Examining the Relationship Between Prospective Teachers' Listening Skills, Reading Habits, Effective Speech Self-Efficacy, Writing Dispositions, and Communication Skills: A SEM Approach

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Abstract

Conceptually, although the effectiveness of communication is generally associated with the development of language skills, studies that model this relationship comprehensively are limited. Based on this, the current study examines the relationship between different linguistic variables (listening skills, attitude towards reading habits, speech self-efficacy, and writing disposition) and their own and communication skills. The study data was collected from 566 prospective teachers in Turkey. As a result of the study, the theoretical structure between linguistic variables and communication skills has been statistically proven. In the model, it was seen that the model-data fit was at a good level (χ^2/df=4.46, CFI=.955, $RMSEA$=.078, $SRMR$=.033). The proposed model indicates that listening skills affect communication skills at a medium level and speech self-efficacy at a high level. In addition, writing disposition affects communication skills indirectly through speech self-efficacy, and reading habits affect communication skills indirectly through both listening skills and speech self-efficacy. The highest relationship is between listening skills and speech self-efficacy. Also, the relationships between all the variables are significant. The study supports existing hypotheses about the role language plays in communication skills.

Keywords: Listening skill, Attitude towards reading habits, Effective speech self-efficacy, Writing disposition, Communication skills

Introduction

Communication is not a linear or one-dimensional process. Rather, it is a complex process that includes elements such as observing, listening, revealing critical information, interpreting information, and communicating the information to others (National Research Council [NRC], 2011, p. 9). This process is carried out by "social actors" and community members who undertake linguistic to and communicative tasks in specific settings and areas of action (Council of Europe, 2001). These actors communicate by listening and understanding different types of verbal messages; speaking briefly and clearly; following the process of writing; writing different types of texts for various purposes; and being able to read and understand different texts by adopting strategies suitable for different reading purposes and various text types (Binkley et al., 2012). Therefore, communication is closely related to language skills. Basically, language, which is a communication system, consists of four important skill areas: listening, speaking, reading, and writing. The development of communication skills is both a cause and a natural consequence of the development of these complex interrelated language skill areas with various cognitive, affective, psychosocial, and behavioral dimensions. Coordination and positive transfers between language skill areas contribute to the competence to communicate effectively, which is the ultimate goal of language teaching (Nan, 2018). Considering the opposite, language-based cognitive and affective problems of individuals will have a detrimental impact on their ability to communicate effectively.

Deficiencies in individuals' communication skills have been reported in research conducted in various fields, such as education (Durukan & Maden, 2010; Gökçe & Atanur Başkan, 2012), health (Kumcağız, Yılmaz, Balcı Çelik, & Aydın Avcı, 2011), tourism (Ceylan, 2015), and sports (Özbey & Doğu, 2020); however, the reasons of this problem stemming from language skills have not been sufficiently focused. Although the relationship between

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communication skills of prospective teachers' and affective variables such as empathic tendency (Günönü Kurt, 2019), self-esteem (Derici Cevap, 2017), self-efficacy perception (Küpeli, 2019), attitude (Çakmak, 2019), cognitive and skill-based skills such as problem solving (Koser, 2019), behavioral factors such as the frequency of using technological tools (Kadakal Dölek, 2015) has been investigated, there remains a gap in the literature regarding studies on the relationship between communication skills and all areas of language learning. However, communication is among the critical competencies that teachers use in the classroom. Speaking, listening, reading, writing, and nonverbal communication skills such as sign language are all included in this resource (Güneş, 2007, p. 72).

It is theoretically stated that the development of a language skill will contribute to the development of other language skills, and the ultimate goal of developing these skills is to establish correct and effective communication (Ministry of National Education, 2019). However, there are no comprehensive studies that reveal the extent to which these language skills or affective or behavioral competencies in learning domains are interrelated and support each other's development as a whole. In the literature, there are correlational studies (Bozorgian, 2012; Demir, 2017; Nelson, Benner, Neill, & Stage, 2006) that investigate the relationships within language skill. Studies revealing the relationship of more than one language skills with communication or sub-categories of communication are quite limited in terms of their findings. In this respect, the current study will contribute to the relevant literature on issues such as investigating the linguistic causes of deficiency in prospective teachers' communication skills; developing a deeper understanding of cognitive and affective factors that affect the formation of the multidimensional structure of communication; and revealing the different mechanisms that direct communication and the relationships between these mechanisms.

The current study is more comprehensive than previous studies in the literature in that it includes four learning areas of language (listening, speaking, reading, and writing) and examines different variables such as habits and attitudes, disposition, self-efficacy, and skills towards these learning areas. Additionally, the proposed comprehensive model will benefit the relevant literature, especially theoretically. In this direction, the variables of listening skill, effective speech self-efficacy, attitude towards reading habits, and writing disposition are included in the study, and the relationships between these variables and their relationships with communication skills are modeled.

Conceptual Framework

Communication Skills: Communication skills (CS) explored in this study, are discussed in four sub-dimensions: communication principles and basic skills, self-expression, active listening, non-verbal communication, and willingness to communicate.

The communication principles and basic skills dimension include principles such as being a purposeful and process-based activity, including interconnected elements, realizing within the framework of certain rules, and being influenced by cultural factors. In addition, communication includes many sub-skill areas such as transparency, providing feedback, sending the message in effective ways, empathy, listening, persuasion, leadership, and self-confidence (Bambacas & Patrickson, 2008). Another sub-dimension is self-expression, which is defined as "the free expression of one's feelings, thoughts, talents, attitudes, or impulses" (VandenBos, 2015, p. 955). Non-verbal communication is a type of communication based on coding non-verbal symbols and signs and decoding messages encoded by others (Eaves & Leather, 2018). These elements include facial expression, eye behaviour, bodily communication (postures), proxemics, gaze, tactile / haptics, personal appearance, and vocalic communication (Eaves & Leather, 2018; Matsumoto, Hwang, & Frank, 2016).

"Willingness to communicate" (WTC), which was first conceptualized by McCroskey and Baer (1985) in mother tongue teaching, is "personality-based, character-like predisposition" (p. 1) as well as being sensitive to situational conditions and restrictions (McCroskey & Baer, 1985). Moving the concept to the field of second language teaching, MacIntyre, Clement, Dornyei, and Noels (1998) defined the willingness to communicate as "readiness to enter into discourse at a particular time with a specific person or persons" (p. 547). This element affects people's initiation and maintenance of a communication (Cao & Philp, 2006). This dominant personality structure, which permeates every aspect of an individual's life, has an important effect on "social, educational and organizational achievements" (Richmond & Roach, 1992, p. 104).

Listening Skill: Listening skills (LS) are "one of the basic ways of communicating and learning, which includes understanding, interpreting, and evaluating the message correctly" (Ministry of National Education, 2006). The fact that it is seen as one of the receptive language skills in the literature causes it to be labeled as a passive process. Listening mainly focuses on actively building information rather than receiving and storing information passively

(Rost, 2020). Listening is a special interpretation process that focuses on understanding and contextualizing what is heard as the deliberate communicative expressions of others (Burleson, 2011). This active skill area includes cognitive, affective, behavioral/verbal, behavioral/non-verbal, and behavioral/interactive dimensions (Halone, Cunconan, Coakley, & Wolvin, 1998). Among these, especially the interaction dimension, makes listening an important communication activity. Because the meaning in listening is formed by both the speaker and the listener in communicative contexts (Rost, 2020, pp. 265-266). In this context, effective listening is defined as "the dynamic, interactive process of integrating appropriate listening attitudes, knowledge, and behaviors to achieve the selected goals of a listening event" (Thompson, Leintz, Nevers, & Witkowski, 2004, p. 240). In this context, paying close attention to what is said, asking the other party to explain exactly what you mean, and demanding repetition of ambiguous ideas or statements are among the characteristics of effective listening, which is an interpersonal skill (Klein, DeRouin, & Salas, 2006). According to research, good listening skills lead to greater academic and professional success, as well as increased interaction and relational pleasure (Bodie & Fitch-Hauser, 2010).

Effective Speech Self-Efficacy: Self-efficacy is conceptualized in the social cognitive theory of Bandura (1997), which accepts that people's thoughts and actions arise as a result of dynamic interaction between personal, behavioral, and environmental effects (Schunk & Pajares, 2010, p.668). In this theory, it is argued that the things that individuals think, feel, and believe affect their choices and behaviors; that they can make inferences about the results by examining the adequacy of their behavior themselves; and that they can mentally keep the belief that they have developed in terms of their ability to guide their next behavior (Bandura, 1997). Self-efficacy is a central motivational variable that can affect task preference, attempt, patience, purposefulness, flexibility, and accomplishment (Schunk, 1995; Schunk & Pajares, 2010). This motivational variable has been defined by Bandura (1997) as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Based on this definition, speech self-efficacy can also be defined as the belief in one's own knowledge, skill, and competence level in order to organize, execute, and control a series of operations necessary for the success of the speech act.

People with low self-efficacy beliefs in a certain field "perceive difficult tasks as personal threats and tend to lose faith in their abilities easily because they focus on their own personal deficiencies and the obstacles, they face rather than how they can successfully perform the task" (Dörnyei & Ushioda, 2011, p.16). People with high self-efficacy approach difficult tasks not as threats to be avoided, but as challenges to be overcome (Schunk & Pajares, 2010, p.670). These individuals also tend to have lower anxiety levels, use more flexible learning strategies, and show higher interest in academic tasks (Mills, 2014, p.9). However, they have more control over their own learning processes (Pintrich, 1999; Zimmerman, Bonner, & Kovach, 1996). In terms of speaking, people with high self-efficacy have better speaking skills (Leeming, 2017) and people with low speech self-efficacy have higher speaking anxiety (Gürsoy & Karaca, 2018).

Attitude towards Reading Habit: Attitude is "the way a person consistently thinks or feels about something or is disposed to react to it; often used with reference to how a person values something, i.e., how far he is for or against it" (Sutherland, 1995, p. 40). "Attitudes can be influenced by and can influence beliefs, affect, and behavior in relation to the attitude object" (Matsumoto, 2009, p. 59). Reading attitude is defined as "a set of acquired feelings about reading that consistently predispose an individual to engage in or avoid reading" (Conradi, Jang, & McKenna, 2014, p. 154) and is accepted as one of the main factors affecting an individual's reading intention (Mathewson, 1994). Developing an attitude toward reading habit (RH) allows an individual to continue reading activity permanently and frequently throughout their lives (Odabaş, Odabaş, & Polat, 2008).

Writing disposition: Disposition is "a recurrent behavioral, cognitive, or affective tendency that distinguishes an individual from others" (VandenBos, 2015, p. 323). These repetitive tendencies, which direct the person's activities such as thinking, feeling, acting, and reacting (Matsumoto, 2009, p. 167), are related to internal factors rather than external factors (Sutherland, 1995, p. 129). Driscoll and Wells (2012) conceptualized these personal internal qualities as "habits of mind." In this context, they consider disposition in relation to factors such as context, the process and time of learning as well as personal characteristics, and draw attention to the fact that tendencies are a concept that determines how these characteristics are used or applied rather than intellectual characteristics such as knowledge or skills. Within this theoretical framework, writing disposition (WD) is a comprehensive term that encompasses emotional qualities such as writing "self-discipline, perseverance in the face of difficulties, tolerance of ambiguity, autonomy, willingness to take risks, motivation, self-efficacy, and interest" (Piazza & Siebert, 2008, p. 275).

Piazza and Siebert (2008) listed the critical affective dimensions, which constitute the dispositional aspect of writing, as confidence, persistence, and passion. Of these elements, confidence refers to an individual's belief in

his writing ability and does not doubt his effectiveness as a writer. Persistence reflects the willingness of the author to devote time to writing and to continuous effort. Passion can be conceptualized as an intense urge or desire to write, a strong commitment to writing, and the pleasure of writing over and over again (Piazza & Siebert, 2008).

In this conceptual framework, the current study aims to determine the link between linguistic variables and the effects of these variables on CS. In this context, the hypotheses of the study and the theoretical and empirical background supporting these hypotheses are expressed in the following section:

Hypothesis 1: There are positive relationships between the RH with LS and ESS.

Listening and reading, sharing similar decoding processes, are important tools for acquiring linguistic knowledge and developing linguistic understanding (Hoover & Gough, 1990). The mental skills required to understand and interpret what is heard can be developed through reading or thinking about what is read. Competencies gained through reading can be expanded by listening studies. In this respect, reading and listening skills are complementary to each other (Göçer, 2019). This link between reading and listening, both receptive skills, has been reported in several studies (Diakidoy, Stylianou, Karefillidou, & Papageorgiou, 2005; Hoover & Gough, 1990; Powell, 1999; Wolf, Muijselaar, Boonstra, & Bree, 2019).
Reading, which is a graphical system, and speaking, which is a phonological system, are interrelated (Arıcı, 2012; Gibson, 1972). When a person who brings grammatical information to reading can decode graphic elements and know the punctuation marks, he can automatically transfer this information to speech (Gibson, 1972, pp. 9-12). Speaking is one of the tools people use to share the information they have acquired through reading with others. Reading affects speaking positively in terms of both pronunciation and content. Therefore, being a good reader is a necessity for successful speaking (Arıcı, 2012, p. 12).

There are correlational studies in the literature that prove these theoretical relationships (Demir & Börekçi, 2021; Tekşan & Çinpolat, 2018; Oğuz, 2009). In one of these, Demir and Börekçi (2021) determined that the number of books at home and the amount of daily reading of secondary school students were related to their perceptions of verbal expression self-efficacy. In another study, Oğuz (2009) found that one of the reasons for the prospective teachers' inadequacy in verbal expression skills was that their reading habits were not sufficiently developed. Tekşan and Çinpolat (2018) revealed that there is a positive and significant relationship between prospective teachers' attitudes towards speaking self-efficacy and reading habits.

Hypothesis 2: There is a positive relationship between WD and ESS.

There is a reciprocal relationship between speaking and writing, which are productive skills (Kantor & Rubin, 1981; Kroll, 1981; Moxley, 1990; Nan, 2018). Both skills are based on a common cognitive skill set that includes working memory, linguistic cohesion, and morphological knowledge (Shanahan, 2006, p. 180). The mechanisms of speaking and writing, which enable the construction of grammar forms, are related. Although the outcomes of both skills are different, they use similar syntactic representations (Cleland & Pickering, 2006). Speaking helps a person become familiar with language material, make language production a fluent process, and use language skills. This, in turn, contributes to the person's ability to think quickly and express himself in a logical way, which has a positive effect on his writing skills (Nan, 2018). Especially during social conversations, many skills, such as giving information about a subject chosen by the speaker or shaping a message according to a certain audience, are strategies that he can later use in explanatory and persuasive writing (Weissberg, 2006).

Studies in the literature (Carlisle, 1996; Dockrell & Connelly, 2016; Motallebzadeh, Ahmadi, & Hosseinnia, 2018) also support this relationship. Motallebzadeh et al. (2018) found that EFL learners' speaking and writing skills are highly correlated. The study conducted by Dockrell & Connelly (2016) with primary school students revealed a significant relationship between students' forming oral and written sentences. Carlisle (1996), in his study in which students with learning difficulties were included in the sample, revealed "there was a moderately strong relationship between the ability of children to produce morphologically complex words in a verbal task and the accuracy of using morphological forms in their stories" (p. 69). This study was noteworthy as it showed the relationship between speaking and writing, and that students' verbal language errors explained many of their morphemic errors in writing.

Hypothesis 3: There are positive relationships between LS, ESS, and CS.

Listening is a key skill in acquiring other language skills (Doğan, 2012). By listening, individuals learn how to behave, distinguish between appropriate and inappropriate behavior patterns, and tailor their actions to a specific communication context (Brownell, 2010, p. 142). Therefore, listening is a prerequisite for communication. As a

matter of fact, the findings that the failure to acquire the right listening habit is one of the challenges faced in daily communication in daily life supports this thesis (Yalçın, 2002). "Educational research has consistently shown that many students lag behind in verbal communication and literacy development due to a lack of LS" (Rost, 2020, p. 265). It is pointed out in studies in the literature that listening is an important component of communication (Brownell, 2010; Cooper, 1997; Davenport Sypher, Bostrom, & Hart Seibert, 1989; Doğan, 2012; Kline, 1996; Villaume & Bodie, 2007). People reach the competence of listening by communicating, and they achieve their communication goals by listening (Cooper, 1997).

Speaking has two basic functions. The first function is expressed as transactional (transferring information and exchanging services) and the second is interpersonal (establishing and maintaining social relationships) (Thornbury, 2005). We can assume there is a theoretical relationship between ESS and communication, especially since the social cognitive theory, in which the concept of self-efficacy is shaped, emphasizes the interaction of personal, behavioral, and environmental dimensions; and the motivation, effort, and continuity elements of self-efficacy are also important in initiating and maintaining communication.

This theoretical relationship has also been proven by correlational studies (Bria & Jouybar, 2016; Demir, 2017). In one of them, Bria & Jouybar (2016) found in their study that there was a statistically significant relationship between EFL students' desire to communicate, language competence, and verbal competence. In another study, Demir (2017) found that listening accounts for 57% of speaking self-efficacy.

Hypothesis 4: There are positive indirect relationships between RH and WD and CS.

Reading is a purposeful activity that has a social and an individual aspect (Schwab & Hughes, 2010). Its being a social activity makes it one of the more important communication skills. As a matter of fact, Russell (1951) states that reading is not only the acquisition or absorption of ideas, but also communicating with others. Thus, developing reading skills affects both the attitude towards communication and CS. He points out that reading is a skill that is more related to communication situations in the social environment and contributes to socialization (Russell, 1951). Reading is also a communication activity in terms of rhetoric. During this process, both sending and receiving readers gain insights into how communication works (Tierney & Shanahan, 1991). Phillips (1978) states that "reading is communication when the materials reflect reality, and the reader develops skills and strategies parallel to the decoding process used in real life" (p. 284). For this reason, he argues that reading skills and verbal activities should be integrated (Phillips, 1978).

There is a purpose-to-tool relationship between writing and communication. While effective communication is one of the most important purposes of writing, writing has always been one of the most powerful tools of communication (Kansızoğlu, 2019). In addition, factors such as confidence, self-efficacy, self-regulation, motivation, and persistence in WD suggest there may be a theoretical relationship between CS and WD (Piazza & Siebert, 2008).

It is accepted that reading and writing are two skill areas that have common, similar, or overlapping operations, processes, and sub-skills (Abbott, Berninger, & Fayol, 2010; Grabe, 2003; Schoonen, 2019; Shanahan & Lomax, 1986; Tierney & Pearson, 1983; Tierney & Shanahan, 1991). These two skills, which are a constellation of cognitive processes at various language levels (phonemic, orthographic, semantic, syntactic, pragmatic), depend on the same information representations, cognitive processes, contexts, and contextual constraints, so their development processes are parallel to each other (Fitzgerald & Shanahan, 2000). Both skills are acts of composition. People who read and write perform repetitive processes involving self-respect and perceptions of each other's goals (Tierney & Pearson, 1983).

In the literature, there are studies showing the relationship between RH, WD and CS (Eroğlu, 2013; Lee, 2005; Saracaloğlu, Yenice, & Karasakaloğlu, 2009; Ünal, 2019). For example, Ünal (2019) determined that there is a significant, positive and weak relationship between the attitudes towards reading habits and writing dispositions of gifted students at the secondary school level. In another study, Eroğlu (2013) concluded that there are some deficiencies and inaccuracies in the writings of prospective teachers who do not have reading habits in terms of intellectual and conceptual richness, use of language, spelling, and punctuation. Lee (2005), as a result of his study with Taiwanese university students learning English as a foreign language, revealed that voluntary reading is a significant predictor of writing performance and writing quality. In a study conducted by Saracaloğlu et al. (2009) with prospective classroom teachers, it was found that there was a positive and low-level significant relationship between teacher candidates' reading interests and communication skills in the competence sub-dimension.

Method

Research Design

The aim of the study was to reveal the level of explanation of the CS of the linguistic variables (LS, ESS, RH, WD) that were thought to affect the CS and the relationships between these skills. Fraenkel, Wallen, & Hyun (2012) described studies conducted to determine the relationships between two or more variables and explore their cause-effect effects as relational research. Therefore, the current study was a relational screening model. In this context, structural equation modeling, which reveals the causality between observed and latent variables, was used in the study to test a theoretical model (Schumacker & Lomax, 2015).

Participants

The participants of the study were prospective teachers studying at a state university in Turkey. Within the scope of the research, data was collected from 618 participants using the convenience sampling method. This number was reduced to 566 after the data was cleaned due to missing data and outlier values. Descriptive statistics for the participants are included in Table 1:

Table 1. Demographic/statistical information about the participants

Variables	n	%
Gender		
Female	411	72.6
Male	155	27.4

Note. N=566

Data Collection Process and Tools

Before starting the data collection process in the study, necessary permissions were obtained from the researchers who developed the measurement tools used and from the relevant institution to collect data. The data collection tools were delivered by the researchers as a paper-pencil test and were carried out face-to-face, which took approximately 75-90 minutes to complete. Information about the measurement tools used in the study is presented below.

Communication Skills Scale: The Communication Skills Scale was developed by Korkut-Owen and Bugay (2014) to determine the extent to which individuals possess qualities that enrich communication. For this purpose, item samples in the measurement tool were presented as *"When I talk to someone, I check if I understand them correctly before I answer them", "I keep in mind that the words chosen are also important when texting"* The measurement tool was developed by the researchers with four dimensions, measured by 25 five-point Likert type items. The four dimensions were "principles of communication and basic skills," "self-expression," "active listening and non-verbal communication," and "willingness to communicate." Researchers conducted exploratory and confirmatory factor analyses to establish measurement tool's the construct validity. They concluded from the exploratory factor analysis (EFA) that the four-factor solution explained 45.95% of the variance and that this variance ratio was sufficient. They confirmed structure with the fit indices (χ^2/df = 1.40; CFI = .91, IFI = 0.91, TLI = .90, RMSEA = .046, SRMR = .068) obtained from the confirmatory factor analysis (CFA) for the four-factor structure. The reliability of the scale was demonstrated by examining the relationship of the scale with similar scales, the differences between the groups of the scores obtained from the sub-dimensions, test-retest correlations, and Cronbach's alpha values.

Listening Skill Scale: The Listening Skill Scale developed by Kuzgun and Cihangir (2000) was revised by Cihangir Çankaya (2012). Cihangir Çankaya (2012) noted that LS, which are defined as the skills of asking open or closed questions, observing the speaker, encouraging, reflecting content, summarizing, and reflecting emotion, can be measured with the scale. Sample items to measure LS include: *"I can understand the feelings and thoughts of the other person while listening and convey that I understood to him/her through my words and/or nonverbal actions," and "I have difficulty in making eye contact with the other person while listening."* The measurement tool was revised by the researcher as two dimensions with 15 items on a five-point Likert scale, namely "effective listening behaviors" and "ineffective listening behaviors." By exploratory and confirmatory factor analysis, Cihangir Çankaya (2012) obtained evidence of the construct validity of the measurement tool. The researchers concluded from EFA that the two-factor structure explains 44.65% of the total variance, and that the structure has

two factors. They stated that the model data fit was at a good level according to the fit indexes (χ²/df = 1.59; CFI =.98, NFI= 0.96, AGFI =.97, RMSEA =.04) they had obtained from CFA. The reliability of the scale was demonstrated with Cronbach's alpha values obtained as.82 for the effective listening behaviors sub-dimension,.76 for the ineffective listening behaviors sub-dimension, and.83 for the whole scale.

Effective Speech Self-Efficacy Scale: In order to be used in the study, it was aimed to choose the appropriate measurement tool by examining the items and validity-reliability results of the measurement tools available in the literature. Although the "Effective Speech Scale" developed by Çintaş Yıldız and Yavuz (2012) was deemed appropriate, the fact that its items were prepared as a checklist led the researchers of this study to develop a new measurement tool. In order to measure ESS, the items and dimensions of the "Effective Speech Scale" were taken as a basis, and a 36-item Likert-type draft scale was prepared by literature review. In the scale development study, 553 individuals studying at the education faculty of a state university were included in the sample using the convenience sampling method. First, data for EFA (n = 351) were obtained. According to the results obtained from EFA, a scale implementation (*n* = 202) was carried out for CFA. In the development of the measurement tool, the analyses were carried out using the "haven" (Wickham & Miller, 2020), "psych" (Revelle, 2020), "REdaS" (Maier, 2015), "MVN" (Korkmaz, Goksuluk, & Zararsiz, 2014), "lavaan" (Rosseel, 2012), "semPlot" (Epskamp, & Stuber, 2014), and "sirt" (Robitzsch, 2020) packages in the R software (R Core Team, 2020). The adequacy of the sample size for EFA was tested by the Kaiser-Meyer-Olkin test (KMO). The analysis was continued as the KMO was obtained as.93 indicated that the sample was sufficient (Tabachnick & Fidell, 2013). Variance-covariance matrices obtained as a result of Bartlett's test (*χ2*=3364.102; *sd*=210; *p*<0.001) were found to be suitable for factor extraction (Çokluk, Şekercioğlu, & Büyüköztürk, 2010). EFA, the results of which are given in Appendix A, was carried out using the principal factor solution method and promax, which is an oblique rotation method. It is seen that all of the items on the scale except M2 (*"I can clear my speech from unnecessary details"*) have a factor load above the.30 limit. Although the M2 item has a low factor load (.29), it was not removed from the item set because it was considered theoretically important by the researchers and was not far below the limit value.

It was observed that the four-factor structure, which explains 49% of the total variance, is also suitable for theoretical foundations. First, in order to verify the four-factor structure, we tested the normality assumption using Mardia's univariate and multivariate normality tests. The skewness and kurtosis values in both univariate and multivariate normality were statistically significant (p <.001) and normality was not achieved. For this reason, CFA was continued with the WLSMV method. In the CFA model, see Appendix B, there are path coefficients and errors related to observed variables, and correlations between latent variables. When the fit indices obtained from the model are examined (*χ2*= 233.532, df=183, p=0.007, *χ2*/df=1.27; CFI=.958; TLI=.951; RMSEA=.037; SRMR=.049), it can be said that the model-data fit is at a perfect level.

In order to determine the reliability of the scale, Cronbach's alpha internal consistency coefficients were estimated. It was obtained as.80 for the presentation self-efficacy dimension,.82 for the vocal self-efficacy dimension,.75 for the style and expression self-efficacy dimension, and.86 for the audience consideration dimension. A stratified alpha of.92 was calculated for the whole scale. According to these values, it can be said that a valid and reliable "Effective Speech Self-Efficacy Scale" has been developed.

Attitude Scale Towards Reading Habits: Susar Kırmızı (2012) determined the attitude levels of pre-service teachers towards reading with the Attitude Scale Towards Reading Habits. For this purpose, the items in the measurement tool can be exemplified as *"I have a guilty conscience the day I sleep without reading,"* *"Instead of seeing reading as a leisure activity, I make time to read books."* The researcher developed 34 items in three dimensions as *"attitudes towards meeting the learning needs and having fun,"* *"attitudes towards the meaning and indispensability of the habit of reading books,"* and *"attitudes towards the development of book reading habits"* using a five-point Likert type measurement tool. As a result of the EFA the researcher conducted to determine the structure of the measurement tool, she estimated the variance explained by the scale three dimensions as 57.92 and stated that the three dimensions were appropriate. The Cronbach alpha reliability coefficients calculated to determine the reliability of the measuring tool were found to be.78 for the first dimension,.88 for the second dimension, and.72 for the third dimension.

Writing Disposition Scale: The "Writing Disposition Scale" developed by Piazza and Siebert (2008) was adapted into Turkish by İşeri and Ünal (2010). *"I have the skills I need to write well"* and *"Writing gives me great pleasure"* are examples of items on the scale developed to measure individuals' writing skills. The measurement tool was adapted by the researchers as in the original, consisting of three dimensions: "trust", "continuity", and "passion" with 21 five-point Likert type items. Concerning the construct validity of the measuring tool, researchers carried out EFA and CFA. They concluded from EFA that the three-factor structure explained 46.26% of the variance and that this variance rate was sufficient. They verified the structure with the fit indices they obtained from CFA

for the three-factor structure (χ^2/df= 1.243; CFI = .998, GFI= 0.996, AGFI= 0.992, NFI =.992, RMSEA =.008). The researchers found the Cronbach Alpha coefficients for reliability at.874 for the whole scale,.882 for the passion dimension,.734 for the confidence dimension, and.639 for the continuity dimension. Since the validity and reliability study of the measurement tool was carried out with primary school students, CFA was applied to the structure specified by İşeri and Ünal (2010) with the study group data to use the measurement tool in this study. For the analysis, the "haven" (Wickham & Miller, 2020), "MVN" (Korkmaz et al., 2014), and "lavaan" (Rosseel, 2012) packages were used in the R software. The Mardia test was used to validate the normality assumption, and it revealed that univariate and multivariate normality were not achieved (p.001). For this reason, the WLSMV estimation method was used for CFA. As in the adaptation study for the three-factor structure, when the modification suggestions (four modifications with estimated parameter changes above.10) presented by the analysis regarding the error values of the items within the same dimensions were made, it was observed that the fit indices indicated the acceptable level for model-data fit (χ^2/df = 3,202; CFI =.911, RMSEA =.062, SRMR=.047). In addition, the standardized path coefficients of the observed variables are between.49 and.96, and the absence of error values greater than.76 indicates that the structure is verified. For this reason, it can be said that the data obtained from the measurement tool are suitable for use in this research.

Data Analysis

In the analysis of the data, the "stats" (R Core Team, 2020), "haven" (Wickham & Miller, 2020), "MVN" (Korkmaz et al., 2014), "Hmisc" (Frank & Harrell, 2020), "lavaan" (Rosseel, 2012), and "semPlot" (Epskamp & Stuber, 2014) packages were used in the R software. Before the analysis of the data obtained, 21 individuals who left the whole scale blank in one or more of the measurement tools given in the application and had missing data in their demographic information were excluded from the data set. In addition, considering the Mahalanobis distance coefficients in terms of variables used in the model, the versatile extreme values ($n = 31$) were removed from the data set because they do not belong to any group systematically. Whether the data met the assumption of normality was examined by Mardia's test of normality. It was found that both univariate and multivariate normality were not provided (p <.001). Since a normal distribution was not provided to determine the relationships between variables, the Spearman rank difference correlation was examined. Since the WLSMV method is recommended to be used when the data does not show a normal distribution (Finney & DiStefano, 2006), the structural equation model (SEM) established in this study to reveal the relationships between variables was established with the WLSMV method.

Results

Before the structural equation modeling, the Spearman rank difference correlation was examined in order to obtain preliminary information about the relationships between variables and to form a basis for modeling. The results obtained are given in Table 2.

Table 2 shows the Spearman rank difference correlation coefficients for variables

Variables	M	SD	1	2	3	4	5	6	7	8
CS1	4.11	0.48	1.00							
CS2	4.10	0.63	.43*	1.00						
CS3	4.16	0.54	.33*	.65*	1.00					
CS4	3.92	0.61	.28*	.66*	.63*	1.00				
RH	3.68	0.56	.58*	.19*	.26*	.25*	1.00			
WD	2.98	0.76	.66*	.24*	.27*	.29*	.16*	1.00		
LS	3.93	0.52	.63*	.44*	.52*	.51*	.25*	.06	1.00	
ESS	3.93	0.50	.59*	.63*	.66*	.58*	.28*	.33*	.43*	1.00

Note. N=566; *p<.001; *CS1 = communication principles and basic skills; CS2 = self-expression; CS3 = active listening and nonverbal communication; CS4 = communication willingness.*

The variables in Table 2 were obtained with the average scores of the relevant measurement tools and dimensions (for CS). When the correlation coefficients were examined, there was a positive relationship among all variables. If the coefficients are smaller than.30, it is at a low level; when they are between.30 and.49, it is at a medium level; and when they are.50 and larger, there is a high level of correlation (Cohen, 1988). All coefficients were statistically significant except for the correlation coefficient between listening and writing variables. For this reason, no relationship was established between listening and writing variables in SEM.

A structural equation model, which is assumed to predict the CS of LS, ESS, RH, and WD, was established under the name of Model 1. On a suggestion by the program, two modifications were made regarding the established model, which were also theoretically related. One of the modifications was the covariance between the error values of ESS and LS. In the model, it was seen that the endogenous variables of ESS and LS were explained only by the exogenous variables of WD and RH. However, it is known that many environmental factors can affect both speaking and listening. Listening and speaking are two interrelated and complementary language skills (Göçer, 2019; Nan, 2018). A person learns to speak by listening; speaking improves the acquisition and internalization of new information and provides a creative use of language. It provides a large number of language materials to be used in listening and speaking (Nan, 2018). For this reason, new exogenous variables were added to the model in order to reduce the unexplained part (error) of the speaking and listening endogenous variables.

For the purposes of this study, different variables were not focused on. Therefore, the proposed modification between the errors of the two variables is included in the model. Another modification suggestion is among the errors of the second (self-expression) and fourth (willingness to communicate) dimensions of the CS scale. Given that both errors belong to dimensions for measuring the same skill, adding the modification to the model was considered suitable. Studies revealing the relationship between self-expression and willingness to communicate variables (Baki, 2018; Karadağ, 2019) constitute the rationale for the proposed modification. Model 2: The full latent variable model created with the suggested corrections is presented in Figure 1. The fit coefficients of Models 1 and 2 and the cut-off values that were acceptable in the literature and indicate good fit are given in Table 3.
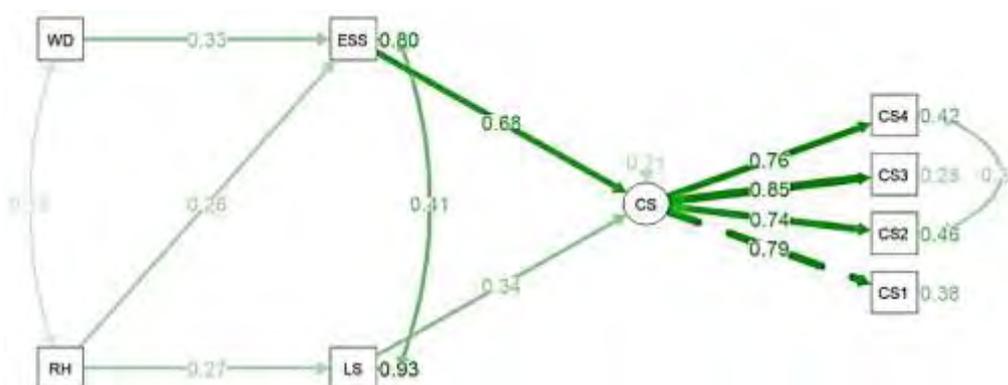

Figure 1. Model 2 full latent variable model

*Note. *WD = Writing disposition; RH = Reading habit attitude; ESS = Effective speech self-efficacy; LS = Listening skill; CS = Communication skill; CS1 = communication principles and basic skills; CS2 = self-expression; CS3 = active listening and nonverbal communication; CS4 = communication willingness*

Table 3 contains information on cut-off values and model differences for comparison of full latent variable models. Model 2 was chosen as the full latent variable model, confirming the theoretical structure due to the significant differentiation of Model 2 as a result of the difference tests ($\Delta\chi2(2) = 154.65, p < 0.01; \Delta CFI > 0.01$).

Table 3. SEM fit indices and cut-off values

	χ^2	df	χ^2/df	CFI	RMSEA [90% CI]	SRMR	$\Delta \chi^2$	Δdf	ΔCFI
Good fit			-	≥.95	≤.06 [≤.10]	≤.06			
Acceptable fit			-	≥.90	≤.08 [≤.10]	≤.08			
Model 1	221.60	17	13.03*	.823	.146 [.129-.163]	.068	-	-	-
Model 2	66.95	15	4.46*	.955	.078 [.060-.098]	.033	154.65	2	-.132

*Note. *p<.001 (Browne & Cudeck, 1993; Hu & Bentler, 1995; Kline, 2015)*

When Model 2 fit indices are compared with cut-off values in the literature, it is seen that CFI and SRMR values indicate perfect fit, while RMSEA values show acceptable fit. The value of χ^2 / df was statistically significant (p <.001). This value showed that there was a significant difference between the theoretical model and the established model. However, as the sample size increased, the significance increased, so it rarely points out that there was no difference (Weston & Gore Jr, 2006). For this reason, it was accepted that the model fits the data. The direct and indirect effects of Model 2 are included in Table 4.

Table 4. Path coefficients, error variances, and covariances for the Model 2 latent variable model

Parameters	Unstandardized	SE	Standardized
Direct effects			
WD → ESS	.211	.028	.328*
RH → LS	.248	.039	.267*
RH → ESS	.229	.040	.263*
ESS → CS	.527	.033	.682*
LS → CS	.247	.029	.341*
CS → Communication principles and basic skills	.376	.046	.788*
CS → Self-expression	.465	.070	.736*
CS → Active listening and non-verbal communication	.457	.050	.850*
CS → Willingness to communicate	.464	.066	.765*
Indirect effects			
WD → ESS → CS	.295	.016	.224*
RH → ESS → CS	.321	.023	.180*
RH → LS → CS	.151	.012	.090*
Residual variances			
LS	.248	.012	.926*
ESS	.189	.014	.798*
CS	.030	.005	.212*
Communication principles and basic skills	.086	.007	.379*
Self-expression	.183	.016	.459*
Active listening and non-verbal communication	.080	.007	.278*
Willingness to communicate	.153	.013	.415*
Covariances			
RH ↔ WD	.063	.018	.149*
ESS ↔ LS	.088	.011	.408*
Self-expression ↔ Willingness to communicate	.044	.010	.266*

Note. *p<.001

When Table 4 was examined, it was seen that all path coefficients, error variances, and covariances between variables were significant. There are low level positive and significant relationships between RH, LS, and ESS, at.267 and.263, respectively. These results showed that the first hypothesis of the research was confirmed. The second hypothesis, which stated that there was a positive relationship between WD and ESS, was confirmed by the moderately positive (.328) relationship between the variables. There was a moderate and highly positive relationship between LS and ESS, which was thought to directly affect CS, as.341 and.682, respectively. This relationship revealed that the third hypothesis of the research was also confirmed. Finally, when the indirect relationships between the RH and WD and CS were examined, it was found that WD affected CS through the effective speech variable, while the RH affected CS through both ESS and LS. These effects were found to be low-level positive, at.224,.180 and.090, respectively, and it was determined that the fourth hypothesis was also accepted.

Discussion

In this study, it is aimed to investigate the connections between the four language systems that are stated to be related to each other and developed as "overlapping and parallel waves rather than in discrete, sequential stages" (Berninger, 2000, p. 66) and to reveal the relationship of these linguistic variables with communication. The results of the study, in which the relationship expressed conceptually in the literature was tested with a comprehensive model, are as follows:

The Effect of RH on LS & ESS

The Model 2 established in the study showed that the RH had a weak direct significant (r = .267, p <.05) effect on the LS. Studies revealing the relationship between LS and reading (Demir, 2017; Diakidoy et al., 2005; Wolf et al., 2019) also support this finding. In one of these studies, Demir (2017) revealed that the habit of reading books and the time allocated for reading books have a significant effect on the development of LS. In another study, Diakidoy et al. (2005) found that listening and reading scores were significantly correlated at all four different grade levels in primary and secondary school, and the relationship between the two variables was

stronger as competence in decoding processes improved. In another study, Wolf et al. (2019) concluded that "reading comprehension explained 34% of the variance in listening comprehension, and listening comprehension explained 40% of the variance in reading comprehension" (p. 1747). Studies show that vocabulary was an especially important factor that improved this relationship. Because vocabulary is an important element, which contributes to understanding what is both read and heard (Wolf et al., 2019; Wolfgramm, Suter, & Göksel, 2016). Exposing themselves to practical and contextual words through listening improves their vocabulary in reading, which positively affects reading comprehension (Nan, 2018).

In Model 2, one of the variables in which the RH has a positive direct effect was speech self-efficacy. This effect was weak but significant, according to the established model (r = .263, p <.05). It was seen in studies conducted on similar samples that obtained findings that matched the current study. Among these, the study by Tekşan and Çinpolat (2018) reported that there was a positive and significant relationship (r =.515) between prospective teachers' reading habits and their perceptions of speech self-efficacy. The significant relationships between variables, such as the time allocated for reading (Demir, 2017), the frequency and amount of reading (Hayran, 2020), and the self-efficacy of speech were determined. The studies in which it was conducted also support the results of the current research.

The Relationship Between WD and ESS

WD was found to have a moderate effect (r =.328) on ESS in Model 2. The results of some studies (Carlisle, 1996; Dockrell & Connelly, 2016; Hubert, 2008; Motallebzadeh et al., 2018) in which the relationship between speaking and writing was reported, support these findings. Although these studies reveal the relationship between the skill dimension, not the writing disposition, and speaking, their findings are remarkable. In one of these studies, Motallebzadeh et al. (2018) found that there is a high level of correlation between the speaking and writing skills of EFL students. Hubert (2008), in his study with university students learning Spanish as a foreign language, revealed that this correlation is weak at the beginner level and much stronger at intermediate and advanced levels. Similar findings showing the relationship between speaking and writing were found in studies conducted by Carlisle (1996) with students with learning difficulties, and with primary school students by Dockrell & Connely (2016). This is also important in terms of showing that the relationship between speaking and writing is not limited to the results obtained from a particular sample group.

The Relationship Between LS, ESS, & CS

Model 2 demonstrates that LS has a moderate effect (r =.341) on CS. This finding coincides with the results of some studies in the literature (Davenport Sypher et al., 1989; Şimşek, 2019). In their study, Davenport Sypher et al. (1989) found that various aspects of listening (selective listening, short-term listening, short-term listening with rehearsal, lecture listening, interpretive listening) and each of the skills related to communication (cognitive differantiation, persuasive arguments, self-monitoring, perspective-taking) revealed medium and high positive correlations. Similarly, Şimşek (2019) found a significant positive correlation between effective listening and mental and behavioral communication levels, and ineffective listening and mental, affective, and behavioral communication levels. Considering these results, it can be said that one of the factors determining the quality of communication is effective LS.

According to Model 2, ESS has a strong influence on CS (r =.682). This result is similar to the findings of studies in the literature (Baki, 2018; Bria & Jouybar, 2016; Motallebzadeh et al., 2018) that reveal the relationship between speech as a whole and CS. Baki (2018) found in his study that there was a significant positive correlation between speech self-efficacy and CS of Turkish prospective teachers. Similar findings were obtained in the study of Bria and Jouybar (2016). In this study conducted with EFL students, a statistically highly significant relationship (r =.786) was found between the willingness to communicate and the students' oral fluency. Accordingly, it was determined that those who have a higher level of willingness to communicate express themselves more fluently. Finally, Motallebzadeh et al. (2018) determined that the relationship of speech with communication is higher (r =.68) than its relationship with other 21st century skills (critical thinking, interpersonal skills, technology literacy, and leadership skills).

Model 2 found a moderately significant (r =.408; p <.05) relationship between ESS and LS. In the study, Demir (2017) revealed that there was a high level of relationship between ESS and LS.

Indirect Relationships Between RH, WD, and CS

The Model 2 showed that WD affects CS with the effective speaking mediator variable and the effect was weak (r = .224). Motallebzadeh et al. (2018) found that communication affects writing scores moderately (r = .35) in the model they put forward as a result of their study. Gücükkılınç (2017) revealed that primary school students who have difficulty with written expression show lower performance in dimensions such as communicating, socializing, and taking part in activities. These two studies showed the effect of writing activity on CS.

In Model 2, it was determined that the RH affects CS at a weak level positively and significantly (r =.18; r =.09, respectively) on ESS and LS. In the study conducted by Saracaloğlu et al. (2009), it was found that there is a positive and weakly significant relationship between prospective teachers' reading interests and the competence sub-dimensions of their CS. Kaynar (2007) found in his study with high school students that the effect of reading habits on improving vocabulary was positively reflected in communication and improved students' CS. Attitude can affect the reading skill level that a person will ultimately acquire through its effect on factors such as participation and practice (McKenna, Kear, & Ellsworth, 1995). Communication was also a skill area that required a certain level of participation and practice. Therefore, a person who reads books regularly and has a positive attitude towards reading can find the opportunity to put it into action through listening and speaking in communication environments. The fact that the RH was a significant predictor of CS can be associated with this situation.

A remarkable point the Model 2 was that ESS functioned as a mediator variable in the relationship between both reading habit and WD and CS. Other studies that investigated the relationship between speaking and communication (Baki, 2018; Bria & Jouybar, 2016) found the role of this mediator variable and the critical function of speech in communication became more understandable.

The model also found a low-level significant relationship (r =.149; p <.05) between RH and WD, which was related to CS. These findings were consistent with the findings of Ünal (2019) and Baş & Şahin (2013). In addition, the results obtained in the present study support the findings of studies (Bolat, 2019; Eroğlu, 2013; Lee, 2005) in which the relationship between dimensions such as writing self-efficacy and writing skills and reading habits was reported. It would be appropriate to discuss the possible reasons for this relationship on the basis of the theoretical connection between reading and writing, which was the umbrella concept of two variables. Both skills are developmental, mostly based on similar knowledge and communicative processes in which there is a transfer of knowledge and skills (Shanahan, 2020).

All these findings reveal the importance of linguistic skills in improving prospective teachers' communication skills. Therefore, a teacher education isolated from language skills will have a negative impact on teachers' communication activities in and out of the classroom.

Limitations and Future Directions

In this study, a model that reveals the relationship between language and CS was tested. Since there are many linguistic variables that can affect communication processes, future research may focus on variables that are not tested in this model. These include various dimensions of listening, speaking, reading, and writing, such as metacognition, motivation, anxiety, and self-regulation. The effects of these factors alone or as synergistic effects on CS or communication-related sub-skill areas can be investigated. Bodie & Fitch-Hauser (2010) stated that if listening is a critical component of communication, it is necessary to discover how the structures that affect communication affect listening, and thus the role and function of listening in the communication process should be further defined. This recommendation can also be generalized to other language skill areas. In this context, the effects of various factors such as personality structure (Sims, 2017), culture (Collier, 1986), and gender (Marsnik, 1993) on language skills can be analyzed comparatively.

The participants of this study were prospective teachers. In future studies, the generalizability of the model tested in this research to different samples can be investigated. Since it was not included among the hypotheses, the role of participants' demographic and socioeconomic differences in different CS levels was not emphasized in the study. Gender is one of these variables. The correlation coefficients in the model established in this study, where the study participants were mostly women, and the coefficients in the model established in a study where male participants are predominant or both genders are equivalent may differ. This situation may be subject to investigation.

In addition, age-dependent change in the relationship between language skills can be determined by longitudinal studies. Two or more models tested in the same study can be analyzed comparatively. In the study, the relationship between variables was discussed in a theoretical and research-based manner, and the mediator variables that were

effective in the emergence of this relationship were not focused on much. In future studies, the mediating role of variables such as vocabulary, phonological awareness, and declarative knowledge can be tested. In addition, the research was carried out with participants whose native language is Turkish. A similar study can be conducted on participants who are learning Turkish or another language as a second language, and the relationships between variables can be investigated.

Considering that one of the basic competencies that a teacher should have is communication skills, it is clear that determining the relationship between this skill and which linguistic variables and at what level will have various practical benefits. First of all, this gives an idea to education administrators and experts on which elements should be given priority in the development of prospective teachers' and teachers' communication skills. This situation has a potential benefit, especially in shaping the content and general structure of pre-service and in-service training. These trainings can be organized on topics such as effective listening strategies, factors that facilitate the acquisition of reading habits, applied activities that will improve speaking self-efficacy, and practices that can positively affect affective orientations towards writing. In addition, in the current study, a high level of relationship was found between listening skills and speaking self-efficacy. This finding is an important argument for many curricula where these two linguistic outcomes are combined under the name of "verbal interaction skills." The relationship between affective, cognitive, and behavioral variables of language and communication skills can be tested on a larger sample in more comprehensive studies. The results of such studies can be shared with various stakeholders, including pre-service teachers, teachers, and experts through an authorized institution.

Conclusion

From the model established by this study, it is possible to draw a series of conclusions regarding the structure of communication and its relationship with language skill areas. In the model, LS and ESS are variables that directly affect CS, while WD affects CS indirectly through ESS and reading habits indirectly through both LS and ESS. The variable that affects CS at the highest level is ESS, and ESS is in a higher relationship with LS compared to other variables. However, the relationships between all the variables are significant. This network of relationships demonstrates that the development of language skills will have a positive effect on CS. However, the findings also support the assumption that language skills are a whole and that practices aimed at developing a skill area reflect positively on other language skills. This positive transfer can occur not only among cognitive factors such as skills but also among variables with different qualities such as self-efficacy, attitude, and disposition. As a result, the theoretical framework was supported by structural equation modeling in the study conducted to reveal the relationships between language skills and the effects of these skills on CS. The network of relationships between language skills and CS has been proven on a statistical basis.

Author(s) Contribution Rate
The authors contributed equally to the paper. The authors contributed to all aspects of the study in collaboration.

Conflicts of Interest
Authors declare that they have no conflict of interest.

Ethical Approval
Ethical permission (2021-SBB-0309) was obtained from the Bartın University Social and Human Sciences Ethics Committee for this research.

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Appendix A. EFA results of Effective Speech Self-Efficacy Scale*

The items are given in their osriginal language (in Turkish).

Factor	Item no	Item	Factor load	h²	u²
Sunum Özyeterliği	M2	Konuşmamı gereksiz detaylardan arındırabilirim.	.29	.28	.72
	M3	Süreyi dikkate alarak konuşmamı yapabilirim.	.59	.45	.55
	M6	Konuşurken dikkatimi toplayabilirim.	.50	.37	.63
	M7	Konuşma süremi doğru şekilde planlayabilirim.	.99	.82	.18
	M8	Konuşmamın içeriğinin bütünlüğünü sağlamada zorlanırım.	.84	.65	.35
		Açıklanan varyans	%14		
Ses Özyeterliği	M16	Dinleyicileri rahatsız etmeyecek bir ses tonuyla konuşabilirim.	.81	.51	.49
	M17	Sesleri ve heceleri yutmadan konuşma yapabilirim.	.51	.47	.53
	M19	Sesimi fiziki ortama göre düzenleyebilirim.	.86	.64	.36
	M20	Gereken yerlerde sesimi yükseltip alçaltarak konuşmamı etkili kılabilirim.	.68	.53	.47
	M21	Anlaşılacak hızda konuşabilirim.	.46	.26	.54
		Açıklanan varyans	%12		
Üslup ve İfade Özyeterliği	M24	Gergin bir ortamda yapıcı bir üslup kullanabilirim.	.32	.25	.74
	M25	Konuşmamda atasözü, deyim, ikileme gibi söz varlığı unsurlarından yararlanırım.	.33	.63	.75
	M26	Konuşurken kelimeleri doğru telaffuz ederim.	.79	.37	.37
	M27	Zengin bir kelime hazinesiyle konuşabilirim.	.49	.36	.63
	M28	Konuşurken standart Türkçeyi (İstanbul Türkçesi) kullanabilirim.	.72	.25	.64
	M29	Nezaket kuralları çerçevesinde cümleler kullanırım.	.69	.46	.54
		Açıklanan varyans	%12		
Dinleyicileri Dikkate Alma	M32	Konuşmamı yaparken dinleyenlerin yüz ifadelerini ve beden dilini dikkate alırım.	.63	.48	.52
	M33	Konuşmamda dinleyicilere değerli olduklarını hissettirebilirim.	.84	.67	.33
	M34	Anlattıklarımla dinleyicilerde güven duygusu oluşturabilirim.	.89	.72	.28
	M35	Dinleyicilerin düzeylerini (sosyal durum, cinsiyet, yaş vb.) dikkate alarak konuşabilirim.	.54	.44	.56
	M36	Konuşmamı yaparken dinleyicilerle etkileşim kurabilirim.	.54	.57	.43
		Açıklanan varyans	%11		
		Açıklanan toplam varyans	%49		

Appendix B. Effective Speech Self-Efficacy CFA Model and Predictions
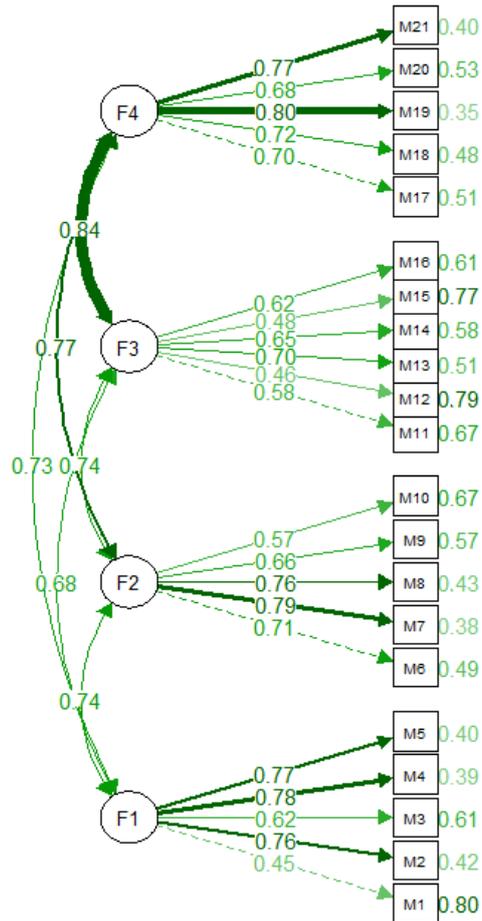
Note. *F1: Presentation SE, F2: Vocal SE, F3: Style and Expression SE, F4: Audience consideration SE