Generation of Receptive Items for Negative Communication in Urdu Language

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Abstract

Language is the most crucial way of communication. Language development mainly involves receptive and expressive domains. The use of negations is another significant issue to discuss while understanding the language development domain. Therefore, the present study aims to generate receptive items for negations in Urdu. The study's objective is to generate receptive items for negations in Urdu. The present study is quantitative, and the study design is a cross-sectional survey. Participants were 170 Urdu-speaking children aged 3-5 years. Fifteen participants were retested to check their reliability. The study was conducted in Rawalpindi/Islamabad. The tool was developed in three rounds, and the final questionnaire was validated through content validity. The least acceptable value for the seven expert panels is 0.83. Univariate normality analysis confirmed that all the scores were normally distributed. The reliability of the Receptive scale for negations in Urdu was excellent for both internal consistency (Cronbach's $\alpha > 0.96$ for all domains) and test-retest reliability (Cronbach's $\alpha \geq 0.95$ for all domains). The study has practical implications regarding generating receptive items for negations in Urdu in Pakistan. The receptive language scale showed excellent reliability and validity, indicating its applicability to young children as a simple screening tool for receptive language in Urdu.

Keywords: Receptive Language, Negation, Urdu, Negative Items.

Introduction

People can communicate in different ways, such as speaking, writing, body language, and facial expressions (Raza et al., 2017). There are three significant aspects of language: lexical/semantic skills, syntactic/morphological skills, and functional communicative skills (Nordmeyer, 2018) encompassing two major domains: receptive (comprehension of language) and expressive (production of language) (Hockema & Smith, 2009).

Some authors have studied the pace of language acquisition (Witherington & Lickliter, 2009), while others argue in the context of task adaptability (Power & Schlaggar, 2017). One research elaborates on the role of cognitive abilities (Hui et al., 2020). Research also identifies experience-driven as well as automatic processes of language development (Syeda & Iqbal, 2021).

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The present study focuses on the development of the receptive domain, explicitly examining the role of negations in the Urdu language. Negatives can also indicate the absence, withholding, or removal of something positive, reflecting the negative motivation of shame (Nordmeyer, 2018). Children need to develop an understanding of spoken language before they can effectively express themselves (Klein & Perdue, 2018).

Negation is considered challenging to acquire and teach due to several reasons. First, due to their numerous meanings, applications, and rules, teaching negatives is difficult since they are not taught as nouns or adjectives. Second, it can be difficult for parents or teachers to pinpoint the particular feature of negation that a kid may find particularly difficult to comprehend. Last but not least, the use of negatives in a sentence has the potential to alter or reverse the meaning of the statement, which can make it challenging for kids to understand and communicate clearly (Ladusaw, 1992).

"Do not/do not," "does not/does not," "can't/cannot," "is not/is not," "wouldn't/would not," "will not/will not," "was not/was not," "were not/were not," and "did not/did not" are examples of negatives in the present tense. In inquiry forms like "Aren't you coming?" and "Isn't he tired?" they are also employed. The negative modal verbs "could not be," "would not have been," and "should not have" are also included (Bekteshi & Tafani, 2020). In order to grasp polarity, feelings, sentiments, and performance in the present, past, or future tense, negations are also a component of the Urdu language. In Urdu, "nah" (meaning "not"), "naa" (meaning "no"), "nahi" (meaning "no"), "mat" (meaning "do not" or "stop"), "baghair" (meaning "without" or "except"), and "bena" (meaning "without" or "except") are the most often used harmful particles of speech (Tian & Breheny, 2018).

There are three different types of negation in the Urdu language: morphological negation, which is typically accompanied by prefixes or suffixes and offers potential negative options, and explicit negation, which uses negative words to maintain the structure, manner, and polarity of the sentence (Dudschig et al., 2021).

An essay on Pakistan has emphasized the need to comprehend the variations in how Pakistani children learn and use Urdu (Nordmeyer & Frank, 2013). Similarly, a prior study on the syntax of the Urdu language sought to characterize the characteristics, origins, and derivations of negation markers in Urdu verbs (Fowler, 2006). Another study sought to enhance the precision of emotional communication by investigating the understanding and appropriate application of negation in the Urdu language (Kaup et al., 2006). By translating a speech and language-related scale that concentrates on the use of negation by young children in Urdu, the current study aims to shed light on negation in the Urdu language. This translation will further the literature on the Urdu language in general and help us comprehend how young children pick up on and use negation in spoken language.

This study's primary goal is to generate negation sentences in Urdu that are specifically made for developing children and those who have speech issues to make it easier for them to grasp the laws of negation. Children will find it simpler to understand and absorb the notion of negation in Urdu if these statements are delivered with clear illustrations.

In order to help the majority of people with Urdu language origins overcome their linguistic barrier, the study addresses the need for an assessment instrument in the national language of Urdu. The study will add to the body of knowledge by producing receptive items for negation in Urdu and verifying the scale in Pakistani culture. It will also offer an essential resource for the early stages of language acquisition.

This study will examine the position of developing receptive items for negation in Urdu, evaluate their validity and reliability, and administer the developed scale to both typically developing children and those who have language impairments. By achieving these goals, the study will advance our knowledge of negation in the Urdu language and offer a valid and accurate assessment instrument that can be utilized with children who are both typical and atypical.

Materials and Methods

Study Design

The study employed a cross-sectional survey design, utilizing a questionnaire that focused on incorporating negatives in the receptive domain of language development. Additionally, the scale was validated on a specific sample to ensure the reliability of the developed tool and the validity of the study.

Sample Size: The Sample was 170 Urdu-speaking children.

Sampling Technique: Non-probability Convenient sampling was used for the study.

Study Setting

The study was conducted in Rawalpindi/Islamabad. The data for the children was collected from the following sources:

- Al Hadi School System
- Al Qalam Model School
- RHS Rand Health Services
- Homes

Duration: The study duration was six months post-research board approval.

Sample Selection

Inclusion Criteria: Children of both genders (boys and girls), including typical and atypical children with age ranges from 3 to 5 years.

Exclusion Criteria: Children are having any medical issues.

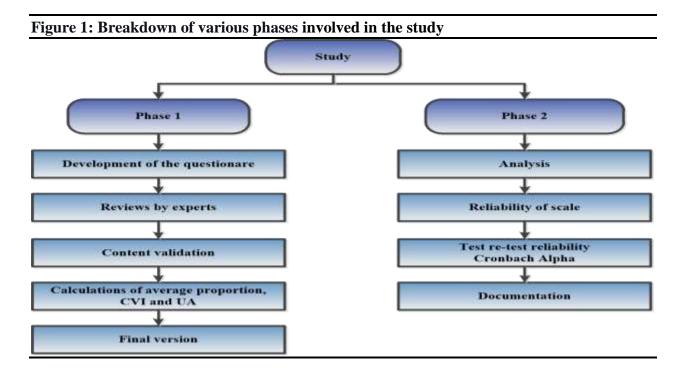
Data Collection Tools

- Demographics.
- Receptive Items for Negative in Urdu(RINU). Through literature review and different stories and books of Urdu.
- ICW (information carrying words). An ICW is a word that carries meaning. There are four steps of ICW. (0 ICW, 1 ICW, 2 ICW, 3 ICW, 4 ICW).

Data Collection Procedure: The data was collected in a systematic procedure which involved various steps.

Data Analysis Procedure

After completing the data collection process, the data was analyzed using SPSS version 23. The data was tabulated using percentage distribution. The data was also descriptively analyzed by mean, standard deviation and graphically presented using a bar chart. The questionnaire was validated through test-retest reliability to ensure the psychometric properties of the developed questionnaire. Figure 1 shows the breakdown of various phases involved in this study.



Results

The purpose of the present study was to generate the receptive items for the negatives in Urdu language and validation of the scale in the Pakistani culture in the early childhood. The study was conducted on 150 typical and 20 atypical children of language disorder. The results were computed through SPSS 23. Scale was developed through a step-by-step process following content validation by experts and data collection from typical and atypical sample. After that data was analyzed using SPSS to ensure reliability and retest reliability. The results are based on the frequencies, percentages, psychometrics, and reliability and retest reliability. Table 1shows the content validity of questions developed by Law sight method which is a linear transformation of a proportional level of agreement, Total 7 "experts" within a panel rate an item "essential" calculated in the following way CVI=0.94. The least acceptable value for 7 expert panel is 0.83.

| Table 1: Con | ntent v | alidi | ty of | que | stions | deve | eloped | by Law sight m | ethod | |
|--------------|---------|-------|-------|-----|--------|------|--------|----------------|----------|----|
| Items | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Experts | in I-CVI | UA |
| | | | | | | | | Agreement | | |
| Q1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q4 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 5 | 0.8 | 0 |
| Q5 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 7 | 1 | 0 |
| Q6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |
| Q11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 |

| Q12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | |
|--|---|---|---|---|---|---|---|----|---------|---|------|
| Q13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | |
| Q14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | |
| Q15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | |
| Q16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 1 | 1 | |
| Q17 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 0.9 | 0 | |
| Q18 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 6 | 0.9 | 1 | |
| | | | | | | | | | S- | | 0.97 |
| | | | | | | | | | CVI/Ave | | 0.97 |
| Average proportion of items judged as relevance across 7 experts | | | | | | | | 0. | .94 | | |

It shows that in this study total n=7 experts reviewed the content for validation.

Demographics of the sample

Frequency and Percentage of Participants (N=170) is shown in Table 3.

Table 2: Gender of the participants.

| Gender | Frequency | Percentage | |
|--------|-----------|------------|---|
| Male | 85 | 50% | _ |
| Female | 85 | 50% | |

The table shows the frequency analysis of gender of all typical and atypical children. In study total 170 participants have participated, out of which 85(50%) were male and 85(50%) were female.

Table 3: Age of the participants along with frequency and their percentage

| Age | Frequency | Percentage | |
|-----|-----------|------------|--|
| 3 | 49 | 28.8 % | |
| 4 | 60 | 35.2% | |
| 5 | 61 | 35.8 % | |

The table shows the frequency analysis of age of all typical and atypical children. In study total 170 participants have participated, out of which 49(28.6%) were of age 3, 60(35.2%) were of age 4 and 61(35.8%) were of age 5.

Frequency and Percentage of Participants (N=170) is shown in Table 4 with respect to their age groups.

Table 4: Number of the participants

| Participants | Frequency | Percentage | |
|--------------|-----------|------------|--|
| Typical | 150 | 90.9% | |
| Atypical | 20 | 9.1% | |

The table shows the frequency analysis of age of all typical and atypical children. In study total 170 participants have participated, ut of which 150(90.9%) were typical and 20(9.1%) were of atypical.

Cronbach's Alpha Reliability and Analysis

| Table 5: Scales used for the reliability and test-retest reliability | | | | |
|--|------------------|--|--|--|
| Scales | \boldsymbol{A} | | | |
| Reliability of scale | 0.96 | | | |
| T test reliability of scale | 0.92 | | | |

Discussions

The current study attempted to create a receptive items scale in Urdu for children aged 3-5 years. The present study intends to construct a questionnaire to assess young children's capacity to detect receptive language and use no in sentences.

A similar study from the literature explored the critical period for language acquisition. It explored that the crucial age for language development is almost 3-5 years when the child is involved in initiating words and making short sentences. It is the best age to understand the negatives in language along with affirmative sentences (Tian & Breheny, 2016).

The research was divided into two stages. In the first step, the questionnaire was developed from an item pool and refined through many sessions with the supervisor. After completing the questions, the questionnaire is subjected to content validation by several experts in an 8-step standardized approach. The newly designed items were validated in the second phase.

Items developed and validated for language development are not applicable everywhere. There are many scales present that are for language development (Zimmerman et al., 2011). However, there is a scarcity of standardized scales for children with language disorders (Coles, 2004), especially in Pakistan, to identify the children, especially before schooling, as these children have fewer receptive skills as compared to other children (Butt et al., 2022). The internal consistency of the Receptive scale for negatives in Urdu was excellent (Cronbach's $\alpha > 0.96$ for all domains, and test-retest reliability (Spearman's rho ≥ 0.95 for all domains).

The result of this study showed that the newly designed scale of the receptive language (Urdu) was internally consistent and accurate for the Pakistani community. The scale is a practical, rapid screening tool that requires no special training to use.

Furthermore, all typical participants in this study completed the receptive item scale (Urdu) in less than 2 minutes. Most reported no issues comprehending the questionnaire or selecting replies. Based on this data, we concluded that the receptive language scale (Urdu) matched the study's goal of developing a simple and quick screening instrument for young infants.

Conclusion

The receptive language for opposing in the Urdu scale showed acceptable reliability and validity, indicating its applicability to young children as a simple screening tool for receptive language. The use of negations is another significant issue to discuss while understanding the language development domain, so the present study aims to generate receptive items for negative in Urdu. This scale will help gauge Pakistani children's language in the receptive domain between ages 3-6 years. The internal consistency of the Receptive scale for negatives in Urdu was excellent. (Cronbach's $\alpha > 0.96$ for all domains, and test-retest reliability (Spearman's rho ≥ 0.95 for all domains).

Recommendations

This tool should be applied to children with language and speech difficulties so that their learning from the understanding of negatives can be accessed.

References

- Bekteshi, A., & Tafani, V. (2018). *Syntactic Structures and Semantic issues of Negation in Albanian and English (A contrastive analysis)*. East European Doctoral Student Conference.
- Butt, B., Anwar, B., & Rasool. S. (2022). The Syntax of Negation of Serial Verbs in Urdu. *Humanities*, 8(1):119-38.
- Coles, W. (2004). Negative concord in child African American English: Implications for specific language impairment. *Journal of Speech Language and Hearing Research*, 47(1).
- Dudschig, C., Kaup, B., Svaldi, J., & Gulewitsch, M. (2021). Negation Processing in Children with ADHD: The generic problem of using negation in instructions. *Journal of psycholinguistic research*, 50(6):1309-20.
- Fowler, A.M. (2006). *Negation in natural language processing*. The University of Texas at Dallas.
- Hockema, S.A., & Smith, L.B. (2009). Learning your language, outside-in and inside-out. *Linguistics*, 47(2), 453–479.
- Hui, D.S., Azhar, E.I., Madani, T.A., Ntoumi, F., Kock, R., & Dar, O. (2019). The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health-The latest 2019 novel coronavirus outbreak in Wuhan, China. *Int J Infect Dis*, *91*, 264-266.
- Kaup, B., Lüdtke, J., & Zwaan, R. (2006). Processing negated sentences with contradictory predicates: Is a door that is not open mentally closed? *Journal of Pragmatics*, 38(7):1033-50.
- Klein, W., & Perdue, C. (1997). The Basic Variety (or: Couldn't natural languages be much simpler?) *Second Language Research*, 13(4):301-47.
- Ladusaw, W.A. (1992). Expressing negation. Semantics and linguistic theory.
- Nordmeyer, A., & Frank, M. (2013). *Measuring the comprehension of negation in 2-to 4-year-old children*. Proceedings of the Annual Meeting of the Cognitive Science Society, 35.
- Nordmeyer, A.E., & Frank, M. (2018). Development. Early understanding of pragmatic principles in children's judgments of negative sentences. *Language Learning and Development*, 14(4), 262-78.
- Power, J.D. (2017). Neural plasticity across the lifespan. *Schlaggar*, 6(1):e216.
- Raza, A.A., Habib, A., Ashraf, J. & Javed, M. (2017). A review on Urdu language parsing. *International Journal of Advanced Computer Science and Applications (IJACSA)*, 8(4):93-7.
- Syeda, S.F., & Iqbal, Z. (2021). The Noun phrase structure rules as comparative study of English and Urdu language. *Literature*, 4(2):9-36.
- Tian. Y., & Breheny, R. (2016). Dynamic pragmatic view of negation processing. *Perspectives*, 16, 21-43.
- Tian, Y., & Breheny, R.E. (2018). *Pragmatics and negative sentence processing*. Handbook of Experimental Pragmatics. Oxford University Press.
- Witherington, D.C., Lickliter, R. (2017). Integrating development and evolution in psychological science: Evolutionary developmental psychology, developmental systems, and explanatory pluralism. *Human Development*, 59(4):200-34.
- Zimmerman, I., Steiner, V., & Pond, R. (2011). *Preschool language scales-fifth edition*. Pearson. (PLS-5).