

THE EFFECT OF LITERACY IN REFUGEE CHILDREN'S VOCABULARY SKILLS

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ABSTRACT

The present study aims to investigate the role of literacy in the acquisition of vocabulary in refugee children. Recent studies in bilingual children have found the beneficial role of literacy in lexical knowledge. In the present study participated ten refugee children with Greece as area of residence. Since 2015 over a million refugees came to Greece, either to stay or to continue deeper into Europe, the majority of which are from Afghanistan, Syria, Iraq, Pakistan, Iran and the Democratic republic of Congo. For the purposes of this study half of the participants received literacy support in Greek through schooling (i.e. the control group), whereas the other half received additional literacy support (three hours per week) attending teaching interventions (i.e. the experimental group). The examination of the participants was conducted in three stages: a pretest stage, followed by three-month teaching interventions and ended with the administration of a post-test. The participants were tested in vocabulary skill (i.e. expressive vocabulary) in both test and teaching intervention stages. The findings demonstrate better performance of the control group on vocabulary in the pre-test. However, this performance of both groups appeared equal after the end of the teaching interventions.

Keywords: Refugees, vocabulary knowledge, literacy.

INTRODUCTION

Children deriving from refugee backgrounds have experienced childhood adversity, which has impacted their academic, linguistic and social development. From a cognitive perspective, these traumatic experiences have been linked with negative effects on executive functioning, weaknesses in understanding instructions, organization of information and working memory problems such as difficulties in retaining instructions during problem solving (Cole, O'Brien, Gadd, Ristuccia, Wallace & Gregory, 2005; Kaplan, Stolk, Valibhoy, Tucker & Baker, 2016). Refugee trauma can also cause neurobiological dysfunctions in the brain by even impairing the development of specific regions such as the prefrontal and parietal lobes (Whittle et al, 2013). This in turn can contribute to difficulties in the development of attention, concentration, verbal declarative memory and language acquisition process (Hart & Rubia, 2012; Wilson et al., 2011). Poor schooling quality and reduced educational experience, as in refugee camps, has also been shown to have detrimental effects on cognition, as exhibited in children's low scores in various cognitive measurements such as Block Design, Digit Symbol, Digit Span and Matrix Reasoning (Ostrosky-Solis & Lozano, 2006; Shuttleworth-Edwards et al., 2004). In addition, migrant/refugee children's difficulties with literacy in Greek and school vocabulary affect their school performance (Papadopoulou & Agathopoulou 2017; Tzeveleku et al. 2013).

However, as soon as literacy begins to be developed the development of language and cognitive skills are also enhanced (Ardila et., 2010). Regarding the formal education for refugee children in Greece, the Institute of Educational Policy provides reception classes for primary and secondary education that covers the levels from A1 to A2 and was established since 1980. The

programme is aimed for refugee children who either have a minimal level or no literal skills. Their target is to teach the Greek language to these children as a second language, in order to enhance their communication skills and to start the process of their integration into the society. They are offered with the opportunity to learn information about the Greek culture and they learn skills that will also help them in their interpersonal communication, socialization and later on professional life.

LITERATURE REVIEW

Research in monolingual children claims that limited vocabulary development leads to incomplete development of literacy (Swanson et al., 2008; Lee 2011) which also affects school performance (Duff et al. 2015; Rescorla 2005; Ricketts et al. 2007). Similar studies have been conducted with bilingual children as well.

Studies on bilingual children from different educational settings have manifested that children attending schools, where both languages are supported, have higher cognitive skills than children attending schools, where one language, mainly the majority language, is supported. For instance, bilinguals coming from bilingual educational settings scored higher on fluid intelligence, verbal working memory and updating tasks compared to bilinguals coming from educational settings where the majority language is mainly supported (Andreou 2015). Similar findings were demonstrated in other studies (Leikin et al. 2009).

With respect to the bilingual educational setting and its connection with vocabulary knowledge, it has been found that bilingual children who receive language support in their L1 performed better in vocabulary tasks in both languages compared to children who are educated only in the majority language (Cobo-Lewis et al., 2002; Oller & Eilers, 2002).

In linguistic tasks recent studies have shown that bilingual children, who attended a bilingual educational setting and who lag behind in the vocabulary scores (in Greek) compared to bilingual children attending monolingual schools, showed similar performance on Elicited Imitation Task with the bilinguals who attended a monolingual educational setting (Andreou et al. 2020). Likewise, similar results have been found in tasks that have to do with narrative abilities (Andreou & Tsimpli, 2020) and referential expressions (Andreou et al. 2015).

So far, the number of studies investigating the efficacy of teaching intervention in refugee children is very limited. Moreover, research has not in depth examined the extend to which language and literacy abilities develop in refugee children who acquire Greek as a second language.

METHODOLOGY

Participants

Participants of the present study were ten typically developing refugee children with Arabic as their mother tongue (10-12 years of age), living in Boetia (Greece). Two groups were administered: The control group consisting of 5 children, who acquired literacy support by being schooled in Greek; the experimental group, consisting of the remaining 5 children, who acquired extra literacy support through teaching interventions received two hours per week. The children did not have any knowledge in Greek prior to the study.

Material

In order to ensure the participants' normal intelligence level, the children were tested in a non-verbal intelligence task before the beginning of the pre-test. (Raven, Raven & Court 1998). The pre-test stage, examined expressive vocabulary. An identical test was administered in the post-test stage, directly after the end of the intervention, (immediate post-test), in order to evaluate the potential improvement in the vocabulary skills of the children. A series of three-month teaching interventions was conducted, where the participants belonged exclusively in the experimental group. During the interventions, the children were deployed with new vocabulary on a daily basis, implementing various teaching techniques, providing information regarding morphosyntactic features. The participants experienced all four categories of language skills (listening, speaking, reading and writing); therefore they acquired literacy skills in Greek.

RESULTS

No differences were detected among the two groups in the non-verbal intelligence task. For the statistical analysis non-parametric tests (Mann Whitney U) were performed.

From Table 1 we observe that the control group outperformed the experimental group ($U=5.324$; $z=-2.142$; $p=.031$) in the pre-test expressive vocabulary but not in the post-test.

Furthermore, as we observed in the within group comparisons (Wilcoxon tests), in the experimental group the knowledge of the receptive vocabulary has been increased ($z=1.882$; $p=.049$).

Table 1. Participants' percentage means score.

Groups	Raven task (%)	Pre-test expressive vocabulary (%)	Post-test expressive vocabulary (%)
Experimental group	72%	8%	13%
Control group	74%	12,5%	14%

DISCUSSION

The aim of the present study was to investigate the impact of literacy on expressive vocabulary in refugee children.

The children were exposed to literacy by means of teaching interventions. For testing the literacy effect, the experimental group (consisting of half of the participants) received teaching intervention aside from their school curricular activities, whereas the control group (consisting of the other half of the participants) received class lessons in the camp. All participants took part in the pre- and post-tests for determining their morphosyntactic and vocabulary abilities in Greek prior to and after the end of the interventions.

The findings revealed that the two groups varied in terms of performance only before the intervention, with the experimental group presenting inferior vocabulary skills in comparison to the controls. However, the groups did not demonstrate any variation after the end of the intervention stage. The results indicate the positive influence of the interventions on linguistic skills. (Robinson & Sorace 2018; Beck & McKeown 2007).

CONCLUSIONS

The aim of this project was to explore the extend to which a systematic enrichment of vocabulary input through teaching interventions could have a positive effect on the language

skills of the refugee children. It is however implicit that further research is required in order to adequately investigate the topic.

REFERENCES

- Andreou, M. & Tsimpli I. M. (2020) Bilingualism, biliteracy and syntactic complexity: the role of crosslinguistic influence and cognitive skills. *Language Acquisition, Processing and Bilingualism*, TRT7.
- Andreou, M., Dosi, I., Papadopoulou, D & Tsimpli I. M. (2020) Heritage and Non- heritage Bilinguals: the Role of Biliteracy and Bilingual Education. *Studies in Bilingualism*. Amsterdam: John Benjamins.
- Andreou, M., Knopp, E., Bongartz, C. & Tsimpli, I.M. (2015) Character reference in Greek-German bilingual children's narratives. In L. Roberts, K. McManus, N. Vanek & D. Trenkic (Eds.), *EUROSLA Yearbook 2015* (pp. 1-40). Amsterdam: John Benjamins
- Ardila, A., Bertolucci, P. H., Braga, L. W., Castro-Caldas, A., Judd, T., Kosmidis, M. H., . . . Rosselli, M. (2010) Illiteracy: The neuropsychology of cognition without reading. *Archives of Clinical Neuropsychology*, 25(8), 689–712.
- Beck, I.L., & McKeown, M.G. (2007) Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *Elementary School Journal*, 107(3), 251-271.
- Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005) *Helping traumatized children learn: Supportive school environments for children traumatized by family violence*. Boston, MA: Massachusetts Advocates for Children.
- Duff, F.J., Reen, G., Plunkett, K., & Nation, K. (2015) Do infant vocabulary skills predict school-age language and literacy outcomes? *Journal of Child Psychology and Psychiatry*, 56(8), 848-856.
- Hart, H., & Rubia, K. (2012) Neuroimaging of child abuse: a critical review. *Frontiers in human neuroscience*, 6, 52.
- Lee, J. (2011) Size matters: Early vocabulary as a predictor of language and literacy competence. *Applied Psycholinguistics*, 32(1), 69-92.
- Leikin, M., Schwartz, M. & Share, D. L. (2009) General and specific benefits of bi-literate bilingualism: a Russian-Hebrew study of beginning literacy. *Reading and Writing* 23, 269-292.
- Oller, D. K. & Eilers, R. E. (2002) *Language and literacy in bilingual children*. Clevedon: Multilingual Matters.
- Ostrosky-Solis, F., & Lozano, A. (2006) Digit span: Effect of education and culture. *International Journal of Psychology*, 41(5), 333-341.
- Papadopoulou, D. & Agathopoulou E. (2017) Effects of external and internal factors on language proficiency in Greek reception classes. In 16th International Conference of the Greek Applied Linguistics Association, Migration and Language Education, 6-8 October 2017, Aristotle University of Thessaloniki, Greece.
- Perfetti, C. A. (1985) *Reading Ability*. Oxford University Press, New York.
- Raven J., Raven J. C. & Court J. H. (1998) *Raven manual section 4: Advanced Progressive Matrices*. Oxford: Oxford Psychologists Press.
- Rescorla, L. (2005) Age 13 language and reading outcomes in late-talking toddlers. *Journal of Speech, Language, and Hearing Research*, 48, 459-472.
- Ricketts, J., Nation, K., & Bishop, D.V. (2007) Vocabulary is important for some, but not all reading skills. *Scientific Studies of Reading*, 11(3), 235-257.

- Robinson, M. & Sorace, A. (2018) The influence of collaborative language learning on cognitive control in unbalanced multilingual migrant children. In *European Journal of Psychology of Education*, 1-18.
- Shuttleworth-Edwards, A. B., Kemp, R. D., Rust, A. L., Muirhead, J. G. L., Hartman, N. P. & Radloff, S. E. (2004) Cross-cultural effects on IQ test performance: A review and preliminary normative indications on WAIS-III test performance. *Journal of Clinical and Experimental Neuropsychology*, 26(7), 903–920
- Tzevelekou et al. (2013) Second language assessment in the Greek educational system: The case of Reception Classes. *Glossologia* 21, 75-89.
- Whittle, S., Dennison, M., Vijayakumar, N., Simmons, J., Yucel, M., Lubman, D., . . . Allen, N. (2013) Childhood maltreatment and psychopathology affect brain development during adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(9), 940–952.
- Wilson, K. R., Hansen, D. J. & Li, M. (2011) The traumatic stress response in child maltreatment and resultant neuropsychological effects. *Aggression and Violent Behavior*, 16(2), 87–97.