

Directions for 21st Century Lifelong Learning Institutes: Elucidating Questions from Osher Lifelong Learning Institute Studies

Craig A. Talmage¹, Robert Jack Hansen², Richard C. Knopf³,
Steven P. Thaxton²

¹ Hobart & William Smith Colleges, ² National Resource Center for Osher Lifelong Learning Institutes, ³ Arizona State University

The literature regarding lifelong learning is robust, while the literature on lifelong learning institutions, centers, and programs remain under-researched in comparison. This article draws insights from a specific network of lifelong learning institutes with a rich history and high rapport in the United States: the Osher Lifelong Learning Institute (OLLI) network. Sixty articles regarding OLLIs are catalogued and highlighted to elucidate twelve thematic areas and twelve questions for future research and practice. In particular, these themes are related to adult education, healthy aging, and educational gerontology. The article concludes by reflecting on trends in and needs for institutional research and practice.

Les publications portant sur l'éducation permanente sont nombreuses, contrairement à celles touchant les institutions, centres et programmes d'éducation permanente qui, en comparaison, demeurent généralement mal connus. Cet article recueille des idées d'un réseau d'instituts d'éducation permanente ayant un passé riche et de bons rapports aux États-Unis : le réseau Osher Lifelong Learning Institute (OLLI). Soixante articles portant sur OLLI ont été catalogués et analysés pour faire ressortir douze thèmes et douze questions pour la recherche et la pratique à l'avenir. Ces thèmes se rattachent à l'éducation des adultes, le vieillissement sain et la gérontologie éducative. L'article se termine par des réflexions sur des tendances et des besoins relatifs à la recherche et la pratique institutionnelles.

Although few would question the importance of lifelong learning to the human experience, many questions remain regarding effective approaches to lifelong learning research and practice. Despite over half a million hits on Google Scholar when searching for publications regarding lifelong learning, only a third of these hits address the importance of lifelong learning institutes, centers, or programs. Great room thus remains for investigation of lifelong learning institutes, centers, or programs, which are by no means homogeneous across members, structures, offerings, experiences, pedagogies, and locations. This study takes on this call by conducting a thematic review of the lifelong learning literature that has concerned Osher Lifelong Learning Institutes in the United States to inform future lifelong learning research and

practice.

The Osher Lifelong Learning Institute (OLLI) network has a rich history in the United States. Across the U.S., Osher Institutes are independent programs affiliated with colleges or universities. Each institute is funded in part by The Bernard Osher Foundation with intentionally minimal restrictions or operational requirements to encourage independence, ingenuity, and highly local programming. These institutes are not franchised nor centralized in their operations, but their staff connect virtually and in-person at events to share resources and effective practices.

Nonetheless, the Osher Institutes share similar structures for and expressions of their missions. According to the OLLI National Resource Center, “all Osher Institutes offer a wide variety of intellectually stimulating, university-level, non-credit courses and learning opportunities designed for people ‘50 and better’...It is learning solely for the joy of learning” (Osher NRC, 2015, para. 3). Offerings may include lectures, study groups, special and on-going events, or travel experiences. Students take no tests and receive no grades. The institutes require members to pay membership fees and/or fees for courses and activities. All activities and opportunities aim “[t]o develop the mind and spirit for a lifetime of purpose and human flourishing” (Osher NRC, 2015, para. 5).

The network began in 2001 with funding from California philanthropist and Maine native, Bernard Osher, through grants from The Bernard Osher Foundation. By late 2004, there were 48 OLLIs¹ grantees, and by 2006, the network had grown to include 101 institutes. Currently, the network includes 121 Osher Institutes nationwide serving 378 cities, with more than 160,000 total members/students collectively (Osher NRC, 2015). Smaller OLLIs serve around 500 members, and the largest OLLI, Florida Atlantic University, serves more than 13,000 members.

In 2004, a National Resource Center for Osher Institutes (Osher NRC) was established at the University of Southern Maine, which moved to Northwestern University in 2014. The Osher NRC is a separately endowed, non-governing center for excellence with the mission to connect the network of Osher Institutes, collaborate with them, consult with them on effective practices, and celebrate their successes.

A small cadre of researchers and champions have investigated the members, structures, offerings, experiences, pedagogies, and variations of OLLIs since the 2001 inception of the network and subsequent expansion of OLLIs across the United States. From Fall 2006 to Fall 2011, Osher NRC published its own journal of six volumes titled, *LLI Review*. The journal served both academics and practitioners, specifically those that conduct research on OLLIs and their learners or run OLLI programs. Research has since expanded from the OLLI journal to other publication outlets across disciplines, such as education, gerontology, social work, community development, among others.

Focus and Review

This article centers on sixty-refereed investigations of OLLIs in the lifelong learning literature in an effort to elucidate thematic areas and essential questions for future research and practice. Specifically, it focuses on questions that impact lifelong learning institutes to provide directions for lifelong learning in the 21st century. This article will draw on investigations found in *LLI Review* and other publications regarding OLLIs derived from Google Scholar. We note that the sixty articles identified vary in their peer- and editorial-review strategies; however, we believe

that the articles sourced from an exhaustive search of Google Scholar and, in particular, the sixty articles identified based on their relevance to this literature review prove useful to informing the field of lifelong learning. What follows first is a sorting of those articles into thematic areas, so that essential questions may be developed to help further develop research and practice as lifelong learning institutes continue to evolve in preparation for the future.

A few national studies specifically concerning OLLIs and their learners have been published (e.g., Hansen, Brady, & Thaxton, 2016). But, most studies of OLLIs are regional or local in scope. Across individual studies, almost every region of the continental United States has been represented, but not all states. In general, most studies focus on the lifelong learners and the impact of lifelong learning on them, while few focus specifically on the institutes and their structures. For the purpose of this study, themes and questions elucidated for this study cover both learners and learning institutes, even though they are distinct streams of inquiry.

The sixty articles were coded to identify the different themes present. One of the study authors read each article in its entirety and took notes regarding possible themes. Audit trails, peer debriefing, and research reflexivity were utilized in order to ensure that codes were appropriately assigned and that rigor was maintained in the qualitative analyses (Lietz & Zayas, 2010). This author did not source all the articles selected for inclusion and analysis in this literature review, but he also relied on the other study authors for collecting the study articles.

The coding author only noted themes that were found across two or more articles. These themes were then counted. In total, twelve themes emerged (Table 1). The studies varied broadly regarding twelve themes, and some articles received multiple codes as demonstrated by the seventy-eight observed frequencies of codes from sixty articles coded.

Healthy aging (cognitively and physically) was the largest domain of inquiry. Many of such studies highlighted the cognitive benefits of lifelong learning (Lamb, 2011; Lamb & Brady, 2005; Pstross, Talmage, Peterson, & Knopf, 2017b; Simone & Cesena, 2010; Simone & Sculli, 2006; Spiers, 2012, 2015), such as resiliency (Lamb, Brady, & Lohman, 2009) and dementia deferral

Table 1.

Thematic Content of Publications on OLLI Study and Practice

Thematic Area	Number	Percent
Healthy Aging (Cognitively and Physically)	13	22%
Positive Reactions (Satisfaction, Engagement, and Transformation)	9	15%
Demographics and Diversity	9	15%
Structure and Design	8	13%
Technology and Information Literacy	7	12%
Creativity and Self Expression	7	12%
Inclusion and Age-Friendliness	6	10%
Pedagogy and Learning	5	8%
Intergenerational Learning	5	8%
Research and Evaluation	4	7%
Benefits of Social and Community Setting	3	5%
Community Partnerships	2	3%

(Richeson, Boyne, & Brady, 2007). Others focused on tools to promote health management (Butler et al., 2016; Zettel-Watson & Tsukerman, 2016) and health care education (Sierpina, Kreitzer, & Sierpina, 2009). If it follows that lifelong learning helps individuals achieve their full human potential (Lamb, 2011), we ask: *What are effective lifelong learning strategies to help older adults reach their highest potential(s) for physical and cognitive health?*

The second most dominant theme for research on OLLIs pertains to the positive reactions (i.e., satisfaction, engagement and transformation) experienced by members. Lifelong learning positively provides individuals with transformative moments for older adults through teaching, learning, and community (Lightfoot & Brady, 2005; Pstross et al., 2017a; 2017b). They are inspired to be more engaged in topics with focuses that are global (Shapiro & Sokoloff, 2009) and local (Yamashita, López, Soligo, & Keene, 2017). They also find satisfaction and have better moods from participation in lifelong learning (Simone & Cesena, 2010; Simone & Haas, 2007; Spiers, 2015; Yamashita, López, Keene, & Kinney, 2015). Lifelong learning has been connected to higher levels of life satisfaction, happiness, well-being, optimism, and positive outlook on life (Spiers, 2012, 2015; Yamashita et al., 2015). Since lifelong learning contributes to the transcendence of older adults (Tornstam, 2011), we ask: *How does lifelong learning transform the lives of older adults?*

Of equal frequency to the above, was a domain that focused on the demographics and diversity of lifelong learners. This domain is important considering that nearly a third (32.1%) of the U.S. population is 50 years of age or older (U.S. Census Bureau, 2010). Doetinchem de Rande (2012) noted the opportunities and challenges education for older adults could face in the U.S., such as too much homogeneity. One study encouraged institutes to look beyond retirees to pre-retirees as a recruiting pool for attracting older adults to lifelong learning programs (Miller & Beard, 2008). Another study looked at the socio-demographic constituency of participants in Osher Lifelong Learning Institutes compared to a broader set of lifelong learning programs; some were affiliated with universities and others with non-academic adult education centers (Shinagel, 2012). One study compared institutes from different states and found that their members had similar demographics (Lee, 2016), while another study showed differences in age, education, and socioeconomic status (Simone & Cesena, 2010). Yamashita and colleagues' (2015) study showed their OLLI sample to be predominantly white women of higher levels of income, formal education, and religious affiliation. Their average age was 70.9 (SD = 7.2).

Within this theme, Hansen et al. (2016) undertook the first national survey of the demographic characteristics of the OLLI population as a whole in 2013-2014 following a survey of directors by Hansen and Brady (2013). The survey included 3,023 respondents from eight OLLI programs. The largest age group proportionally was that between 65 and 69 years of age. The study identified important ways in which the over 3,000 OLLI learners surveyed differed from norms of the U.S. older adult population. First, the percentage of female participants (70.1%) exceeded that of male participants (29.9%), which differs from U.S. population of those 50 years of age and older that is 46.3% male and 53.7% female (U.S. Census Bureau, 2010). In this study, 87% of the OLLI participants have earned at least a bachelor's degree and slightly more than one-half have completed a graduate program, compared to the national norm of around 29.7% with a Bachelor's degree or higher and around 11.2% with a graduate/professional degree (U.S. Census Bureau, 2011-2015).

Overall, OLLI learners appear to be demographically homogeneous, but some institutes seek greater heterogeneity. Most of the OLLI studies highlighted did not consider race, ethnicity, or sexual orientation in their investigations (exception: Pejic, 2008, for cultural and ethnic

diversity). Hansen and Thaxton (2017) reported that OLLI programs typically consist of White/Caucasian learners (over 94%) and non-LGBTQ+ learners (over 96%). Pejic's (2008) work discussed how OLLI learners in Portland, Maine could encourage lifelong learning institutes to cultivate diverse membership bodies through programming. Taking these demographics into consideration, we ask: *How might lifelong learning institutes continue to serve their current populations while also working to reach and serve other diverse older adult populations?*

The next most frequent theme concerned the structure and design of lifelong learning institutes. One study spoke to the dynamics of starting an Osher Lifelong Learning Institute (Harrison & McGuire, 2008). Some have focused on the quality of instruction (Einstein, 2008), instructional services (Hensley, 2012), and course leadership and curricula (Sokoloff & Cohen, 2006). Two studies focused on the types of learning activities (Yamashita et al., 2017) and course offerings (Talmage, Lacher, Pstross, Knopf, & Burkhart, 2015). One article focused on the most effective communication networks (Clement, 2009). Another focused on balancing adult learning perspectives (Orte & March, 2012). Thus, we ask: *How do we design and structure lifelong learning programs and institutes that will sustain or thrive for the long-term and have long-term impact for lifelong learners?*

The fifth most prevalent theme of inquiry pertains to technology and information literacy. As older adults are exposed to new technologies to access pertinent information (Birdsong & Freitas, 2012), lifelong learning institutes have sought to help older adults become more competent regarding technologies (Meiselwitz & Chakraborty, 2011). These studies have focused on Internet training (Shedletsky, 2006), teaching computer skills (Smith, 2012), social networks (Hansen et al., 2016; Lennon & Curran, 2012), and communication forms such as texting (Cardale & Brady, 2010). The national survey conducted by Hansen et al. (2016) showed a high level of computer technology utilization compared to the older adult population as a whole, and also decreasing utilization with increasing age. These findings are consistent with other studies of technology utilization variation with age and education (e.g., Smith, 2014). In this light, we ask: *How can lifelong learning institutes effectively utilize current and emergent technologies for learning in their programs?*

The sixth frequent theme of inquiry related to the role of creative and self-expression (e.g., artistic expression) among OLLI learners and how such expression plays out in their lives (Hanna & Perlsetein, 2008; Perlstein, 2006; Spiers, 2012, Sherman, 2006). One study in particular looked at expression through journal writing (Brady & Sky, 2003). Fischer and colleagues (2011) looked at the importance of experiencing challenge when learning through art. Expression, specifically creative expression, has been found to be a transformative path for older adults (Fischer, Hersh, Hoffman, & von Doetinchem de Rande, 2011; Pstross et al., 2017b); therefore, we ask: *How might lifelong learning institutes effectively encourage creative expression?*

Characterizing the seventh theme, six studies focused on inclusion and age-friendliness regarding older adults' engagement in continuing and higher education. As noted by DiSilvestro (2013), pursuing and achieving the ideal of inclusivity is challenging. Colleges, universities, and other institutions of continuing and higher education must become more age-friendly to create more inclusive learning pedagogies and platforms (Talmage, Mark, Slowey, & Knopf, 2016). They must also adapt to the constraints, motivations, and perceptions of the demographics they serve (Baral, 2014; Ferssizidis et al., 2010). Again, programming may help bring more diverse populations into lifelong learning programs and facilitate an inclusive environment for learning

(Pejic, 2008). Finally, Mahoney (2017) questioned the definition of lifelong learning from the perspective of academic librarian to investigate how students and administration understood the term to be more inclusive of multiple definitions and perspectives. Thus, we ask: *How must lifelong learning institutes adapt to effectively reach older adults, especially diverse populations not currently engaged with lifelong learning?*

The eighth theme centers on examination of pedagogies and strategies for learning. One study assessed peer teaching as a strategy (Brady, Holt, & Welt, 2003). Another looked at self-integration (Hunt, 2007). And, another looked at variety in course offerings (Talmage et al., 2015) finding older adults desire breadth and depth in learning. Sheridan (2007) considered what lifelong learning looks like in a postmodern age, specifically pointing towards democratic and collaborative participation. Lamb and Brady (2005) asked, “What turns members on?” They highlighted four areas: (1) intellectual stimulation; (2) experience a nurturing and supportive community; (3) enhancing self-esteem; (4) and having opportunities for spiritual renewal (p. 207). In general, we ask: *What are effective strategies and pedagogies for older adults?*

Another cluster of studies examined the dynamics of intergenerational learning in OLLIs, representing the tenth theme. One study looked at the intergenerational learning for Internet training (Shedletsky, 2006). Two looked at intergenerational learning from a service-learning context pointing to the social benefits (e.g., companionship and meaningful relationships) derived from such programs for both younger and older adult learners (Borrero, 2015; Pstross et al., 2017a). More recently, researchers have looked to understand intergenerational service-learning and its effects on older adults and students (Donorfio, 2017; Leedahl et al., 2018). Leedahl and colleagues (2018) explored the effectiveness of reverse mentoring programs that are interdisciplinary and utilize technology for intergenerational service-learning. All of these sources point to the need for more research and reflections on intergenerational practice. We ask: *What is the place for and benefits of intergenerational learning in lifelong learning programs?*

Four articles focused research and evaluation efforts of lifelong learning institutes, forming our tenth theme. One study examined the fruits of community research teams that were member-driven and reflective (Waldron, Shattuck, Zimbrick, Finter, & Edwards, 2007). Another examined how institutes could solve the inherent organizational and institutional challenges (e.g., programming or staffing) of OLLIs through action research approaches (Hansen & Brady, 2011). Another conducted a national survey of directors to unearth the most common evaluation strategies (i.e., course and instructor evaluations and demographics) and pertinent issues to them (Hansen & Brady, 2013). Finally, one study addressed how to evaluate the success of their enterprise based on enrollment monitoring (Talmage et al., 2015). We ask: *What are effective ways to evaluate lifelong learning institutes and their programs/programming?*

Surprisingly, only three studies have focused on the social and community benefits of lifelong learning (Brady & Cardale, 2013; Lamb & Brady, 2005; Pstross et al., 2017b), the eleventh emerging theme. Pstross and colleagues (2017b) posited seven areas of transformation for older adults through community building: “(1) asset-based thinking; (2) critical reflection; (3) systems thinking; (4) cognitive vibrancy, (5) inclusiveness; (6) creative expression; and, (7) purpose in life” (p. 62). Brady and Cardale’s (2013) open-ended survey of 65 OLLI directors highlighted benefits for their learners from community-building, such as “common goals, a sense of ownership, sustained relationships, holistic engagement, and meaningful peer interactions” (p. 627). They also discussed the importance of volunteers, institutional responsiveness, educational travel opportunities, special (or shared) interest groups, social

activities, and communication networks in fostering and supporting community-building efforts. Thus, we ask: *What role does community-building play in lifelong learning?*

A twelfth emerging theme was a focus on community partnerships of OLLIs. Community partnerships have been identified as instrumental in enhancing OLLI programs and experiences (Alexander, Aten, Fadness, & Lightfoot, 2011; Pstross et al., 2017a). Alexander and colleagues (2011) described the experience of the OLLI at Montana regarding building community partnerships because of the personal growth learners receive and lower barriers to participation learners are provided through such partnerships. Strategies for partnerships ranged from “sharing advertising in each other’s newsletters and concert programs to co-sponsoring events” (p. 132). OLLI at Montana partners included the local symphony orchestra, art museum, film festival, and event organizations. Pstross and colleagues (2017) write about community partnerships focused on intergenerational learning experiences, where both younger and older learners cognitively and socially benefit as well as the hosting university and local community. Given the transformational power of community partnerships for OLLIs, we ask: *Which roles do community partnerships play in lifelong learning?*

Direction for 21st Century Research and Practice

In summary, we draw upon the foci and revelations of the current portfolio of sixty research studies crafted around Osher Lifelong Learning Institute programs, offerings, and participants to frame twelve emerging questions that might guide future research and practice. The twelve framing questions are posted in Table 2. It is our hope that each will spur additional query toward the goal of capturing and articulating the power of lifelong learning for older adults.

Table 2.

Twelve Questions for 21st Century Research and Practice

1. What are effective lifelong learning strategies to help older adults reach their highest potential(s) for physical and cognitive health?
 2. How does lifelong learning transform the lives of older adults?
 3. How might lifelong learning institutes continue to serve their current populations while also working to reach and serve other diverse older adult populations?
 4. How do we design and structure lifelong learning programs and institutes that will sustain or thrive for the long-term and have long-term impact for lifelong learners?
 5. How can lifelong learning institutes effectively utilize current and emergent technologies for learning in their programs?
 6. How might lifelong learning institutes effectively encourage creative expression?
 7. How must lifelong learning institutes adapt to effectively reach older adults, especially diverse populations not currently engaged with lifelong learning?
 8. What are effective strategies and pedagogies for older adults?
 9. What is the place for and benefits of intergenerational learning in lifelong learning programs?
 10. What are effective ways to evaluate lifelong learning institutes and their programs/programming?
 11. What role does community-building play in lifelong learning?
 12. Which roles do community partnerships play in lifelong learning?
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Implications for Future Research

One reviewer of this manuscript posed two additional questions that could have pertinence to future research on individual OLLIs and lifelong learning institutes overall. First, does structure matter and how? Second, is one particular structure more successful in achieving particular outcomes? Comprehensive examinations of lifelong learning programs are present in the literature (e.g., Park, Lee, & Dabelko-Schoeny, 2016), but these examinations are not well-catalogued nor compared across institutes. Meta-analyses and cross-institute analyses will help research on lifelong learning institutes move forward. Furthermore, future research of OLLI structures and their members might review the different institutes' annual reports. Such research might also conduct interviews and conversations with some key stakeholders, such as members and staff persons, to further inform practice².

Future research would also be well-served to look separately at publications that assess learners in lifelong learning institutes and that assess lifelong learning institutes. While these subjects have important overlaps, they are distinct areas of inquiry. Lifelong learning institutes would do well to look at the institutional practices that are most impactful on key indicators of success, such as enrollment, retention, and member engagement. Regarding the lifelong learners and potential overlap, these practices might be tied to the value of such practices and how such practices transform lifelong learners. Furthermore, such impact or transformation of learners could be compared across institutes or compared to alternative opportunities for lifelong learning outside of OLLIs and other lifelong learning institutes. Lifelong learners make choices regarding how, what, where, and why they want to learn (Boulton-Lewis & Buys, 2015; Talmage et al., 2015). More cross-institute studies are needed to better understand learners' choices and their links to institutional practices.

Looking beyond the questions elucidated from the twelve themes, there appears to be gaps in the literature on OLLIs that the field of lifelong learning institute research has explored. The sixty-refereed studies concerning OLLIs primarily fell in the disciplines of adult and continuing education, aging and health, and educational gerontology. More recently, calls have gone out for more interdisciplinary research that includes fields focused on social and behavioral sciences, among others (e.g., Findsen, 2018; Mark, 2018). Findsen (2018) emphasizes that such interdisciplinary approaches be holistic rather than reductionist. We find holism to be more focused on opening up and challenging different fields rather than seeking precise answers to preset questions. Furthermore, researchers have looked at lifelong learning as a pathway to greater well-being not just health outcomes (Park, Lee, & Dabelko-Schoeny, 2016); such notions deserve further research as they might also inform institutional practices.

This article sought to explore research trends on lifelong learning institutes by specifically looking at Osher Lifelong Learning Institutes in the United States. As discussed, these trends need verification to see if they are indicative of larger trends in lifelong learning. Reviews of literature in adult education are common (Akçayır & Akçayır, 2016), but are often topical. More research can be done on the institutional levels to better inform practice.

Implications for Post-Secondary Education Practice

This study aimed to inform post-secondary education practice by identifying and synthesizing the twelve elucidated themes. The study has particular practice insights for lifelong learning institutes that serve older adults. Reflecting on the studies particular to Osher Lifelong Learning

Institutes in the United States, we can compare which topics are most popular, where much work is being done to topics that are less popular, and thereby needing more research to inform practice. Again, these notes are based on analyses of research on OLLIs in the U. S. not lifelong learning institutes across the world, so we hesitate to make any sweeping generalizations.

There has been much research on what elucidates positive reactions from learners. While there is always room for improvement and further research, practitioners are well-informed regarding which aspects of lifelong learning institute's participants enjoy, such as stimulating course topics, welcoming classroom environment, opportunities to socialize, quality instructors, among others. While the different components or parts of institutes that spur enjoyment are well-known, practitioners would do well to investigate which of these components or parts learners value the most. Feedback mechanisms, such as course evaluations and annual surveys, would better inform practitioners on where to put the most amount of their energies by ranking or further assessing, which aspects are valued most or least (and in-between). These mechanisms can inform research and practice regarding structure and design, another prevalent theme.

Research trends toward focusing on healthy aging (cognitively and physically) are useful to lifelong learning institute practitioners looking to promote the benefits of their programs and to attract new learners. The cognitive and physical benefits may be enticing to individuals not yet involved. These articles on healthy aging (to a varying degree) can also provide practitioners with insights regarding lifelong learning strategies and programs that can promote cognitive and physical health, as well.

Research on lifelong learning institutes and their members has also informed practitioners regarding how the demographics and diversity of their members compare regionally, nationally, and internationally. This allows practitioners to compare their own institutes with demographic trends in lifelong learning; however, diversity is only an indicator on an institute's current situation. Other researchers (and practitioners) have undertaken good work to explore how to make their institutes more inclusive and age-friendly. Researchers and practitioners must consider indicators of diversity, inclusion, and inclusiveness as they seek to improve the learners they attract, engage, and retain (Talmage & Knopf, 2017).

Looking at more topical areas of research, practitioners can look to the lifelong learning institute literature to better understand the technology and information literacy levels of their learners. It continues to be important the individual institutes assess such levels in order to provide accessible learning resources to their learners. Furthermore, older adults continue to desire to learn how to be more technologically savvy; however, this may not be a growing trend (Talmage et al., 2015).

Creativity and self-expression are important facets of communities that lead to higher levels of well-being (Talmage, Peterson, & Knopf, 2017), especially lifelong learning and in older adult communities (Hafford-Letchfield, 2009; Pstross et al., 2017b). Pstross and colleagues (2017b) proposed the following reflective question to practitioners, "What activities do we incorporate into our curriculum to enhance creative expression?" (p. 70). As one of their seven positive pursuits for lifelong learning, they encourage artistic, performance, and role-playing activities. Furthermore, they encourage lifelong learning practitioners and researchers to explore the importance of playfulness to lifelong learners. Lifelong learning practitioners would do well to encourage creative expression in their programs, but research needs to further identify the best strategies to best inform such practices.

Among Osher Institutes, pedagogy did not receive as much attention as the other topics.

This is a departure from the lifelong learning field in general, which has spent a significant time and energy addressing pedagogy (e.g., Findsen, 2007; Merriam, 2001). Lifelong learning institutes would do well to reflect on and assess the impacts of their own pedagogies in order to better serve their learners (Pstross et al., 2017b).

These notions connect with the need for lifelong learning institutes to gain greater access to information on the best institutional research and evaluation strategies. Institutes may assess learner engagement by looking at course enrollment by topic or instructor (Talmage et al., 2015). They may ask students to fill out course evaluations, which generally are influenced by whether or not students simply liked or disliked the class (Rutledge, 2005). Some institutes such as OLLI at Arizona State University ask their instructors to fill out evaluations regarding how they thought their course sessions went. Regardless, there are a variety of strategies in practice across institutes, but practitioners would be well served by access to more research on the best strategies for institutional research and evaluation.

As noted earlier, intergenerational learning was not a common research trend across OLLIs, and it is not necessarily a large research trend for lifelong learning institutes. Still, intergenerational learning serves as a positive practice that can benefit individuals and communities (Newman & Hatton-Yeo, 2008; Pstross et al., 2017a). Intergenerational learning can link the wisdom of older adults with scripted curriculum (Newman & Hatton-Yeo, 2008), and it can also bring older adults and younger individuals together to serve their communities (Borrero, 2015). But, practice could be better informed regarding the best strategies for incorporating intergenerational learning into curriculums and the value of intergenerational learning to older adults active in lifelong learning institutes.

The second to last researched theme (in terms of frequency) was the social and community benefits of OLLI experiences. It is well-known that lifelong learning is a mechanism used to improve individual and community well-being for older adults (Merriam & Key, 2014), but in this study it was discovered that these benefits are under-researched at an institutional level. This is likely the case because practitioners have particular variables that are easier to manipulate or provide accountability for (e.g., instructors or course topics) than the more intrinsic social and community benefits experienced by learners. Practitioners would do well to seek feedback from their learners regarding the value of the social and community aspects of their institutes. They would also benefit from more research on the best strategies for social and community-building activities inside and outside of their classrooms.

Finally, the large dearth of research on the ideal strategies for cultivating and sustaining community partnerships leaves OLLIs less prepared to understand the potential impacts of harnessing co-created learning experiences by and within the broader communities they serve. In the lifelong learning institute literature, this is not a dominant topic of interest. Much more research on lifelong learning institutes is needed to inform practice.

Conclusion

This reflection aims to provide lifelong learning researchers and practitioners with an overview of the prevalent themes and relevant questions that can inform future research and practice based on sixty refereed studies regarding Osher Lifelong Learning Institutes and their members. While greater interdisciplinary research is needed regarding the twelve thematic areas and the twelve questions, future researchers and practitioners must look beyond these areas and questions to expand the scope, both in breadth and depth, to better inform research and inquiry.

Researchers and practitioners should find encouragement in the breadth of themes and the overlap observed regarding research on OLLIs; however, many more studies will be necessary to achieve necessary depth in the areas of adult and continuing education, aging and health, and educational gerontology. As already mentioned, greater interdisciplinary research is important. Noting these findings, with what we know now, where must research and practice go?

We began this essay with the premise that few would question the importance of lifelong learning to the human experience. And, we noted that many questions remain regarding effective approaches to lifelong learning research and practice. It may be possible, that as purveyors of lifelong learning experiences, our task is relatively simple: to provide yet another channel of passive entertainment for the burgeoning population of older adults globally. Yet, we are informed otherwise by this synthesis of research focusing on the activities and outcomes of Osher Lifelong Learning Institutes in the United States. As a gestalt, it is clear that OLLIs produce positive and transformative experiences, demonstrated by the themes such as cognitive health, physical health, resilience, self-integration, creative expression, and community-building that dominate this body of literature. And, the quest is on to design effective pedagogies and delivery systems that accelerate the production of these experiences through vehicles such as service learning, emergent technologies, intergenerational programming, cultural diversification, improved access to learning platforms, and reflective, interactive classroom practices. The twelve framing questions emerging from the current state of literature can be an effective guide for future research pertaining to this quest.

Whether focusing on inventorying benefits or improved pedagogies and delivery systems, this collection of sixty studies point to the power of OLLI experiences as a catalyst for pursuing renewed invigoration with life and meaning (Brady & Cardale, 2013; Pstross et al, 2017b). Yet, within the collection of sixty OLLI-related research studies, this broad frame has not been found to guide inquiry. Given its importance both pragmatically and philosophically, it is imperative to do so. So, we end with two broader questions: (1) *How does lifelong learning invigorate a renewed sense of purpose in life*; and, (2) *how can lifelong learning institutes facilitate such a journey?*

References

- Akçayır, G., & Akçayır, M. (2016). Research trends in social network sites' educational use: a review of publications in all SSCI journals to 2015. *Review of Education*, 4(3), 293-319. Retrieved from <https://doi.org/10.1002/rev3.3075>.
- Alexander, S., Aten, C., Fadness, D., & Lightfoot, K. (2011). Osher Lifelong Learning Institute at the University of Montana: A model of successful university and community partnerships. In P. Hartman-Stein & A. LaRue (Eds.), *In Enhancing Cognitive Fitness in Adults* (pp. 125-136). Retrieved from https://doi.org/10.1007/978-1-4419-0636-6_7.
- Baral, S. M. (2014). *Learning as leisure among older adults: Triggers, motivations and constraints of OLLI members* (Master's thesis). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 1592308)
- Birdsong, L., & Freitas, J. (2012). Helping the non-scholar scholar: Information literacy for lifelong learners. *Library Trends*, 60(3), 588-610. Retrieved from <https://doi:10.1353/lib.2012.0003>.
- Borrero, L. (2015). Intergenerational service learning: Bringing together undergraduate students and older adult learners to engage in collaborative research. *Journal of Intergenerational Relationships*, 13(2), 188-192. Retrieved from <http://dx.doi.org/10.1080/15350770.2015.1025679>.
- Boulton-Lewis, G. M., & Buys, L. (2015). Learning choices, older Australians and active ageing.

- Educational Gerontology*, 41(11), 757-766. Retrieved from <https://doi.org/10.1080/03601277.2015.1039455>
- Brady, E., & Sky, H. Z. (2003). Journal writing among older learners. *Educational Gerontology*, 29(2), 151-163. Retrieved from <http://dx.doi.org/10.1080/713844282>.
- Brady, E. M., Cardale, A., & Neidy, J. C. (2013). The quest for community in Osher lifelong learning institutes. *Educational Gerontology*, 39(9), 627-639. Retrieved from <http://dx.doi.org/10.1080/03601277.2012.734147>.
- Brady, E. M., Holt, S. R., & Welt, B. (2003). Peer teaching in lifelong learning institutes. *Educational Gerontology*, 29(10), 851-868. Retrieved from <http://dx.doi.org/10.1080/716100364>.
- Butler, J. M., Hirshberg, E. L., Hopkins, R. O., Wilson, E. L., Orme, J. F., Beesley, S. J., ... & Brown, S. M. (2016). Preliminary Identification of Coping Profiles Relevant to Surrogate Decision Making in the ICU. *PLoS one*, 11(11). Retrieved from <http://dx.doi.org/10.1371/journal.pone.0166542>.
- Cardale, A., & Brady, E. M. (2010). To talk or to text--Is that the question?. *LLI Review*, 5, 15-28. Retrieved from <http://nrc.northwestern.edu/?p=11>
- Clement, T. (2009). Twenty-first century communications for OLLI. *LLI Review*, 4, 67-72. Retrieved from <http://nrc.northwestern.edu/?p=11>
- DiSilvestro, F. R. (2013). Continuing higher education and older adults: A growing challenge and golden opportunity. *New Directions for Adult and Continuing Education*, 2013(140), 79-87.
- Doetinchem de Rande, S. V. (2012). Education for elders in the US: opportunities and challenges in the context of the demographic change. *Zeitschrift für Weiterbildungsforschung*, 35(4), 35-54.
- Donorfio, L. K. (2017). Teaching aging through service learning in an intergenerational environment. *Innovation in Aging*, 1 (S1), 727. Retrieved from <https://doi.org/10.1093/geroni/igx004.2617>
- Einstein, E. E. (2008). *Creating lifelong learning: Implications for instructional design* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3304473)
- Ferssizidis, P., Adams, L. M., Kashdan, T. B., Plummer, C., Mishra, A., & Ciarrochi, J. (2010). Motivation for and commitment to social values: The roles of age and gender. *Motivation and Emotion*, 34(4), 354-362. Retrieved from <https://doi.org/10.1007/s11031-010-9187-4>.
- Findsen, B. (2007). Freirean philosophy and pedagogy in the adult education context: The case of older adults' learning. *Studies in Philosophy and Education*, 26(6), 545-559. Retrieved from <https://doi.org/10.1007/s11217-007-9063-1>.
- Findsen, B. (2018). Learning in Later Adulthood: A Critical Perspective. In M. Milana, S. Webb, J. Holford, R. Waller & P. Jarvis (Eds.), *The Palgrave International Handbook on Adult and Lifelong Education and Learning* (pp. 839-855). Palgrave Macmillan, London.
- Fischer, C. B., Hersh, G. L., Hoffman, S. E., & von Doetinchem de Rande, S. N. (2011). Learning through art: Experiencing challenge. *LLI Review*, 6, 52-64. Retrieved from <http://nrc.northwestern.edu/?p=11>
- Hafford-Letchfield, T. (2009). The age of opportunity? Revisiting assumptions about the life-long learning opportunities of older people using social care services. *British journal of social work*, 40(2), 496-512. Retrieved from <https://doi.org/10.1093/bjsw/bcp004>
- Hanna, G., & Perlstein, S. (2008). Creativity matters: Arts and aging in America. *The Monograph*, 1-15. Retrieved from http://www.giarts.org/sites/default/files/Monograph_Creativity-Matters-Arts-and-Aging-in-America.pdf.
- Hansen, R. J., & Brady, E. M. (2011). Solving problems through action research. *LLI Review*, 6, 82-90. Retrieved from <http://nrc.northwestern.edu/?p=11>
- Hansen, R. J. & Brady, E. M. (2013). Research in the Osher Lifelong Learning Institute Network. *The Journal of Continuing Higher Education*, 61(3), 143-150. Retrieved from <http://dx.doi.org/10.1080/07377363.2013.836812>.
- Hansen, R. J., & Thaxton, St. P. (2017). Report on the 2016 National Survey of the Osher Lifelong Learning Institutes' membership: Demographics, technology use, Employment, relocation in

- retirement, and topic choices, paper presentation at the Osher NRC Symposium, Chicago, IL, October 2017. Northwestern University's School of Professional Studies: The National Resource Center for Osher Institutes.
- Hansen, R. J., Brady, E. M., & Thaxton, S. P. (2016). Demographic and behavioral characteristics of Osher lifelong learning institute members. *The Journal of Continuing Higher Education*, 64(1), 42-50. Retrieved from <http://dx.doi.org/10.1080/07377363.2016.1131541>.
- Harrison, M. B., & McGuire, F. (2008). Starting a lifelong learning institute: A firsthand perspective. *Activities, Adaptation & Aging*, 32(2), 149-157. Retrieved from <http://dx.doi.org/10.1080/01924780802256253>.
- Hensley, M. (2012). Lifelong learning and instructional services for adult learners through OLLI. *LOEX Quarterly*, 38, 4-5. Retrieved from https://www.ideals.illinois.edu/bitstream/handle/2142/44878/LifelongLearningan%20InstructionalService%20forAdultLearners_Hensley.pdf?sequence=2.
- Hunt, M. L. (2007). *A construction of twelve lifelong learners' perspectives: An in-depth, naturalistic study of self-integration of learning*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI 3239363)
- Lamb, R. (2011). Lifelong learning institutes: The next challenge. *LLI Review*, 6, 1-10. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Lamb, R., & Brady, E. M. (2005). Participation in lifelong learning institutes: What turns members on?. *Educational Gerontology*, 31(3), 207-224. Retrieved from <http://dx.doi.org/10.1080/03601270590900936>.
- Lamb, F. F., Brady, E. M., & Lohman, C. (2009). Lifelong resiliency learning: A strength-based synergy for gerontological social work. *Journal of Gerontological Social Work*, 52(7), 713-728. Retrieved from <http://dx.doi.org/10.1080/01634370802716216>.
- Lee, J. M. (2016). *A comparative analysis of demographics and reported preferential learning modes of Florida and non-Florida Osher Lifelong Learning Institutes members* (Unpublished doctoral dissertation). University of South Florida, Florida. Retrieved from <http://scholarcommons.usf.edu/etd/6297>
- Leedahl, S. N., Brasher, M. S., Estus, E., Breck, B. M., Dennis, C. B., & Clark, S. C. (2018). Implementing an interdisciplinary intergenerational program using the Cyber Seniors® reverse mentoring model within higher education. *Gerontology & geriatrics education* (OnlineFirst), Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/02701960.2018.1428574>.
- Lennon, R., & Curran, J. M. (2012). Social networks and older users: An examination of attitudes and usage intentions. *Contemporary Marketing Review*, 2(2), 01-13. Retrieved from <http://www.businessjournalz.org/cmz>.
- Lietz, C. & Zayas, L. E. (2010). Evaluating qualitative research for social work practitioners. *Advances in Social Work*, 11(2), 188-202. Retrieved from <https://journals.iupui.edu/index.php/advancesinsocialwork/article/view/589>.
- Lightfoot, K., & Brady, E. M. (2005). Transformations through teaching and learning: The story of Maine's Osher Lifelong Learning Institute. *Journal of Transformative Education*, 3(3), 221-235. Retrieved from <https://doi.org/10.1177/1541344605276667>.
- Mahoney, M. H. (2017). An academic librarian's search for meaning: A survey of lifelong learning in library literature. *The Journal of Academic Librarianship*, 43(6), 540-547. Retrieved from <https://doi.org/10.1016/j.acalib.2017.05.004>.
- Mark, R. (2018). Promoting age friendly universities which are sustainable and open to all: a new challenge for the academy? *Widening Participation and Lifelong Learning*, 20(2), 169-183. Retrieved from <https://doi.org/10.5456/WPLL.20.2.169>.
- Meiselwitz, G. H., & Chakraborty, S. (2011). Exploring the connection between age and strategies for learning new technology related tasks. *Information Systems Education Journal*, 9(4), 55-62.

- Retrieved from <http://isedj.org/2011-9/>.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New directions for adult and continuing education*, 2001(89), 3-14. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1002/ace.3>
- Merriam, S. B., & Kee, Y. (2014). Promoting community wellbeing: The case for lifelong learning for older adults. *Adult Education Quarterly*, 64(2), 128-144. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/0741713613513633>.
- Miller, C. M., & Beard, H. (2008). An untapped audience: Looking beyond retirees. *LLI Review*, 3, 73-81. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- National Resource Center for Osher Lifelong Learning Institutes at Northwestern University [Osher NRC]. (2015). The Osher Lifelong Learning Institute Network. Retrieved from <http://nrc.northwestern.edu/?p=587>.
- Newman, S., & Hatton-Yeo, A. (2008). Intergenerational learning and the contributions of older people. *Ageing horizons*, 8(10), 31-39. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.457.2130&rep=rep1&type=pdf>.
- Orte, C., & March, M. X. (2012). Balance and perspectives of lifelong learning programmes in the international arena from the perspective of adult learning. *Procedia-Social and Behavioral Sciences*, 46, 4593-4597. Retrieved from <https://doi.org/10.1016/j.sbspro.2012.06.302>.
- Park, J. H., Lee, K., & Dabelko-Schoeny, H. (2016). A comprehensive evaluation of a lifelong learning program: Program 60. *The International Journal of Aging and Human Development*, 84(1), 88-106. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/0091415016668352>.
- Pejic, B. (2008). Culture, community, and diversity in OLLI: A Case Study. *LLI Review*, 3, 1-10. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Perlstein, S. (2006). Creative expression and quality of life: A vital relationship for elders. *Generations*, 30(1), 5-6. Retrieved from <http://www.ingentaconnect.com/content/asag/gen/2006/00000030/00000001/art00002>.
- Pstross, M., Corrigan, T., Knopf, R. C., Sung, H., Talmage, C. A., Conroy, C., & Fowley, C. (2017a). The benefits of intergenerational learning in higher education: Lessons learned from two Age Friendly University programs. *Innovative Higher Education*, 42(2), 157-171. Retrieved from <https://doi.org/10.1007/s10755-016-9371-x>.
- Pstross, M., Talmage, C. A., Peterson, C. B., & Knopf, R. C. (2017b). In search of transformative moments: Blending community building pursuits into lifelong learning experiences. *Journal of Education Culture and Society*, 62(2), 62-78. Retrieved from <https://www.ceeol.com/search/article-detail?id=549337>.
- Richeson, N. E., Boyne, S., & Brady, E. M. (2007). Education for older adults with early-stage dementia: Health promotion for the mind, body, and spirit. *Educational Gerontology*, 33(9), 723-736. Retrieved from <http://dx.doi.org/10.1080/03601270701364438>.
- Rutledge, G. W. (2005). *Study of adult learning assumptions as applied to online course design strategies* (Unpublished doctoral dissertation). Oklahoma State University, Oklahoma. Retrieved from <https://hdl.handle.net/11244/7555>.
- Shapiro, B., & Sokoloff, S. (2009). OLLI at Brandeis: Part of the Global Village. *LLI Review*, 4, 106-111. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Shedletsky, L. J. (2006). Internet training for older adult learners: An intergenerational mentoring approach. *LLI Review*, 1, 34-43. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Sheridan, J. (2007). Lifelong learning in a postmodern age: Looking back to the future through the lens of adult education. *LLI Review*, 2, 4-16. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Sherman, A. (2006). Toward a creative culture: Lifelong learning through the arts. *Generations*, 30(1), 42-46. Retrieved from <http://www.ingentaconnect.com/content/asag/gen/2006/00000030/00000001/art00010>.

- Shinagel, M. (2012). Demographics and Lifelong Learning Institutes in the 21st Century. *Continuing Higher Education Review*, 76, 20-29. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1000648.pdf>.
- Sierpina, V. S., Kreitzer, M. J., & Sierpina, M. (2009). Taking integrative healthcare education to the community through lifelong learning. *Explore: The Journal of Science and Healing*, 5(6), 359-361. Retrieved from <https://doi.org/10.1016/j.explore.2009.09.008>.
- Simone, P. M., & Haas, A. L. (2007). The influence of lifelong learning on mood. *LLI Review*, 2, 36-42. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Simone, P. M., & Sculli, M. (2006). Cognitive benefits of participation in lifelong learning institutes. *LLI Review*, 1, 44-51. Retrieved from <http://nrc.northwestern.edu/?p=11>.
- Simone, P. M., & Cesena, J. (2010). Student demographics, satisfaction and cognitive demand in two lifelong learning programs. *Educational Gerontology*, 36(5), 425-434. Retrieved from <http://dx.doi.org/10.1080/03601270903493001>.
- Smith, A. (2014). *Older adults and technology use: Usage and adoption* (Research Report No. 202-419.4500). Retrieved from Pew Research Center website: <http://www.pewinternet.org/2014/04/03/usage-and-adoption/>.
- Smith, N. I. (2012). Teaching computer skills to senior citizens: A library assistant's learning experience. *Georgia Library Quarterly*, 49(1), Article 9.
- Sokoloff, S., & Cohen, M. D. (2006). Learn and lead: Developing course leaders and curricula in a lifelong learning institute. *LLI Review*, 1, 122-128. Retrieved from <http://nrc.northwestern.edu/?p=11>
- Spiers, P. (2012). *Master Class: Living Longer, Stronger, and Happier*. New York, NY: Center Street.
- Spiers, P. (2015). *Lifelong learning: A national resources for well-being in retirement*. Boston, MA: Elderhostel, Inc. Retrieved from https://www.road scholar.org/globalassets/road scholar_lifelonglearningday_oct15_lores.pdf.
- Talmage, C., & Knopf, R. C. (2017). Rethinking Diversity, Inclusion, and Inclusiveness: The Quest to Better Understand Indicators of Community Enrichment and Well-Being. In P. Kraeger, S. Cloutier, & C. Talmage (Eds.), *New Dimensions in Community Well-Being* (pp. 7-27). Retrieved from https://doi.org/10.1007/978-3-319-55408-2_2.
- Talmage, C. A., Lacher, R. G., Pstross, M., Knopf, R. C., & Burkhart, K. A. (2015). Captivating lifelong learners in the third age: Lessons learned from a university-based institute. *Adult Education Quarterly*, 65(3), 232-249. Retrieved from <https://doi.org/10.1177/0741713615577109>.
- Talmage, C. A., Mark, R., Slowey, M., & Knopf, R. C. (2016). Age Friendly Universities and engagement with older adults: moving from principles to practice. *International Journal of Lifelong Education*, 35(5), 537-554. Retrieved from <http://dx.doi.org/10.1080/02601370.2016.1224040>.
- Talmage, C. A., Peterson, C. B., & Knopf, R. C. (2017). Punk rock wisdom: An emancipative psychological social capital approach to community well-being. In R. Phillips & C. Wong (Eds.), *Handbook of Community Well-Being Research* (pp. 11-38). Retrieved from https://doi.org/10.1007/978-94-024-0878-2_2.
- Tornstam, L. (2011). Maturing into gerotranscendence. *Journal of TransPersonal Psychology*, 43, 166-180. Retrieved from <http://www.atpweb.org/jtparchive/trps-43-11-02-166.pdf>.
- U.S. Census Bureau. (2010). *Profile of General Population and Housing Characteristics: 2010: 2010 Demographic Profile Data*. Washington, DC: American Fact Finder Tool.
- U.S. Census Bureau. (2011-2015). *Educational Attainment: 2011-2015 American Community Survey 5-Year Estimates*. Washington, DC: American Fact Finder Tool.
- Waldron, V., Shattuck, R., Zimbrick, D., Finter, L. E., & Edwards, P. (2007). Community research team: An experiment in member-driven research and reflection. *LLI Review*, 2, 44-53. Retrieved from <http://nrc.northwestern.edu/?p=11>
- Yamashita, T., López, E. B., Keene, J. R., & Kinney, J. M. (2015). Predictors of adult education program satisfaction in urban community-dwelling older adults. *Educational Gerontology*, 41(11), 825-838. Retrieved from <http://dx.doi.org/10.1080/03601277.2015.1050909>.

- Yamashita, T., López, E. B., Soligo, M., & Keene, J. R. (2017). Older lifelong learners' motivations for participating in formal volunteer activities in urban communities. *Adult Education Quarterly*, 67(2), 118-135. Retrieved from <https://doi.org/10.1177/0741713616688957>.
- Yamashita, T., López, E. B., Stevens, J., & Keene, J. R. (2017). Types of learning activities and life satisfaction among older adults in urban community-based lifelong learning programs. *Activities, Adaptation & Aging*, 41(3), 239-257. Retrieved from <http://dx.doi.org/10.1080/01924788.2017.1310583>.
- Zettel-Watson, L., & Tsukerman, D. (2016). Adoption of online health management tools among healthy older adults: An exploratory study. *Health informatics journal*, 22(2), 171-183. Retrieved from <https://doi.org/10.1177/1460458214544047>.

Notes

- 1 Not all Osher Institutes or Osher Lifelong Learning Institutes utilize the OLLI acronym.
- 2 We thank the peer-reviewers for their suggestions for future research and their thoughtful additional questions.

Dr. Craig Talmage serves as a Visiting Assistant Professor of Entrepreneurial Studies at Hobart and William Smith Colleges in Geneva, New York. Entrepreneurial Studies is a new fast growing minor that officially started in the Spring of 2016. He teaches courses on economic principles, quantitative tools, social innovation, the history of entrepreneurship theory, and the senior capstone experience. He seeks to empower community members, faculty, staff and students through the development of knowledge regarding entrepreneurship and skills that match that knowledge. He completed his PhD in Community Resources and Development at Arizona State University (ASU). At ASU, he worked for the Osher Lifelong Learning Institute, Partnership for Community Development, and the Southwest Interdisciplinary Research Center. He still serves as a faculty associate for Arizona State University where he teaches Community Resilience to Emergency Management and Homeland Security students in the School of Public Affairs. He is actively involved in the Community Development Society, the International Society for Quality-of-Life Studies, and the Association for Research on Nonprofit Organizations and Voluntary Action.

R. Jack Hansen is mostly retired from a career in research leadership, having served as the Deputy Center Director for Research of the NASA Ames Research Center and as Associate Director for the Institute for Human and Machine Cognition. He still works with these organizations on a part-time basis. In addition, he has coauthored two books on the personal dimensions of life beyond full-time work and administered surveys of participants in the Osher Lifelong Learning Network with the National Resource Center for Osher Institutes. He has a B.S. degree from Stanford University and an Sc.D. degree from M.I.T.

Dr. Richard C. Knopf serves as Director of Osher Lifelong Learning Institute at Arizona State University (OLLI at ASU). He is a Professor of Community Resources and Development at ASU, and also directs the ASU Partnership for Community Development. His expertise rests in advancing community quality of life by building innovative partnerships among businesses, government, non-profit and community service organizations. He has formulated a vision for OLLI at ASU that fuses adults 50 and over with the intellectual and cultural resources of Arizona State University, while providing meaningful pathways for civic engagement. Dr. Knopf also heads the Age Friendly University initiative at ASU, and serves on a multinational steering committee for introducing Age Friendly design principles to universities on a

global scale. His primary research specialty is on the role of community formation in optimizing lifelong learning experiences for older adults. He holds an M.S. in Urban and Regional Planning and a Ph.D. in Environment and Sustainability from The University of Michigan—Ann Arbor.

Steve Thaxton was named Executive Director of the National Resource Center for Osher Institutes at Northwestern University in February 2015. He prepared for his original 33-year career in television management earning a bachelor's degree from the University of Minnesota. Later during graduate studies at the University of Southern Maine, he joined the Osher Lifelong Learning Institute at USM (OLLI)—the first OLLI formed in 2001. There, he was a member, volunteer and graduate assistant while finishing his M.S. in Adult and Higher Education.