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## **Intergenerational Programs for Persons With Dementia: A Scoping Review**

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*Participation in intergenerational programs can have a positive impact on quality of life and well-being across age groups. We sought to examine the characteristics, goals, and outcomes of intergenerational programs for persons with dementia and children or youth. Six hundred and seventy-nine unique abstracts were identified through a search of 7 medical databases, 16 social science databases, 2 gray literature databases, and other sources. Twenty-seven articles met criteria for review. Articles must have gathered information on program design, goals, outcomes, or participants' perceptions. Overall, 3 themes emerged: program design, outcomes for child or youth participants, and outcomes for persons with dementia. Music, arts-based, and narrative programs were most common. Outcomes include effects on perceptions of aging and dementia, behavior, mood, engagement and sense of self. The use of qualitative and quantitative data, as well as descriptive articles, provided a richer picture of the relational features of intergenerational programs to emerge. The type of program had less of an impact on positive outcomes than if the activity was meaningful for participants and supported shared opportunities for relationship building and growth. The relationship-based skill set and scope of social work practitioners provides opportunity for the development, facilitation, and evaluation of intergenerational programs. The difficulties of establishing best practices due to methodological challenges and implications for further research are presented.*

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*KEYWORDS* *intergenerational program, relationships, dementia, Alzheimer's, cognitive impairment, older adult, children, youth*

## INTRODUCTION

A diagnosis of dementia is accompanied by a range of losses, perhaps one of the most significant being the loss of relational and social roles (Innes, 2002; Weintraub & Mesulam, 1993). Kontos (2012) provocatively argued that a person's sense of self is intrinsically connected to relationships and social interaction, indicating that social isolation can lead to a loss of personal identity. In 2012, an estimated 35.6 million people were living with dementia worldwide (World Health Organization, 2012). Currently, in the United States, as many as 6.8 million people have Alzheimer's disease or another form of dementia (National Institutes of Health, 2013). Thus, whether society promotes the ongoing inclusion of persons with dementia (PWD) in meaningful activities and social relationships will have a tremendous impact on communities and the well-being of PWD. It is imperative that gerontological social workers, and others who work with PWD, have an understanding of evidence-based practices that best support their changing needs (Sanders & Morano, 2008).

PWD experience declines in functioning that can affect emotional well-being, physical ability, and social inclusion (Sanders & Morano, 2008; Stolee, Hillier, Cook, & Rockwood, 2011). Dementia negatively impacts memory and cognition, language and behavior, and motivation and judgment (Riley, 2010). Common changes often include an increased need for assistance with activities of daily living and instrumental activities of daily living (Curtin, 2010), differences in mood and and/or personality expression (Sanders & Morano, 2008), and psychological and/or behavioral disturbances (Burns & Iliffe, 2009). Sabat (2005) cautioned that, as a result of these shifts in functioning, PWD often face additional challenges to their sense of self, right to self-determination, and perceived capabilities. To counter these negative effects, Dupuis, Wiersma, and Loiselle (2012) encouraged the continued support of PWD for self-expression and to create opportunities for meaningful relationships and purposeful exchanges to take place. This requires knowledge about how environmental or systemic factors impede or enhance social inclusion and quality of life.

Relationships provide a critical context for shared meaning-making and can support the continuing capacity of PWD through opportunities for engagement. Modern people are living in an increasingly age-segregated society that does not provide much opportunity for meaningful interactions across age stratifications (McNair & Moore, 2010; Uhlenberg & De Jong Gierveld, 2004; Winkler, 2013). Current practices of institutionalization and segregation, negative media representations, and a general lack of exposure

produce misconceptions in children about older adults in general, and PWD in particular (McNair & Moore, 2010). This often results in stigma, discrimination, and exclusion of those with dementia from participation in communities and meaningful activities.

Over the past few decades, there has been growing interest in bringing the younger and older generations together through the use of intergenerational programming, and there is a growing interest in these programs in the field of dementia care (Brenner & Brenner, 2004; Camp et al., 1997; Whitehouse, 2013). Intergenerational programs can have a positive impact on children and older adults' well-being and perceptions of one another (Aday, Aday, Arnold, & Bendix, 1996; Cook & Bailey, 2013; Jarrott & Bruno, 2007). Many older adults would like to engage in meaningful and purposeful relationships with children and youth; intergenerational programming provides a structured and secure environment for this exchange to take place (Cook & Bailey, 2013). Children's perceptions of older adults and the aging process begin developing at an early age (Aday et al., 1996). In fact, Corbin, Kagan, and Metil-Corbin (1987) found that by the age of eight, most children endorse well-defined negative perceptions of older adults and the aging process. Meaningful exposure and contact with older adults has been shown to promote more positive perceptions among children (McNair & Moore, 2010).

Despite the growing interest in intergenerational programs, there is limited literature on the subject, particularly concerning PWD. Additionally, the literature is not synthesized, which means that there are a lack of clear guidelines for best practices in program design and implementation. With our scoping review, we address this gap in the literature through documenting and synthesizing the characteristics, goals, experiences, and outcomes of intergenerational programs that include PWD and children or youth, with the intention of contributing to the evidence-base in the area.

## METHODS

An online literature search was conducted in February, 2014. A total of 25 databases were searched, including 16 social science databases, 7 medical databases, and 2 gray literature databases. These databases were chosen with the guidance of a University of Toronto librarian. The social sciences databases that were searched were as follows: AgeLine, Applied Social Sciences Index and Abstracts (ASSIA; 1987–current), Child Development & Adolescent Studies, ERIC (1966–current), Project MUSE, ProQuest Social Science Journals, PsycINFO (1806–January, Week 3, 2014), PsycINFO (1806–current), Sociological Abstracts (1952–current), Social Sciences Abstracts (H. W. Wilson), Social Services Abstracts (1979–current), Social Work Abstracts (1968–December, 2013), The Campbell Library, and The Cochrane Library. The medical databases included the following:

AMED (Allied and Complementary Medicine; 1985–January, 2014), CINAHL, Embase (1974–2014, Week 3), National Institute for Health and Clinical Excellence (NICE), Ovid Healthstar (1966–November, 2013), Ovid Medline® (1946–January, Week 3, 2014), and Ovid Medline® In-Process and Other Non-Indexed Citations. The educational databases were as follows: CBCA Education and ProQuest Education Journals (1988–current). The gray literature databases included: Generations United and Scottish Intercollegiate Guidelines Network.

The following keywords were used:

“inter-generation\*” OR intergeneration\* OR “multi-generation\*” OR multigeneration\* OR “trans-generation\*” OR transgeneration\* OR “age integration” OR “cross-age” OR “cross-generation\*” OR (“older adult” OR senior\* OR elder\* OR “older people” OR “older person\*” OR “old old”) AND (child\* OR youngster OR toddler OR youth OR adolescen\* OR teen\*) AND (program\* OR activit\* OR intervention\* OR course\* OR group\* OR project\*) AND (dement\* OR “cognitive decline” OR “cognitive impairment\*” OR alzhi\* OR “neurocognitive disorder” OR senil\* OR “picks disease” OR “supranuclear palsy” OR “lewy body disease”)

These search terms were developed with the assistance of a University of Toronto librarian, and from an extensive search on online databases of terms used in studies about similar topics. The gray literature databases did not allow us to conduct the detailed search listed. We modified the search terms to fit within the constraints of the respective gray literature databases’ search functions. Relevant articles located through these data sets went through the same reviewing process as all other articles.

## INCLUSION AND EXCLUSION CRITERIA

Articles were considered eligible for review if the focus of the article was on organized intergenerational programs that included both PWD and persons under 19 years old. Articles must have gathered information on program design, goals, outcomes, or client perceptions. Both qualitative and quantitative studies were eligible, as were descriptive articles about intergenerational programs. Due to the limited number of studies on this topic, we were not able to only include high-quality studies, but instead have provided a brief description of the reference type and study design in [Table 1](#) to allow the reader to make his or her own conclusions about the quality and rigor of the data collected. Sources were excluded if their focus was on: (1) programs that were not dementia specific, even if people with dementia or cognitive impairment were included in the sample; (2) intergenerational relationships between family members; or (3) informal programs. Peer-reviewed articles not available in English and newspapers were also excluded.

**TABLE 1** Systematic Review Results—Table of Themes

Author(s)	Type of Reference	Type(s) of Programs and Activities	Investigated Outcomes for Children <sup>a</sup>	Investigated Outcomes for Older Adults <sup>a</sup>
Brenner and Brenner (2004)	*Discusses Camp et al. (1997)	*See Camp et al. (1997)	*See Camp et al. (1997)	*See Camp et al. (1997)
Brenner and Brenner (2012)	Descriptive article	A3, A7		C1 <sup>+</sup> , C4 <sup>+</sup>
Brownell (2008)	Quasi-experimental design <i>N</i> = 41; PWD ( <i>n</i> = 36), children ( <i>n</i> = 5)	A1	B1 <sup>+</sup> , B2 <sup>+</sup>	C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
Camp et al. (1997)	Randomized control trial <i>N</i> = 26; PWD ( <i>n</i> = 12), children ( <i>n</i> = 14)	A3, A4, A5	B2 <sup>+</sup> , B3 <sup>+</sup>	C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
Camp and Lee (2011)	Descriptive review of three studies	*See Camp et al. (1997); Lee, Camp, and Malone (2007)	*See Camp et al. (1997); Lee, Camp, and Malone (2007)	*See Camp et al. (1997); Lee, Camp, and Malone (2007)
Camp, Orsulic-Jeras, Lee, and Judge (2005)	Randomized control trial <i>N</i> = 28; PWD ( <i>n</i> = 15), children ( <i>n</i> = 13)	A3		C2 <sup>+</sup> , C4 <sup>+</sup>
George (2011)	*Same study/program as George et al. (2011)	*See George et al. (2011)	*See George et al. (2011)	*See George et al. (2011)
George and Singer (2011)	*Description of George et al. (2011)	*See George et al. (2011)	*See George et al. (2011)	*See George et al. (2011)
George, Whitehouse, and Whitehouse (2011)	Mixed methods evaluation of a randomized control trial <i>N</i> = 47; PWD ( <i>n</i> = 15), students ( <i>n</i> = 32)	A1, A2, A4, A5, A6, A7	B2 <sup>+</sup>	C1 <sup>+</sup> , C2 <sup>+</sup>
Giglio (2006)	Random control trial <i>N</i> = 46; PWD ( <i>n</i> = 29), children ( <i>n</i> = 17)	A2		C3 <sup>+/+</sup> , C4 <sup>+</sup>
Griff, Lambert, Dellmann-Jenkins, and Fruit (1996)	Pilot project; activity analysis <i>N</i> = 15; PWD ( <i>n</i> = 5), children ( <i>n</i> = 10)	A2, A6	B1 <sup>-</sup> , B3 <sup>-</sup> , B4 <sup>+/-</sup>	C2 <sup>-</sup> , C3 <sup>-</sup>

(Continued)

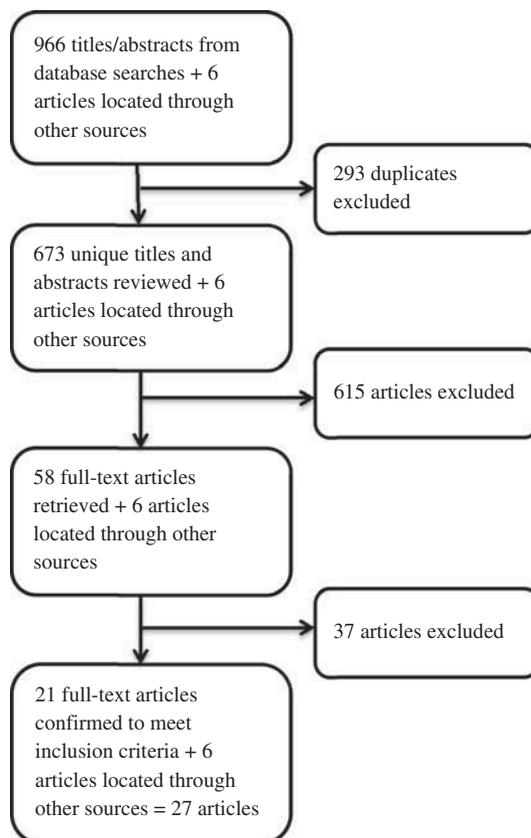
**TABLE 1** (Continued)

Author(s)	Type of Reference	Type(s) of Programs and Activities	Investigated Outcomes for Children <sup>a</sup>	Investigated Outcomes for Older Adults <sup>a</sup>
Jarrott and Bruno (2003)	Quasi-experimental design PWD ( <i>n</i> = 48)	A6		C2 <sup>+</sup> , C4 <sup>+</sup>
Jarrott and Bruno (2007)	Mixed methods quasi-experimental design; case study <i>N</i> = 113; PWD ( <i>n</i> = 39), caregivers ( <i>n</i> = 50), parents ( <i>n</i> = 24) Random control trial <i>N</i> = 29; PWD ( <i>n</i> = 14), children ( <i>n</i> = 15)	A1, A2, A5, A6		C1 <sup>+</sup> , C2 <sup>+</sup>
Lee, Camp, and Malone (2007)	Descriptive and prescriptive article	A3, A4		C4 <sup>+</sup>
Lewis (2008)	Mixed-methods quasi-experimental design Phase 1: <i>N</i> = 29; PWD ( <i>n</i> = 12), 7th and 8th graders ( <i>n</i> = 17) Phase 2: <i>N</i> = 43; PWD ( <i>n</i> = 27), pre-kindergarten children ( <i>n</i> = 16)	A6	B1 <sup>+</sup>	C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
McNair and Moore (2010)	Descriptive article	A1, A2, A4, A5, A6, A7	B1 <sup>+</sup> , B2 <sup>+</sup> , B3 <sup>+</sup>	C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
Melvin and Ryder (1989)	Descriptive article	A1, A2, A6		
Newman and Ward (1993)	Quasi-experimental design <i>N</i> = 40; PWD ( <i>n</i> = 20), preschoolers ( <i>n</i> = 20)	A1, A2, A6		C3 <sup>+</sup> , C4 <sup>+</sup>
O'Rourke (1999)	Quasi-experimental design <i>N</i> = 11; PWD ( <i>n</i> =6), children ( <i>n</i> =5)	A1		C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
Seifert, Drennan, and Baker (2005)	Descriptive and prescriptive article	A1		

Short-DeGraff and Diamond (1996)	Quasi-experimental design <i>N</i> = 22; older adults ( <i>n</i> = 10), children ( <i>n</i> = 12)	A1, A6, A7	C3 <sup>+</sup> , C4 <sup>+</sup>
Waggoner (1996)	Descriptive article		
Ward, Los Kamp, and Newman (1996)	Quasi-experimental design <i>N</i> = 45; PWD ( <i>n</i> = 21), children ( <i>n</i> = 24)	A1, A4, A5, A6 A2	C2 <sup>+</sup> C2 <sup>+</sup> , C3 <sup>+</sup> , C4 <sup>+</sup>
Whitehouse (2013)	*Description of George et al. (2011)	*See George et al. (2011)	*See George et al. (2011)
Whitehouse and Whitehouse (2005)	Descriptive article	A4, A5, A6, A7	B1 <sup>+</sup> , B2 <sup>+</sup> , B4 <sup>+</sup>
Wren (2004)	Descriptive article	A4, A6	B1 <sup>+</sup> , B2 <sup>+</sup>
Xaverius and Mathews (2004)	Quasi-experimental design <i>N</i> = 85; PWD ( <i>n</i> = 25), children's experimental group ( <i>n</i> = 28), children's control group ( <i>n</i> = 32)	A1, A6, A7	B1 <sup>n</sup> C3 <sup>n/+</sup> , C4 <sup>+</sup>

*Note.* PWD = persons with dementia.

"Outcomes for children and PWD are qualified by "+" when improvements were reported, "-" for when problematic outcomes were reported, and "n" when no or minimal changes in investigated outcomes were indicated. It was indicated as "n/+", "+/+," "+/-," or "n/-" if an article found varied behavioral outcomes (e.g., improvement in emotionally expressive behavior but found no change in on-task behavior).



**FIGURE 1** Identification of studies, inclusion and exclusion assessment.

## DATA EXTRACTION

As presented in [Figure 1](#), the database searches described previously resulted in 673 unique abstracts. These titles and abstracts were then reviewed by two independent researchers. From this, 58 articles were identified for full text review. The full texts were reviewed by two independent researchers. Twenty-one of these articles were confirmed for inclusion. Articles were excluded for violating the inclusion/exclusion criteria previously above, including: wrong age group, not dementia specific, or inappropriate source (e.g., newspaper articles). In the event of a disagreement between evaluators, agreement was reached through discussion. Additionally, six articles were identified from other sources (e.g., the references of reviewed full-text articles). A combined total of 27 articles met the inclusion criteria.

## RESULTS

### Program Design

*Types of programs and activities.* Seven types of intergenerational programs were discussed: art, music, Montessori, education, mentorship, narrative-based activities, and recreation.

Programs that incorporated visual arts used activities such as crafts, collage, or drawing (Brownell, 2008; George, Whitehouse, & Whitehouse, 2011;<sup>1</sup> Jarrott & Bruno, 2007; McNair & Moore, 2010; Melvin & Ryder, 1989; O'Rourke, 1999; Short-DeGraff & Diamond, 1996; Xaverius & Mathews, 2004). Other programs focused on the performing arts, such as dance (e.g., wheelchair square dancing) and movement (Melvin & Ryder, 1989; Newman & Ward, 1993). One paper described a pen-pal program, where PWD and child participants did not actually meet, but shared visual art through the mail (Seifert, Drennan, & Baker, 2005).

Music was used in eight programs (George et al., 2011; Giglio, 2006; Griff, Lambert, Dellmann-Jenkins, & Fruit, 1996; Jarrott & Bruno, 2007; McNair & Moore, 2010; Melvin & Ryder, 1989; Newman & Ward, 1993; Ward, Los Kamp, & Newman, 1996). Music therapy (Giglio, 2006; Newman & Ward, 1993), music and movement (Jarrott & Bruno, 2007; Newman & Ward, 1993; Ward et al., 1996), rhythm band (Griff et al., 1996; Newman & Ward, 1993), and singing groups (George et al., 2011) were among the music programs described in the literature.

Montessori-based programs, which are defined by Lee et al. (2007) as “involv[ing] task breakdown, provision of materials to manipulate, use of external cuing, and matching tasks to the capabilities of the individual” to provide them with meaningful occupations (p. 478), were incorporated in four programs (Brenner & Brenner, 2012; Camp et al., 1997; Camp, Orsulic-Jeras, Lee, & Judge, 2005; Lee et al., 2007).

Three educational programs had the PWD teaching the children (Camp et al., 1997; Lee et al., 2007; McNair & Moore, 2010), and one program was based on the students learning about dementia and older adults through a volunteer partnership (Waggoner, 1996). Wren (2004) described the use of curriculum content for experiential education through community service. Two articles described an intergenerational school focused on learning for all ages, young and older (George et al., 2011; Whitehouse & Whitehouse, 2005). Two programs focused on creating opportunities for discussion (George et al., 2011; Xaverius & Mathews, 2004).

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<sup>1</sup> In our review, we found multiple articles referring to the same study or program. Some of these also contained unique descriptive details that were not contained in the original article, so we included them in our descriptions of programs, but we excluded them in both our table and our numbered results within this document, referencing only the original study (Camp et al., 1997; George et al., 2011; Lee, Camp, & Malone, 2007).

Closely linked to educational programs, several of the intergenerational programs were developed around PWD mentoring children (Camp et al., 1997; George et al., 2011; Jarrott & Bruno, 2007; McNair & Moore, 2010; Whitehouse & Whitehouse, 2005) and around volunteer initiatives (George et al., 2011; Jarrott & Bruno, 2007).

Activities based on narrative and storytelling were used in eight programs. These activities included reminiscence (Brenner & Brenner, 2012; George et al., 2011; McNair & Moore, 2010; Waggoner, 1996), reading, and creative storytelling (George et al., 2011; Whitehouse & Whitehouse, 2005). These activities also focused on sharing oral histories (Short-DeGraff & Diamond, 1996; Wren, 2004).

Recreational activities were also offered as part of intergenerational programs, including: gardening (Melvin & Ryder, 1989; Jarrott & Bruno, 2007), bingo (Jarrott & Bruno, 2007), board games (Short-DeGraff & Diamond, 1996; Wren, 2004), brain games (Whitehouse, 2013), baking (McNair & Moore, 2010; Melvin & Ryder, 1989; Jarrott & Bruno, 2007), woodworking (Melvin & Ryder, 1989), nature walks (George et al., 2011; Wren, 2004), and table ball games (Lewis, 2008).

*Characteristics.* Programs were held in a variety of settings. Ten were located in long-term care (LTC; Brenner & Brenner, 2012; Brownell, 2008; Lewis, 2008; Waggoner, 1996; Ward et al., 1996), four of which specified that they were in specialized dementia units within LTC (Lee et al., 2007; McNair & Moore, 2010; Wren, 2004; Xaverius & Mathews, 2004); six were in adult day programs (Camp et al., 2005; Melvin & Ryder, 1989; Newman & Ward, 1993; O'Rourke, 1999; Short-DeGraff & Diamond, 1996; Waggoner, 1996) and one was in a retirement home (Waggoner, 1996). Two studies described programs at an intergenerational school (George et al., 2011; Whitehouse & Whitehouse, 2005). Furthermore, five programs were held on shared sites including LTC and child daycare (Camp et al., 1997; Giglio, 2006; Griff et al., 1996) and joint adult day program and child daycare (Jarrott & Bruno, 2003; Jarrott & Bruno, 2007). Finally, in the pen-pal program the PWD were in a LTC home and the children were in a school classroom, and the two groups never met (Seifert et al., 2005).

In terms of program participants, seven programs involved individuals at all stages of dementia (Camp et al., 1997; Giglio, 2006; Jarrott & Bruno, 2007; Lee et al., 2007; Lewis, 2008; McNair & Moore, 2010; Seifert et al., 2005); three were designed for persons with mild to moderate dementia (Camp et al., 2005; George et al., 2011; Griff et al., 1996; Newman & Ward, 1993); and two involved individuals with moderate to severe dementia (Brownell, 2008; Newman & Ward, 1993). Child participants were typically from daycares, either community-based (Camp et al., 1997; Camp et al., 2005; Giglio, 2006; Griff et al., 1996; Jarrott & Bruno, 2003, 2007; Newman & Ward, 1993; O'Rourke, 1999; Short-DeGraff & Diamond, 1996; Ward et al., 1996) or shared sites. Other child and youth participants were from the intergenerational

school (George et al., 2011; Whitehouse & Whitehouse, 2005), or elementary (Lewis, 2008; Seifert et al., 2005; Xaverius & Mathews, 2004), middle school (McNair & Moore, 2010; Wren, 2004), and high school (Brownell, 2008; Waggoner, 1996).

Several programs were cofacilitated by adult day program and child daycare staff members (Camp et al., 2005; Jarrott & Bruno, 2003, 2007; Short-DeGraff & Diamond, 1996; Ward et al., 1996) and two programs were cofacilitated by LTC home staff members and school teachers (Lewis, 2008; Seifert et al., 2005). One program was facilitated by PWD with supervision from staff members (Camp & Lee, 2011), two were facilitated by youth participants (Brownell, 2008; Waggoner, 1996), and four programs were facilitated by school teachers (George et al., 2011; Whitehouse & Whitehouse, 2005; Wren, 2004; Xaverius & Mathews, 2004). Others were led by Montessori-trained instructors (Brenner & Brenner, 2012), music therapists (Giglio, 2006; Newman & Ward, 1993; Ward et al., 1996), and dance instructors (Melvin & Ryder, 1989).

Programs were group-based (Brownell, 2008; George et al., 2011; Griff et al., 1996; Jarrott & Bruno, 2007; McNair & Moore, 2010; Melvin & Ryder, 1989; O'Rourke, 1999; Seifert et al., 2005) or partner-based (Brenner & Brenner, 2012; Camp et al., 1997; Camp et al., 2005; Giglio, 2006; Lewis, 2008; McNair & Moore, 2010; Short-DeGraff & Diamond, 1996; Waggoner, 1996). Programs frequently had a one-to-one ratio between PWD and children to promote relationship building (Camp et al., 1997; Camp et al., 2005; Giglio, 2006; Lewis, 2008; McNair & Moore, 2010; O'Rourke, 1999; Waggoner, 1996; Xaverius & Mathews, 2004). Scheduled programming occurrence ranged from daily to semimonthly. Four programs were offered during the academic school year (George et al., 2011; Short-DeGraff & Diamond, 1996; Waggoner, 1996; Wren, 2004); others ranged from 3 weeks (O'Rourke, 1999) to 6 months (Camp et al., 2005; Lee et al., 2007; Ward et al., 1996) or 10 months (Seifert et al., 2005). Not all articles explicitly stated whether the programs were ongoing or offered over a fixed time period. Scheduled program sessions typically ran between 15 and 60 min.

*Goals of programs.* Although not all articles outlined program goals, the majority were created to benefit both participants (PWD and children) and the greater community. When programs aimed to benefit PWD, their goals were to provide meaningful social roles and a chance to utilize experiences and skills (Camp & Lee, 2011; George et al., 2011; Melvin & Ryder, 1989; Seifert et al., 2005). Meanwhile, objectives for child and youth participants sought to address fear and discomfort toward PWD (Melvin & Ryder, 1989), and to help children understand, respect, and empathize with older adults (Lewis, 2008; McNair & Moore, 2010), while dispelling misconceptions of aging (Waggoner, 1996). Some programs were designed to benefit both generations. Here, the goals focused on linking generations by providing an

opportunity for meaningful dialogue and the transmission of knowledge, wisdom, and skills (Camp & Lee, 2011; George et al., 2011; Lewis, 2008; McNair & Moore, 2010; Seifert et al., 2005). These programs also focused on improving the quality of life, wellness, and pleasure of all participants (Camp et al., 2005; Camp & Lee, 2011; George et al., 2011; Whitehouse & Whitehouse, 2005). Furthermore, some programs indicated that their goals were to benefit the greater community (Brownell, 2008; Melvin & Ryder, 1989), and hoped to do so through reinventing approaches to caring for PWD while developing a further commitment to childhood education (Whitehouse & Whitehouse, 2005).

*Barriers.* Many articles explored barriers to program development and implementation. Jarrott and Bruno (2007) referred to concerns shared by some parents and guardians of the children who thought that the children may be hesitant or reluctant to engage with PWD. In the same study, some caregivers of PWD were concerned about the noise and the potential for disagreements between the PWD and the children. Giglio (2006) found that PWD expressed concern about the children's noise, commotion, and impoliteness. Jarrott and Bruno (2007) found that some PWD did not enjoy activities with children, and O'Rourke (1999) reported that those with milder cognitive impairment preferred the companionship of cognitively intact older adults. Another barrier was that children were not adequately aware of the unique needs of PWD (Xaverius & Mathews, 2004). One program indicated that obtaining informed consent from all participants and guardians and maintaining confidentiality where necessary was a major concern (Seifert et al., 2005).

Regarding staff, one article noted that staff members were not adequately trained (Griff et al., 1996) and another found that staff members had general skepticism about the benefits of these programs (Giglio, 2006). One article discussed difficulties implementing intergenerational programs for PWD as a result of a general misunderstanding by staff members of the capabilities of PWD (McNair & Moore, 2010). Griff and colleagues (1996) noted the challenges that arose when some of the PWD wandered during intergenerational programs. Other barriers included difficulties with evaluating program outcomes for PWD (Jarrott & Bruno, 2003) and high dropout rates among PWD (O'Rourke, 1999).

## Outcomes for Children

Although most studies focused on the outcomes of intergenerational programs for PWD, some studies examined beneficial outcomes for child and youth participants. These outcomes can be categorized into four themes: perceptions of older adults and dementia, skill development and character building, mood and enjoyment, and impact on children's behavior.

*Perceptions of older adults and dementia.* Following participation in programs with PWD, the younger generation was often found to have deepened their understanding and positive views of aging, older adults and PWD (Brownell, 2008; Lewis, 2008; McNair & Moore, 2010; Waggoner, 1996; Wren, 2004) and to have learned how to relate to PWD (Whitehouse & Whitehouse, 2005). In contrast, no significant change in perceptions of aging was observed in one study (Xaverius & Mathews, 2004).

*Skill development and character building.* Three articles indicate that child participants developed valuable skills, including: increased self-esteem and confidence; specific skills necessary for interacting with PWD, such as patience, sensitivity, compassion, respect, and empathy; and life skills including accountability, problem solving, and social responsibility (George et al., 2011; Waggoner, 1996; Wren, 2004). When asked about their experiences, children reported feeling helpful (George et al., 2011) while also reflecting that they learned more about themselves and how to work with PWD (Brownell, 2008; Waggoner, 1996; Whitehouse & Whitehouse, 2005). Children were proud of the knowledge they acquired (Camp et al., 1997), and in two studies were found to have improved communication and vocabulary (Brownell, 2008; George et al., 2011). One young participant's comments illustrate these benefits: "I feel really good because I helped her. I was very surprised at how it turned out. I felt a lot more comfortable now than I was before" (McNair & Moore, 2010, p. 151).

*Mood and enjoyment.* The impact of participating in programs with PWD provided child participants with opportunities for joy, but also encouraged them to experience and reflect on emerging mature emotional responses as one participant commented:

It's just like being a friend to anybody else, really. You see someone was okay one week and now they're in bed the next, or you go back in and someone doesn't remember you. You can have really hard days, but I feel so good about doing this. (cited in Waggoner, 1996, p. 49)

Three studies stated that children and youth were happy and enjoyed their time spent with the PWD (Camp et al., 1997; McNair & Moore, 2010; Waggoner, 1996). One child participant stated: "When you go in there, their eyes light up. . . . They just love to see people" (Waggoner, 1996, p. 49). Significant negative effects were observed in one study, and included discomfort and being upset by the PWD's "decreased capacity" (Griff et al., 1996, p. 610). Children also expressed confusion about the behaviors exhibited by PWD (Griff et al., 1996).

*Behavior.* Waggoner (1996) found that participating in programs with PWD resulted in positive behavioral outcomes among the children, such as being more attentive to older adults. Griff and colleagues (1996) observed examples of role reversal, when children would kindly instruct a PWD about

expected behavior. At the same time, however, the children also became frustrated with PWD, both for not being able to complete activities and for not being expected to follow the same rules that the children had to follow. Occasionally, children would complete activities for the PWD in frustration, rather than supporting the PWD.

### Outcomes for PWD

All but two of the articles included in this review commented on outcomes for PWD. (For exceptions, see Melvin and Rider, 1989, and Wren, 2004.) Overall, the outcomes were generally positive or neutral. Griff et al. (1996), however, found negative results associated with their program though the authors make clear that more in-depth training of the facilitators and educating the children around dementia may have led to more positive results. For our purposes, we separated the outcomes for PWD into areas focused on: sense of self, mood, behavior, and engagement. Concerning sense of self, there were a number of ideas explored in these articles.

*Sense of self.* Three articles reported an increase in participants' sense of purpose and usefulness (George et al., 2011; Jarrott & Bruno, 2007; Whitehouse, 2013), and one article referred to "role continuation," particularly with regards to joy derived from teaching children (George et al., 2011, p. 399). Other positive outcomes among older adults include an increase in self-confidence or self-esteem (Jarrott & Bruno, 2007; Waggoner, 1996), an opportunity for meaning making (Brenner & Brenner, 2012), a sense of feeling loved (Jarrott & Bruno, 2007), and feelings of acceptance and reciprocity (George et al., 2011). Two articles referred to a renewed sense of youthfulness among the PWD (George et al., 2011; Jarrott & Bruno, 2007).

*Mood.* Most of the articles measured mood through exhibited behaviors, but eight of the articles referred to outcomes related to mood independent of behavior. Only one article referred directly to an increase in joy (Waggoner, 1996), although many articles measured behaviors suggestive of joy and well-being, as is outlined in the following. Many studies found that participation in the intergenerational program led to a decrease in anxiety (Brownell, 2008; George et al., 2011; Jarrott & Bruno, 2007; O'Rourke, 1999). One article found that there was no anxiety or confusion in the PWD while participating in the program; however, the level of anxiety prior to participating in the program is unknown (Camp et al., 1997). Four articles stated that participants exhibited a more positive affect during and after participation (Jarrott & Bruno, 2007; Jarrott & Bruno, 2003; Lewis, 2008; McNair & Moore, 2010). Camp et al (2005) were unique in finding that PWD had increased pleasure during Montessori activities with children, however no carry-over effect was observed. As stated, Griff and colleagues (1996) were unique in finding that participating in the program created an increase in distress, particularly in structured activities, and in those activities where the PWD realized they

previously knew how to do something but were unable to do it now. That particular program was so unsuccessful that the project was not completed. However, they did find that PWD derived joy from activities that did not require too much “performance,” such as passively listening to music (Griff et al., 1996, p. 608). Further, activities that relied on long-term memories and reminiscence were more joyful.

*Behavior.* Several studies did not find statistically significant changes in PWD with regard to “inappropriate” behavior (Brownell, 2008; Xaverius & Mathews, 2004), or on-task behaviors (Giglio, 2006). However, most articles cited positive behavioral outcomes in the PWD. O’Rourke (1999) stated that PWD had double the amount of positive behaviors when children were present. Interestingly, Newman and Ward (1993) stated that there were more positive behavioral outcomes for persons with moderate to advanced dementia than in those with mild to moderate dementia. Four programs observed a decrease in agitation (Brownell, 2008; Lewis, 2008; O’Rourke, 1999; Ward et al., 1996) and one found that there was no agitated or disruptive behavior during the program (Camp et al., 1997). Another article stated that there was no excessive aggression during the program (O’Rourke, 1999). Short-DeGraff and Diamond (1996) reported increased mobility in PWD, and McNair and Moore (2010) found an increase in active behavior in the second phase of their study.

*Social engagement.* Seven of the articles cited changes in positive emotionally expressive behavior, such as an increase in smiling (Giglio, 2006; O’Rourke, 1999; Short-DeGraff & Diamond, 1996; Ward et al., 1996; Xaverius & Mathews, 2004) and laughter (O’Rourke, 1999; Short-DeGraff & Diamond, 1996; Xaverius & Mathews, 2004), both of which reflect social engagement. As one participant commented; “My time spent with the children was good, very good. The conversations were good and the party was great!” (McNair & Moore, 2010, p. 11).

Nine of the articles cited social engagement particularly between PWD and children, and one article cited that the presence of children improved engagement among PWD themselves (Giglio, 2006). Studies noted increased touching, extending hands, and hand-holding (Newman & Ward, 1993; O’Rourke, 1999; Short-DeGraff & Diamond, 1996; Ward et al., 1996; Xaverius & Mathews, 2004), as well as eye contact (Giglio, 2006; O’Rourke, 1999). Four articles stated that the PWD were increasingly attentive to the children, offering assistance and support (Giglio, 2006; O’Rourke, 1999; Short-DeGraff & Diamond, 1996), or simply watching them attentively (Ward et al., 1996). Three studies found that verbal interaction increased (Camp et al., 2005; O’Rourke, 1999; Ward et al., 1996). Yet, another study found that verbal interaction was lower in the intergenerational group than in a comparison group of PWD who participated in a music therapy group, but stated that this may have been related to the sample (Giglio, 2006).

*Engagement in activity.* Eight programs observed increased participation—both active and passive—in the activities (Brenner & Brenner, 2012; Camp et al., 1997; Camp et al., 2005; Lee et al., 2007; Lewis, 2008; McNair & Moore, 2010; O'Rourke, 1999; Xaverius & Mathews, 2004), although improvement was not universal. Three of the programs observed more head-nodding along with music (Giglio, 2006; Ward et al., 1996; Xaverius & Mathews, 2004). Four articles found fewer passive behaviors in the intergenerational programs than in other programs (Camp et al., 2005; Jarrott & Bruno, 2003; Lee et al., 2007; Xaverius & Mathews, 2004). Brownell (2008), on the other hand, found no statistical difference in engagement. As outlined previously, Camp et al (2005) were unique in finding increased engagement during intergenerational Montessori activities, however no transfer effect outside of the intervention. Finally, both Giglio (2006) and Ward et al. (1996) found less head-nodding in their intergenerational music programs than in their regular music programs.

## DISCUSSION

### Best Practices

The use of intergenerational programming with PWD and children or youth is generally supported by the literature. This finding is of interest to social workers and recreation therapists who often develop and implement programming for both PWD and children. There are many opportunities for social workers at LTC homes and adult day programs to build community partnerships with day cares, schools, and community centers. Importantly, although music, arts-based, and narrative programs were most common, the type of activity selected is less important than ensuring that it is meaningful for the participants and occurs in an environment that fosters relationship building and shared growth between participants. Nevertheless, best practices are difficult to establish at this time due to the methodological challenges encountered in the studies. Given the overall positive outcomes for most participants, social workers and other clinicians and/or educators can consider whether developing an intergenerational program might benefit the people and communities they work with. Eligibility criteria for inclusion in an intergenerational program must consider whether the presence of certain responsive behaviors in participants can be managed to ensure a safe and supportive environment for all. Whether a PWD, child, or youth fulfills the eligibility requirements should be reevaluated over set timeframes for both those initially deemed eligible and ineligible, to reflect changing capabilities and situational contexts.

Knowledge-building and training for participants and facilitators is a necessary precursor to program implementation. Through observation and debriefing, training exercises can develop over the course of the program

to address context-specific situations. The educational programs, by their very design, seemed to incorporate the most comprehensive preparatory knowledge-building, which takes the form of skill development, psychoeducation, and/or role-playing (Camp et al., 1997; Lee et al., 2007; George et al., 2011; McNair & Moore, 2010; Waggoner, 1996; Whitehouse & Whitehouse, 2005; Wren, 2004). The negative effects of inadequate information and training were highlighted by the child participants' misunderstanding and confusion over the cognition and behaviors of PWD (Griff et al., 1996; McNair & Moore, 2010; Xaverius & Mathews, 2004). The development of a systematic training manual or certificate program for dementia-sensitive intergenerational programming would be a valuable contribution to the social work and recreation therapy fields. It would ensure delivery of quality programming, would provide a common vocabulary across programs, and would allow for more effective program evaluation and comparative research. A certificate program may ease the concerns of caregivers of both PWD and children, which were found to be barriers to programming in some of the articles.

### Methodological Challenges

The literature we retrieved was highly variable in terms of program design, participants' characteristics, outcomes reported, and evaluation methods. Both descriptive and research articles were included for review (see [Tables 1](#) and [2](#) for details on study design). In the reviewed studies, a variety of methods were used to measure outcomes and evaluate programs. The use of both qualitative and quantitative data allowed for a richer picture of the relational features of intergenerational programs to emerge, yet made direct comparisons difficult. Studies that did not randomize participants to intergenerational programs versus comparison groups may not have been equivalent, as was reported by Giglio (2006). Methods of evaluation included structured and semistructured interviews, focus groups, questionnaires, standardized measurement tools, and direct or indirect (use of videotape) observation with or without a standardized measurement tool. Program evaluators ranged in their level of expertise and research training. Samples were small (typically between 10 and 20 PWD) and the PWD were predominantly Caucasian, so generalizability to other cultures and groups is limited. Furthermore, due to the age of the geriatric population, some samples experienced changes due to attrition and the introduction of new participants part way through the study (Brownell, 2008; O'Rourke, 1999). Inconsistencies in participant recruitment for PWD, including different inclusion/exclusion criteria and variation in the level of severity of cognitive impairment of participants, further complicate the comparability of the outcomes. For example, Camp et al. (1997) noted that PWD were only included in the program if they had not

**TABLE 2** Table of Themes Legend

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Types of programs and activities	
A1	Art
A2	Music
A3	Montessori
A4	Education
A5	Mentorship
A6	Recreation activities
A7	Narrative-based activities
Investigated outcomes for children	
B1	Perceptions of older adults and dementia
B2	Skill development/character building
B3	Mood
B4	Behavior
Investigated outcomes for people with dementia	
C1	Sense of self
C2	Mood
C3	Behavior
C4	Engagement

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shown any aggressive behavior in the last month. Staff members were also sometimes inconsistent in their facilitation and/or attendance to the program, and in one case put interested participants in bed just prior to program commencement (Giglio, 2006). Overall, the aforementioned differences between studies' methodologies, partnered with a limited amount of research on intergenerational programming with PWD, decreased the comparability of studies and the definitive conclusiveness of research findings here.

### Implications for Future Research

Although there is interest in supporting the continued meaningful inclusion of PWD in relationships that cross age-stratifications, further research is needed to develop evidence-based best practices for intergenerational programming. More randomized control trials with larger sample sizes are needed to further inform and enhance the knowledge of participants' experiences and outcomes. Consistent and validated evaluative tools that allow for more direct comparisons across studies should be used when possible. Two proposed instruments include the Myers Research Institute Engagement Scale (Lee et al., 2007) and the Dementia Care Mapping assessment tool (Jarrott & Bruno, 2003). It is important to be mindful of the challenges and limitations of objectively rating another person's subjective experience of quality of life.

The results of this research indicates that reliable screening tools for inclusion in an intergenerational program should be developed and tested

for recruitment of PWD and for child/youth participants. Screening tools that assess suitability must also consider the presence of behaviors in participants that place themselves or others at risk. Future research may explore which participant characteristics are considered when forming dyads or groups to identify factors that can increase the likelihood of a good match. This will ultimately support the selfhood of those involved and increase the likelihood of a positive experience in the intergenerational program. Additionally, this study indicates that the most effective training for facilitators and participants remains unclear and must also be further investigated. Without best practices for training those involved, the risk that facilitators will become confused, interpret activities differently and poorly execute the program increases. As presented in this research, these actions by facilitators negatively impact the outcome for participants. Finally, little to no attention was placed on how gender, race, ethnicity, or socioeconomic status may influence children's perceptions of PWD, PWD's tolerance and enjoyment of the presence of children, and how these characteristics might promote or impede intergenerational relationship-building. These cultural and personal preferences are important to consider, as individual differences between participants could impact both their experience in the program and the research's generalizability to the greater population. As previously outlined, as the number of older adults continues to increase, a larger heterogeneous group of individuals will necessarily age and increase with it, and should be considered to ensure that the most accurate best practices in intergenerational programming with PWD may be developed.

## CONCLUSION

This scoping review of intergenerational programs with PWD identified the following three themes: types of programs and activities, outcomes for children and youth, and outcomes for PWD. Program goals were generally focused on improving children and youth's perceptions of older adults and PWD, enhancing PWD's quality of life, fostering relationships between generations, and benefitting the community. Music, arts-based, and narrative programs were the most commonly described programs. However, the type of program has less of an impact on outcomes than whether it is meaningful and relationship focused, as these factors promote participation, engagement, and personality. Furthermore, this review has identified opportunities for future research, including the need to develop and evaluate tools for screening and training, as well as exploration of the influence of gender and race on program outcomes. Further inquiries would advance evidence-based best practices for intergenerational programs with PWD.

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