."

Some of the participants shared that prior to the start of the program, they spent the majority of their leisure time in media endeavors, such as watching television, using a computer, and listening to music. At the end of the program, all of the participants reported a decrease in the amount of time spent watching television on a weekly basis.

Discussion

The initial interviews showed that occupational therapy programming for this population was warranted and that the topics they identified aligned with the profession's scope of practice. A basic premise of the profession of occupational therapy is the concept that daily occupations affect health and well being in a profoundly meaningful manner (AOTA, 2013a). The relationship between unhealthy habits and disease and illness has been clearly documented in scientific research. When individuals, especially youth, are faced with limited occupational choices, occupational deprivation, and/or limited understanding of coping skills and stress management, they may experience disengagement in meaningful occupational life patterns. An occupation-based practice approach highlights the importance of the meaning-making aspects of the therapeutic process, the process through which individuals feel confident and successful in the

world around them (Price & Miner, 2007). By matching the participants' needs and preferences, the occupation-based program was relevant, meaningful, and useful in relation to each participant's life goals and aspirations. The best opportunity to experience postive change in health behavior is through client-centered occupation-based interventions (Pizzi, 2010). The programming empowered the girls to accept their own self image and gave them increased confidence to begin making manageable lifestyle changes.

Despite the popularity of exercise and diet programs promoting rapid weight loss, more focus needs to be placed on lifestyle changes that are sustainable and realistic (Ludwig, 2012).

For most individuals to make active changes that will impact life satisfaction and well being, the process toward change needs to be filled with opportunities for creativity, fun, meaning, relevance, happiness, and social interaction. This may be why exercise-based weight reduction interventions have typically failed and many individuals have difficulty adhering to a strict exercise routine (Ludwig, 2012). More effective strategies have emphasized encouraging social play activities and reducing time that is spent on sedentary activities (Berntsen et al., 2010). Tapping into inherently creative processes and activities enables the individual to experience flow or the feeling that they are living life more fully than at other times of the day (Csikszentmihalyi, 1996). Experiencing new occupations during the program, such as yoga or tae kwon do, gave the participants the opportunity to embrace the element of flow and

sustaining meaningful occupations. By incorporating elements of fun, the participants had the opportunity to reflect on the sessions as both a learning experience and a time to just have fun together in a group. In an ideal situation, the experience of flow acts as a magnet for learning new skills (Csikszentmihalyi, 1997).

Research agrees with what several of the participants shared during the interviews and over the course of the program: Youth who are overweight or obese are more likely to be bullied and teased, and they can present with depression, social withdrawal, and negative self-concept (Pizzi & Vroman, 2013). The program emphasized positive body image, stress management, and empowerment through activity. Occupational therapy practitioners are uniquely suited to create programs and supports for youth based on their knowledge of physical, mental, spiritual, and psychosocial development.

Through reflection on the program activities during the postprogram interviews, it became clear that the participants had begun moving from contemplation (acknowledgement of a problem and desire to change) to preparation (plan for action) and then action (actual behavior change) during the 7 weeks of the program (Arechiga, 2010). The Transtheoretical Model of Health Behavior Change is based on the concept that change progresses through these steps and that a personal and interactive approach is the most powerful health promotion strategy (Prochaska & Velicer, 1997). Personal perspective transformation is the process by which individuals change their views of the world based on new information attained or by

learning from experience or instruction (Dermody, Volkens, & Heater, 1996). Understanding the cycle of change is the first step toward making choices that lead to a healthier existence. Individuals are open systems that are constantly changing and adapting to keep up with everyday living. As individuals interact with their environments, they have the opportunity to respond to daily happenings in a healthy way that leads to balance and well being, or they respond in an unhealthy manner that leads to disease, illness, dysfunction, and an overall personal imbalance (Dermody et al., 1996). To promote change, youth must understand their own personal power in leading a healthier life. Individuals are not motivated toward change until they experience an inner conflict with their current lifestyle choices and are presented with ideas or strategies for change, such as the healthy occupations program.

The work of occupational therapy is to strategically create opportunities to change the way a person perceives the world in order to enhance and improve occupational performance (Turpin, 2007). Based on the interviews, the participants gained an enhanced view of the meaning of occupation as well as the tools for choosing and creating more meaningful and healthful daily occupations. Occupational therapy's distinct value recognizes that promotion of our important services is essential in order for our profession to move forward, and we can only do this by "facilitating participation and engagement in occupations, the meaningful, necessary, and familiar activities of everyday life" (AOTA, 2015, para. 6).

Limitations and Future Research

The sample size for this study was small. Due to the variability of attendance at the club, not all of the participants were able to attend each session. This study was conducted in a small rural community with specific demographics; therefore, the results from this study may not generalize to other populations. Future research could focus on examining the impact of short- and long-term afterschool programming, emphasizing an occupationbased approach. It would also be beneficial to implement a family-centered approach to health behavior change, provide practical lifestyle strategies for busy families, and collect data to further analyze outcomes and impact across the lifespan. Similar programming and research could also be conducted in other practice settings, especially as youth with physical disabilities may have a higher risk for obesity.

Conclusion

Youth today are faced with societal pressures and health problems, such as obesity, that were once obscure for this age group. While the causes are vast and far from simple, it is evident that a breakdown occurs in regard to understanding the impact and value of daily occupations and their influence on healthy lifestyle patterns and routines. Occupational therapy has both a profound opportunity and responsibility to address the needs of youth in our communities through holistic and client-centered practice (Pizzi & Vroman, 2013). As we embrace practical wisdom and the historical roots of the profession, we are able to go beyond the typical practice models, settings, and forms of intervention and meet each client at his or her own

level, on his or her own personal journey. "As we enable healing occupations, we reclaim our heart" (Peloquin, 2005, p. 623). When we can more fully reclaim the heart and soul of the profession occupation—we can best meet the needs of a dynamically changing society.

Heather Javaherian-Dysinger, OTD, OTR/L is Associate Professor and Program Director of the Masters of Occupational Therapy Program at Loma Linda University. Her teaching emphasis involves research, program development, domestic violence, end of life care, and education. She is involved in initiatives including palliative care, wellness, domestic violence, and primary care. She is also a fieldwork educator. Dr. Javaherian is a co-founder of Roots Down, Inc., a non-profit that serves survivors of domestic violence. In 2014 she was the Honored Lecturer and recipient of the Humanitarian Award from the California Occupational Therapy Foundation.

Liane Hewitt, DrPH, CHES, is the chair of the Occupational Therapy Department at Loma Linda University. Her primary responsibilities are administrative, along with serving as the co-chairperson of the University Academic Service Learning Committee. Her interests include health and wellness, community based OT practice, dementia care, working with at-risk youth and kinship support services.

References

- American Occupational Therapy Association. (2013a). Obesity and occupational therapy. American Journal of Occupational Therapy, 67(Suppl. 6), S39-S46. http://dx.doi.org/10.5014/ajot.2013.67S39
- American Occupational Therapy Association. (2013b). Occupational therapy in the promotion of health and well being. American Journal of Occupational Therapy, 67(Suppl. 6), S47-S59. http://dx.doi.org/10.5014/ajot.2013.67S47
- American Occupational Therapy Association. (2015). Articulating the distinct value of occupational therapy. Retrieved December 8, 2015 from http://www.aota.org/Publications-News/AOTANews/2015/distinct-value-ofoccupational-therapy
- Arechiga, A. (2010). Facilitating health behavior change. In M. Stuber & D. Weddings (Eds.), Behavior and medicine (5th ed.). Cambridge, MA: Hogrefe & Huber.
- Baum, C., & Law, M. (1998). Community health: A responsibility, an opportunity, and a fit for occupational therapy. American Journal of Occupational Therapy, 52(1), 7-10. https://scholarworks.wmich.edu/ojot/vol5/iss1/2

DOI: 10.15453/2168-6408.1259

- http://dx.doi.org/10.5014/ajot.52.1.7
- Berg, F. M. (2004). Underage and overweight: America's childhood obesity crisis—what every family needs to know. Long Island City, NY: Hatherleigh Press.
- Berntsen, S., Mowinckel, P., Carlsen, K.-H., Carlsen, K. C. L., Kolsgaard, M. L. P., & Anderssen, S. A. (2010). Obese children playing towards an active lifestyle. International Journal of Pediatric Obesity, 51(1), 64-71. http://dx.doi.org/10.3109/17477160902957166
- Cahill, S. M., & Suarez-Balcazar, Y. (2009). Promoting children's nutrition and fitness in the urban context. American Journal of Occupational Therapy, 63(1), 113-116. http://dx.doi.org/10.5014/ajot.63.1.113
- Centers for Disease Control and Prevention (CDC). (2015a). Defining childhood obesity. Retrieved from http://www.cdc.gov/obesity/childhood/defining.html
- Centers for Disease Control and Prevention (CDC). (2015b). Physical activity facts. Retrieved from http://www.cdc.gov/healthyschools/physicalactivity/f
- Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. New York, NY: HarperCollins Publishers.
- Csikszentmihalyi, M. (1997). Finding flow: The psychology of engagement with everyday life. New York, NY: Basic Books.Dermody, J. L., Volkens, P. P., & Heater, S. L. (1996). Occupational therapy students' perspectives on occupation as an agent that promotes healthful lifestyles. American Journal of *Occupational Therapy*, 50(10), 835-841. http://dx.doi.org/10.5014/ajot.50.10.835
- Kuczmarski, M., Reitz, S. M., & Pizzi, M. A. (2010). Weight management and obesity reduction. In M. E. Scaffa, S. M. Reitz, & M. A. Pizzi (Eds.), Occupational therapy in the promotion of health and wellness (pp. 253-279). Philadelphia, PA: F. A. Davis Company.
- Law, M., Baptiste, S., Carswell, A., McColl, M. A., Polatajio, H., & Pollock, N. (1998). Canadian Occupational Performance Measure (3rd ed). Ottawa, Ontario, Canada: CAOT Publications ACE.
- Luborsky, M. R., & Lysack, C. (2006). Overview of qualitative research. In G. Kielhofner (Ed.), Research in occupational therapy: Methods of inquiry for enhancing practice (pp. 326-340). Philadelphia, PA: F. A. Davis Company.
- Ludwig, D. S. (2012). Weight loss strategies for adolescents: A 14-year-old struggling to lose weight. Journal of American Medical Association, 307(5), 498-508. http://dx.doi.org/10.1001/jama.2011.2011
- Lysack, C., Luborsky, M. R., & Dillaway, H. (2006). Gathering qualitative data. In G. Kielhofner (Ed.), Research in occupational therapy: Methods of inquiry for enhancing practice (pp. 341-357). Philadelphia, PA: F. A. Davis Company.

- National Heart, Lung, and Blood Institute (NIH). (2015, May 6). *Curricula and toolkits*. Retrieved September 1, 2015 from http://www.nhlbi.nih.gov/health/educational/wecan/tools-resources/curricula-toolkits.htm
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *The Journal of the American Medical Association*, 311(8), 806-814. http://dx.doi.org/10.1001/jama.2014.732
- Palmer, S. (2006). *Toxic childhood: How the modern world is damaging our children and what we can do about it.*Great Britain, London: Orion Books Ltd.
- Peloquin, S. M. (2005). Embracing our ethos, reclaiming our heart. *American Journal of Occupational Therapy*, 59(6), 611-625. http://dx.doi.org/10.5014/ajot.59.6.611
- Pizzi, M. A. (2010). Health promotion for people with disabilities. In M. E. Scaffa, S. M. Reitz, & M. A. Pizzi (Eds.), *Occupational therapy in the promotion of health and wellness* (pp. 376-396). Philadelphia: F. A. Davis.
- Pizzi, M. A., & Vroman, K. (2013). Childhood obesity:

 Effects on children's participation, mental health, and psychosocial development. *Occupational Therapy in Healthcare*, 27(2), 99-112.

 http://dx.doi.org/10.3109/07380577.2013.784839
- Price, P., & Miner, S. (2007). Occupation emerges in the process of therapy. *American Journal of Occupational Therapy*, 61(4), 441-450. http://dx.doi.org/10.5014/ajot.61.4.441
- Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, *12*(1), 38-48. http://dx.doi.org/10.4278/0890-1171-12.1.38
- Taylor, R. R., & Kielhofner, G. (2006). Collecting data. In G.
 Kielhofner (Ed.), Research in occupational therapy:
 Methods of inquiry for enhancing practice (pp. 530-547). Philadelphia, PA: F. A. Davis Company.
- Turpin, M. (2007). Recovery of our phenomenological knowledge in occupational therapy. *American Journal of Occupational Therapy*, 61(4), 469-473. http://dx.doi.org/10.5014/ajot.61.4.469