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EXPERIENCES OF PARTICIPATING IN INTERGENERATIONAL INTERVENTIONS

IN OLDER PEOPLE'S CARE SETTINGS: A SYSTEMATIC REVIEW AND META-

SYNTHESIS OF QUALITATIVE LITERATURE

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ABSTRACT

Aims: To synthesize the findings of qualitative research exploring the experiences of being involved in intergenerational interventions in older people's care settings.

Design: A meta-synthesis of the qualitative literature, employing Sandelowski and Barroso's method, was conducted.

Data sources: Eight databases were searched in March 2017.

Review Methods: The PRISMA statement was used for reporting the different phases of the literature search, and the Critical Appraisal Skills Programme qualitative research checklist was used as an appraisal framework. Data synthesis was conducted using Sandelowski and Barroso's method.

Results: Four qualitative studies were included in the meta-synthesis. Thematic analysis revealed four themes: 'Recreating the family'; 'Building intergenerational empathy and respect'; 'Uplifting and energizing'; and 'Engagement risks and challenges'.

Conclusion: The meta-synthesis strengthens the evidence that intergenerational interventions can be positive. However, it also shows that there may also be some negative aspects if not planned or managed carefully.

Impact:

• What problem did the study address?

This review contributes to the body of evidence by synthesizing the experiences of older people and children involved in intergenerational interventions.

• What were the main findings?

Although qualitative literature supports the quantitative evidence that intergenerational interventions can have a positive effect, intergenerational interventions could also have negative effects on some participants. Older people may feel tired, or experience feelings of infantilization.

• Where and on whom will the research have impact?

Practitioners need to be more aware of the potential negative effects of intergenerational interventions and include risk assessment, possibly by requiring ethical scrutiny.

Key words: Intergenerational program; patient's perspective; relationships; meta-synthesis; older people; children; nurses.

INTRODUCTION

Over the last decade, there has been a growing interest in the use of intergenerational interventions between children and older people as a therapeutic intervention to improve older peoples' health and quality of life and promote intergenerational understanding. Numerous quantitative studies have demonstrated the benefits that older people can gain through socialization with school age and pre-school children. A smaller number of studies have also shown the benefits that the children who participate in these activities can obtain from their engagement with older people (Seefeldt Jantz, Serock, & Bredekamp, 1982; Issacs & Bearison, 1986; Newman, 1986). The research in this area has mainly consisted of case-control study designs, with few studies designed to explore participants' experiences in a qualitative manner. However, there are a small number of qualitative studies that do this and an aggregation of the findings of this body of work is both timely and useful to increase our understanding of this type of intervention from the perspectives of the participants themselves.

Background

The nature of intergenerational interventions varies, but in essence they involve children visiting the residential care environment and engaging in structured or semi-structured activities with older people. Newman and Ward (1993) studied the benefits of when older people participate in intergenerational interventions with children showing how this type of intervention (musical activity between older people, staff and children) increased spontaneous behaviours among older people such as smiling more frequently, positive facial expressions, embracing, and improving the psychological health and quality of life in older people. More recent studies have also focused on specific activities within intergenerational work: such as, music therapy that improves the attitudes

of children to older people (an increase in children's positive descriptions of older adults), and vice versa, and an increase of older people's feeling of usefulness (Belgrave, 2011); older people playing board games or reading books to elementary school children can maintain, and in some cases increase, the cognitive functions and physical functioning of older people (Sakurai et al., 2015). Participation in various socializing activities, such as social games or the narration of events, has also been shown to increase measures of wellbeing amongst older people (Morita, & Kobayashi, 2013). Furthermore, other types of intergenerational interventions (i.e. physical exercise conducted creating a dyad with one child and one older person; strolling in the community; playing old games) have also been shown to improve the psychological health and quality of life in older people (Cerruti, & Shepley, 2016; Liu, Dupre, Gu, Mair, & Chen, 2012) and reduce depressive symptoms (Kamei et al., 2010). Other quantitative research has also shown a beneficial effect on the attitudes of children towards older people: the results of one study in which 4th grade students were engaged in social visits, during which they interviewing the elders, writing mini biographies based upon the interviews, and drawing pictures of their partner, revealed how students were more likely to perceive elders as intelligent, healthy, or valuable (Lynott & Merola, 2007). Another study analysed the effects of playing board games and reading picture books to children, showing not only beneficial effects on older people (such as the improvement of physical and psychological functioning), but also improving the attitudes of children towards the elderly (Yasunaga et al., 2016).

However, these quantitative studies have their limitations: a reduction in the interaction between children and older people following a break period in the intervention - suggesting that children required more time to get back into the routine of the programme was evident (Belgrave, 2011); perceiving older people as a homogenous population within sampling without distinguishing any

demographic or other social differences (Liu et al., 2012); a failure to account for why some older people were non-responsive within the interventions (Newman & Ward, 1993); high dropout rates between the intervention and follow up (Yasunaga et al., 2016); and a failure to fully account for children's previous experience with older people and how this may influence their perceptions (Kamei et al., 2010). Most of these limitations could have been addressed by the inclusion of a qualitative element in the design to capture the lived experience of the participants involved in the study (Sasso et al., 2019). It is acknowledged that qualitative research adds depth and detail to quantitative investigations in health care – particularly when the patient experience is so central to the study. Qualitative data allows for nuance to be uncovered and also to add context to statistical data. A qualitative element to the evaluation of interventions allows a more comprehensive and holistic perspective to guide care development – it helps ensure the patient voice is clear within the development of care interventions in a way that quantitative research cannot – thus ensuring that we develop care using the most wide ranging and inclusive evidence (Creswell and Clark, 2017).

In the field of intergenerational interventions there have been some qualitative studies (even if far fewer than quantitative ones), and given the numerous limitations of the quantitative studies there is a need to explore and synthesise this body of qualitative evidence to add to the body of knowledge on intergenerational interventions – and in particular explore what new dimensions this evidence can bring to this aspect of older people's care. This paper is therefore designed to address this gap.

THE REVIEW

Aims

The aim of this systematic review and meta-synthesis of the qualitative literature is to examine this body of qualitative work as a whole and summarize and aggregate the key areas of intergenerational interventions to inform future practice and research.

Design

A systematic qualitative review was conducted. Meta-synthesis is the strategy by which the results of qualitative research are synthesized and combined in an integrated manner by identifying overarching themes from across the body of literature as a whole (Finfgeld, 2003; Schreiber, Crooks, & Stern, 1997).

Search methods

In March 2017, a systematic search strategy was conducted using a combination of MeSH and free-text terms. Eight databases were searched: CINAHL, Cochrane Library, Eric, Joanna Briggs, PsycINFO, MedLine (Pubmed), Scopus, Social Science.

English language only papers were included in the review and no date restrictions were applied to the database searches. The review included all qualitative studies or mixed-method studies that used a recognized method of data collection (e.g. focus groups, interviews) and analysis (e.g. thematic analysis, grounded theory), and those focussing on the experiences of the participants in intergenerational programs. Studies with a purely quantitative design, conference abstracts and commentaries were not included in the review (see Table 1). Guided by the work of Barroso et.al (2003), we also checked citation data for the studies we found, combed the references of discovered papers and also searched author fields for other papers by the authors of papers we discovered.

Search outcomes

Two reviewers (RP, SR) independently assessed titles and abstracts, and then the full-text articles against the eligibility criteria. Duplicate records were removed. In case of disagreement between the two reviewers, a third reviewer made the decision regarding the inclusion of the article. Reasons for excluding the studies were recorded.

Quality appraisal

Study quality was assessed using the Critical Appraisal Skills Programme (CASP[©]) by one reviewer (SR) and checked by another (RP). This well recognised tool enabled us to make a judgement on the studies' design and rigour by judging the studies against the research criteria for qualitative papers. It enabled the scoring of papers in terms of quality from high to low in order to give the reader a sense of the quality of the studies retrieved from the search. The outcome of the CASP ratings and scrutiny can be seen in Table 2. Consideration was also given to the inclusion of studies based on quality and whether to exclude low quality studies from the review. In this respect we were guided by the work of Walsh and Downes (2005) and Britten et.al (2003) who argue that papers in a qualitative synthesis should not be excluded on grounds of quality – as long as readers can see the relative quality ratings of all papers in the review methods (Campbell et al, 2003). They take this stance because they argue that inclusion supersedes quality and missing out papers limits the comprehensiveness of the review and synthesis. The outcome of the CASP ratings and scrutiny can be seen in Table 2.

Table 2 here

Data abstraction

Data on each study were extracted using an Excel database (see Table 3). Data were extracted by two reviewers (RP, SR), and analyzed through a specific matrix, created ad hoc to identify the main characteristics of each included study.

Table 3 here

Synthesis

MH, SR, RP extracted the data from the findings sections of each included study and entered this into a table, respectively MH, SR, and RP performed the thematic analysis using the approach by Sandelowski and Barroso (2003). Firstly, all qualitative data were extracted from the papers and grouped by identifying topically similar issues within the data. These were then subject to thematic analysis that produced a final, exhaustive set of overarching themes where all the data were ordered in a meaningful manner. The themes and exemplar data are shown in Table 4.

Table 4 here

RESULTS

The results of the systematic search are shown in in the PRISMA Flow Diagram (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009) (Figure 1). The initial search discovered 1464 articles, which dropped to 1343 after duplicates were removed. The abstracts of these 1343 papers

were read, and 140 were selected as relevant, of which the full texts were examined. From this evaluation 4 studies met the inclusion criteria, and were finally included in the synthesis.

Study characteristics

All of the four selected studies were carried out in the USA. Each of them uses a different methodology of investigation: there was a Grounded Theory study (Hutchinson, & Webb, 1988), two descriptive studies (Schwalbach, & Kiernan, 2002; Heyman, & Gutheil, 2008), and an ethnographic study (Salari, 2002). Three studies investigated the evaluation of the outcomes of the older population (Hutchinson, & Webb, 1988; Heyman, & Gutheil, 2008; Salari, 2002), while one also evaluated of the attitudes of children towards older people (Schwalbach, & Kiernan, 2002). Three studies used interviews and observations for data collection (Hutchinson, & Webb, 1988; Schwalbach, & Kiernan, 2002), with one using the focus groups with older people (Heyman, & Gutheil, 2008). Two studies were carried out in a nursing home (Hutchinson, & Webb, 1988; Schwalbach, & Kiernan, 2002) and two in day care centres (Salari, 2002, Heyman, & Gutheil, 2008).

Qualitative synthesis

The analysis revealed four overarching themes that reflect the overall social and emotional components related to the experiences of being involved in an intergenerational intervention: 1) Recreating the family; 2) Building intergenerational empathy and respect; 3) Uplifting and energizing; 4) Engagement risks and challenges. Participant's quotes are used below to illustrate these themes and are taken directly from their original texts.

THEME 1: Recreating the family

One of the effects of intergenerational interventions is the creation of a 'family' type atmosphere. Whether this is intended or not, this is how it was perceived by some participants. For example, in some studies older people remarked on how their interactions with children made them think about a family:

"It makes you feel like you're a real grandma." (Older person) (Salari, 2002)

"Being with the pals [children] is sort of like being with my own kids. The pals substitute for family." (Older person) (Hutchinson, & Webb, 1988)

"It has kept me in touch with the world, with the kids, and I've got grandchildren at home and it's kept me in touch with them." (Older person) (Hutchinson, & Webb, 1988)

This was also the case for some of the children who likened the older people to their grandparents: *"I really like the play. The grandmas and grandpas were the background, the sun and the clouds and the mountains." (Child)* (Heyman, & Gutheil, 2008)

In the studies that included the children's parents or health care staff, the way in which the intergenerational interventions helped to create a family atmosphere was also evident:

"And talking about them just like they talk about their own grandparents and I think it's phenomenal. Actually, I have a picture of my son kissing one of the grandmas. And I never imagined that they would be so close to them, so it's wonderful." (Parent) (Heyman, & Gutheil, 2008)

"And the child comes over and says, 'That's my grandpa' and she always hugged him." (Staff) (Heyman, & Gutheil, 2008) "When we go over for activities, she'll grab my hand and say I have to show you my new grandma. And she points to one of the ladies." (Staff) (Heyman, & Gutheil, 2008)

In addition, some parents, older people and staff all commented how the intervention formed a replacement for family members who were not regularly seen by the children:

"He doesn't get to see much of his grandparents. But the grandmas here do the same thing and I thought it was so cute because they just felt so comfortable together." (Parent) (Heyman, & Gutheil, 2008)

"It's like a family because my parents are in the South also . . . and this is sort of an extended family." (Parent) (Heyman, & Gutheil, 2008)

THEME 2: Building intergenerational empathy and respect

The manner in which the intergenerational interventions helped build an understanding of older people was also evident across the studies. This was apparent in the comments of the children:

"What is fun is when they tell you stories and you learn about what happened to them." (Child) (Heyman, & Gutheil, 2008)

"I had a great time. I felt good to go to a nursing home. Gary [resident] has a very cool room. And a radio" (Child) (Schwalbach, & Kiernan, 2002)

"I think other kids should go to the nursing home. You learn a lot from them and they learn a lot from you" (Child) (Schwalbach, & Kiernan, 2002) In addition, the development of intergenerational understanding also worked both ways – with some of the older people commenting on how the intervention helped them understand more about children:

"We learn from the kids, they learn from us." (Older person) (Hutchinson, & Webb, 1988)

Parents and staff also noticed that the intergenerational intervention was having an effect:

"We'd be in a park or the grocery store or whatever. He'll see an older person and he'll go up to them and say hi. Just out of the blue. Hi! And I just think it's wonderful they're not scared to approach older people and to be friends." (Parent) (Heyman, & Gutheil, 2008)

"In this day and age, a lot of younger children, as they get older, tend to disregard older people. They think they're old and not useful anymore . . . I think it's good if they're starting at a young age." (Parent) (Heyman, & Gutheil, 2008)

However, some of the children also formed views about aging from the interventions that were, at times, quite negative:

"You start getting weak" (Child) (Schwalbach, & Kiernan, 2002) "You don't feel well" (Child) (Schwalbach, & Kiernan, 2002) "I will feel worried because I am going to die soon" (Child) (Schwalbach, & Kiernan, 2002)

But sometimes positive:

"I think it will be pretty good because I get to stay at home and I am retired" (Child) (Schwalbach, & Kiernan, 2002)

THEME 3: Uplifting and energizing

Across the 4 studies there was clear evidence that most of the older people valued the intergenerational interventions. They commented that they had a positive effect on their mood and sense of wellbeing:

"They let you know you're still alive. . . I believe it helps us stay young. [Later] . . . The children seem to like me, and I can walk into the room and ask "who's going to play ball with me today?" and six children will throw balls... That's what I come for. . . " (Older person) (Salari, 2002)

"It makes you feel like you are not on the end of a limb by yourself." (Older person) (Hutchinson, & Webb, 1988)

"The program gives you company, keeps you on your toes with your social manners, and makes you feel proud to be associated with these children." (Older person) (Hutchinson, & Webb, 1988)

"I watch them and stay with them, and it's uplifting to see them get enthused, to see them active and absorbed. I am moved by that. I like to be in an atmosphere that is stirring-up, a striving, sort of like [when] a band plays with high spirits, but I don't want to overdo it. It should be medium uplifting. I pick up the chemistry of it." (Older person) (Hutchinson, & Webb, 1988)

It was also apparent that others noticed the effects on the older people:

"My wife has dementia, yet she flourishes with her activities with the kids." (Caregiver) (Heyman, & Gutheil, 2008)

"He acts as if he has a job, something he has got to do, somewhere he's got to go. Yet, he doesn't remember the name of his pal (because he has a severe memory deficit). If he's reminded in the morning, he will remember in the afternoon and he'll push himself down there." (Nurse) (Hutchinson, & Webb, 1988)

THEME 4: Engagement risks and challenges

Although there are clearly substantial benefits to be gained from intergenerational interventions – for both the older people and children involved – the studies did reveal that these types of interventions have challenges and risks associated with them. One was the issue that some older people may find the interaction with children tiring:

"I'd have a hard time talking. I'm not much to talk." (Older person) (Hutchinson, & Webb, 1988)

"At least for my mother, it's hard for her to really initiate and keep interaction going." (Caregiver) (Heyman, & Gutheil, 2008)

"Mr. B was in and out of touch with reality. Occasionally he slept. Other times he seemed to understand what was going on." (Staff) (Hutchinson, & Webb, 1988)

In addition, some of the older people did not value the intergenerational intervention very much, commenting about the children and also the nature of the activities they were encouraged to become involved with:

"I can do without (the program). We don't speak the same language. They're just foolish kids." (Older person) (Hutchinson, & Webb, 1988)

"No. Not really. They are all too babyish. I don't like that dropping a penny into your hand. I don't like the games they play . . . because they are on a child's level. I don't appreciate that a bit. . . " (Older person) (Salari, 2002)

"I'm not very interested in any of them. I do like it when they play music and exercise. If it's the baby stuff and they repeat it constantly, then I sleep. We used to have rooms where we had beds; now, all we have are these recliners, and as a rule, I get one." (Older person) (Salari, 2002)

In addition, there were also remarks by some older people about some of the tensions and anxieties the intergenerational interventions may evoke. For example, feeling sad if a particular child did not attend:

"I know when she doesn't show up. I don't feel like being in the program. I'm used to her being there and when other kids come and she isn't there, I feel lonely and distressed." (Older person) (Hutchinson, & Webb, 1988)

There were also some who had concerns about the programs, such as, not feeling a connection with the child and also not being sure what the intervention was about and their role within it:

"My pal is all right, but he doesn't get here every time. He sings in the choir, he plays a sport. We're not very close. He's just there because the class is there. He hasn't made any personal recognition of me. Maybe some of it is my fault." (Older person) (Hutchinson, & Webb, 1988)

"I can't see so I can't participate. I love to listen, I'm willing to be of service, but I don't think I'm helping the child as I should." (Older person) (Hutchinson, & Webb, 1988)

Finally, there was a view that the intervention actually interrupted the peaceful time they wished to have in the care home:

"No, because it involves all the little children instead of adult groups. [Later]... Somehow it was much better when we were not as involved with the little ones. I felt we were more at ease. Oh, I shouldn't be telling you this! There are one or two like me that feel the time with them is interrupting what time we could use . . . [Later] I don't want to give the impression I don't like to be with the children . . . I do like to, but I do notice that when the children come in, I move back a little, to not get involved . . . but I haven't felt good in a while and I want to keep every minute. Oh, I don't know how to tell you . . . Once a day is enough... . We are older and have been through this with our children and grandchildren, and this is kind of a place to come and relax, listening to music . . . " (Older person) (Salari, 2002)

DISCUSSION

This review was carried out to synthesise the body of qualitative research of participants' experiences of intergenerational interventions. The synthesis brings together this empirical evidence through the four overarching themes – this synthesis therefore strengthens the evidence base for the effects of these types of intervention, sheds new light on how they are experienced, and enables them to be linked with some of the issues and factors that affect older people – and

can also have a positive effect on the children involved. All four studies included in the synthesis were checked for their quality using the CASP tool. Three of them were judged to be medium or high-quality articles (Hutchinson & Webb, 1988; Heyman & Gutheil, 2008; Salari, 2002). There were no major flaws in their design and were of a medium to high level of trustworthiness. One study (Schwalbach & Kiernan, 2002) was judged to be of a medium-low quality. There were no low quality studies.

The synthesis shows that intergenerational interventions demonstrate a dynamic that can recreate the family relationships between grandparents and grandchildren. Roh et al. (2015), and Kawachi & Berkman (2001) found that one of the key predictors of depressive illness formation among older people in residential care is the loss of regular contact with their family – especially child relatives. In the modern era, the increasing mobility of families enhances this risk of separation (Liu, 2014). As such, the fact that the participants in this study speak about how the intergenerational intervention 'creates' a family type of experience seems very relevant. Importantly, this experience has not emerged from the quantitative research into intergenerational interventions – showing the value of qualitative work in this area. Further research into how the 'family effect' could be enhanced would be a useful element to the planning of intergenerational interventions.

The relationship that is generated between the older people and the children also seems to provide some of the older people with a sense of purpose: they recognize the fragility of the child and perceive the possibility of helping them by drawing on their life experiences. This seemed particularly strong in the interventions that were well structured and also involved shared activities (Hutchinson, & Webb, 1988 and Schwalbach, & Kiernan). This could also have a therapeutic effect in terms of the mental health of the older people – as one of the risk factors in the

development of reactive depression in older people is the feeling that they are not able to contribute socially, and see their role in guiding the younger people in their families eroded as they age (Courtin, & Knapp, 2017).

The synthesis of qualitative work in this area also revealed how these interventions helped foster intergenerational empathy and respect – again, an issue not strongly reflected in the quantitative research literature. The literature is very clear that one of the factors that contribute to a sense of isolation among older people is that they feel a sense of disrespect from the younger generations (Van Der Geest, 2004) and that they can also feel that their experiences and values are seen as unimportant by the young (Matheson, Collins, & Kuehne, 2000). Similarly, young people often feel that older people do not appreciate how things change and how the issues in their lives are different, maybe more complex, to those of older people (Drury, Hutchinson & Abrams 2016). The fact that intergenerational interventions may help address this is a positive outcome and one that should be explored further as a way of helping both older people and the young to increase mutual respect – an aspect that seemed strong when interventions had shared, creative type interventions such as the one studied by Schwalbach and Kiernan,(2002).

The lack of social relationships for older people can be a factor in malaise and loneliness (Mosher et al., 2012). The day of the intervention was seen as an event to look forward to by most of the older people in the studies – a time also when everyone had to present themselves at their best, it provided a stimulus and an uplifting experience for many participants. The feeling of being useful, and of contributing to the wellbeing of others, results in a strengthening of the energies and a feeling of an incitement to do more. This increase in self-esteem may help an older person to find the stimulus to face everyday life and, at the same time, reduces social isolation. This is an issue that is recognized more widely in the literature that links social engagement and a sense of purpose

as having a positive effect on the mental health of older people (Maciwjewski, Prigerson, & Mazure, 2000).

However, this synthesis did reveal evidence that not all the effects of intergenerational interventions are positive and that it is important that the wellbeing effects of these interventions should not be generalized to all older people. In the synthesis it can be seen that some older people find the commitment to keep active during the interaction with the child, and this generates a sense of tiredness that they do not enjoy. There was also evidence that some older people just did not like the company of children and did not enjoy sharing their time with them - and saw this as an interruption in their peaceful existence. This aspect resonates with the importance of autonomy in care related decisions for older people - assumptions should not be made. In trying to do good professionals must avoid the potential paternalism that can be seen in some older people's care environments and be aware that enabling older people to make autonomous decisions is a key aspect of care (Tuckett, 2006). It was also clear that not all the older people in the studies enjoyed the types of activities used during the intergenerational interventions. The issue of infantilization has been recognised as a risk in the care of older people (Cassidy, 1997) and it is important that this potential risk is built into the planning of intergenerational interventions and that health professionals monitor the reception and responses of the older people engaging with the activity. This was particularly seen in the studies that had shared games with children – for example the study by Salari (2002). In health care, generally it is important that any care interventions are evaluated by seeking the views of patients (Condon, 2017) - the evaluation of intergenerational interventions should be no different. Evaluation must also be built in to the design and implementation of such interventions. Finally, another potential negative effect, not picked up in the quantitative literature, was the possible negative emotional effects on the older person - an

aspect that was prominent in the studies where the type and duration of the intervention was not clearly planned or explained to participants – for example the unstructured visits intervention studied by Schwalbach and Kiernan (2002). The relationship between the older person and a child that is created can be unique and its interruption or temporary suspension can be painful; the sudden lack of presence of a person with whom a path of sharing has been established can result in experiencing a sense of loss.

It is acknowledged that the qualitative studies in this review may have occurred before or during the years where both researchers and practitioners began to attach more importance to autonomy in the care of older people. There has been a rise in understanding and recognition of the importance of respect for dignity and the co-development of care interventions in older peoples nursing. It could be that the issues of risk and autonomy are more prominent in the development of inter-generational interventions now than they were then. However, given the lack of qualitative research in this area this is simply an assumption. More qualitative work into how older people are involved in, and experience participation in, inter-generational interventions would help to assess this possibility.

Limitations

Our review has some limitations. Although we searched eight databases, it is possible that some studies have not been found. In addition, we did not search the grey literature. However, we adopted the approach suggested by Sandewolski and Barroso (2013) and the guidance on searching for qualitative studies by Barroso et al (2003) to ensure the trustworthiness of our results.

CONCLUSION

Qualitative literature shows that the participation in intergenerational interventions is broadly positive for both the older people and the child participants. They replicate family type encounters and encourage intergenerational respect and understanding. They can also give older people a sense of purpose that improves their self-esteem. However, they are not devoid of drawbacks. Some older people may feel the interventions are an interruption and also can make them feel infantilized by some of the activities. It is therefore important that this is recognized and that intergenerational interventions are monitored for any negative effects – and that this possibility is recognized in their planning and implementation. The potential negative effects also mean that these interventions may have ethical dimensions that are missed by those conducting them, therefore, good practice would suggest that any intergenerational intervention recognises the potential for harm and undergoes similar ethical scrutiny to that of research studies or other more clinical interventions.

Further research should look at different designs of interventions and how they affect impact as well as more qualitative research into the issues identified in this synthesis within new types of intergenerational interventions. It is also important that older people are consulted on the design of activities within the interventions to reduce the risks of the negative effects of interventions.

Conflict of Interest statement

Authors declare that they have no conflicts of interest.

REFERENCES

Barroso, J, Gollop, C.J, Sandelowski, M, Meynall, J, Pearce, P.F., & Collins L.J. (2003). The Challenges of Searching For and Retrieving Qualitative Studies. *Western Journal of Nursing Research*, 25(2): 153-178. doi:10.1177/0193945902250034

Belgrave, M. (2011). The effect of a music therapy intergenerational program on children and older adults' intergenerational interactions, cross-age attitudes, and older adults' psychosocial well-being. *Journal of Music Therapy*, *48*(4), 486-508. doi:10.1093/jmt/48.4.486

Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of Health Services Research and Policy* 7(4), 209–215. doi:10.1258/135581902320432732

Campbell, R., Pound, P., Pope C., Britten, N., Pill, R., Morgan, M., & Donovan, J. (2003). Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science and Medicine* 56(4), 671–684. doi:10.1016/S0277-9536(02)00064-3

Cassidy, E. L. (1997). *Infantilization of the elderly in the institutional environment*. (Doctoral Dissertations), University of Massachusetts, Amherst.

Cerruti, M.S., & Shepley, M. (2016). The Effects of Spatial Enclosure on Social Interaction Between Older Adults With Dementia and Young Children. *Health Environments Research & Design Journal*, 9(3), 63-81. doi:10.1177/1937586715615348

Condon, L. (2017). Seeking the views of service users: from impossibility to necessity. *Health Expectations*, 20, 805-806. doi:10.1111/hex.12621

Courtin, E., & Knapp, M. (2017). Social isolation, loneliness and health in old age: a scoping review. *Health and Social Care in the Community*, *25*(3), 799–812. doi:10.1111/hsc.12311.

Creswell, J.W., & Clark, V.L.P. (2017) *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.

Critical Appraisal Skills Programme. (2017). CASP Qualitative Research Checklist. Retrieved from <u>http://www.casp-uk.net/casp-tools-checklists</u>

Drury, L., Hutchison, P., & Abrams, D. (2016). Direct and intergenerational contact and young people's attitudes towards older adults, *British Journal of Psychology*, *55*, 522-543. doi:10.1111/bjso.12146

Finfgeld, D.L. (2003). Metasynthesis: the state of the art—so far. *Qualitative Health Research*, *13*(7), 893-904. doi: 10.1177/1049732303253462

Heyman, J.C., & Gutheil, I.A. (2008). "They Touch Our Hearts": The Experiences of Shared Site Intergenerational Program Participants. *Journal of Intergenerational Relationships*, 6(4), 397-412. doi: https://doi.org/10.1080/15350770802470726

Hutchinson, S., & Webb, R.R. (1988). Intergenerational Geriatric Remotivation: Elders' Perspectives. *Journal of Cross-Cultural Gerontology*, *3*, 273-297. doi:10.1007/BF00116680

Issacs, W.L., & Bearison, L.D. (1986). The Development of Children's Prejudice Against the Aged. *International Journal of Aging and Human Development*, *23*, 175-194. doi:10.2190/8GVR-XJQY-LFTH-E0A1

Kamei, T., Itoi, W., Kajii, F., Kawakami, C., Hasegawa, M, & Sugimoto, T. (2010). Six month outcomes of an innovative weekly intergenerational day program with older adults and school-aged children in a Japanese urban community. *Japan Journal of Nursing Science*, *8*, 95–107. doi: 10.1111/j.1742-7924.2010.00164.x.

Kawachi, I., & Berkman, L.F. (2001). Social ties and mental health. *Journal of Urban Health*, 78(3), 458-467. doi: 10.1093/jurban/78.3.458

Liu, G., Dupre, M.E., Gu, D., Mair, C.A., & Chen, F. (2012) Psychological well-being of the institutionalized and community-residing oldest. *Social Science & Medicine*, *75*, 1874-1882. doi: 10.1016/j.socscimed.2012.07.019.

Liu, J. (2014). Ageing, migration and familial support in rural China. *Geoforum*, *51*, 305-312. doi: https://doi.org/10.1016/j.geoforum.2013.04.013

Lynott, P.P., & Merola, P.R. (2007). Improving the Attitudes of 4th Graders Toward Older People Through a Multidimensional Intergenerational Program. *Educational Gerontology*, *33*(1), 63-74. doi:10.1080/03601270600864041

Maciwjewski, P.K., Prigerson, H.G., & Mazure, C.M. (2000). Self-efficacy as a mediator between stressful life events and depressive symptoms. Differences based on history of prior depression. *The British Journal of Psychiatry*, *176*, 373-378. doi:10.1192/bjp.176.4.373

Matheson, D.H., Collins, C.L., & Kuehne, V.S. (2000). Older Adults' Multiple Stereotypes of Young Adults. *Aging and Human Development*, *51*(4), 245-257. doi:10.2190/LL3H-VKE8-QAT1-7M9M

Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., & The PRISMA Group. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med*, 6(7), e1000097. doi:10.1371/journal.pmed1000097

Morita, K., & Kobayashi, M. (2013). Interactive programs with preschool children bring smiles and conversation to older adults: time-sampling study. *BMC Geriatrics*, *13*, 111. doi: 10.1186/1471-2318-13-111.

Mosher, C.E., Lepore, S.J., Wu, L., Austin, J., Valdimarsdottir, H., Rowley, S., ... Rini, C. (2012). Social correlates of distress following hematopoietic stem cell transplantation: Exploring the role of loneliness and cognitive processing. *Journal of Health Psychology*, *17*(7), 1022–1032. doi: 10.1177/1359105311432490.

Newman, S. (1986). Who Will Care for Our Children? Perspectives on Aging, 18(6), 22-23.

Newman, S., & Marks, R. (1997). *Children's views on aging*. Generations Together. Pittsburgh, PA.

Newman, S., & Ward, C. (1993). An Observational Study of Intergenerational Activities and Behavior Change in Dementing Elders at Adult Day Care Centers. *The International Journal of Aging and Human Development*, *36*(4), 321-333. doi:10.2190/7PN1-L2E1-ULU1-69FT

Reisig, C., & Fees, B. (2008). Older Adults' Perceptions of Well-Being after Intergenerational Experiences with Youth. *Journal of Intergenerational Relationships*, 4(4): 6–2. doi: 10.1300/J194v04n04 02

Roh, H.W., Leeb, Y., Leed, K.S., Changa, K.J., Kimb, J., Leeb, S.J., ... Hong, C.H. (2015).
Frequency of Contact with Non-Cohabitating Adult Children and Risk of Depression in Elderly:
A Community-based three year Longitudinal Study in Korea. *Archives of Gerontology and Geriatrics*, 60(1), 183-189. doi: 10.1016/j.archger.2014.09.007.

Sakurai, R., Yasunaga, M., Murayama, Y., Ohba, H., Nonaka, K., Suzuki, H., ... Fujiwara, Y. (2016). Long-term effects of an intergenerational program on functional capacity in older adults: Results from a seven-year follow-up of the REPRINTS study. *Archives of Gerontology and Geriatrics*, *64*, 13-20. doi: 10.1016/j.archger.2015.12.005.

Salari, S.M. (2002). Intergenerational Partnerships in Adult Day Centers: Importance of Age-Appropriate Environments and Behaviors. *The Gerontologist*, 42(3), 321-333. doi:10.1093/geront/42.3.321

Sandelowski, M., & Barroso, J. (2003). Creating Metasummaries of Qualitative Findings. *Nursing Research*, *52*(4), 226-233. doi:10.1097/00006199-200307000-00004

Sasso, L., Hayter, M., Catania, G., Aleo, G., Zanini, M., & Bagnasco, A. (2019). Including qualitative research in Randomized Controlled Trials: Opportunities for nursing researchers. *Journal of Advanced Nursing*, *75*, 705-706. doi:10.1111/jan.13873

Schreiber, R., Crooks, D. & Stern, P.N. (1997). *Qualitative meta-analysis. In Completing A Qualitative Project: Details and Dialogue* (Morse J.M., ed.), Sage, Thousand Oaks, CA, pp. 311–326.

Schwalbach, E., & Kiernan, S. (2002). Effects of an Intergenerational Friendly Visit Program on the Attitudes of Fourth Graders Toward Elders. *Educational Gerontology*, 28(3), 175-187. doi: https://doi.org/10.1080/036012702753542490

Seefeldt, C., Jantz, R., Serock, K., & Bredekamp, S. (1982). Elderly Person's Attitudes Toward Children. *Educational Gerontology*, 8(5), 493-506. doi: 10.1080/0360127820080508

Tuckett, A.G. (2006). On paternalism, autonomy and best interest; telling the (competent) agedcare resident what they want to know. *International Journal of Nursing Practice*, *12*(3), 166-173. doi: 10.1111/j.1440-172X.2006.00565.x

Van Der Geest, S. (2004). "They Don't Come to Listen": The Experience of Loneliness Among Older People in Kwahu, Ghana. *Journal of Cross-Cultural Gerontology*, *19*(2), 77-96. doi:10.1023/B:JCCG.0000027846.67305.f0

Walsh, D., & Downe, S. (2005). Meta-synthesis method for qualitative research: a literature review. *Journal of Advanced Nursing*, 50: 204-211. doi:10.1111/j.1365-2648.2005.03380.x

Yasunaga, M., Murayama, Y., Takahashi, T., Ohba, H., Suzuki, H., Nonaka, K., ... Fujiwara Y. (2016). Multiple impacts of an intergenerational program in Japan: Evidence from the Research on Productivity through Intergenerational Sympathy Project. *Geriatrics & Gerontology International*, 16(1), 98-109. doi: 10.1111/ggi.12770.