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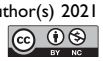

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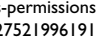

Implementation of Evidence-Based Practices in Intergenerational Programming: A Scoping Review

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Abstract

Evidence-based intergenerational practices are sought by practitioners interested in the potential value of intergenerational programs. These are often difficult to identify as intergenerational program research frequently consists of small samples and pre-post analyses of attitudinal data with little attention to implementation characteristics. We systematically identified evidence-based intergenerational practices linked to program outcomes from peer-reviewed journal articles ($n = 21$) published between 2000 and 2019. Scoping reviews facilitate synthesis of available evidence-based practices and identification of gaps in the literature. Fifteen evidence-based intergenerational practices were identified; each was coded in at least five articles. The practices informed program content (e.g., using technology), program considerations (e.g., environmental modifications), facilitator and participant preparation (e.g., training), and quality interactions among participants (e.g., incorporating mechanisms of friendship). While these identified practices reflect extant theory and research, rigorous implementation research is needed to advance evidence-based intergenerational practice as policymakers and practitioners advocate for intergenerational program growth.

Keywords

scoping review, intergenerational programs, evidence-based practices, inter-generational, multi-generational, implementation

New intergenerational programs that foster relationships between youth and older adults emerge constantly to provide mutual benefits to all age participants (Jarrott, 2019a). Organizations employ intergenerational strategies to utilize available resources and respond to community needs, such as the opioid crisis that has placed many youth into foster and kinship care (Lent & Otto, 2018). Leaders responsible for these programs seek evidence-based practices to inform intergenerational program implementation, but these can be hard to locate. Moreover, intergenerational program evaluations are often insufficient because they commonly consist of anecdote or simple pre-post analyses conducted with small samples (Jarrott, 2011; Lee et al., 2020). Without implementation details, practitioners cannot determine the mechanisms by which outcomes are achieved. When desired change fails to materialize, practitioners cannot explain whether this stems from implementation failure (the wrong strategies were used in the intergenerational context) or theoretical failure (intergenerational strategies are not the right approach to address the need; Stame, 2010). With support for intergenerational services and programs growing, including from the recently reauthorized Older Americans Act (Supporting Older Americans Act, 2020), practitioners need guidance on the most effective strategies to employ in their work linking young and old persons. In the current study, we present intergenerational practices that demonstrated impact on program outcomes using a systematic scoping review method of peer-reviewed journal articles published in English since 2000.

Background Literature

Intergenerational Programming

Developmental and educational theory point to the unique need for intergenerational contact to achieve milestones critical to health. For example, developmental crises of trust and generativity described in Erikson's developmental model (1982) require relationships with members of other age groups to achieve resolution. Non-familial intergenerational programs, the focus of the current paper, have been operating for decades to meet this need. Foster Grandparents, for example, is one of the oldest formal intergenerational programs. Established in 1965, it continues today as part of the Corporation for National and Community Services, placing older adult volunteers in schools and other locations to work with young people with exceptional needs.

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Research evidence also highlights the potential value of intergenerational programs. Consider first the evidence of need for intergenerational relationships; indicators of social isolation and loneliness have been on the rise for years (Hawkley & Kocherginsky, 2018; McPherson et al., 2006). Institutional segregation and technology gaps contribute to the experience of feeling socially distant from members of one's own community (Hagestad & Uhlenberg, 2006). Intergenerational programs have been effectively utilized to build connections and reduce isolation (Breck et al., 2018), among myriad other targeted outcomes (e.g., Gruenewald et al., 2016; Murayama et al., 2015). In some cases, programs incorporate technology to close generational gaps by building skills and facilitating close ties (e.g., Bernard et al., 2011), never so keenly needed than during the current Coronavirus Pandemic.

While evidence of intergenerational program benefits seems plentiful, gaps in the data challenge many of these programs to sustain or replicate their offerings (Jarrott, 2011; Stame, 2010). Characterized primarily by small samples, pre-post design, and attitudinal or satisfaction measures (Jarrott, 2011), studies lack evidence of the mechanisms by which outcomes are achieved. One exception is Experience Corps™. Established in 1996 to support social and socioeconomic health of low-income older adults, it now operates in 22 cities, serving a dual purpose of improving grade level reading among kindergarten through third grade students and engaging community older adults. Evidence indicates gains in physical activity and cognitive performance among Experience Corps volunteers (Carlson et al., 2008; Fried et al., 2004). Child participants demonstrated greater reading achievement than children in comparison schools (Rebok et al., 2004). With thousands of volunteers and students participating annually, Experience Corps researchers are able to conduct sophisticated analyses that reveal factors associated with program impact. For example, Gruenewald and colleagues (2016) identified a dose-response effect for adult participants; adults who volunteered more hours demonstrated greater levels of generative desire and achievement than volunteers with lower involvement.

Experience Corps™ is unusual in its reach, strict implementation protocol, use of validated measures, and levels of funding. With the current scoping review, we sought to systematically identify and represent emerging evidence of science-based practices impacting outcomes measured in diverse intergenerational program research.

Scoping Reviews

A scoping review is defined as a preliminary assessment of potential size and scope of studies and literature available on a given topic (Munn et al., 2018). Researchers conducting a scoping review often seek to enhance the consistency in evidence, to identify gaps in the evidence, and to set future research agendas by synthesizing knowledge (Tricco et al., 2016). Being a relatively new approach, scoping reviews have been increasingly popular across multiple disciplines as a means of synthesizing knowledge (Levac et al., 2010; Munn et al., 2018). However, only a few scoping reviews exist on the topic of intergenerational programs. For example, Galbraith et al. (2015) conducted a scoping review to examine the characteristics, goals, and outcomes of intergenerational programs among persons with dementia and youth. Another scoping review focused on older persons with cognitive impairment addressed elements for successful intergenerational programs (Gerritzen et al., 2020). Lee and colleagues (2019) also performed a scoping review assessing the effects of intergenerational programs specific to older participants and the tools used to quantitatively measure these effects. To our knowledge, research has not yet synthesized evidence of intergenerational practices associated with program outcomes. Therefore, the present study sought to undertake a scoping review to locate evidence-based practices used during intergenerational programming to further understand which evidence-based practices demonstrate appropriateness, effectiveness, meaningfulness, and feasibility within intergenerational programming (Pearson et al., 2005).

Method

A scoping review was conducted to address the question "what evidence is emerging of intergenerational practices that impact outcomes?" among older adults (aged 50 or older) and younger people (aged 24 or younger). Following Arksey and O'Malley (2005), our protocol consisted of five stages: (a) identifying the research question(s), (b) identifying relevant studies, (c) study extraction, (d) charting the data, and (e) collating, summarizing, and reporting the results. Additionally, we incorporated both the PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols; Moher et al., 2015) and the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews; Tricco et al., 2018) checklists to add rigor. The PRISMA-P specifies creation of an initial review protocol, which we developed for the current study and followed during the search and data extraction processes (see our unpublished review protocol included as Supplemental Material). Due to the iterative and rigorous process involved with scoping reviews (Levac et al., 2010), the protocol evolved and was revised as needed. For example, our operationalization of the term *evidence-based practice* developed as we reviewed the body of relevant literature. PRISMA-ScR (Tricco et al., 2018) specifies items to include in reports of scoping reviews to enhance interpretability for readers.

Identification of Studies

We used EBSCOhost to identify relevant articles within five databases: Academic Search Complete, Ageline, ERIK, PsychInfo, and Social Work Abstracts. The initial search, conducted between October 18th and 19th of 2019, was not restricted to publication dates. However, articles published earlier than 2000

were then excluded to capture the last two decades of intergenerational literature. All searches were restricted to peer-reviewed journal articles in order to gather empirical evidence of explicit intergenerational practices.

Articles were collected using combinations of the independent main subject terms "intergenerational," "multigenerational," and "cross generational" with the following: "practice," "program," "programming," "project," and "strategy" (e.g., intergenerational AND practice). To reduce article duplicates, "NOT" was used for main subject terms not being searched (e.g., intergenerational NOT multigenerational NOT cross generational). In total, this search approach resulted in 15 unique combinations. Adopting a suggestion by Arksey and O'Malley (2005), we also searched references cited in discussion sections of articles included for data extraction to identify other relevant studies.

Eligibility Criteria

Covidence, a web-based scoping and systematic review platform, was used for study selection. Covidence first identified the vast majority of article duplicates (776 articles) before initial screening took place. During initial screening of 7,116 articles, we utilized the following inclusion criteria to determine article eligibility: (a) involved an intervention or program within any country in which social contact was made between older adults aged 50 or older and younger people aged 24 or below, (b) contained evidence of explicit intergenerational practices with either quantitative or qualitative data, and (c) was written in either English, Spanish, or Korean. Articles were excluded if familial participants of consecutive generations (e.g., parent/child) were involved.

Authors worked in pairs to screen a subset of the articles ($n = 556$) using the study's inclusion and exclusion criteria; each pair obtained intercoder agreement above 93%. A separate author resolved conflicts when they arose. Next, three independent reviewers (S.J., R.S., and C.P.) screened the remaining full-text articles using the same procedure. Reasons for excluding studies were organized in a hierarchy of essential study components (see Figure 1). To reduce researcher bias, all articles written by authors on this project were screened by another researcher.

Data Extraction

Full-text articles that met all inclusion criteria were eligible for data extraction. First, the four authors independently extracted three articles for study characteristics and reached adequate interrater agreement of 88%. Then, the remaining articles were independently extracted by the four authors. Similar to the eligibility criteria, articles written by authors on this project were extracted by another researcher. To ensure extracted components were agreed upon by all authors, meetings were held where each researcher presented their findings; other authors could pose questions about coding decisions. Discussions continued until all authors came to agreement on extracted article components.

We organized our major findings in a table adapted from Arksey and O'Malley (2005) to include the following components: (a) article authors and publication year, (b) study funding, (c) research methodology, (d) data sources, (e) sample size, (f) intergenerational program participants, (g) stakeholders measured, (h) program content (see Table 1 for items a–h), and (i) evidence-based practices (Table 2 presents a description of the practices and lists the associated articles). Detailed coding protocol are provided in Supplemental Materials.

Next, two authors (S.J. and R.S.) extracted textual support for explicit intergenerational practices from included articles using a focused content analytic strategy (Stemler, 2000). First, the two authors constructed an initial set of codes which were modified if explicit practices did not fit the initial codes (see Table 2 for the codes). Then, using Atlas.ti 8 software, the two authors independently coded a subset of articles ($n = 5$) and discussed discrepancies until they came to 100% consensus. The remaining articles were then evenly divided between the two authors and individually coded. The two authors held meetings to address questions and concerns during the process.

Summarizing the Data

As suggested by Arksey and O'Malley (2005), the final step is to report important study components from included articles to identify relevant study characteristics and explicit evidence-based intergenerational practices. Data synthesis began with describing the present study's sample size while discussing reasons for excluding articles. Next, components coded during data extraction were summarized. Because scoping reviews do not attribute weight to findings (Arksey & O'Malley, 2005), only descriptive synthesis was used.

Results

Search Results

Starting with 7,892 articles from the database search, 776 duplicates were identified by Covidence and removed. Next, 6,677 articles were excluded through title and abstract review by the authors. From the remaining 439 articles, full-text analysis was conducted to advance 21 articles for extraction. Figure 1 presents the PRISMA diagram of the search process.

Study Characteristics

The 21 intergenerational program research articles extracted for review were coded for study characteristics in a shared spreadsheet. Published between 2003 and 2019, the studies were typically funded, most commonly by a federal agency. One-third of the researchers relied on multiple funding sources to conduct their studies. While researchers utilized quantitative, qualitative, and mixed method approaches to data collection and analysis, qualitative methods predominated, often involving a combination of interviews, surveys, and/or journals. Samples were generally small, with half comprised of less than 50 persons. University students were the most frequently

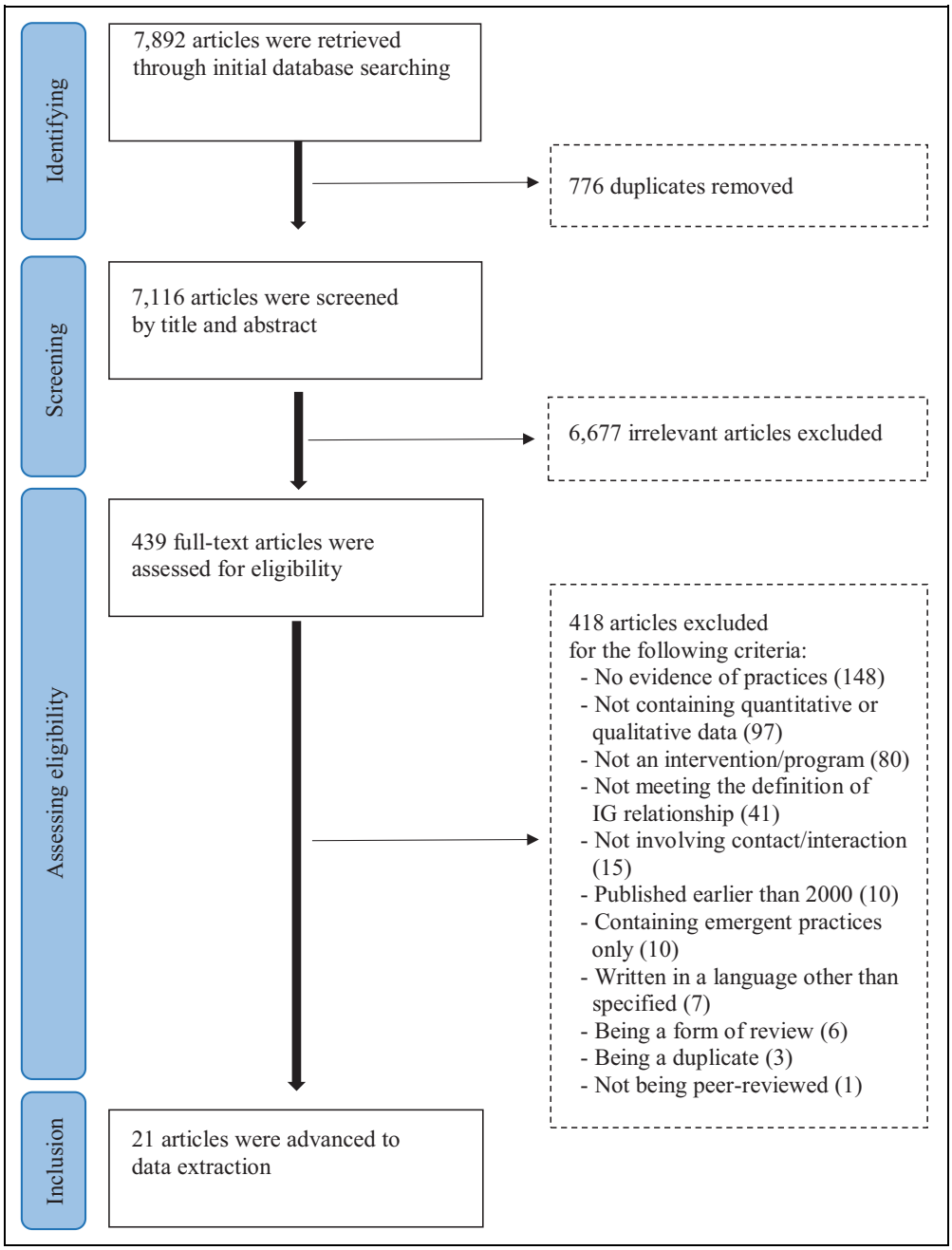

Figure 1. PRISMA flow chart of the included studies.

reported youth participants (57%), but independent and frail older adults were equally likely to be the older adult participants. Program content ranged from art to tutoring to foreign language practice to theatrical productions. Table 1 offers detailed information of the characteristics of the 21 articles. We attempted to code dosage, the frequency and duration of intergenerational contact, but the information was not consistently provided, making summarizing difficult. Programs involving university students typically extended over an academic semester (about 8–12 weeks), meeting on a weekly to monthly basis (e.g., Gonzales et al., 2010). Programs involving younger children were more likely to be ongoing with programming frequently occurring several times each week (e.g., Varma et al., 2015).

Evidence-Based Practices

We identified 15 codes and sub-codes reflecting intergenerational practices associated with program outcomes. Table 2 presents a brief summary of each code and sub-code linked to associated articles and offers an illustration from our included articles. Each of the 15 codes and sub-codes was identified in at least five articles. The practice of incorporating

Table 1. Characteristics for Articles Reviewed.

Authors (Year)	Study Funding	Methodology	Data Source(s)	Sample Size	Intergenerational Participants	Program Content
1. Alant et al. (2015)	Internal	Qualitative	Interviews	26-49	K-12*; Frail OA; Staff*	Memory Bridge: social visits
2. Alcock et al. (2011)	None	Qualitative	Focused ethnography	26-49	K-12*; Indep OA*	Photography
3. Anderson et al. (2017)	Federal and foundational	Qualitative	Interviews	26-49	University*, Indep OA*	Arts
4. Bernard et al. (2011)	Federal and State	Mixed	Observation, surveys	26-49	K-12*; University*; Indep OA*; Frail OA	Telementoring: foreign language study
5. Breck et al. (2018)	None	Qualitative	Journals, surveys	50-99	University*; Indep OA*	Reverse mentoring: technology
6. Bunting & Lax, (2019)	State and federal	Qualitative	Journals, interviews	N/A	University; * Frail OA*	Current events discussion
7. Carson et al. (2011)	Federal	Qualitative	Case study	50-99	K -12*; Frail OA*; Family/staff*	Varied
8. Chua et al. (2013)	Federal	Quantitative	Surveys	100+	University*; Indep OA*	Video games
9. Epstein and Boisvert (2006)	Foundational	Quantitative	Observation	100+	Pre-K*; Frail OA*; Staff*	Varied
10. Gardner and Alegre (2019)	None	Qualitative	Journals	100+	University;* Indep OA	Age-friendliness evaluation
11. Gonzales et al. (2010)	Federal and Internal	Mixed	Journals, interviews, surveys	100+	University*; Indep OA*	Museum visits
12. Grignoli et al. (2015)	Federal	Qualitative	Case studies	N/A	Varied	Varied
13. Gruenewald et al. (2016)	Federal, Internal, and Foundational	Quantitative	Surveys	100+	K-12; Indep OA*	Experience Corps: Tutoring
14. Hancock et al. (2013)	State	Qualitative	Journals	100+	University; Frail OA*	Varied: social visits
15. Hayes (2003)	Federal	Qualitative	Observation, journals	26-49	Pre-K*; Frail OA*; Staff/ volunteers*	Varied
16. Heydon et al. (2017)	State	Qualitative	Program documents, interviews	≤25	Pre-K*, Frail OA*	Art, including technology
17. Jarrott et al. (2006)	None	Qualitative	Interviews	≤25	University; Frail OA; Staff*	Varied
18. Ortiz et al. (2012)	Foundational and Internal	Mixed-Methods	Journals, surveys	≤25	University*; Frail OA	Social visits
19. Rubin et al. (2015)	State	Mixed-Methods	Journals, interviews, surveys	26-49	University*; Indep OA*	Art
20. Varma et al. (2015)	Federal, Foundational, State, and Internal	Qualitative	Interviews	26-49	K-12; Indep OA*	Experience Corps: Tutoring
21. Weaver et al. (2019)	Federal	Qualitative	Interviews	≤25	Pre-K; Indep OA, Frail OA, staff/admin*	Varied

Note. Pre-K; K-12; University; Independent older adults (Indep OA); Frail older adults (Frail OA).
*denotes participants experiences measured in study

mechanisms of friendship was most common; coders identified it in 14 studies (67%).

Coded practices were achieved by youth and/or older adult participants, intergenerational program facilitators, and other stakeholders. They related to: mechanisms of friendship, the physical environment, training, empathy, cooperation, meaningful roles for participants, time, structure and flexibility, authority support for intergenerational contact, use of technology, facilitator strategies to promote interaction, novelty of program content, and conveying equal group status among intergenerational participants.

Both presence and absence of practice implementation were associated with program impact, such as when Bunting and Lax, (2019) noted that inattention to the space chosen for conversation shared between a student Service-Learner and an older adult resident resulted in an environment that "was not

Table 2. Operationalization of Evidence-based Intergenerational (IG) Practices With Illustrative Quotes and Articles Coded for These Practices (see Table 1 for key).

Practice Operationalization	Illustrative Quote (Article Number)
Incorporate mechanisms of friendship: Participants engaged in practices that build friendship, such as self-disclosure of personal experience, background, and preferences, and consistent contact with IG partners Articles: 2, 3, 4, 5, 7, 8, 10, 11, 15, 17, 18, 19, 20, 21	"increased contact hours via shared activities are likely to help the members develop attraction [for their IG partners]" (8) "The most meaningful [IG] exchanges occurred when they were expressing something about their past, an event that had significance in the present, or performing a task that illustrated a competence"(15)
Select or set the environment: Physical and social elements of the environment were selected or modified to support participant engagement Articles: 3, 4, 6, 7, 9, 10, 15, 16, 18, 19, 21	"[After completing IG training], staff were eager to rethink uses for the existing facilities and equipment. They realized that the building's lobby was an underutilized space . . . The lobby became an [IG] meeting center that invited seniors and children to [interact.]"(9)
Provide training to staff or participant group(s): Staff, youth, or older adults received training to facilitate the IG program Articles: 1, 9, 10, 14, 15, 16, 17, 19, 20, 21	"Representatives were more engaged in training as the project evolved: 'I don't know what we would have done without the practice guide; I think that drives the ship . . . " (21)
Foster empathy: Programming taught or promoted empathy for the other group, including through challenging stereotypes Articles: 1, 2, 3, 5, 7, 10, 17, 18, 19	"reflection assignments showed critical thinking on the prevalence of ageism and ways students can contribute to positive change in societal attitudes toward older adults." (19)
Promote IG cooperation: Programming encouraged mutual support and a common goal among participants and/or between staff Articles: 3, 4, 5, 8, 12, 15, 16, 17, 19	"Respondents identified [facilitator] collaboration as essential . . . [Child and adult care staff] explained that effective partnership involved sharing goals, open and regular communication, comfort with the other's clients and spaces, and responsibility for initiating, planning, facilitating contact." (17)
Offer meaningful roles: Broadly, roles for youth and older adults were meaningful and developmentally-appropriate. Articles: 2, 3, 4, 5, 6, 7, 9, 10, 15, 19, 20 Sub-theme: roles emphasize decision making: Participants engaged in developmentally appropriate decision-making about programming Articles: 3, 6, 9, 14, 16 Sub-theme: roles involve mentoring: Roles purposefully engaged youth or older person in mentoring the other Articles: 2, 4, 5, 7, 13, 17, 20	"having received training . . . some volunteers were upset that assigned tasks did not effectively utilize their skills." (20) "honoring resident request in designing programs maintained autonomy, interest, involvement." (6) "Young mentors reported increasing their self-efficacy by gaining leadership skills through mentoring their older adult partners." (5)
Attend to issues of time: Programming developed with consideration of time of day, frequency, and consistency of IG contact Articles: 7, 8, 13, 14, 15, 18, 20	Data "[indicate] a more positive effect of [Experience Corps] engagement as a function of greater exposure to the program." (13)
Structure activities for flexibility: IG program plans included potential modifications Articles: 3, 6, 7, 9, 15, 17, 21	"social connections served as both antecedents and outcomes of planned interactions (e.g., project activities) and spontaneous (e.g., mentorship) interactions between students and residents. In other words, social connections intrinsically promote positive health and educational outcomes and also serve to mediate or enable these outcomes."(7)
Authority figures endorse IG contact: One or more stakeholder groups demonstrated awareness of, input on, or support for the IG program Articles: 2, 11, 16, 17, 20, 21	"Volunteers acknowledged that Experience Corps strengthened their connection to the larger community, [as] when volunteers were recognized and complemented for their work by children and relatives of children, in settings outside of school." (20)
Use technology: Technology was the focus of programming or the means by which young and old participants engaged with each other Articles: 2, 4, 5, 8, 16	"[youth] found value in their technological expertise that might have been taken for granted because it was seen as too basic." (5) "there were not enough iPads; [some would not] connect to the internet, leaving two residents excluded." (16)
Facilitate to promote interaction: Facilitators used strategies that encouraged interaction Articles: 4, 7, 9, 15, 16	"the image on the iPad pulled the [IG] pair together to share a viewing experience. The teacher used mentor texts to guide group discussions and think-pair-shares" (16)
Offer something novel: Novel programming focused attention on the activity, relieving some pressure of meeting someone different Articles: 2, 8, 11, 19	"mixing young and old [in community arts programming] created a unique space that released participants from usual ways of thinking and interacting" (3) "The camera as mediator . . . was a great ice-breaker when the groups first came together as it provided a tool through which to share experiences to date" (2)

(continued)

Table 2. (continued)

Practice Operationalization	Illustrative Quote (Article Number)
Convey equal group status: Programming designed to convey that each age group had something to offer and gain from the interaction Articles: 3, 7, 19	"IG participants perceived each other as peers—the older adults and medical students were insecure of their creative abilities." (11) [A parent commented]: "I think the [students and residents] just connected as people. I don't think either party was condescending to the other. People tend to be condescending to kids and seniors. They [broke] through that." (7)

conductive to conversation" (p. 240). A number of practices could be achieved by multiple stakeholder groups. The practice of *delivering training* was exercised with different stakeholder groups. For example, Experience Corps volunteers received extensive training that was described as crucial by the volunteers (Varma et al., 2015). Another investigator evaluated the experiences of student participants who received communication training to support empathy during intergenerational programming with older adults with dementia (Alant et al., 2015).

Practices frequently co-occurred, with a few discernible patterns. For example, in looking at practices coded for studies involving focused programming (i.e., arts, visiting, or mentoring), those related to *training one or more group of stakeholders*, *providing meaningful roles*, and *fostering empathy* cut across all categories of programming. The practices of *offering something novel* and *promoting equal group status* were only coded in studies of intergenerational arts programming. Considering whether the practices were equally applicable to different participant groups, we compared practices coded for studies involving different groups. Comparing studies where youth were all university students or were all in grade 12 or earlier, 13 of the 15 practices were represented across groups. The practice of *facilitating activities to promote interaction* was exclusive to studies with youth in grades 12 and under. Turning to older participants, we compared codes for studies where the older persons were primarily independent (e.g., retirement community residents) to those where older participants were primarily dependent (e.g., nursing home residents). The practice related to *novelty* was uniquely associated with programs involving independent older participants, and the practice of *facilitating activities to promote interaction* was exclusive to programs involving frail older adults. Thus, with few exceptions (see Table 3), the 15 codes and sub-codes characterized programming with varied youth and older adult participants and assorted program content.

Discussion

Intergenerational programming has been associated with achievement of varied participant goals; the means by which these goals are achieved in the intergenerational context, however, is rarely assessed. Features of the physical and social environment, including practices used by facilitating staff, likely impact outcomes (Lawton, 1983). Adoption of evidence-based practices optimizes achievement and sustainability of positive outcomes (Stame, 2010), increases program replicability, and can contribute to the growth of intergenerational programs—a goal specified in the 2020 Older Americans Act reauthorization (Supporting Older Americans, 2020). Our scoping review depicts the landscape of practices empirically associated with program impact that are employed by practitioners across diverse settings and participant groups.

Consistent with the purpose of scoping reviews, our study synthesizes knowledge and identifies gaps in evidence for future research agendas. We found a collection of intergenerational program evaluations, mostly with small sample sizes, mirroring past findings from intergenerational systematic reviews (Jarrott, 2011; Lee et al., 2020). These studies largely represent the experiences of adults, including both the youth (university students) and older adult program participants. Programs incorporate diverse programming and systematically document a number of practices associated with measured outcomes and achieved by varied program stakeholders. Most practices cut across content areas and participant groups, though some may be more salient in certain contexts. Novelty of programming, for example, may engage independent older adults but unnerve frail older adults and discourage their participation.

Next steps involve filling gaps in evidence. For example, the predominance of university students as studied youth participants raises the question of how well represented young intergenerational program participants are in the research literature. The recently reauthorized Older Americans Act (2020) is directing attention to multigenerational service delivery, which most typically involves young children and frail older persons. Data needs to guide these programs and should reflect their experiences (Jarrott, 2011), which are only marginally represented in the current study.

Also un-represented in our scoping review are studies of programs aimed at intergenerational family relationships. Our inclusion criteria would have permitted familial intergenerational programs that systematically assessed implementation practices, but none populated into our sample. We excluded familial intergenerational studies without an intervention (e.g., Waites, 2007) and associated implementation and outcome data, such as the review of resources from Fruhauf and Hayslip (2013). Family scholars evaluating intergenerational programs, such as those aimed at grandfamilies, may find that studying implementation features supports program tailoring and replication.

Table 3. Practices coded (✓) and Absent (x) in Studies with Exclusive Participant Groups and Content.

	Exclusive Participant Group				Exclusive Program Content		
	Youth		Older Adults				
Practice[a]	PreK -12	University	Independent	Frail	Arts	Social Visits	Mentoring
1. Friendship	✓	✓	✓	✓	✓	✓	✓
2. Environment	✓	✓	✓	✓	✓	✓	✓
3. Training	✓	✓	✓	✓	✓	✓	✓
4. Empathy	✓	✓	✓	✓	✓	✓	✓
5. Cooperation	✓	✓	✓	✓	✓	x	✓
6. Roles[b]	✓	✓	✓	✓	✓	✓	✓
7. Time	✓	✓	✓	✓	x	✓	✓
8. Structure	✓	✓	✓	✓	✓	✓	x
9. Authority	✓	✓	✓	✓	✓	x	✓
10. Technology	✓	✓	✓	✓	✓	x	✓
11. Facilitation	✓	x	x	✓	x	x	✓
12. Novelty	✓	✓	✓	x	✓	x	x
13. Equal status	✓	✓	✓	✓	✓	x	x

[a]Includes meaningful role sub-codes: (a) decision-making and (b) mentoring/reverse mentoring. [b]Table 2 provides detailed operationalization and examples of practices.

The relationships between evidence-based practices identified here and program outcomes should be further studied. The practices identified here may be validated, and additional practices may emerge through rigorous evaluation. Investigators should adopt reliable, valid quantitative outcome measures (Jarrott, 2011), aiming for the largest sample size feasible to permit bivariate and multivariate analyses; then, the nature and strength of association between measured practices and outcomes can be assessed. Some research questions are best explored with qualitative methods. Researchers using this approach can develop research questions and methods that intentionally evaluate the association between program features and outcomes. Regardless of the methodology used, more diverse stakeholder groups, such as child participants and family caregivers, should be included in intergenerational program research. They may serve as self- or proxy-reports, and their experience of intergenerational programming should be measured (Jarrott, 2011). Research incorporating new practices, such as delivering novel programming to achieve successful outcomes (e.g., Gonzales et al., 2010), should be replicated.

Practitioners have described the challenge of locating intergenerational program and staff development resources (Jarrott, 2019a). They can incorporate the intergenerational practices identified here into their current programming, particularly those aligning with their organization's practice or care philosophy. Some of the practices stem from research and theory specific to youth (e.g., fostering empathy; Heydon et al., 2017) or older adults (e.g., providing meaningful occupation; Gruenewald et al., 2016). These may be familiar to practitioners accustomed to working with one age group and are often equally effective in the intergenerational setting. Practices like incorporating technology, used to positive effect with photography (Alcock et al., 2011) and video game playing (Chua et al., 2013), will be new to some practitioners and may inspire programming ideas.

Our findings also hold implications for funders and policy makers. Funders of intergenerational programs should require grantees to document evidence-based program implementation and its association with program outcomes. Grantees may require technical assistance to conduct implementation evaluations, which funders can provide. Funding may be considered a best practice (McBride et al., 2011); immense interest in the association between program funding (e.g., staff, materials, and participant incentives) and outcomes belies the available data on funding models and cost-benefit data specific to intergenerational programs (Generations United, 2019). Beyond funding, the *Intergenerational Program Evaluation Toolkit* (Jarrott, 2019b) can support practitioners with this effort through an open-ended evaluation guide and a collection of established measures used in intergenerational programming research. Policy makers advocating for intergenerational programs, such as through the Older Americans Act reauthorization (Supporting Older Americans Act, 2020), should empower practitioners with tools for success, such as protocol incorporating evidence-based practices.

Strengths and Limitations

Scoping reviews possess a number of strengths that characterize our study. We incorporated an extensive literature search, using guidelines specific to systematic and scoping reviews. The analytic strategy, completed in duplicate via focused content analysis of practices, increases validity and reliability of identified practices. Study results reflect tenets of contact theory (Allport, 1954; Pettigrew, 1998; Pettigrew & Tropp, 2008) and Erikson's psychosocial stages of development (1982), as well as previously studied intergenerational practices (Jarrott et al., 2019).

Turning to weaknesses, our scoping review protocol did not include a search of the gray literature, a common scoping method (Arksey & O'Malley, 2005), though we did search references cited in discussion sections of selected articles. Articles presenting research associating intergenerational practices with intergenerational program outcomes that lacked the specified main subject terms did not populate into our initial sample and were thus not screened for meeting other eligibility criteria. For example, a number of studies by Experience Corps (e.g., McBride et al., 2012) might have presented findings associating specific practices with program outcomes but lacked a main subject term of "intergenerational," "cross generational," or "multi generational." Thus, support for identified practices may have been bolstered or additional practices identified with a search that incorporated additional key terms.

Our sample was small compared to other scoping reviews—118 was identified as the mean number of studies included in a scoping review (Tricco et al., 2016), which we attribute to our study's highly focused objective and, potentially, inconsistent use of main subject terms by intergenerational researchers. Still, the repeated notation of the 15 codes and sub-codes suggests their relevance across diverse intergenerational program settings. Our definition of practice evolved with time, so we may have missed some articles during the initial screening, and there may still be practices to identify or studies that would bolster evidence of the practices we noted.

Conclusion

Intergenerational program researchers are responding to encouragement to measure the means by which outcomes are achieved. Their efforts can support replication and sustainability of intergenerational programs, which would support public interest (Generations United, 2018) and policy (Supporting Older Americans Act, 2020) support for intergenerational services. Most of the practices identified through systematic quantitative, qualitative, and mixed research methods build upon theory widely used to inform intergenerational programs (Jarrott, 2011). They are complemented by innovative practices emerging as groups draw on strategies proven effective in single generation settings and explore their potential value in the intergenerational context (e.g., Chua et al., 2013). Our scoping review demonstrates that these practices translate across varied non-familial intergenerational contexts and may serve practitioners interested in developing new intergenerational programs. Stakeholders supporting intergenerational partnerships may find that continued investigation of the association between practice and outcomes advances the number and health of programs as diverse as the participants and programming involved.

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*Indicates an extracted article.

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