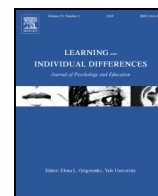




Contents lists available at ScienceDirect

Learning and Individual Differences

journal homepage: www.elsevier.com/locate/lindif

Links between children's language comprehension and expressive vocabulary and their personality traits: A longitudinal investigation

Pirko Tõugu*, Tiia Tulviste

Institute of Psychology, University of Tartu, Estonia

ARTICLE INFO

Article history:

Received 12 September 2015

Received in revised form 5 February 2017

Accepted 25 March 2017

Available online xxx

Keywords:

Language comprehension

Expressive vocabulary

Preschool children

Personality

Longitudinal study

ABSTRACT

The concurrent and longitudinal relationships between preschoolers' language comprehension and expressive vocabulary and children's personality traits were addressed in an Estonian-speaking sample. The two waves included 386 and 359 participants, respectively; 276 children participated in both waves, their mean age was 4 during the first and 6 during the second wave. Children's expressive vocabulary score showed main effects of extraversion, conscientiousness, and emotional stability. During the first wave the children who scored higher on emotional stability and conscientiousness had smaller expressive vocabularies than their age-mates. During the second wave children's expressive vocabulary was positively related to extraversion. There was no main effect of children's personality on their language comprehension, although some concurrent links could be established at the two time points. Children's earlier personality assessments did not predict their later language abilities.

© 2017 Elsevier Inc. All rights reserved.

1. Introduction

Language development in early childhood has been linked to children's future language, emotional, social, and cognitive development as well as their academic success (Conti-Ramsden & Durkin, 2012; Walker, Greenwood, Hart, & Carta, 1994). Yet, there is a great variation in early language development (Conti-Ramsden & Durkin, 2012). The present study uses a longitudinal design and focuses on Estonian-speaking preschoolers' language comprehension and production and their personality traits in order to establish the concurrent and longitudinal links between personality traits and language development.

Mother's education has been related to children's language development, and children of more educated mothers outperform their age-mates on many aspects of language development (Hart & Risley, 1995; Hoff, Laursen, & Tardif, 2002; Pan, Rowe, Singer, & Snow, 2005). Also, the rate of language development of girls is faster than boys: both, receptive and productive languages skills of toddlers and preschool-age girls are better than those of boys (Eriksson et al., 2012). More educated mothers use a more varied vocabulary and talk more to their children than less educated mothers (see Hoff, 2006, for review), and mothers talk more to their daughters as compared to sons (see Leaper, Anderson, & Sanders, 1998, for review). Attention has also been paid to children's personal characteristics that may affect the quality and

length of interaction (Conture, Kelly, & Walden, 2013; Paul & Kellogg, 1997; Slomkowski, Nelson, Dunn, & Plomin, 1992).

1.1. Child characteristics and language development

Social interaction approaches to language development stress the importance of face-to-face communication in early language development and the adjustment of child directed speech to child's language abilities (Gallaway & Richards, 1994; Snow & Ferguson, 1977). It is likely that the way people interact with children is also related to their personal characteristics. This implies that children who are highly social and outgoing, i.e. extraverted, may find interactional partners more easily and seek out more possibilities to communicate than children who are not as social. Shyness, in opposite, restricts children's social contacts, and shy children engage in fewer and shorter interactions with unfamiliar peers and adults in new situations. As a consequence, shy children receive less stimulation and practice of language skills than their not shy peers. Therefore, shyness and extraversion can be considered to be the different characteristics that affect learning language in social interaction. In addition, Mervielde and De Fruyt (1999, 2002) include the reverse measure of shyness in the measure of extraversion. There is an accumulating amount of research reports supporting the idea that being social could be beneficial, and being shy disadvantageous to language development (e.g., Coplan, Barber, & Lagace-Seguin, 1999; Prior et al., 2008; Slomkowski et al., 1992). Shy children have been shown to have smaller vocabularies than their less shy peers (Crozier & Badawood, 2009; Spere & Evans, 2009). Aspects of temperamental difficulty (e.g., negative affect and low executive control) have been found

* Corresponding author at: Institute of Psychology, University of Tartu, Näituse 2-211, Tartu 50409, Estonia.

E-mail address: pirko.tougu@ut.ee (P. Tõugu).

to be negatively (Salley & Dixon, 2007) and extraversion positively linked to the expressive vocabulary of toddlers (Slomkowski et al., 1992). In addition, extraversion has been related to higher receptive vocabulary at ages 2 and 3 (Slomkowski et al., 1992), and high emotionality has been linked to the lower receptive vocabulary of 4-year-olds (Noel, Peterson, & Jesso, 2008). More emotional 3–4-year-old children provide shorter and less informative narratives compared to their less emotional age-mates, while the narratives of more sociable children are longer and more cohesive than those of their less sociable peers (Noel et al., 2008). Poorer narrative skills are also reported for older (5–6-year old and 8–9-year-old) shy children as compared to less shy children of the same age (Crozier & Perkins, 2002).

At the same time, there are studies that have not found a link between child characteristics and language abilities. Westerlund and Lagerberg (2008) show that child difficultness is not related to child's vocabulary at the age of 18 months. For 4–6-year-old kindergarten children, some studies indicate no relationship between shyness and vocabulary for the normally developing children (Coplan & Armer, 2005; Noel et al., 2008; Spere, Evans, Hendry, & Mansell, 2009) or for children with a language impairment (Prior, Bavin, Cini, Eadie, & Reilly, 2011). Similarly, Spere and Evans (2009) report no relationship between grade one children's shyness and vocabulary test scores.

A few of the studies concentrating on the links between child characteristics and language development have been longitudinal, and the results are mixed. Slomkowski et al. (1992) have shown that children's extraversion score measured at the age of two predicts their language abilities at the age of three and at the age of seven. Spere and Evans (2009) have found a small effect of preschool age shyness on first grade verbal fluency and only marginal and non-linear effects on vocabulary. Prior et al. (2008) found no longitudinal effects of child temperament at the age of 8- and 12-months on vocabulary development at 24 months of age.

The potential sources of the mixed findings are the different informants used for child characteristics ratings, the different age of participating children, the particular child characteristic studied, the different language measures used, and the fact that the other possibly influential variables such as maternal education are not accounted for.

1.2. The present study

The present study sets out to investigate how is children's personality related to their language abilities throughout development during preschool years. Most prior research on the topic has been carried out in the Anglo-American cultural context where being outspoken is a valued characteristic (Bellah, Madisen, Sullivan, Swidler, & Tipton, 1986). Studies show that shyness is perceived more positively and has a smaller negative impact on life quality in East-Asian as compared to Western societies (see Durkin, 2009; Rapee et al., 2011). The present study is conducted in the Finno-Ugric context where silence is an accepted part of communication, and being silent does not carry any negative connotations (Tulviste, Mizera, & De Geer, 2011). In addition, it has been shown that the conversational style Estonian mothers use with their 2- and 4-year-olds is aimed mostly at directing children's behavior and not eliciting conversation (Tulviste & Raudsepp, 1997). Therefore, the early language experience of Estonian children could be quite different from the Anglo-American children and perhaps not so heavily dependent on child characteristics.

The present study focuses on the links between preschool children's comprehension and expressive vocabulary and personality traits using a longitudinal design. The present study uses the Hierarchical Personality Inventory for Children (HiPIC) that has a five trait structure (*Benevolence*, *Conscientiousness*, *Extraversion*, *Imagination*, and *Emotional stability*) and has been especially developed for children (Mervielde & De Fruyt, 1999, 2002). The inventory has been adapted to Estonian (Laidra, De Fruyt, & Konstabel, 2017). Most of the communication and social contact related characteristics are covered by the trait of

Extraversion that includes assessments of shyness and expressiveness alongside with energy and optimism. *Emotional stability* also includes characteristics relevant to social interaction, such as anxiety and self-confidence. *Benevolence* includes such subtraits as altruism, dominance, egocentrism, compliance, and irritability. *Conscientiousness* includes measures of concentration, perseverance, order, and achievement motivation. *Imagination* includes the subtraits creativity, intellect, and curiosity. All five personality traits were included in the present study.

Both language comprehension and expressive vocabulary are addressed in the present study. Comprehension is measured by a popular child language assessment tool: the Comprehension Scale of Reynell Developmental Language Scales III (RDLS; Edwards et al., 1997). Expressive vocabulary is measured using elicited narrative samples. Elicited narratives provide a relatively natural and ecologically valid sample of children's language and interaction, and the use of such samples is not restricted to any particular age range (Pan, 2012; Reese, Sparks, & Suggate, 2012). In prior research, measures of elicited narrative samples have been shown to correlate well with norm-referenced language tests (Ebert & Scott, 2014) also in other languages besides English (Smolík & Málková, 2011).

For the purpose of our study, a wide age-range is included, and a two-wave longitudinal design is used. Older children, children of more educated mothers, and girls as compared to boys are expected to display better comprehension abilities and larger expressive vocabularies at both time points. Based on earlier research, we expect such personality traits as extraversion and emotional stability to be linked to children's language comprehension and expressive vocabulary. We expect more extraverted children and more emotionally stable children to display better scores on language comprehension and expressive vocabulary than their less extraverted and emotionally stable age-mates at the time of first measurement, and we also expect the effect to be present at the later measurement. No specific hypotheses are proposed for the relationships between language measures and such personality traits as benevolence, conscientiousness, and imagination.

2. Method

2.1. Participants

Participants were recruited from kindergartens catering for typically developing children all over Tartu (the second largest town in Estonia with the population of 100,000) in 2007/2008 and again in 2009/2010. All children were participants in a larger European study IDEFICs (*Identification and prevention of Dietary and lifestyle induced health Effects In Children and infants*) (Ahrens et al., 2011). The present study concentrates on the Estonian additional block that was devoted to the investigation of language and narrative development.

Three hundred and eighty-six children (188 boys or 48.7%, 198 girls; mean age 4.24, range 3–5.4) participated in the first wave of the study. All participants spoke Estonian as their mother tongue. During the first wave of the study, 26 mothers (7.2%) had less than a high-school education, 154 (42.4%) had a high school diploma, and 183 mothers (50.4%) had at least a university degree. For the analyses, the maternal education variable was operationalized to form groups of children with mothers (1) who have no high-school education, (2) who have high-school education, and (3) who have at least a university degree.

One hundred and thirty seven boys (49.64%) and 139 girls (50.36%) participated in both waves. The rest of the families who participated in the first wave had moved, refrained from participating in the study, did not return the consent forms, or the child was absent from kindergarten during the period the data was gathered. It must be noted that the IDEFICs study is a health study and some of the children dropped out due to the fear of more invasive procedures (e.g., blood sampling). In addition, 75 children (36 boys) were recruited for the second wave. Chi-square tests revealed no systematic differences in the maternal education variable in the sample that participated in both waves and the

Download English Version:

<https://daneshyari.com/en/article/4940007>

Download Persian Version:

<https://daneshyari.com/article/4940007>

[Daneshyari.com](https://daneshyari.com)