

## Psychological adjustment and language development of young children in residential care

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In Portugal, 98% children under the age of three removed from their birth families are living in Residential Care (RC) centres. The early placement of children in RC can dramatically affect their development. This study aims to: identify the frequency of internalizing, externalizing and total problems, as well as the average number of words used by young children in RC; compare the frequency of these children's problems and their vocabulary to a Portuguese normative sample that allowed for the validation and standardization of the ASEBA Battery in Portugal; analyse differences among the children in RC according to gender, preschool integration, presence of siblings in the same RC centre, and the size of the RC centre itself and explore the correlations between the adjustment measures and language development and sociodemographic variables. One hundred and sixteen Portuguese children (56.9% female) ranging from 0 to 71 months (under 6 years) participated in this study. Data were collected using the ASEBA Battery. Results showed that these children presented a higher level of vulnerability regarding psychological adjustment and language development, when compared to children living within families, especially those separated from their siblings and living in a context which was not able to provide enough contact with other children. These findings highlight the importance of adopting measures such as family foster care (instead of RC), especially at this age, in order to give these children the chance of living in a normative and family context.

**Key words:** Psychological adjustment; Language development; ASEBA Battery; Young children; Residential care.

The early years of the child's life are crucial for his/her development, since the greater plasticity of the brain in this phase favours the promotion of its potentialities (Willrich, Azevedo, & Fernandes, 2009). This is also enhanced by the appropriateness of the experiences provided to the child (Johnston, 2009; Nóbrega & Minervino, 2011). Some risk factors, such as biological (e.g., developmental disorders) and contextual (e.g., residential care) ones may jeopardize the child's development (Nascimento & Piassão, 2010).

Longitudinal studies have shown that early placement in Residential Care (RC), during the first six months of the child's life, dramatically affects emotional, cognitive, social and neuro-psychological development (Misquiatti, Nakaguma, Brito, & Olivati, 2015; Zeanah et al., 2009), with possibly irreversible consequences (Cavalcante, Magalhães, & Pontes, 2007). Therefore, RC

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may be a risk factor, especially when caregivers are poorly skilled; when there is an inadequate child/caregiver ratio; when the physical space is overcrowded; and when there are little opportunities of experiencing an adequate stimulation (Nascimento & Piassão, 2010). However, the consequences may be curtailed by factors such as improved RC quality, shorter stays, and the presence of siblings in the RC centre (Álvares & Lobato, 2013), as well as post-institutionalization contexts (Bronfenbrenner, 1996).

Studies analysing the impact of placement of preschool-aged children in RC are scarce (Cardona, Manes, Escobar, López, & Ibáñez, 2012; Misquiatti et al., 2015), particularly the ones aiming to consider behavioural and emotional problems (Egger & Angold, 2006) since clinical professionals' attention is often focused on the aggressive, hyperactive, challenging, anxious, volatile, disruptive, inflexible or inattentive behaviours. Due to the scarcity of research, this study sought to focus on a sample of preschool children (under the age of 6) to react to this pressing need. Nevertheless, these behaviours are very common in children's development (Wakschlag et al., 2007) and tend to stabilise over time, particularly when manifested early (Alink et al., 2006). Screening these problems during the first two years of life allows for early intervention and the prevention of other more severe troubles.

Studies have shown that there is a higher incidence of health problems in children living in RC when compared to children living with families (Maclean, 2003). A high index of Externalization Problems and Total Problems reported by caregivers through CBCL (Achenbach & Rescorla, 2000) in children aged 3 to 5 has been identified (Marcovitch et al., 1997). Beckett and colleagues (2002) concluded that the length of stay in RC was positively correlated with the amount of problems shown by the children.

Maclean (2003) found that the experience of RC placement in children aged under 2 increased the likelihood of showing behavioural problems, namely, eating disorders, unhealthy peer relationships, short attention span and stereotypical behaviours. Repeated movements (e.g., rocking) reflect a strategy of self-relaxation or the child's attempt to self-stimulate when alone. Children who live in RC centres often remain in their baby cots or play alone on the floor, which leads to inadequate motor and cognitive stimulation (Loman, Wiik, Frenn, Pollak, & Gunnar, 2009).

The delay in cognitive, motor and language developments is frequent in children placed in RC (Cardona et al., 2012; Dozier, Stovall, Albus, & Bates, 2001; Loman et al., 2009; Maclean, 2003; Manso, 2003; Nóbrega & Minervino, 2011; Otieno, Nduati, Musoke, & Wasunna, 1999). Language development is an extremely complex process which is affected by the environment where the child is, by the social relationships established and by the child's individual characteristics (Sheridan, Dury, McLaughlin, & Almas, 2010). Language delay refers to semantic and phonological verbal fluency (Cardona et al., 2012) and Misquiatti and colleagues (2015) concluded that children in RC centres use fewer words than their peers in normative samples. Manso (2003) reported that children in RC presented verbal immaturity with vocabulary (i.e., word definition), verbal memory (i.e., repetition of sentences after hearing), verbal fluency (i.e., expressive language speed) difficulties and inability to match words and meanings (i.e., opposite words).

Zeanah and colleagues (2003) and Misquiatti et al. (2015) considered that irreparable damage regarding language development was strongly related to the experience of separation and loss of significant figures. Other factors that are closely related to language development damage are the caregiver's poor education and lack of preparation to stimulate the child (Morais, Leitão, Koller, & Campos, 2004; Scarr & Eisenberg, 1993); the child's difficulty to build an affective and long-term relationship with a caregiver, due to staff turnover and practices of collective care, characterized by impersonality (Nóbrega & Minervino, 2011; Zeanah et al., 2003) and the lack of opportunities of social interaction and active participation in adult-child conversations (Borges &

Salomão, 2003). Children who have responsive and empathic caregivers, who frequently interact with them, have more exploratory behaviours, healthier relationships with peers, as well as better developmental outcomes (Scarr & Eisenberg, 1993).

Language developmental delays also seem to be related to the length of stay in RC, since the longer the child remains in the RC centre, the worse the developmental outcomes are (Loman et al., 2009; Nóbrega & Minervino, 2011). These delays occur mainly when the services provided are institutional and do not respect the individual characteristics of the child (Sigal, Perry, Rossignol, & Ouimet, 2003). Furthermore, the earlier the child's placement in RC, the greater the probability of delaying language development (Nóbrega & Minervino, 2011; Sigal et al., 2003).

Portuguese children removed from their families are almost always placed in RC centres. Despite the Portuguese Law defining that children up to the age of 6 should be placed in foster families (art. 46<sup>th</sup> LPCJP [Law for the Protection of Children and Youngsters in Danger]), recent statistical data show that 98.5% of children under 3 removed from their birth families are placed in RC centres (ISS, IP, 2018). In order to minimize the impact of institutionalization, it is essential to ensure the child's right to live within a family (Delgado, 2010; Silva & Aquino, 2005), as well as attend preschool so that the child can enjoy stimulating and normalizing experiences (Lordelo, 2002). Therefore, the aims of this study are: (1) to identify the frequency of internalizing, externalizing and total problems, as well as the average number of words used by young Portuguese children in RC; (2) to compare the frequency of these children's problems and their vocabulary to the Portuguese ASEBA normative sample that allowed for the validation and standardization of the ASEBA Battery in Portugal (Achenbach et al., 2014); (3) to analyse the differences related to psychological adjustment and language development among the children in RC according to gender, preschool integration, presence of siblings in the same RC centre, the size of the RC centre itself and child/caregiver ratio and (4) to explore the correlations between the adjustment measures and language development and the child's individual variables, such as age, reason for placement and length of past/present institutionalization.

## Method

### *Participants*

One hundred and sixteen children (56.9% female) aged 0 to 71 months participated in this study ( $M=38.04$ ,  $DP=18.72$ ). These children were living in 17 RC centres in nine districts of Portugal, for 18.63 months on average ( $DP=13.79$ , ranging from 1 to 57). Some of these children had already been in other RC centres for 1 to 44 months ( $M=2.53$ ,  $DP=6.55$ ). The main reasons that had led to the children's placement in RC were parental neglect ( $n=78$ , 67.2%) and lack of alternative family care ( $n=23$ , 19.8%). Most of these children ( $n=89$ , 76.7%) had siblings, however, only 44.8% of these were living together in the same RC centre. Only 36 children (31.0%) were attending a crèche or kindergarten, and the remaining ones (69.0%) spent most of their time at the RC centre.

One hundred and ten participants (94.8%) were living in gender mixed centres and six participants (5.2%) were living in female RC centres. Furthermore, 69.0% children ( $n=80$ ) were living in medium sized centres (ranging from 13 to 24 children), 17.2% ( $n=20$ ) were living in large sized centres (over 25 children) and 13.8% ( $n=16$ ) were living in small sized centres (up to 12 children). There was no statistically significant relationship between the type of centre regarding gender segregation and size,  $\chi^2(2)=2.85$ ,  $p=.241$ . In all the RC centres there were children of different ages, ranging from 0 months to 19 years, and there was no centre specially for children

under five. In general, the child/caregiver ratio presented an average of 1.30 ( $DP=0.39$ ), ranging between 0.70 e 2.67.

The normative sample used for comparison is the national representative sample that allowed for the validation and standardization of the ASEBA Battery in Portugal (Achenbach et al., 2014), and was defined following a stratified random sampling method, which considered the distribution of the Portuguese population by region, gender and age. This sample is made up of 750 children (52.1% male), aged 0 to 71 ( $M=42.50$ ,  $SD=12.93$ ), living with at least one parent.

### *Instruments and measures*

In order to evaluate the psychological adjustment of children, the *Child Behavior Checklist for ages 1½-5* (CBCL 1½-5) of the ASEBA Battery for preschool (Achenbach et al., 2014) was used. This questionnaire was filled in by the referral caregivers of children aged 18 months to 5 years old, in accordance to the frequency by which these children expressed 100 different behaviours and skills, and thus, allowing for the identification of emotional and behavioural problems.

The development of the children's language was evaluated using the *Language Development Survey* (LDS) of the ASEBA Battery for preschool (Achenbach et al., 2014). This questionnaire was given to the referral caregivers of children aged 18 to 35 months and allowed for the identification of the developmental level of the children's language in accordance to a list of 310 words, amongst the first learnt by most children.

The *ASEBA Battery* (Achenbach et al., 2014) is an instrument that was duly adapted to the Portuguese population and obtained good validity and reliability rates. The Cronbach's Alpha figures obtained in the present study ranged from .865 for Internalizing Problems to .997 for the number of words, whereas in the ASEBA Battery sample the respective figures varied from .834 to .998.

The children's individual variables were collected using the Previous Information Survey (PIP) included in the ARQUA-P: *A Comprehensive Evaluation System for Residential Care in Portugal* (Rodrigues, Barbosa-Ducharne, & Del Valle, 2015). PIP allows for the collection of socio-demographic information (e.g., date of birth, age, gender, schooling, length of placement, reasons for institutionalization and previous placements); health data (e.g., medical needs) and information on the family of the children living in the RC centre.

### *Procedures*

Research procedures were approved by the Ethics Committee of the University and all necessary ethical, deontological and legal requirements were assured. Prior to visiting each participating RC centre, a Declaration of Informed Consent for the collection of data was signed by the Director. Participation was strictly voluntary and the use of codes safeguarded the anonymity of the participants. The inclusion criteria for children were as follows: aged 71 months or less and being at the RC centre for at least 2 months. The sample consisted of all children who met these inclusion criteria, with a minimum of 70% of children in small RC centres, 40% in medium RC centres and 30% in large RC centres.

### *Data analyses*

Data were analysed using the statistical software IBM SPSS – version 23 (IBM Corp, 2014). The frequencies of Internalizing, Externalizing and Total Problems and the number of words used

by the children were compared to the normative and representative sample of the Portuguese population (Achenbach et al., 2014). T tests for independent samples and univariate ANOVA's were conducted to explore differences related to Internalizing, Externalizing, Total Problems and Language Development according to gender, the presence of siblings in the same RC centre, external school attendance and the RC centre size. Pearson correlations were performed between the Internalizing, Externalizing, Total Problems and Language Development variables and the child's individual and the RC's contextual variables. Finally, a simple linear regression analysis was performed considering the variables that obtained a statistically significant Pearson correlation, in order to predict the variance of the dependent variable based on an independent variable.

## Results

The results are presented following the study's objectives. Internalizing, Externalizing and Total Problems results are given first, in reference to the normative cut-off points for a Portuguese preschool population. The standardized results obtained from the ASEBA Battery (T-scores) were read considering three levels of severity: normative, borderline and clinical levels. For the three scales which were analysed (Internalizing Problems, Externalizing Problems and Total Problems), the following cut-off points were considered: the normative scores corresponded to T-scores under 65; borderline scores corresponded to T-scores ranging from 65 to 69; clinical ones corresponded to T-scores above 69. A normative level means that situations are not problematic; a borderline level indicates the existence of situations that deserve clinical attention and further evaluation; and a clinical level reveals difficulties of psychological adjustment. Table 1 shows the frequencies of each severity level, by scale, for both the study sample and the normative Portuguese preschool population.

Table 1

*The ASEBA Battery Scales scores according to the cut-off points, in percentage*

		Normative level		Borderline level		Clinical level	
		National sample	Study ample	National sample	Study sample	National sample	Study sample
CBCL	Internalization problems	82.6%	83.5%	10.0%	7.8%	7.4%	8.7%
	Externalization problems	90.3%	80.0%	4.9%	11.3%	4.9%	8.7%
	Total problems	87.2%	85.2%	6.8%	8.7%	6.0%	6.1%

The analysis of the scores obtained in the three problem scales, by reference to cut-off points, showed that a high percentage of children were classified as borderline or clinical cases. This result indicated psychological problems and maladaptive behaviours pointing to signals of psychopathological symptoms. The analysis of the frequencies, as recommended by Achenbach and Rescorla (2000), showed that the sample of the present study presented higher scores at the clinical level and lower scores at the normative one, when compared to the representative sample of the Portuguese population, reinforcing the incidence of symptomatology of emotional and behavioural problems. The prevalence of symptoms of psychological maladjustment in the participants of this study was evident in the Total Problem scale, where the sum of the percentages of children with borderline and clinical scores amounted to 14.8%. Despite these figures, it is possible to observe that a significant percentage of children living in RC present a normative psychological adjustment similar to the representative sample of the Portuguese population.

Table 2 shows the scores of the mean number of words spoken by the children spontaneously, according to the caregivers, based on the normative cut-off points for the Portuguese preschool aged population. The results were read considering two levels of severity: normative and clinical levels. The cut-off points differ according to gender (female and male), as well as age group (18-23 months, 24-29 months, 30-35 months). A percentile  $\leq 15$  suggests delay in language development.

Table 2

*Scores of the average number of words according to the cut-off points, in percentage*

		Normative level		Clinical level	
		National sample	Study sample	National sample	Study sample
18-23 months	Female	89.4%	37.5%	10.6%	62.5%
	Male	92.7%	50.0%	7.3%	50.0%
24-29 months	Female	74.8%	70.0%	25.2%	30.0%
	Male	80.5%	20.0%	19.5%	80.0%
30-35 months	Female	52.8%	33.3%	47.2%	66.7%
	Male	53.7%	60.0%	46.3%	40.0%

The analysis of the frequencies showed that there was a large percentage of children at the clinical level, ranging from 30% to 80%. The sample of the present study presented higher scores at the clinical level and lower scores at the normative one, when compared to the representative sample of the Portuguese population, highlighting a language development delay in children living in RC centres.

There were no statistically significant differences in the scores of Internalizing (Portuguese population:  $M=8.89$ ,  $SD=6.04$ ; study sample:  $M=8.23$ ,  $SD=6.17$ ;  $t(114)=-1.14$ ,  $p=.257$ , 95% CI [-1.79, 0.48]), Externalizing (Portuguese population:  $M=11.63$ ,  $SD=6.78$ ; study sample:  $M=12.03$ ,  $SD=8.51$ ;  $t(114)=0.51$ ,  $p=.611$ , 95% CI [-1.17, 1.98]) and Total Problems (Portuguese population:  $M=31.89$ ,  $SD=17.12$ ; study sample:  $M=29.21$ ,  $SD=17.55$ ;  $t(114)=-1.64$ ,  $p=.104$ , 95% CI [-5.92, 0.56]), between the study sample and the representative sample of the Portuguese population. However, in terms of the number of words spoken by children spontaneously, the differences between the representative sample of the Portuguese population ( $M=0.55$ ,  $SD=0.34$ ) and the study sample ( $M=0.38$ ,  $SD=0.33$ ) were statistically significant,  $t(75)=2.94$ ,  $p=.006$ ,  $d=0.51$ , 95% CI [-0.29, -0.05].

The existence of differences regarding psychological adjustment and language development associated to the child's gender, the presence of siblings in the same RC centre, preschool integration (Table 3) and the size of the RC centre (Table 4) were analysed. Out of all these variables, only the presence of siblings in the RC centre determined differences between the groups.

Children who did not have siblings in the same RC centre presented more Internalizing, Externalizing and Total Problems than children living with their siblings. The mean number of words of children who did not have siblings in the same RC was significantly lower than the mean number of words of children with siblings in the same RC centre. Children who were able to attend a kindergarten outside the RC centre had lower rates of Externalizing Problems and spontaneously used a higher mean number of words than children who did not attend external preschool. These results indicate that the presence of siblings in the same RC centre and the child's preschool attendance seem to be protective factors to emotional and behavioural problems as well as to the child's development. Regarding the size of the RC centre, there were statistically significant differences among children in terms of the mean number of words spontaneously used, and the Post Hoc Scheffe test showed that the children housed in large or medium RC centres had an average number of words higher than those in small RC centres.

Table 3

*Differences regarding psychological adjustment and language development, associated to the child's gender, the presence of siblings in the same RC centre and preschool integration (t tests for independent samples)*

	Female (N=66) Mean (SD)	Male (N=49) Mean (SD)	t	p	95% CI	d
Internalizing problems	7.86 (5.87)	8.73 (6.58)	-0.75	.456	[-3.18; 1.44]	-0.14
Externalizing problems	11.12 (7.50)	13.27 (9.65)	-1.34	.183	[-5.31; 1.02]	-0.25
Total problems	27.08 (16.72)	32.08 (18.39)	-1.52	.131	[-11.53; 1.51]	-0.28
Mean number of words	0.59 (0.38)	0.54 (0.36)	0.61	.544	[-0.12; 0.23]	0.14
	Presence of siblings (N=63) Mean (SD)	Absence of siblings (N=52) Mean (SD)	t	p	95% CI	d
Internalizing problems	6.59 (5.06)	10.23 (6.82)	-3.29	.001	[-5.84; -1.45]	-0.61
Externalizing problems	9.81 (7.31)	14.73 (9.13)	-3.21	.002	[-7.96; -1.88]	-0.59
Total problems	24.14 (14.71)	35.35 (18.66)	-3.58	.001	[-17.41; -5.00]	-0.66
Mean number of words	0.68 (0.32)	0.46 (0.39)	-2.70	.009	[-0.38; -0.06]	-0.62
	Preschool integration (N=78) Mean (SD)	No preschool integration (N=37) Mean (SD)	t	p	95% CI	d
Internalizing problems	7.81 (5.91)	8.44 (6.31)	-0.51	.614	[-3.07; 1.82]	-0.10
Externalizing problems	9.57 (7.21)	13.21 (8.87)	-2.18	.032	[-6.95; -0.33]	-0.45
Total problems	25.43 (17.05)	31.00 (17.61)	-1.60	.112	[-12.46; -1.33]	-0.32
Mean number of words	0.69 (0.34)	0.33 (0.34)	4.48	.000	[-0.52; -0.20]	1.06

Table 4

*Differences regarding psychological adjustment and language development, associated to the size of the RC centre (univariate ANOVA's)*

	Small (S) Mean (SD)	Medium (M) Mean (SD)	Large (L) Mean (SD)	F	Df	$\eta p^2$	Dif. Pairs
Internalizing problems	8.94 (6.80)	8.10 (5.96)	8.14 (6.24)	0.12	2.11	.00	–
Externalizing problems	12.75 (8.85)	13.55 (9.49)	10.72 (7.54)	1.41	2.11	.03	–
Total problems	30.88 (16.90)	30.90 (17.27)	27.49 (18.07)	0.54	2.11	.01	–
Mean number of words	0.38 (0.41)	0.62 (0.35)	0.59 (0.36)	1.90**	2.74	.05	L-S, M-S

Note. \*\* $p < .01$ .

Table 5 presents the matrix of correlations between psychological adjustment measures and language development and individual and contextual variables, such as age, reason for placement (neglect and lack of alternative family care), length of placement, previous placements and caregiver-child ratio. The mean number of words spoken by the children is positively and significantly correlated with age, showing the increase of lexical fields with the child's age. Regarding the reasons for placement, the lack of alternative family care was positively and significantly correlated with Internalizing, Externalizing and Total Problems. It, thus, reinforced the impact that the child's previous life experience seems to have on his/her adjustment and development. The contextual variables (length of placement, previous placements and caregiver-child ratio) did not present significant correlations with the scales analysed. The simple linear regression analyses which were performed showed that the lack of alternative family care explained approximately 4% of the variance of Internalizing Problems [ $R^2 = .035$ ;  $F(1,11) = 4.13$ ,  $p = .044$ ], 6% of Externalizing Problems [ $R^2 = .059$ ;  $F(1,11) = 7.03$ ,  $p = .009$ ] and 5% of Total Problems

[ $R^2=.050$ ;  $F(1.11)=5.94$ ,  $p=.016$ ]. The age of the child explained 41% of the variance of the average number of words [ $R^2=.408$ ;  $F(1.75)=51.63$ ,  $p=.000$ ].

Table 5

*Correlations between the problem scales and the average number of words and individual and contextual variables*

		Internalizing problems	Externalizing problems	Total problems	Average number of words
Child's individual variables	Age	.088	.171	.148	<b>.639**</b>
	Reason for placement( $r_{pb}$ )				
	Neglect Lack of alternative family care	-.051	.033	-.037	.014
Contextual variables		<b>.188*</b>	<b>.242**</b>	<b>.223*</b>	.135
	Length of placement	-.045	-.013	-.005	.111
	Previous placements	-.020	.003	-.003	-.161
	Caregiver/child ratio	.139	.113	.139	.104

Note. \* $p<.05$ ; \*\* $p<.01$ .

## Discussion

Children in RC are more vulnerable and predisposed to emotional and behavioural problems. The results of the present study conclude that children in RC tend to have higher levels of Internalizing, Externalizing and Total Problems when compared to children living with their families (e.g., Beckett et al., 2002; Maclean, 2003; Marcovitch et al., 1997) and indicated a higher prevalence of psychopathology.

Regarding the mean number of words, the results of the current study agree with previous research indicating that children in RC show a greater language delay when compared to children living with their families (e.g., Cardona et al., 2012; Manso, 2003; Misquiatti et al., 2015). This may be because of the caregivers' poor preparation to adequately stimulate the child's development (e.g., Morais et al., 2004; Scarr & Eisenberg, 1993), the difficulty of the child to build an affective and lasting relationship with a caregiver (e.g., Nóbrega & Minervino, 2011; Zeanah et al., 2003), as well as the few opportunities children have to socially interact (e.g., Borges & Salomão, 2003), since most of them are not attending preschool settings, often staying in RC centres without any organized or structured activity (e.g., Loman et al., 2009).

The presence of siblings in the RC centres determined statistically significant differences, reinforcing that the placement of siblings together works as a protective and preventive factor and a promoter in the child's development (Álvares & Lobato, 2013). The differences between children attending and not attending external preschool contexts were expected, since kindergarten is a privileged context for language development (e.g., Lordelo, 2002). However, this assumption is only valid if the preschool includes concrete, innovative and specific activities aimed at the adequate stimulation of children (e.g., Cavalcante, Magalhães, & Pontes, 2009). Thus, it is essential to closely supervise the children's caregivers in order to understand the type of work that is being carried out and the impact it is having on the child's development.

The reason leading to the child's placement in RC – lack of alternative family care – was positively and significantly correlated with the psychological adjustment measures, emphasizing the impact of previous experiences on the child's adjustment and development (e.g., Misquiatti et al., 2015; Zeanah et al., 2009). Furthermore, these results are in agreement with previous studies (Misquiatti et al., 2015; Zeanah et al., 2003) showing the relationships between psychological

maladjustment and separation from attachment figures, namely the family. Thus, in order to minimize the impairment, it is essential to ensure that the child has family living opportunities, either with his/her birth family or with a foster family (Silva & Aquino, 2005).

As for the size of the RC centres, only statistically significant differences in the average number level of words were found, showing that medium and large houses promote further language development. This result can be understood as a many children of different ages in the RC centre are able to stimulate further communication skills in preschool children. However, the simple presence of other children may not always have a strong potential for stimulation, since this depends on the quality and quantity of positive interactions. Large RC centres can provide impersonal care services which do not respect the idiosyncratic characteristics of each child (Sigal et al., 2003).

### **Study limitations**

There were some limitations to the study, such as, the fact that the sample was of convenience, limiting the representativeness of the conclusions regarding the Portuguese RC system, but stressing the urgency of conducting a national study to identify signs and symptoms of mental health problems in children in RC. Another limitation is related to using only one data time point, which merely allows for a picture of how the children were doing at the time of data collection, and, thus, the problems that were identified did not reflect static characteristics of the children. Nevertheless, findings highlight specific needs of children under 6 placed in RC.

### **Conclusions and implications for practice**

The current study is relevant because it pays attention to the specific needs of preschool children in RC, who have been neglected by child protection research. The results show that the placement of children in an institution at an early age may be an important risk factor for the child's psychological adjustment and development. These results emphasized the greater vulnerability of the children living in RC when compared to children growing up in normative conditions. Children placed separately from their siblings and in a closed context that does not provide participation and contact experiences outside the RC centre are particularly vulnerable. Family interactions constitute the opportunity that children need to develop in a harmonious way, to their full potential and catch up from previous negative experiences. Results also reinforce the current Legislation which defines that priority should be given to family foster care, in particular for children up to six years of age.

Family foster care consists in placing the child in a selected family providing appropriate care for his/her needs, well-being and education (art. 46<sup>th</sup> LPCJP). It is essential to evaluate, select and train foster families and closely support and supervise them throughout the foster care process (Delgado, 2010). These families establish normative developmental contexts and provide the children with experiences adjusted to their characteristics and needs as well as the opportunity to maintain affective, secure and protective relationships, promoting self-regulation and allowing them to internalize rules and adjust patterns of behaviour that respond to their needs.

Early screening of the child's specific difficulties and needs is critical for appropriate recovery from early adversity, requiring the awareness of the RC caregivers in relation to the child's

expected behaviour at a certain stage of development and the presence of psychopathological symptomatology (Nascimento & Piassão, 2010). The use of standardized instruments can give professionals efficient and inexpensive tools for early screening. The ASEBA Battery is particularly useful as a screening instrument, since it resorts to multiple informants for a more comprehensive and ecological assessment of the child, providing early diagnosis and intervention (Achenbach et al., 2014).

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### **Ajustamento psicológico e desenvolvimento da linguagem de crianças em acolhimento residencial**

Em Portugal, 98% das crianças com menos de três anos de idade retiradas das suas famílias de nascimento vivem em casas de Acolhimento Residencial (AR). A colocação precoce de crianças em AR pode afetar drasticamente seu desenvolvimento. Este estudo tem como objetivo: identificar a frequência de Problemas de Internalização, Externalização e Total, bem como o número médio de palavras utilizadas por crianças em AR; comparar a frequência dos problemas e o vocabulário destas crianças com a amostra normativa da população portuguesa que permitiu a validação e a aferição da Bateria ASEBA em Portugal; analisar as diferenças entre as crianças em AR de acordo com o sexo, integração pré-escolar, presença de irmãos na mesma casa de AR e o tamanho da própria casa de AR e explorar as correlações entre as medidas de ajustamento psicológico e o desenvolvimento da linguagem e as variáveis sociodemográficas. Participaram neste estudo cento e dezasseis crianças portuguesas (56,9% do sexo feminino) com idades compreendidas entre os 0 e os 71 meses (menores de 6 anos). Os dados foram recolhidos através da bateria ASEBA. Os resultados mostraram que estas crianças apresentaram um maior nível de vulnerabilidade em relação ao ajustamento psicológico e ao desenvolvimento da linguagem, quando comparadas com as crianças que vivem com as suas famílias, principalmente aquelas separadas dos seus irmãos e que vivem num contexto fechado que não proporcione experiências de contacto com outras crianças externas ao AR. Estes resultados reforçam a importância de se privilegiar a medida do acolhimento familiar (ao invés do AR), particularmente nesta faixa etária, para que as crianças tenham oportunidade de se desenvolver num contexto familiar normativo.

**Palavras-chave:** Ajustamento psicológico, Desenvolvimento da linguagem, Bateria ASEBA, Crianças, Acolhimento residencial.

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