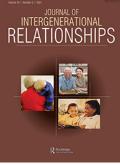


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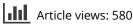
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# "Give and Receive": The Impact of an Intergenerational Program on Institutionalized Children and Older Adults

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#### ABSTRACT

This study describes the effects of an intergenerational program on self-esteem, loneliness, depression and happiness of a sample of six institutionalized children and six institutionalized older adults. A mixed-method with a pre-post approach was used. Such impact occurred in purpose, well-being and positive emotions, intergenerational sharing, and community involvement. The difficulties found were mobility constraints, low emotional expression and alphabetization (in elders), difficulty in establishing affective bonds (in children) and, also, length and periodicity. These results are discussed, and the implications of the psychosocial impact of such programs on all agents implicated in the intergenerational relationships are highlighted. **KEYWORDS** 

Intergenerational program; institutionalized children and older adults; intergenerational relationships; intergenerational benefits

## Introduction

Intergenerational programs (IP) emerged in the United States of America in the 1960's, with the purpose of minimizing the effects of geographic distance on family generations. These programs focused on the relationships between children and the elderly, to reduce isolation and stereotypes and strengthen what was weak intergenerational contact (Sánchez & Torrano, 2013).

In the decades that followed, these programs have varied in goals, issues and people involved, and their importance has increased. Between 1980 and 1990, IP were focused on the problems affecting youngsters, such as drugs and early pregnancy, as well as on the ones affecting the elderly, like loneliness, alcohol abuse, and illiteracy. Beginning in 1990, and up to the present, IP have been associated with communitarian development. In 2002, the United Nations stressed the importance of intergenerational solidarity. Ten years later, the World Health Organization declared 2012 as the European Year for Active Aging and Solidarity between Generations.

Conceptually, the literature presents several definitions of IP (Newman & Sánchez, 2007). The National Council on Aging (NCA) claims that these

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programs "aim to increase cooperation or exchange between two generations from the exchange of experiences and knowledge between young and old" (1993, as cited in Sánchez & Torrano, 2013, p. 217). In general, IP refers to programs provided by social services, schools, universities and other locations, which provide opportunities for different generations to come together and share experiences, knowledge and skills that are mutually beneficial and foster positive long-term relationships. These experiences typically involve the interactions between generations at opposite ends of human life: youth to late adulthood.

For Newman and Sánchez (2007, p. 9), despite the variability of conceptions of IP, there are three common denominators to this concept, regardless of the definition that is being used: (1) all IP are attended by people from the different generations in a family; (2) participation in the IP includes activities aimed at achieving benefits for all people involved (and, ultimately, to the community in which they live); (3) the participants are kinship-related to each other.

When analyzing the impact of these programs, the presence of benefits for all participants involved can be found. For children, such benefits include the improvement of self-esteem, the promotion of a healthy lifestyle, a stronger commitment to school, and a decrease in school dropout rates (Sánchez & Torrano, 2013). Also, the participation in IP can prevent risk behaviors, like drug use and violence, and promotes respect for others, as well as social skills (Jones et al., 2004). For the older adults involved in such programs, several benefits were found, such as an increase in well-being (Sánchez & Torrano, 2013), a decrease in vulnerability to mental illness, an increased feeling of being useful to society, in addition to assisting individuals in finding a meaning for life. Also, participation in IP was found to raise social interactions, and to decrease feelings of loneliness and isolation (Pinquart et al., 2000).

Additionally, IP were found to reduce the perception of stereotypes regarding other generations. Indeed, research shows that IP promote a new look at the elderly by children. For instance, when analyzing how children saw old adults before an IP and after, some differences were found (Pinquart et al., 2000; Schwalbach & Kiernan, 2002). These were differences that stress important changes concerning stereotypes toward the elderly, and promote a positive attitude toward this population (Holmes, 2009; Pinquart et al., 2000; Schwalbach & Kiernan, 2002).

Concerning the characteristics of the participants in research concerning IP, a broad diversity of subjects can be found in terms of age. Usually, children are aged between eight and 12 years old (Heyman & Gutheil, 2008; Schwalbach & Kiernan, 2002), although some programs assess younger children (Gigliotti et al., 2005; Holmes, 2009), while other programs opt to assess older children or even adolescents (Wise, 2010). Another characteristic is whether the program is organized to function inside the family, including grandparents and grandchildren (Wise, 2010), or in the community, including generations that have not had a previous relationship between them (Joung & Janke, 2013). At the

operationalization level, some programs introduce one generation into the routines of other generations – the elderly go to school and help children in their classes, or the children go to a residential home and take part in some activities with the elderly (Holmes, 2009; Schwalbach & Kiernan, 2002). Other kinds of IP, such as the one we present in this paper, create a different experience in a family's routine and propose different activities for both generations (Heyman & Gutheil, 2008; Jones et al., 2004; Lopes & Costa, 2012; Pinquart et al., 2000).

Currently, IP are rather common and focus on different approaches, goals, and ages; nevertheless, only a few receive the interest from researchers (Kamei et al., 2011; Kuehne, 2003a, 2003b). For this reason, one of the main goals of the present study is to accurately assess the impact of an IP on two generations living in residential houses, away from the family. This study focuses on the effects of intergenerational relationships on the self-esteem, loneliness, depression, and happiness of institutionalized children and elderly adults. An important goal of this intervention program was to create significant relationships between these generations, as well as to promote more positive representations of both age categories for each group, thus highlighting the value of each age group.

#### Method

#### **Research design**

A mixed sequential method approach was used to determine the program's impact on children and the elderly. Concerning the quantitative, and first, approach, we used a quasi-experimental pretest-posttest nonequivalent control group design. We sought to select groups that were as similar as possible, to compare the experimental and the comparison groups fairly. In pre- and posttest, we assessed the levels of self-esteem, loneliness, depression, and happiness of children and old adults (intervention and control groups). Concerning the qualitative analysis, we aimed to answer the question "How do people experience this intervention?" Thus, we used the focus group method for each group, creating environmental conditions for more spontaneous expression from each one, as well as facilitating the interaction of all participants. Moreover, we conducted an open-ended interview at the end of the IP to evaluate the perceptions of other agents (the staff and professionals from both institutions who were involved in this program).

#### **Participants**

#### Child participants

A group of twelve boys participated in the present IP: six boys aged seven to 11 in the intervention group (Mdn = 11), and six boys aged six to 11

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(Mdn = 10) in the control group. There were no significant age differences between groups [Z (U) = -0.325, p = .81, r = -0.103]. Due to their parents' risk behaviors or inability to raise their children, or due to their parents' deaths, all children in the sample are institutionalized and live in a charitable institution in a city in the north of Portugal. For these reasons, all these children have a person in the institution (tutor, in this case a psychologist) that is legally responsible for their education and integral development (providing links with schools, medical care, etc.); this individual has daily contact with the child. Specifically, it was this professional who selected children to participate in the study, considering age (to attend basic education), poor social network (children with no or reduced family contact) and whose schedule was compatible with the frequency of sessions. Children who met the above criteria but were unable to attend the program (because their schedules conflicted due to other activities) constituted the control group.

#### **Older participants**

The sample of older participants was constituted by six seniors aged between 75 to 87 (five females) were in the intervention group (Mdn = 80.5), and six seniors aged between 72 to 90 years (five females) (Mdn = 87). There were no significant age differences between groups [Z (U) = -0.923, p = .464, r = -0.292].

All seniors are institutionalized and live in a residential home, also in a city in the North of Portugal. The reasons for their institutionalization relate to their inability to live alone (especially from lose of physical faculties), no social network available or was far away or the spouse needs permanent care, even though autonomous. All participants (control and experimental group) were from the same residential home and were suggested by the institution's social worker.

#### Measures

#### Quantitative measures

Self-esteem and Happiness were measured by the same scales for both samples. However, considering the specificities of each age group, loneliness and depression were assessed with different instruments, previously constructed and validated for each age group.

- Subjective Happiness Scale (Lyubomirsky & Lepper, 1999; Portuguese version by Pais-Ribeiro, 2012): has 4 items and a 7-point Likert scale format. Higher scores indicate greater happiness (item 4 is reverse-coded). The Portuguese scale revealed good psychometric properties ( $\alpha = .76$ ).
- Rosenberg Self-esteem Scale (Rosenberg, 1965; Portuguese version by Vasconcelos-Raposo et al., 2012, with good psychometric properties  $(\alpha = .85)$ ): a 10-item, 4-point Likert scale, to indicate how strongly the

person agrees or disagrees with each statement. Higher scores indicate greater self-esteem (5 items are reverse-coded).

- Geriatric Depression Scale (GDS; Yesavage et al., 1983; Barreto et al., 2003; also, a reliable measure ( $\alpha = .86$ )). The GDS, 30-item version, on a dichotomic scale (yes and no), assesses feelings over the course of the past week. Higher scores indicate greater levels of depression.
- For children, we administrated the Portuguese version (Marújo, 1994) of the *Child Depression Inventory* (Kovacs, 1992). It is a 27-item rating instrument and the participants can choose between tree statements that describe them more accurately over the last two weeks. Higher scores are related to more depressive stages. The Portuguese version has good reliability ( $\alpha = .80$ ).
- Older adult's loneliness was measured using the Portuguese version of the UCLA Loneliness Scale (Russell et al., 1988; Neto, 1989; Cronbach's standardized α was .82). A 20-item scale, measured on a 4-point Likert scale indicating the frequency of the feeling stated. Higher scores indicate more loneliness.
- Child loneliness was evaluated by the *Loneliness Scale* (Asher et al., 1984), translated and re-tested by a team of researchers (Campinho, Silva & Barbosa, 2014; with a Cronbach standardized  $\alpha$  of .90). It is a 24-item, 5-point Likert scale to indicate how true the statement is for the child. Higher scores indicate less loneliness (ten items are reverse-coded). The scale includes questions about feelings of loneliness, feelings of social adequacy and subjective perceptions of peer status. We translated this scale and re-translated it to make sure the translation was accurate. We also use this translation with young people unrelated to the program (with a similar age range as participants) to measure understanding of this scale.
- All participants also completed a sociodemographic questionnaire.

#### Qualitative measures

Two focus groups (with older and child participants) and two semi-structured interviews (by a social worker, from the nursing home, and by a psychologist, from the children's institution) were performed. We aimed to answer the following questions: "How would you describe the impact of this program?" and "What were the main difficulties/challenges that you experienced?" Besides the self-reports, the focus groups and the interviews, we also analyzed the researchers' field notes from each session throughout the program.

## Data collection procedures

This project was intentionally built and operationalized by three Clinical Psychologists from the FPCEUP, in collaboration with the professionals of the institutions and the sponsoring entity. This work was developed in three fundamental stages; a) there were initially meetings concerning the presentation and establishment of mutual knowledge of the professionals (researchers and study managers). Subsequently, the researchers had direct contact with the target population of the intervention (the children and the older adults selected in advance by the professionals of these institutions, taking into account inclusion criteria indicated below); b) Based on the knowledge of the situations of the institutions and the intended objective, a project organized in sessions was drawn up, presented and discussed with the professionals of the institutions directly involved in it; c) Finally, it was implemented, considering the willingness and availability of all stakeholders.

The conditions to participate in this study were to be institutionalized currently, to show high(er) levels of loneliness, weaker social networks, and, in the case of the elderly, to lack cognitive ability.

#### Quantitative measures

The questionnaires were administered in session 0 and in the last session (in each of the institutions, in a quiet and reserved place), when the program was presented. In the case of children, they were self-administered (lasting approximately 40 min); in the case of older adults, they were administered with the researcher's help (lasting approximately 1 hour).

# Qualitative measures

At the end of the IP (one month later), the three investigators conducted two focus groups (one with children and one with the elderly, each one in the own institutions). These discussion groups lasted about 45 minutes and one hour, respectively. Also, the two interviews, with the professionals from both institutions who followed this study more closely, were conducted by the researchers and lasted about 1 hour each. All these materials were audio-recorded and transcripts were made.

Since we were three researchers, one was more responsible for conducting the focus group and the interview and the others were responsible for observing and taking notes. Following, they compared notes and then reconciled any differences. These procedures were designed to analyze the subjective impact of the program on all participants.

## Data analysis procedures

## Quantitative data

Considering the small sample sizes of the groups, non-parametric tests were performed. The Mann-Whitney U Test was used to compare the control and intervention groups for both children and elderly samples, for moment one measures (two-tailed). To compare the intervention effect, new variables were computed for all evaluated dimensions, representing the difference between the post- and pre-intervention times. These variables allowed us to analyze individual variability, and were then used to test the efficacy of the intervention by comparing the control and intervention groups for both samples (one-tailed). The r effect size measure was reported, and we considered the following rules of thumb for interpreting these effect sizes: r = .1represents a "small" effect size; r = .3 represents a "medium" effect size; and r = .5 represents a "large" effect size (Cohen, 1988). A p value was significant for values below 0.05.

Valid responses were obtained for all items; therefore, there were no missing values.

#### Qualitative data

To analyze the focus group and the data from interviews, we used systematic coding through content analysis (Bardin, 2009). The validation involved three coders, the authors of the manuscript. Subsequently, the codes/themes were compared for each classification/coder and when different codes/ themes were obtained, a consensus solution emerged after discussion.

#### **IP program**

The duration of the program was one year (2015), with monthly meetings of two hours each. Most sessions took place in the old adults' institution, and the remaining sessions in spaces that were not part of the usual environments of the participants. The metaphor that accompanied the course of the sessions was the story of *The Little Prince*, a book by Antoine de Saint-Exupéry, which emphasizes the importance of building significant bonds with others. The activities we developed were based on Erikson's Psychosocial Theory, since this theoretical model of development throughout the life cycle would allow us to analyze childhood and old-age tasks.

The plans for the sessions were constantly adjusted based on the participants' needs and characteristics; additionally, the activities were chosen according to the characteristics of the participants, and focused on the process – the opportunity to work together supports positive interactions between children and old adults – regardless of whether the game or the activity was ultimately completed.

In general, all sessions were composed of three key-moments: (1) a warm-up activity, which served to give continuity between sessions, as well (each participant was invited to share something about her/his past month, and the participants were introduced to the theme of the present session by reading an excerpt from *The Little Prince* book); (2) the main activity; and, in the final 10–15 minutes of each session, (3) reflection on the processes that were experienced together.

Session	Theme	Goals	Main activities
Session 0	Global presentation of the program;	Pretest evaluation.	Complete the sociodemographic
	Administration of the questionnaires.		questionnaire.
Session 1		<ol> <li>Introduce participants;</li> </ol>	(a) Presentation ("Who are we?");
	"What does that mean – 'tame'?"	2. Promote bonding and intergenerational	(b) Creation of a symbol for each dyad;
	"It is an act too often neglected," said the fox. It means to	3. Create child-older adult dyads.	(c) Offer of The Little Prince book to each
	establish ties." (Saint-Exunéry 1943 in <i>The Little Prince</i> )		participant.
Session 2	Positivity	I. Promote well-being;	<ul><li>(a) Music and dance dynamics (mirror child-older adult);</li></ul>
	"What makes the desert beautiful," said the little prince, "is that somewhere it hides a well"	2. Encourage joy and positivity;	(b) Share memories/positive stories.
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )	3. Foster group cohesion and sharing between	
		children and the elderly;	
		4. Call attention to the positive side of life.	
Session 3	Emotions	1. Promote self-knowledge;	(a) Emotional regulation dynamics (e.g., recognition of emotions, and development of self-control strategies, such as relaxation).
	"But I was not reassured. I remembered the fox. One runs the risk of weeping a little, if one lets himself be tamed $_{n}^{\prime}$	2. Raise awareness of emotions and how they influence thoughts and behaviors;	
	 (Saint-Exupéry, 1943, in <i>The Little Prince</i> )	3. Foster group cohesion and sharing between	
		children and the elderly; 4. Promote understanding and respect for others;	
		5. Express oneself through music.	
Session 4	Sharing	1. Promote well-being;	(a) Visit to the Dragon Stadium and Museum (of the <i>Futebol Clube do Porto</i> – Oporto Soccer Team), as suggested by the participants.
	"If, for example, you come at four o'clock in the afternoon, then at three o'clock I shall begin to be happy."	2. Foster joy and positivity;	
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )	<ol> <li>Foster group cohesion and complicity in dyads;</li> <li>Share experiences and emotions.</li> </ol>	

Session	Theme	Goals	Main activities
Session 5	Care giving	1. Promote the establishment of ties;	(a) Each participant grows a plant as a metaphor for caring for
	"You become responsible, forever, for what you have tamed."	2. Develop involvement in personal relationships;	others.
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )	<ol> <li>Increase emotional and affective awareness, as well as taking care of affectivity;</li> <li>Increase cohesion in dyads;</li> <li>Promote contact with mature</li> </ol>	
Session 6	Gratitude	1. Promote well-being;	(a) Walk in the park;
	"You'll have five-hundred million little bells; I'll have five- hundred million springs of fresh water "	<ul> <li>2. Promote the acceptance of others, their abilities and limitations:</li> </ul>	
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )	3. Increase intergenerational complicity.	(c) Release of balloons with sentences about the program.
Session 7	Representations of youth/old age	<ol> <li>Increase integration into the life story of the elderly;</li> </ol>	(a) Share life stories;
	What is it like to be our age?	<ol><li>Promote interpersonal relationships based on the discovery of others:</li></ol>	(b) Cognitive and relational stimulation games (Who is who? By Teles. 2008):
	"I was wrong to grow older. Pity. I was so happy as a child."	3. Promote the recognition of positive characteristics in each age, and challenge social	(c) Celebration of grandparents' day.
	(Saint-Exupéry)	representations and stereotypes concerning the different age groups.	
Session 8	Affections	1. Promote well-being and positivity;	(a) Visit the Saint Inácio Zoo (Quinta de Santo Inácio);
	"It is only with the heart that one can see rightly; what is 2. Increase cohesion in the group; essential is invisible to the eye."	5 2. Increase cohesion in the group;	(b) Free activities to share knowledge, emotions and affections.
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )	<ol><li>Encourage the observation of nature and relaxation;</li></ol>	
		<ol> <li>Promote self-knowledge;</li> <li>Perceive the differences that unite people.</li> </ol>	

Table 1. (Continued).

Table 1. (Continued).	inued).		
Session	Theme	Goals	Main activities
Session 9	Integrity	1. Share values;	(a) Game for mutual discovery of the personal characteristics of the elements of each dyad;
	"When I was a little boy I lived in an old house, and legend told us that a treasure was buried there. To be sure, no one had ever known how to find it; perhaps no	<ol><li>Increase self-esteem and strengthen the bonds that were created.</li></ol>	(b) Rescue team game (adapted from Conangla & Soler, 2013);
	one had ever even looked for it. But it cast an enchantment over that house. My home was hiding a secret in the depths of its heart "		
	(Saint-Exupéry, 1943, in <i>The Little Prince</i> )		(c) Sharing positive messages between the children and the older adults.
Session 10	Happiness	<ol> <li>Encourage the integration of the path taken along the program;</li> </ol>	<ul><li>(a) Theater play about the key-moments of the program.</li></ul>
	"Then I am happy. And there is sweetness in the laughter of all the stars." (Saint-Exupéry, 1943, in <i>The Little Prince</i> )		
Session 11	Friendship Farewell/integration	<ol> <li>Promote well-being and positivity;</li> <li>Encourage the integration of the path taken along the program.</li> </ol>	(a) Christmas party and Christmas show.
	"And I knew that I could not bear the thought of never hearing that laughter any more. For me, it was like a spring of fresh water in the desert." (Saint-Exupéry, 1943, in <i>The Little Prince</i> )		
Session 12	Posttest assessment.	Post-intervention assessment. F	Complete the questionnaire; Focus groups and semi-structured interviews.

In Table 1, we briefly summarize the intervention program and present the themes, goals and main activities that were developed in each of the twelve sessions.

#### Ethical considerations

The study was approved by the Ethics Committee of the Faculty of Psychology and Education Sciences of the University of Porto in Portugal.

The children's technical responsible at the institution and older adults were given, by researchers, verbal and written explanations concerning the purpose of the research and the methods to be used. All participants were informed that they could terminate their participation in the study at any time. Their rights to privacy and confidentiality were assured, and all participants provided informed and written consent (Declaration of Helsinki, 1964).

#### Results

#### Quantitative data analysis

#### Children

**Pre-intervention.** Regarding the results for children at the first point of assessment, we found no statistically significant differences for the variables considered: loneliness [Z (U) = -0.946, p = .381, r = -0.299], depression [Z (U) = -0.527, p = .635, r = -0.167], happiness [Z (U) = -1.051, p = .333, r = -0.332], self-esteem [Z(U) = -1.702, p = .119, r = -0.538]. With these results, and even given the lack of statistical power for some of the results due to the small sample size, particularly for self-esteem (which presents a large effect size), we concluded that groups were similar in the pre-intervention phase (cf. Table 2).

		Contro	Group		Intervention Group			up	
Dimensions	Mdn	IQR	Q1	Q3	Mdn	IQR	Q1	Q3	
Loneliness	22.0	8.5	18.5	27.0	26.0	15.0	20.5	35.5	
Depression	6.0	5.5	2.5	8.0	6.0	18.5	4.0	22.5	
Happiness	5.5	2.4	4.0	6.4	5.3	2.1	3.5	5.6	
Self-esteem	2.7	0.7	2.6	3.3	2.6	0.7	2.0	2.7	

Table 2. Descriptive statistics of children (pre-intervention).

Mdn - Median; IQR- Interquartile range (Q3-Q1); Q1 - Quartile 1; Q3 - Quartile 3

	Coi	ntrol	Interv	rention	
Dimension	MR	SR	MR	SR	Mann Whitney U Test/r
Loneliness (post-pre)	4.9	24.5	6.1	30.5	Z (U) = - 0.629, $p$ = .298, $r$ = - 0,199
Depression (post-pre)	5.3	26.5	5.7	28.5	Z (U) = - 0.211, p = .452, r = - 0.067
Happiness (post-pre)	5.5	27.5	5.5	27.5	Z (U) = 0.000, $p$ = .524, $r$ = 0.000
Self-esteem (post-pre)	4.1	20.5	6.9	34.5	Z (U) = - 1.509, p = .111, r = - 0.477

MR – Mean Rank; SR – Sum of Ranks

*Intervention efficacy.* As mentioned, we computed the difference between post and pre-intervention results for all dimensions. The Mann-Whitney U Test results showed no statistically significant differences between children's control and intervention groups for loneliness, depression, happiness, and self-esteem (cf. Table 3) after the intervention, when considering their initial scores.

Again, considering the groups' small sample sizes and the consequent low statistical power values, it becomes relevant to explore the r effect size measure, because it is independent of sample size, unlike significance tests (p values). The most relevant score was obtained for self-esteem, which presented a large effect size. We highlight that this difference is not biased by the participants' initial scores, because it is based on their individual results (pre-post). It is also relevant to mention that the short period between the points in time of measurement could be insufficient to obtain deeper developmental changes.

# Old adults

**Pre-intervention.** No statistically significant results were found between control and intervention groups in the elderly sample at the first point in time for any variable: loneliness [Z (U) = -0.855, p = .443, r = -0.27], depression [Z (U) = -0.647, p = .61, r = -0.205], self-esteem [Z (U) = -0.965, p = .376, r = -0.305] happiness [Z (U) = -1.299, p = .214, r = -0.411]. In light of these results, we concluded that elderly groups were similar in the dimensions assessed in the pre-intervention phase (cf. Table 4).

Intervention efficacy. The difference between post and pre-intervention results was computed for all dimensions. The Mann-Whitney U Test results showed statistically significant differences between old adult control and intervention groups for depression after the intervention, considering this group's initial scores [Z (U) = -2.259, p = .014, r = -0.714]. The intervention produced a significant decrease of depression levels with a large effect size. Although not statistically significant, loneliness and happiness results

	Control Group			Intervention Group					
Dimensions	Mdn	IQR	Q1	Q3	Mdn	IQR	Q1	Q3	
Loneliness	37.0	16.5	26.5	43.0	30.5	9.5	27.5	37.0	
Depression	14.5	8.5	9.5	18.0	12.5	11.5	5.8	17.3	
Happiness	3.5	2.1	2.3	4.4	4.4	0.8	3.8	4.6	
Self esteem	32.0	3.8	30.5	34.3	37.0	11.3	29.5	40.8	

Table 4. Descriptive statistics of older adults (pre-intervention).

Mdn - Median; IQR- Interquartile range (Q3-Q1); Q1 - Quartile 1; Q3 - Quartile 3

Table 5. Mann Whitney U Test results and effect sizes for the older adult's sample.

	Control		Interv	ention	
Dimension	MR	SR	MR	SR	Mann Whitney U Test/r
Depression (post-pre)	8.13	32.5	3.75	22.5	Z (U) = - 2.259, $p$ = .014, $r$ = - 0.714
Loneliness (post-pre)	7.38	29.5	4.25	25.5	Z (U) = -1.609, $p$ = .062, $r$ = -0.509
Self-esteem (post-pre)	5.13	20.5	5.75	34.5	Z (U) = - 0.322, $p$ = .400, $r$ = - 0.102
Happiness (post-pre)	4.0	16.0	6.5	39.0	Z (U) = - 1.291, p = .114, r = - 0.408

MR - Mean Rank; SR - Sum of Ranks

are also relevant, presenting large and medium effect sizes, respectively [Z(U) = -1.609, p = .062, r = -0.509; Z(U) = -1.291, p = .114, r = -0.408] (cf. Table 5).

#### Qualitative data analysis

#### "How would you describe the impact of this program?"

The data resulting from the qualitative analysis of this question was grouped into four main categories (cf. Figure 1).

From the analysis of Figure 1, all participants, as well as the technicians involved, evaluated the program positively. All reported a feeling of wellbeing associated with the whole process, from the very beginning of the program's implementation. On the one hand, the elderly stressed the satisfaction they derived from participating: "I thought it was good and I wish to continue. It was a delight because we were all living together" (AL); "When we were with them, it was a joy" (Mda). Children expressed their satisfaction, as well: "I really enjoyed it! Very cool!" (PD). Moreover, the elderly highlighted the joy that the meetings with the children provided because of the

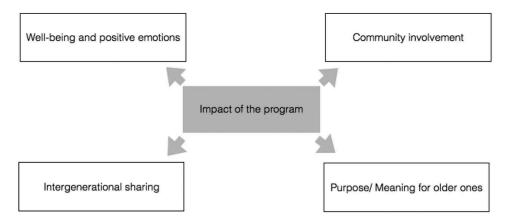


Figure 1. Dimensions of the impact of the program mentioned by the participants.

opportunity to share their experiences and experiencing higher levels of energy: "It looks like we are newer, younger" (AL).

When asked about the activities they enjoyed doing together, children and old adults identified similar activities, such as singing, gardening, and storytelling. There was unanimous agreement among all participants in regard to their favorite sessions: the visits to outdoor institutions, particularly appreciated by the elderly, who did not know most of the places that were visited. Apart from this, the fact that they were in a different place, having the chance to see new things with their pairs, and of sharing such experiences, may have fostered a closer relationship between the elderly and the children.

In association with this category, the importance of affections emerges, often highlighted by all participants, and increasingly, throughout the process. In fact, as expected, at the end of the meetings, we noticed that the two age groups were more at ease with each other, with more visible displays of affection between the children and old adults. The participants themselves took the initiative to greet each other, to prepare gifts for their pairs (especially the elderly), and to display care for and knowledge of the other.

According to the technicians working at the children's institution, one of the main visible signs of the impact of the program for the children was the fact that they had placed a picture of "my old" in their rooms. This reveals the emotional bond that had been built, which was accompanied by expressions of affection, more evident at the end of the program. Furthermore, the same technicians emphasized that: "The children learned a new word (elderly), unknown to them before, and to which they now associate positive feelings" (CRT). Moreover, "They had a different view about what an elderly is, as well as about the kind of bond that may arise between themselves and an older person, since these children had no relationship experience with people that age" (CRT).

A theme that was clear, particularly in the discourse of the old adults and the nursing home technicians, was the impact of this experience on the

construction of a purpose, of a meaning to their lives. In fact, in addition to feeling more excited and enthusiastic about the upcoming sessions, the program allowed the elderly to set goals and be introduced to new things, and to have times of interaction in their lives. The intergenerational meetings were designed for the elderly and they longed for them, thus giving them a sense of usefulness and purpose. According to one of the technicians working at the nursing home, "The elderly were always asking about the next session: 'Where are we going? What are we going to do?' They scheduled visits to their families so they would not miss the program" (SO). Indeed, this perception became even clearer as they foresaw the end of the program, with the elderly asking how would they get by without these meetings: "We feel empty, with nothing. I hope that maybe we could think of doing other activities with children; we need to think about it" (AL). According to a technician at the nursing home, "The project has created an additional incentive, a life goal ... The elderly enjoyed planning things themselves to offer to the boys, they were attentive, they planned ... it was very positive to occupy their days with plans. Even now they ask: 'But is it really over?" (SO).

Intergenerational sharing was also widely mentioned in the evaluation of this program, particularly in terms of sharing moments experienced together in the diverse activities and events, sharing life stories, or sharing personal and/or generational knowledge. For instance, one of the old adults declared: "They taught us how to play" (Mda). This kind of sharing between the two generations continued up to the very end of the program.

Furthermore, this positive effect also extends to the institutions involved, since these meetings were shared with other residents (children and elderly). One of the nursing home technicians stated that "The activities make them happy, and that happiness was also transposed to the institutional community. The other elderly were interested in knowing more about the kids and their stories" (SO). In the case of the children, there was a similar experience, especially because these children come from dysfunctional families, with disconnected elements and very young parents. For these reasons, with this program, they had the opportunity to have contact, with older people, in some cases for the first time or closer contact than ever before. As declared by one of the technicians working at the children's institution, "… the other children, through the speech of those involved, also had some notion of what an elderly person is and the kind of relationship that could be developed with one" (CRT).

Additionally, the participants' visits to each age group's institution, as well as their gathering in festive seasons (such as the Christmas party, or Saint John's lunch), have contributed to such an impact, since children and old adults had the opportunity to get to know each other's existential spaces and the rest of the community. 298 👄 M. R. BARBOSA ET AL.

## What were the main difficulties/challenges that you experienced?

The planning and implementation of the present program became quite challenging for the researchers, since the sample was formed from institutionalized children and the elderly. Although there are several programs with institutionalized older people, the present program is innovative because all participants were institutionalized and from different age groups, which has proven to be even more challenging.

When analyzing the answers of all participants to this question, both professionals and other elements of the staff, five categories emerged (cf. Figure 2).

One of the main difficulties experienced by the psychologists/researchers and by all the technicians involved relates to the difference in the levels of activity of the children and the elderly (the latter with many limitations concerning mobility). According to the technicians at the children's institution, "such children need to live with a more dynamic population, which is closer to their kind of energy" (CRT). This aspect makes it difficult, at times, to choose and implement activities: "Sometimes, the great excitement of children, in contrast to the difficulties the elderly experienced getting around, did not enable us to carry out different activities in harmony" (IS). To the walking difficulties was added the low level of literacy of the old adults, as well as of some of the children, which conditioned the choice of activities, the ability to reflect, both verbally and in writing, and contributed to restrictions at the level of expression of content and emotions.

The amount of time that was shared (two hours per month) between children and old adults may have also influenced the establishment and depth of the bonds that were created. As stated by one of the technicians working at the children's institution, "They learned some things with the elderly, however, the time-shared, in our opinion, was not enough" (IS). As

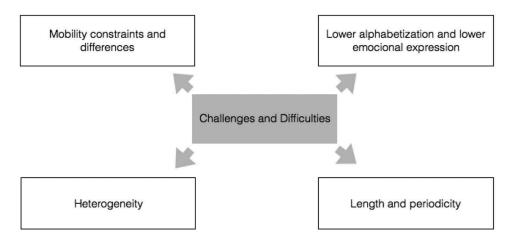


Figure 2. Challenges and difficulties mentioned by the participants.

they have many activities in their day-to-day routines, children seem to have more difficulty valuing the benefits of this program. According to another technician, "After the meetings, the children were always enthusiastic, always enjoying all the proposed activities. However, after arriving at the institution, such experiences faded, dissolving once they began new activities and were integrated again into the remaining community" (CRT). On the other hand, for the elderly, the length of the program was identified as a difficulty, since they would have wished that the sessions were more frequent, in face of the large value they gave to the meetings.

#### Discussion

Our results suggest that the IP implemented had important benefits for all participants, supporting previous research findings (Hannon & Gueldner, 2008; Heyman & Gutheil, 2008; Holmes, 2009; Jones et al., 2004; Kamei et al., 2011; Kuehne, 2003a, 2003b; V. Kuehne, 2005; Lopes & Costa, 2012; MacCallum et al., 2006; Ostir et al., 2004; Pinazo & Kaplan, 2007; Pinquart et al., 2000; Sánchez et al., 2008; Sánchez & Torrano, 2013; Schwalbach & Kiernan, 2002; Springate et al., 2008). In fact, improvements were observed in all the variables explored. For old adults, in particular, the main impact of the program was visible through a decrease in levels of loneliness and depression, when compared to participants in the control group. The qualitative data support the quantitative results, revealing important changes in the social and psychological well-being of old adults after participating in the program. Also, the results highlight the overall sense of joy on the part of the elderly from being in the program, which continued beyond the meeting hours (Heyman & Gutheil, 2008).

Additionally, we found that this program encouraged the improvement of old adults' mental health, which supports other research results (Jones et al., 2004; Kamei et al., 2011; Ostir et al., 2004). Indeed, we consider the relationships that were created during the IP to have provided effective psychological support because of the increase of each participant's sense of self-worth. Both generations shared experiences, took pleasure in the activities with each other, and created new relationships, which contributed to increasing the social networks of old adults, thus preventing situations of loneliness and isolation (MacCallum et al., 2006; Sánchez et al., 2008; Sánchez & Torrano, 2013).

For the older adults, in particular, this IP has brought a purpose to their lives, for they cared not only for the children, but also about the interactions, activities, and other people involved. They felt more energetic and motivated concerning their daily routines. It could be the case that the transition to a nursing home, along with mobility difficulties and aging, have led these older adults to believe that the best moments in their lives were already gone. So, when they felt involved in other experiences, some of them for the very first time, and when they met new boundaries and new people, we believe that this has made them realize that they can still be active people even while aging; they can have good experiences still. Most of all, such an experience seems to have made them believe in their self-worth, and in their ability to (still) be useful and loved.

As for the children, we observed an increase in their levels of happiness and self-esteem, along with a decrease in their depression and loneliness levels. In particular, we found a significant improvement in their self-esteem (V. Kuehne, 2005). We consider this program to have made them feel important to their peer group, which may have had an important impact on them, considering their stage in life. Indeed, each child seems to have begun to develop her/his identity as unique, feeling important from having all the attention and affection of others (old adults and psychologists/ researchers), which had a positive impact on their development and selfconcept. Concerning depression and loneliness differences, in addition to the small number of participants, such results can also be explained by the routines of the children's institution. In fact, this institution presents a familiar environment with a diversified routine: all children are very close to each other and to the staff, so it is less likely that they will present high levels of loneliness, when compared to old adults, who did not seem to have very close relationships with other residents at the nursing home, and who do not have as many opportunities for leisure as the children.

Another benefit of such IP and intergenerational activities for children, also found in the present study, is the construction of a different image of aging or, in some cases, a more proximal contact with older people, in particular, with a grandmother or grandfather figure, who had not been present in their lives.

Additionally, all staff and professionals involved in this IP agreed that this experience was beneficial for all those who were directly or indirectly involved: participants, other children and the elderly, professionals, and community.

## Limitations

This program has presented benefits for all participants, supporting the literature review. Nevertheless, some limitations of the study must be addressed.

Notwithstanding the results, we are aware that the first and most important limitation of the study relates to the sample size and the sampling method and, consequently, its lack of representativeness or generalizability for our observations and conclusions. Due to the nature of this research study, the researchers limited their focus to two local institutions and with participants previously selected by other professionals (who knew them well), which may have led to biases in the sample, such that it is possible that only those interested in and curious about the program participated in the study. Finally, the informal examination of the qualitative data may limit the validity of our conclusions and recommendations.

The profile of our sample (all institutionalized participants) may be an advantage, given the gap in the existing research concerning these populations (particularly, considering children). Yet, it may have also worked as a limitation in this program, considering the increased difficulties that it brought, mainly concerning the children's emotional and behavioral management challenges. As for the older adults, the participants were experiencing different stages of adaptation to institutionalization and had many mobility difficulties, which conditioned the type and range of activities that we could offer them and the children (who had high levels of energy). Perhaps it would have been more beneficial to these specific (institutionalized) populations if children were more expressive and empathetic (regarding the older group), or if the elderly were more active and dynamic (in regard to the children).

Another limitation of the present study was the low literacy level of the older participants. This forced changes and extra care when planning activities, and made it more challenging to conduct some of the reflections during the program.

One final limitation concerns the imbalance between male and female participants, as well as the frequency of sessions. Although monthly sessions were an imposition of this program, we believe, as well does the staff involved, that this program could have had a greater impact with more frequent sessions.

## **Future implications**

Despite its limitations, the results from this program encourage this type of intergenerational intervention, in light of its impact on both generations. We consider it important to raise the awareness of professionals, institutions, and communities in general regarding their (potentially) active role in the implementation of this kind of program, through which they have the power to create social networks and to foster the well-being of children and old adults. Our results also suggest that intergenerational groups have the potential to provide new awareness and respect across generations and can improve the quality of individual lives throughout the process.

## Conclusions

This study, like others in the literature, helps to demonstrate that IPs have a positive impact in the lives of participants, as well as on institutions and the larger community. For the children, for instance, the present IP helped to raise their self-esteem. Indeed, intergenerational contact can be an important dimension in the development of identity in children and adolescents, hence contributing to the promotion of their psychological development, and the prevention of risk behaviors. As for old adults, this IP showed a significant impact in reducing depression and loneliness levels. In fact, by participating in this program, they improved their sense of worth, their well-being, and started to feel more confident about their lives and their aging. This experience gave the elders a purpose and made them feel useful, in addition to working as an important resource to promote relationships and social networks.

Furthermore, our IP had an impact on both groups' institutions. All institutions and staff involved, as well as the other children and old adults who did not participate in the program, experienced some of the benefits of this intervention, which was visible from their interest in the sessions. In general, we believe that this was an important initiative to promote closer contact across generations. Moreover, this IP may be used as a model for other programs and intergenerational initiatives, as well as for other research projects with this kind of intervention, especially because it has the particularity of addressing both young and elderly institutionalized populations. If we can recover the place of old adults in society, and foster what they should offer through intergenerational connections, then we can achieve a better community with better quality of life for all ages.

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