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The Development and Validation of English Communicative Competence Model for High School Students in Korea

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This study develops and validates an English communicative competence model for Korean high school students, in response to the need to redefine the relevant concepts and components of competence that are demanded by the rapidly evolving future society. Drawing on Celce-Murcia's (2008) theoretical model on communicative competence, this research conceptualized a model that could assess high school students' English communicative competence by examining relevant domestic and international studies as well as theoretical reflections. Expert opinions from a two-stage Delphi survey were compiled and incorporated to revise, supplement, and validate the English communicative competence among high school students reflecting Korea's English education environment. Following this process, the conceptual model for English communicative competence was reorganized into five sub-competences (sociolinguistic, discourse, linguistic, interactional, and strategic competence) and 15 corresponding subfactors. The content validity ratio values for the conceptual definition and factor structure of this model were all above 0.64, thus affirming the validity of the conceptual definition and factor structure.

Key words: English communicative competence, model development and validation, Delphi survey, Korean high school, conceptual definition, factor structure

This work is based on the first author's doctoral dissertation completed at Kongju National University.

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1. INTRODUCTION

In today's globalized world, English proficiency has surpassed the confines of mere linguistic accuracy, extending into the realm of effective real-world communication. While theoretical models that address L2 learners' communicative competence, such as Hymes (1972), Canale and Swain (1980), Savignon (2001), Celce-Murcia, Dörnyei, and Thurrell (1995), and Celce-Murcia (2008), have provided significant insights into communicative competence, there exists a gap when tailoring these models to the unique educational and socio-cultural contexts of Korea. Developing and validating such a model isn't just an academic exercise; it's pivotal for curriculum developers, educators, and policymakers (KEDI, 2015; Ku, 2020). Ensuring that the model stands up to rigorous validation ensures its practical applicability in classrooms and its effectiveness in genuinely improving English communicative competences among students.

In response to these demands, various preliminary studies have been conducted, mainly carried out by government-funded educational research institutions. Research on the 2015 revised educational curriculum led by the Ministry of Education, and the 2022 revised educational curriculum are the most representative example (Ministry of Education, 2019, 2022). In these revised educational curricula, there's a recognized need to re-define the concepts and components of capabilities required in future societies. The overarching core competence of the English education is named 'English communicative competence', focusing on communication skills based on the demands of future societies, expanding and systematizing the concept. Additionally, six core competences are specified along with reception, production, and interpersonal interaction areas for English communicative competence (Ministry of Education, 2022).

Moreover, the Korea Institute for Curriculum and Evaluation (KICE) conducted research on evaluating core competences in classroom instruction linked with assessment, starting from the awareness that changes in evaluation are needed to cultivate core competences (KICE, 2016). The research suggested how to evaluate communicative competence and community competence, which are presented as subject competences in many subjects of the revised curriculum, through subject instruction. The study derived the meaning and evaluation elements of communicative competence, analyzed its relevance with the subject curriculum, categorized these competences into knowledge, function, and value/attitude, and presented sub-areas for each (KICE, 2016).

Furthermore, beginning with the critique that the academic achievement evaluation based on the general high school curriculum is not suitable for specialized Meister high school students completing vocational education, the English communicative competence model presented in the Test for Enhanced Employability and Upgraded Proficiency (TEENUP)–a test uniformly conducted by the Ministry of Education for second-year students of

specialized high schools, Meister high schools, and vocational tracks in general high schools nationwide-can be mentioned as an example (Ministry of Education & KCCI, 2020). Additionally, the communicative competence model presented in the Korea Collegiate Essential Skills Assessment (K-CESA), which was developed under the initiative of the Ministry of Education and the Korean Research Institute for Vocational Education and Training (KRIVET) to not only support career development by understanding college students' core competence levels but also to support the enhancement of educational competences of universities, can be cited as an example (KRIVET, 2022).

However, even such research conducted mainly by government-funded educational research institutions in Korea, a universal model of English communicative competence developed and utilized for all students from elementary to high school, or research focusing on vocational basic competence for vocational high school students or college students has been mainly conducted, and the development and validation of conceptual models related to high school students' English communicative competence is lacking. Even in research conducted mainly by domestic and foreign researchers outside government-funded educational research institutions, the situation is the same, with studies on communication competence in general (Ahmad, 2016; Baek, Shin, Kim, Son, & Yoon, 2017; Berns, 2019; Kang & Bae, 2017; Lee, 2019), comparative studies on students' communicative competence changes according to experimental studies (An & Kim, 2018; Bakar, Noordin, & Razali, 2019; Han, 2016; Yoon, 2019), research conducted on elementary or middle school students (Ku, 2020), or research conducted on college students or adults (Blaskova, Blasko, Matuska, & Rosak-Szyrocka, 2015; Farooq, 2015; Kang & Tak, 2019; Kim & Jung, 2022; Kim, Park, Shin, & Lee, 2022; Kwon & Lee, 2021; Lee, Kim, & Hong, 2014; Son, 2016; Song, 2018) being mainstream, and very limited research has been performed to research or develop conceptual models related to high school students' English communicative competence. Therefore, this study aims to develop and validate an English communicative competence model for high school students in Korea.

2. LITERATURE REVIEW

The communicative competence model, pivotal in understanding language acquisition and teaching, has seen nuanced developments since its inception. In 1972, Hymes expanded from a singular focus on grammatical competence to emphasize the role of sociolinguistic competence in understanding context and appropriateness of language use (Hymes, 1972). Canale and Swain (1980) expanded this view by introducing discourse competence and strategic competence, respectively, focusing on communicative strategies and language cohesion. Savignon (2001) emphasized the importance of social interaction in the development of communicative competence in language classrooms by emphasizing the importance of genuine social interaction. Bachman and Palmer (2010) further detailed strategic competence, categorizing it into the processes of assessment, planning, and execution.

Significantly, Celce-Murcia et al. (1995) provided an intricate model integrating together linguistic, pragmatic, discourse, strategic, and sociocultural competences. In this configuration, the structure of language was highlighted as well as the interplay between language and the sociocultural background of the target language community. However, Celce-Murcia (2008) further refined this framework by introducing the concept of formulaic competence. Rather than focusing solely on any individual competence, she emphasized a holistic approach to understanding communicative competence. According to her, true communicative competence consists of a blend of many components, encompassing both complexities and intricacies of language acquisition and usage. She contended that a comprehensive understanding of a language extends beyond its grammatical rules, encompassing a more nuanced appreciation of its socio-cultural, strategic, and discourse-related nuances.

Celce-Murcia's (2008) model on communicative competence provides a deep understanding of how we learn and use language. Similarly, the Korean revised English curriculum from 2015 and 2022 focuses on teaching language as a tool for real-life communication, not just grammar. The Korean revised English curriculum, mirroring Celce-Murcia's approach, highlights communicative language teaching and promotes the comprehensive development of listening, speaking, reading, and writing abilities. Moreover, they also stress the importance of strategies for effective communication and understanding language in its cultural setting. In essence, the alignment between the Korean English curriculum and Celce-Murcia's model shares aims for a complete and practical approach to language learning.

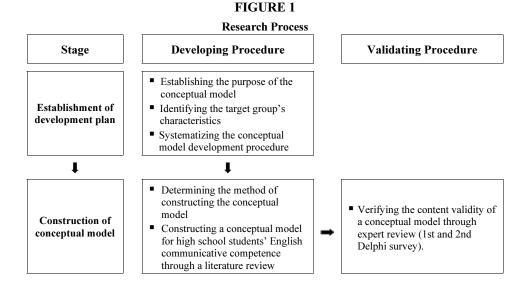
In Korea, research on communication competence for university students has been more active compared to studies focusing on middle and high school students. In this context, the study by Kwon and Lee (2021, p. 138), "A study on the validation of University students' communication competency components," is a notable example. This research categorized university students' communication competences into three main areas "understanding," "expression," and "coordination," including sub-factors like "acceptance and understanding ability," "empathy ability," "self-expression ability," "interpersonal conflict resolution ability," and "emotional connection." Furthermore, this study provided a foundation for developing items to measure university students' communication competences, suggesting significant implications for the development and validation of an English communication competences at the university level can be linked to high school education.

A study by Baek et al. (2017, p. 395) focused on the communicative competence of high school students. Building on previous research, this study divided communicative competence into "productive ability," "content organization ability," and "receptive ability." These were further classified into five sub-factors each such as "speaking," "writing," "gestures and expressions," and "symbols." However, their study was part of the process to develop and validate tools for measuring core competences in the revised curriculum and just assessed overall communication competence of high school students. It did not include specific sub-factors critical for English communication competence in English subjects, indicating a need for more detailed research in this area. Therefore, based on various prior studies, this study aims to develop and validate a high school English communicative competence model that aligns with Korea's English education environment, grounded in Celce-Murcia's (2008) communicative competence model.

3. METHODOLOGY

3.1. Research Design

This research followed a systematic verification procedure (Seong, 2020), and the process is divided into two main stages. In the first stage, the development plan was established by identifying the purpose of the conceptual model, the characteristics of the target group, and the procedures for systematically developing the conceptual model. In the second stage, the construction of the conceptual model, the method of constructing the model was determined. The concept of high school students' English communicative competence, the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to sub-competences were constructed based on previous research and theoretical considerations. Following this, the content validity was verified through an expert review, conducting a Delphi survey (see Figure 1).



3.2. Establishment of Development Plan

To teach English to students, it is essential to first diagnose the level of English communicative competence that the student possesses. In order to do so, the most preliminary step is to develop and validate a model of English communicative competence for the target group (Smith & Jones, 2022). Accordingly, in this study, a comprehensive review of prior research and theories related to English communicative competence was conducted. Thereafter, the concept of high school students' English communicative competence, the factor structure and concept of sub-competences, and the factor structure and concept of sub-competences were constructed.

3.3. Construction of Conceptual Model

As a result of analyzing previous studies on the development procedure of competencerelated models, it was found that the most commonly used method for constructing a factor structure is the deductive approach through literature research and related theories (An, Brown, & Guerlain, 2019). Therefore, using the deductive approach, the researcher established the concept of high school students' English communicative competence, the factor structure and concept of sub-competences, and the factor structure and concept of subfactors according to sub-competences based on the theoretical model of Celce-Murcia (2008).

The previous studies related to English communicative competence are: 1)

communication competency in course curriculum, Ministry of Education, British Columbia, Canada (Ministry of Education in British Columbia, 2022), 2) general capabilities in English as an additional language or dialect in senior secondary curriculum, Ministry of Education, Australia (Ministry of Education in Australia, 2022), 3) competences for democratic culture, Council of Europe (Council of Europe, 2016), 4) collaboration and communication competency in assessment of transversal skills 2020 (ATS2020, 2020), 5) communication skills in partnership for 21st century learning (Partnership for 21st Century Learning, 2022), 6) communicative competence in the 2015 revised national curriculum, Ministry of Education, Republic of Korea (Ministry of Education, 2019), 7) communicative competence in the 2022 revised national curriculum, Ministry of Education, Republic of Korea (Ministry of Education, 2022), 8) research report (RRE 2016-10) of Korea Institute for Curriculum and Evaluation: classroom assessment methods for enhancing students' core competencies focusing on communication and social competencies (KICE, 2016), 9) communication English in Test for Enhanced Employability and Upgraded Proficiency (TEENUP), Ministry of Education and the Korea chamber of Commerce and Industry (KCCI), Republic of Korea (Ministry of Education & KCCI, 2020), 10) communicative competence and global competence in Korea Collegiate Essential Skills Assessment (K-CESA), Ministry of Education and the Korean Research Institute for Vocational Education and Training (KRIVET), Republic of Korea (Ministry of Education & KRIVET, 2010), and 11) the development and validation of six core competencies measurement scale for high school students in Korea (Baek et al., 2017).

To conduct a comprehensive and systematic review of previous studies, a set of predetermined search criteria and keywords was used, extracted from Celce-Murcia's (2008) communicative competence model. Through a rigorous and systematic process of conceptual modeling, including synthesizing, analyzing, separating, adding, deleting, and renaming concepts and factors, the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to sub-competences of previous studies were classified. According to Celce-Murcia's (2008) communicative competence framework, the sub-areas identified in the previous studies related to English communicative competence, as discussed above, can be classified into seven categories: 1) sociocultural competence, 2) discourse competence, 3) linguistic competence, 4) formulaic competence, 5) interactional competence, 6) strategic competence, and 7) not included in any competence or too comprehensive to be classified into a particular category. Based on a synthesis and analysis of these sub-area classifications, this study derives the sub-competences and sub-factors of English communicative competence for high school students.

The validity of the concept of high school students' English communicative competence, the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to sub-competencies were verified through a Delphi survey (Brown, 1968; Linstone & Turoff, 1975). As a type of qualitative research method, the Delphi survey is effective in verifying specific concepts and sub-factors because it derives a collective consensus through organizing and synthesizing the opinions of various expert groups. Hence, it is widely used in conceptual model development (Mengual-Andrés, Roig-Vila, & Mira, 2016; Peeraer & Van Petegem, 2012).

In the case of the Delphi survey, the selection of an expert panel is essential to increase the reliability of the survey results (Green, Jones, Hughes, & Williams, 1999). The experts' expertise in the relevant field, professional knowledge, and experience should be carefully considered in selecting a group of experts in a related field. To ensure a comprehensive selection, criteria included a minimum of 10 years of experience in English education, active involvement in relevant research or policy-making, and a track record of publications in the field. An appropriate number of experts must also be set to minimize errors and derive a reliable consensus while organizing and synthesizing the opinions of the expert panels. The appropriate number of members of the expert panel varies somewhat among scholars, but it is recognized that approximately 10 to 15 members are appropriate (Diamond et al., 2014). Accordingly, in this study, an expert group consisting of researchers from government agencies or government-funded research institutes (3 people), researchers from the College of Education (Department of English Education) (5 people), and English teachers in secondary schools (3 people) was formed to verify content validity. This diverse composition ensured a balanced representation of perspectives from policy, academia, and practical teaching field. In addition, to address potential conflicts of interest and biases, a blind review process within the panel was implemented and ensured that no two members were from the same institution (see Table 1).

		Expert Group		Relevant Experience	
	Selection Criteria	Affiliation and Position	- Degree		
1	 Researchers from government agencies or government-funded research 	Ministry of A, senior researcher	Ph.D. in English Literature	28 years	
2	 institutes Research performance related to a communicative 	B Institute, research fellow	Ph.D. in Education	20 years	
3	competence modelPh.D. in related fields	C Institute, senior research fellow	Ph.D. in Education	22 years	
4	 Researchers from the College of Education (Department of English Education) 	A University (department of English education), professor	Ph.D. in Literature	25 years	
5	Ph.D. in related fields	B University	Ph.D. in	15 years	

 TABLE 1

 General Characteristics of Delphi Expert Panels

		(department of English education), professor	Linguistics	
6		C University (department of English education), professor	Ph.D. in Applied Linguistics	31 years
7		D University (department of English education), professor	Ph.D. in Applied Linguistics	30 years
8		E University (department of English education), lecturer	Ph.D. in Education	11 years
9	 English teachers in the secondary school 	English teacher, A office of education	Ph.D. in Education	27 years
10	 English teachers with experience in English curriculum development, 	Master English teacher, A office of education	Master's degree in Education	34 years
11	 research related to English education evaluation or teacher training experience, etc. Master's degree or higher in related fields 	English teacher, B office of education	Doctor course completion in Education	14 years

The Delphi survey was conducted in two stages, and the process for each stage is as follows. In the 1st Delphi survey, the researcher established the concept of high school students' English communicative competence, the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to sub-competences based on the theoretical model of Celce-Murcia (2008). Then, a semi-structured questionnaire was used to request expert opinions. The 1st Delphi survey was conducted from January 7 to 14, 2022, with 11 experts as Delphi panels. The questionnaire was delivered and collected via email, and all 11 panels participated, resulting in a 100% collection rate.

Based on the revised and supplemented conceptual model of English communicative competence for high school students, the 2nd Delphi questionnaire was developed following the 1st Delphi survey. The 2nd survey was carried out from January 21 to 28, 2022, with the 11 people who participated in the 1st Delphi survey. The questionnaire was delivered and collected via email, with all 11 participants taking part, resulting in a 100% collection rate.

Content validity verification through the Delphi survey was confirmed by descriptive statistics (mean, standard deviation, positive response rate), central tendency (median, mode, interquartile range), and content validity ratio (CVR) index based on the number of panels. CVR is a ratio of how much a panel agrees on a corresponding concept and factor based on the number of panels. The number of panels in the Delphi survey and the minimum value of the CVR followed the criteria presented by Lawshe (1975).

4. RESULTS

4.1. Results of the First Delphi Survey

Based on Celce-Murcia's (2008) theoretical model, the researcher reviewed previous studies and constructed the concept of high school students' English communicative competence, along with the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to each sub-competence. The first Delphi survey analyzed the constructions, and the results are presented below (see Table 2).

First of all, the definitions of English communicative competence, social contextual factors, cultural factors, stylistic appropriateness, cohesion, coherence, deixis factors, structural factors, linguistic competence, orthographic factors, phonological factors, lexical factors, morphological factors, syntactic factors, formulaic competence, collocations, idioms, routines, lexical frames, conversational factors, non-verbal/paralinguistic factors, and meta-cognitive factors as well as the factor structures of sociocultural competence, discourse competence, interactional competence, and strategic competence were confirmed to have a CVR value of 0.64 or higher, indicating a representative content validity index above the criteria value of 0.59 or higher (Lawshe, 1975). Thus, it means that the validity of the concept definition and factor structure was obtained.

On the other hand, the factor structure of English communicative competence, linguistic competence, and formulaic competence as well as the definition of sociocultural competence, discourse competence, interactional competence, actional factors, strategic competence, cognitive factors, affective factors, and instrumental factors failed to achieve content validity due to not satisfying the CVR value.

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		$\mathbf{T}_{\mathbf{F}}$	ABLE 2					
Results of the First Delphi Survey								
		Descriptive Statistics Central Tendency			ncy			
	-	М	SD	PRR (%)	Median	Mode	IR	CVR
The definition of English communicative competence		4.36	.674	91	4	4	4-5	.82*
The factor structure of sub- competences		4.18	.874	73	4	5	3-5	.45
1.5	Sociocultural competence	4.18	.874	73	4	5	3-5	.45
The factor structure of sub- factors		4.36	.674	91	4	4	4-5	.82*
	1.1. Social contextual factors	4.64	.505	100	5	5	4-5	1*
	1.2. Social factors	4.36	.809	82	5	5	4-5	.64*

1.3. Stylistic appropriateness	4.64	.505	100	5	5	4-5	1*
2. Discourse competence	4.09	.831	73	4	4	3-5	.45
The factor structure of sub- factors	4.45	.522	100	4	4	4-5	1*
2.1. Cohesion	4.55	.522	100	5	5	4-5	1^{*}
2.2. Coherence	4.45	.688	91	5	5	4-5	.82*
2.3. Deixis factors	4.27	.786	82	4	5	4-5	.64*
2.4. Structural factors	4.45	.688	91	5	5	4-5	.82*
3. Linguistic competence	4.36	.809	82	5	5	4-5	.64*
The factor structure of sub- factors	4.18	.874	73	4	5	3-5	.45
3.1. Orthographic factors	4.36	.674	91	4	4	4-5	.82*
3.2. Phonological factors	4.36	.645	91	4	4	4-5	.82*
3.3. Lexical factors	4.36	.674	91	4	4	4-5	.82*
3.4. Morphological factors	4.36	.809	82	5	5	4-5	.64*
3.5. Syntactic factors	4.55	.688	91	5	5	4-5	.82*
4. Formulaic competence	4.27	1.009	82	5	5	4-5	.64*
The factor structure of sub- factors	4	.876	64	4	3	3-5	.27
4.1. Collocations	4	.894	82	4	4	4-5	.64*
4.2. Idioms	4.18	.982	82	4	5	4-5	.64*
4.3. Routines	4.18	.603	91	4	4	4-5	.82*
4.4. Lexical frames	3.91	.831	82	4	4	4	.64*
5. Interactional competence	3.82	1.328	73	4	4	3-5	.45
The factor structure of sub- factors	4.27	.647	91	4	4	4-5	.82*
5.1. Conversational factors	4.36	.674	91	4	4	4-5	.82*
5.2. Actional factors	3.73	1.272	64	4	5	2-5	.27
5.3. Non- verbal/paralinguistic factors	4.27	.786	82	4	5	4-5	.64*
6. Strategic competence	4	1	73	4	4	3-5	.45
The factor structure of sub- factors	4.27	.786	82	4	5	4-5	.64*
6.1. Cognitive factors	3.82	1.25	73	4	4	2-5	.45
6.2. Meta-cognitive factors	4	1.095	91	4	4	4-4.25	.82*
6.3. Affective factors	4.09	.831	73	4	4	3-5	.45
6.4. Instrumental factors	3.91	1.044	64	4	5	3-5	.27
I							

Note: M = mean, *SD* = standard deviation, PRR = positive response rate, IR = interquartile range, CVR = content validity ratio

* CVR > .59

The concept definition and factor structure of high school students' English communicative competence were modified by comprehensively analyzing the experts' comments presented in the 1st Delphi survey, as well as the concept definitions and factor structures for which validity was not obtained. Firstly, with regards to the general opinion aspect, experts suggested changing the expression "knowledge and understanding", commonly included in the concept definition of the sub-factors, to "understanding and utilizing" because it is also important for students to actually apply their knowledge.

Looking at the opinions on the concept definition aspect, there was a comment that "purpose" was not reflected in the definition of English communicative competence, and experts suggested reconsidering the expressions "appropriately" and "correctly." In the case of sociocultural competence, there was an opinion that the naming of the competency was too broad, so the scope needed to be narrowed down to a language-related competence. Furthermore, some experts suggested reviewing the expression "in general contexts." In the definition of discourse competence, there was an idea that the expression function and the comprehension function were not balanced. In the definition of cohesion, there was an opinion that it would be desirable to change the expression "between texts" to "between sentences." Additionally, experts suggested changing the expression "in meaning or function" to "of texts" in the definition of coherence because the expression "in meaning or function" is too abstract.

Regarding the definition of linguistic competence, experts suggested using the expression "correctly" in terms of accuracy, which seemed more appropriate than "appropriately" because it was previously used under the name "grammatical competence." In the definition of orthographic factors, there was an idea that it would be appropriate to reconsider the expression "conventions." In the definition of phonological factors, experts suggested changing the expression "segmentals, suprasegmentals" to "segmental features, suprasegmental features." Some experts felt that the definition of lexical factors was too detailed. In the definition of morphological factors, there was a suggestion that the expression "word formation" seems more appropriate than "word form." In the definition of syntactic factors, the deletion of the expression "basic" was suggested.

In the case of interactional competence, it was suggested that it is necessary to specify the concept of the competence more clearly, that is, to clearly define 'what' the competence entails. Regarding strategic competence, there were comments that a more precise statement was needed as the concept of the competence was ambiguous, and the expression "to achieve the purposes of English communication" seemed more appropriate than "to improve communicative competence." The definition of cognitive factors was considered too abstract, and in the definition of meta-cognitive factors, the expression "regulations of cognitive activities" was suggested as more appropriate than "cognitive activities and regulations." There was an opinion that it was necessary to clarify the position referred to in the definition

of affective factors, whether it was that of "the learner oneself" or that of "the other side." Additionally, there was a comment that the concept of 'tools' in the definition of instrumental factors was ambiguous.

Regarding the factor structure aspect, some opinions suggested incorporating 'cultural factors' into 'social contextual factors' since 'cultural factors' were seen as a component of 'social contextual factors' or overlapped with them. Similarly, there was an idea to incorporate 'deixis factors' into 'cohesion' as they were viewed as a component of 'cohesion.' 'Formulaic competence' and its sub-factors were perceived as sub-factors of 'lexical factors' rather than a separate competence. Consequently, it was suggested that 'formulaic competence' should be integrated into 'lexical factors', and sub-factors of 'formulaic competence' should be included while generating inventory items. On the other hand, the suggestion was made to delete 'actional factors' since the concept of these factors was unclear. Finally, there was a suggestion to integrate 'non-verbal/paralinguistic factors' with 'instrumental factors.'

As a result, the factor structure of high school students' English communicative competence was reorganized into five sub-competences, excluding formulaic competence, from the original six sub-competences. Moreover, it was reorganized into 15 sub-factors by deleting, integrating, or incorporating cultural factors, deixis factors, collocations, idioms, routines, lexical frames, actional factors, non-verbal/paralinguistic factors, and instrumental factors from the previous 23 sub-factors. Based on the revised and supplemented conceptual model of English communicative competence for high school students, the 2nd Delphi questionnaire was developed following the 1st Delphi survey. The 2nd survey was carried out, with the 11 people who participated in the 1st Delphi survey, resulting in a 100% collection rate.

4.2. Results of the Second Delphi Survey

In the 2nd Delphi survey, the concept definitions and factor structures of high school students' English communicative competence were modified and supplemented based on the reviews of experts presented in the 1st Delphi survey. The results of the 2nd Delphi survey analysis for the constructions indicated that the CVR values of the concept definition and factor structure of high school students' English communicative competence, which were modified by synthesizing and reflecting the review opinions of the 1st Delphi survey, were all confirmed to be 0.64 or higher. This is above the criteria value of 0.59 or higher, indicating that the validity of the concept definition and the factor structure was obtained.

Furthermore, the concept definitions of high school students' English communicative competence were modified by comprehensively analyzing the experts' comments presented in the 2nd Delphi survey. In terms of the concept definition aspect, there was an opinion that

the expression "understand" is more appropriate than the expression "interpret" in the definition of sociolinguistic competence. In the definition of discourse competence, there were suggestions that it would be desirable to change the expression "interpret" to "understand" and delete the expression "diverse forms" as it overlaps with 'stylistic appropriateness.' Regarding the definition of 'coherence', there were comments that it was necessary to specify the statements on 'connectivity'. In the definition of 'interactional competence', an idea was raised that 'participate in the process of constructing discourse' and 'convey the meaning' seemed to be separated. Finally, in the definition of 'affective factors', it was suggested that it would be appropriate to delete the expression "temperament."

In conclusion, the study's modifications derived from the two-stage Delphi survey were specifically tailored to align with the cognitive and linguistic development stages of Korean high school students. The change from "knowledge and understanding" to "understanding and utilizing" in various sub-factors not only simplifies the terminology but also highlights the application aspect of learning, which is crucial for this age group. Additionally, the adjustments in the concept definitions and factor structures, such as refining 'sociocultural competence' and balancing the expression function in 'discourse competence,' are designed to reflect the unique educational and cultural settings of Korean high schools. These modifications enhance the model's applicability and relevance, ensuring that it appropriately reflects the diverse communicative abilities required in the specific context of Korean high school education. With these context-specific adaptations and the strong CVR values, the model has the potential to significantly impact English educational environments in Korea.

After considering the opinions of experts in the 1st and 2nd Delphi surveys, the concept definitions and factor structures of high school students' English communicative competence were modified and refined. The final concept definitions and factor structures are as follows (see Table 3 & Appendix).

English Communicative Competence for High School Students				
Factor Structures	Concept Definitions			
English communicative competence	• The competence to appropriately express their opinions and feelings by using appropriate language structures, written language, spoken language, symbols, images, medium, and tools, and to interpret and understand others' opinions and feelings to interact in various sociolinguistic English communication contexts			
1. Sociolinguistic competence	• The competence to appropriately express and understand their messages in various sociolinguistic English communication contexts			
1.1. Social contextual factors	• Understanding and utilizing of communication participants and situations			

TABLE 3

1.2	
1.2. Stylistic appropriateness	• Understanding and utilizing of the genres and register of the language
2. Discourse competence	 The competence to organizationally synthesize linguistic structures to deliver a unified message, and to correctly understand meaning by utilizing discourse information
2.1. Cohesion	 Understanding and utilizing of linguistic devices that express the connection between sentences
2.2.	 Understanding and utilizing of the reasonable unity and
Coherence	meaningful connectivity of texts
2.3. Structural factors	 Understanding and utilizing of the discourse structures and formal schemata
Structural factors	The competence to correctly express and interpret their
3. Linguistic competence	messages in various English communication contexts based on the linguistic knowledge such as orthography, phonology, lexicology, morphology, and syntax
3.1. Orthographic factors	• Understanding and utilizing of the rules for writing a language
3.2. Phonological factors	 Understanding and utilizing of segmental features (consonants, vowels, syllable types) and suprasegmental features (stress, intonation, rhythm)
3.3. Lexical factors	 Understanding and utilizing of the characteristics of words and the relationships between words
3.4. Morphological factors	 Understanding and utilizing of the word formation, such as parts of speech, grammatical inflections, and derivational processes, etc.
3.5. Syntactic factors	 Understanding and utilizing of the sentence constituents, sentence structures, word order, and sentence types, etc.
4. Interactional competence	• The competence to convey the meaning by participating in the process of constructing discourse through interactions with others in English communication contexts
4.1. Conversational factors	• Understanding and utilizing of turn-taking system in interactions with others such as 'how to open and close the conversations, how to establish and change the conversation topics, how to interrupt the conversations, etc.'
4.2. Mediational factors	 Understanding and utilizing of appropriate media selection and delivery methods for effective message delivery
5. Strategic competence	• The competence of learners to strategically recognize and regulate their language behaviors or thinking processes in order to achieve the purpose of English communication
5.1. Cognitive factors	 Understanding and utilizing of various strategies to achieve the purpose of English communication (such as outlining, summarizing, note-taking, time gaining, compensating, etc.)
5.2. Meta-cognitive factors	• Understanding and utilizing of overall regulations of cognitive activities, ranging from the awareness of what learners themselves know and don't know to the plans to compensate for the deficiencies and self-evaluate the implementation process of the plan
5.3. Affective factors	 Understanding and utilizing of the learner oneself's affective elements (such as attitude, emotion, sense of values, motivation, etc.)

5. CONCLUSION AND IMPLICATIONS

The purpose of this study is developing and validating a model of English communicative competence for Korean high school students, recognizing the need to redefine the concept and components of competences. Based on the theoretical model of communicative competence by Celce-Murcia (2008), the domestic and international precedents related to the concept of English communicative competence, its sub-competences, and sub-factors were comprehensively examined to design a conceptual model for high school students' English communicative competence. Within a systematic process, the validity was rigorously verified by reflecting the opinions of experts presented in the Delphi survey and statistical verification. As a result, the English communicative competence, discourse competence, linguistic competence, interactional competence, strategic competence) and, based on these, 15 sub-factors (social contextual factors, stylistic appropriateness, cohesion, coherence, structural factors, orthographic factors, phonological factors, mediational factors, cognitive factors, meta-cognitive factors, affective factors) were identified.

Through the conceptual model developed and validated in this study, high school students-the primary target audience-can autonomously utilize it. This model allows them to gain an in-depth understanding of the communicative competence necessary for English proficiency. It provides a clear pathway for students to enhance their English communication competence. Moreover, the model assists students in identifying specific areas for improvement, facilitating targeted learning strategies. This practical approach goes beyond theoretical knowledge, directly influencing their ability to communicate effectively in various contexts. Thus, students are able to identify the necessary content for each subcompetence and understand the learning objectives for sub-factor, promoting self-directed learning. At the school level, educators can leverage the model to craft individualized learning pathways, assisting students of diverse proficiency levels to advance at a pace suitable for their needs. Furthermore, teachers can employ the model to design curricula that align with the real-world communicative demands and expectations of high school students in Korea. Finally, on a national scale, this model can serve as the foundation for developing assessment tools or inventories that resonate with the learning outcomes and prevailing English education policies, offering valuable feedback to learners.

Based on the results of this study, the researcher would like to make the following recommendations for follow-up research and the utilization of research results. Firstly, the conceptual model developed through this study requires ongoing modifications and refinements. There were slight differences between the model derived through theoretical considerations and the model derived from the Delphi survey when designing the English

communicative competence for high school students. While it might be deemed to possess appropriate validity, considering it reflects the actual English communicative competence of Korean high school students and appropriately reflects the concepts of the changed subfactors, continuous research is necessary to respond to the evolving English education environment. Secondly, based on the concept and factor structure of high school students' English communicative competence that was constructed and validated in this study, it can serve as a conceptual framework for the development of English communicative competence models for middle school students or adults. Specifically, the concepts of high school students' English communicative competence validated in this study, the factor structure and concept of sub-competences, and the factor structure and concept of sub-factors according to sub-competences can be applied regardless of the age or educational level of the examinee. Hence, when developing an English communicative competence model for a specific age group or educational level in the future, the concepts and factor structure of high school students' English communicative competence validated in this study can be used as foundational data for the theoretical framework of that research. Lastly, although the model developed through this research may be heavily influenced by the cultural and educational context of Korea, which might pose limitations in its direct application to other cultural or linguistic contexts, the core concepts and factor structures of this model can be applied regardless of a specific country's English education situation. This study's findings offer a framework that, despite its origin, can be adapted to different countries' specific educational and cultural needs. This flexibility not only demonstrates the model's effectiveness in Korea but also its potential as a global framework for improving English communication competence across different cultural landscapes. Consequently, this model can serve as foundational data, supporting a wide range of research in different educational contexts.

Applicable level: Secondary

REFERENCES

- Ahmad, S. R. (2016). Importance of English communication skills. *International Journal of Applied Research*, 2(3), 478-480.
- An, B., Brown, D., & Guerlain, S. (2019). The evaluation of a serious game to improve cross-cultural competence. *IEEE Transactions on Learning Technologies*, 12(3), 429-441.

- An, Y. E., & Kim, S. J. (2018). The effect of the English medium instruction based on students' English levels: Focusing on English communication ability, learning difficulty and GPA. *Asian Journal of Education*, 19(2), 331-352.
- Assessment of Transversal Skills 2020 (ATS2020). (2020). *Collaboration and communication competency presented by the ATS2020*. Retrieved on January 3, 2023, from https://resources.ats2020.eu/resource-details/ADM/ats2020-framework
- Bachman, L., & Palmer, A. S. (2010). Language assessment in practice: Developing language assessments and justifying their use in the real world. Oxford, England: Oxford University Press.
- Baek, S. G., Shin, A. N., Kim, Y. K., Son, J. Y., & Yoon, S. H. (2017). The development and the validation of six core competencies measurement scale for high school students in Korea. *Journal of Educational Evaluation*, 30(3), 363-395.
- Bakar, N. I. A., Noordin, N., & Razali, A. B. (2019). Improving oral communicative competence in English using project-based learning activities. *English Language Teaching*, 12(4), 73-84.
- Berns, M. (2019). World Englishes and communicative competence. In C. L. Nelson, Z. G.
 Proshina & D. R. Davis (Eds.), *The handbook of world Englishes* (pp. 674-685).
 Hoboken, NJ: Wiley & Sons.
- Blaskova, M., Blasko, R., Matuska, E., & Rosak-Szyrocka, J. (2015). Development of key competences of university teachers and managers. *Procedia-Social and Behavioral Sciences, 182*, 187-196.
- Brown, B. B. (1968). *Delphi process: A methodology used for the elicitation of opinions of experts*. Santa Monica, CA: Rand Corporation.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1-47.
- Celce-Murcia, M. (2008). Rethinking the role of communicative competence in language teaching. In E. A. Soler & M. P. S. Jorda (Eds.), *Intercultural language use and language learning* (pp. 41-57). Dordrecht, Netherlands: Springer.
- Celce-Murcia, M., Dörnyei, Z., & Thurrell, S. (1995). Communicative competence: A pedagogically motivated model with content specifications. *Issues in Applied Linguistics*, 6(2), 5-35.
- Council of Europe (2016). Competences for democratic culture: Living together as equals in culturally diverse democratic societies. Strasbourg, France: Council of Europe Publishing.
- Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology*, 67(4), 401-409.

- Farooq, M. U. (2015). Creating a communicative language teaching environment for improving students' communicative competence at EFL/EAP university level. *International Education Studies*, 8(4), 179-191.
- Green, B., Jones, M., Hughes, D., & Williams, A. (1999). Applying the Delphi technique in a study of GPs' information requirements. *Health & Social Care in the Community*, 7(3), 198-205.
- Han, J. I. (2016). Effects of international telecollaboration activities through a virtual classroom on Korean EFL learners' communication skills and intercultural competence. *Multimedia Assisted Language Learning*, 19(3), 137-157.
- Hymes, D. (1972). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmondsworth, England: Penguin Books.
- Kang, J. Y., & Tak, J. K. (2019). Development and validity of the communication competence scale of middle managers. *Korean Journal of Industrial and Organizational Psychology*, 32(4), 439-471.
- Kang, Y. J., & Bae, H. J. (2017). Analysis of K-CESA sub-factors: Focusing on communication skill result. *The Journal of Core Competency Education Research*, 2(2), 15-30.
- Kim, H. J., Park, S. Y., Shin, Y. S., & Lee, Y. K. (2022). The development of a behaviorbased measurement tool for undergraduate students' communication competency in online learning situations. *Korean Journal of Educational Research*, 60(2), 201-229.
- Kim, S. Y., & Jung, S. Y. (2022). Dental English education for Korean dental students: Focused on development of foreign patient-dentist communication skills. *The Journal of the Korean Dental Association*, 60(7), 402-421.
- Korean Educational Development Institute (KEDI). (2015). *KEDI survey research on student competencies: The development and validation of instruments (RR2015-31)*. Jincheon, Korea: KEDI.
- Korea Institution for Curriculum and Evaluation (KICE). (2016). Development and application of an assessment procedure to enhance core competencies: Focusing on communication and social competencies (RRE 2016-10). Jincheon, Korea: KICE.
- Korea Research Institute for Vocational Education and Training (KRIVET). (2022). A study on support and utilization of Korea collegiate essential skills assessment (K-CESA) (2022-05). Sejong, Korea: KRIVET.
- Ku, K. Y. (2020). Development and validation of a self-assessment tool for upper elementary and middle school students key competencies in English education. *The Journal of Mirae English Language and Literature*, 25(2), 135-161.
- Kwon, Y. A., & Lee, H. S. (2021). A study on the validation of university students communication competency components. *Journal of Learner-Centered Curriculum* and Instruction, 21(22), 183-192.

- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563-575.
- Lee, I. W. (2019). The sub-elements of 'communication competency' as core competence reflected in the 2015 revised curriculum. *The Journal of Curriculum and Evaluation*, 22(3), 1-29.
- Lee, J. H., Kim, H. G., & Hong, S. Y. (2014). Development of communicative competency assessment tools for improving curriculum of general education. *Korean Journal of General Education*, 8(2), 299-332.
- Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications*. Reading, MA: Addison-Wesley.
- Mengual-Andrés, S., Roig-Vila, R., & Mira, J. B. (2016). Delphi study for the design and validation of a questionnaire about digital competences in higher education. *International Journal of Educational Technology in Higher Education*, 13(1), 1-11.
- Ministry of Education. (2015). 2015 revised English national curriculum (2015-74). Sejong, Korea: Korean Ministry of Education.
- Ministry of Education. (2022). 2022 revised English national curriculum (2022-33). Sejong, Korea: Korean Ministry of Education.
- Ministry of Education in Australia. (2022). *General capabilities in English as an additional language or dialect in senior secondary curriculum presented by the Ministry of Education in Australia.* Retrieved on January 3, 2023, from https://australiancurriculum.edu.au/senior-secondary-curriculum/english/english-as-an-additional-language-or-dialect/representation-of-general-capabilities/
- Ministry of Education in British Columbia. (2022). Communication competency in course curriculum presented by the Ministry of Education in British Columbia, Canada. Retrieved on January 3, 2023, from https://curriculum.gov.bc.ca/competencies/ communication
- Ministry of Education, & Korea Research Institute for Vocational Education and Training (KRIVET). (2010). 2010 establishment of assessment system for college students' core competency (10-17). Sejong, Korea: KRIVET.
- Ministry of Education, & The Korea Chamber of Commerce and Industry (KCCI). (2020). Test for enhanced employability and upgraded proficiency (TEENUP): Assessment framework. Seoul: KCCI.
- Partnership for 21st Century Learning. (2022). Communication skills presented by partnership for 21st century learning. Retrieved on January 3, 2023, from https://www.battelleforkids.org/networks/p21/frameworks-resources
- Peeraer, J., & Van Petegem, P. (2012). Measuring integration of information and communication technology in education: An item response modeling approach. *Computers & Education*, 58(4), 1247-1259.

- Savignon, S. J. (2001). Communicative language teaching for the twenty-first century. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed., pp. 13-28). Boston, MA: Heinle & Heinle.
- Seong, T. J. (2020). Introduction to educational research (5th ed.). Seoul: Hakjisa.
- Smith, J. A., & Jones, K. L. (2022). The importance of operational definitions in inventory development. *Journal of Applied Psychology*, 107(2), 280-291.
- Son, Y. H. (2016). An exploratory study for development of tools to measure university students' communication competence. *Journal of Speech, Media & Communication Research, 15*(1), 83-107.
- Song, H. J. (2018). Development of a communication competency scale for university students. *Global Creative Leader*, 8(3), 129-148.
- Yoon, S. D. (2019). Effects of cooperative learning on high school students' English reading ability and the key competencies of the 2015 revised national curriculum. *The Journal of Mirae English Language and Literature*, *24*(2), 295-317.

APPENDIX

고등학생 영어 의사소통 역량 모형

요인 구조	개념 정의
영어 의사소통 역량 English communicative competence	다양한 사회언어적 영어 의사소통 맥락에서 상호작용하기 위해 적합한 언어 구조, 문자 언어, 음성 언어, 상징, 이미지, 매체, 도구 등을 활용하여 적절하게 자신의 의견과 감정을 표현할 수 있으며, 타인의 의견과 감정을 해석하고 이해할 수 있는 역량
1. 사회언어적 역량 Sociolinguistic competence	다양한 사회언어적 영어 의사소통 맥락에서 메시지를 적절하게표현하고 이해할 수 있는 역량
1.1. 사회맥락적 요소	의사소통 참여자와 상황에 대한 이해와 활용
1.2. 문체적 적절성	장르 및 언어의 사용역(register)에 대한 이해와 활용
2. 담화적 역량 Discourse competence	유기적으로 언어 구조를 합성하여 통일된 메시지를 전달할 수 있으며, 담화 정보를 활용하여 올바르게 의미를 이해할 수 있는 역량
2.1. 결속성	문장 간의 연결 관계를 표현하는 언어적 장치에 대한 이해와 활용
2.2. 통일성	텍스트의 타당한 일관성과 의미적인 연결성에 대한 이해와 활용
2.3. 구조적 요소	담화 구조와 형식 체계에 대한 이해와 활용
3. 언어적 역량 Linguistic competence	철자, 음운, 어휘, 형태, 통사 등의 언어적 지식을 통해 영어 의사소통 맥락에서 메시지를 올바르게 표현하며 이해할 수 있는 역량
3.1. 철자적 요소	언어를 문자로 표기하기 위한 규칙의 이해와 활용

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3.2. 음운적 요소	분절 자질(자음, 모음, 음절 유형)과 초분절 자질(강세, 억양, 리듬)에 대한 이해와 활용
3.3. 어휘적 요소	단어의 특성과 단어 사이의 관계에 대한 이해와 활용
3.4. 형태적 요소	품사, 문법적 굴절, 파생 과정 등 단어의 형성에 대한 이해와 활용
3.5. 통사적 요소	문장의 구성 성분 및 구조, 단어 순서, 문장 유형 등에 대한 이해와 활용
상호작용적 역량 eractional competence	영어 의사소통 맥락에서 다른 사람과의 상호작용을 통해 함께 담화를 구성하는 과정에 참여하여 의미를 전달할 수 있는 역량
4.1. 대화적 요소	대화를 시작하고 종료하는 방법, 대화의 주제를 설정하고 변경하는 방법, 대화의 중간에 끼어들거나 중단하는 방법 등과 같이 다른 사람과의 상호작용에서 주고받는 체계에 대한 이해와 활용
4.2. 매개적 요소	효과적으로 메시지를 전달하기 위한 적절한 매체 선정, 전달 방법 등에 대한 이해와 활용
 선략적 역량 ategic competence	영어 의사소통 목적을 달성하기 위해 학습자가 자신의 언어 행동이나 사고 과정을 전략적으로 인식하고 조절할 수 있는 역량
5.1. 인지적 요소	개요 작성하기, 요약하기, 메모하기, 시간 끌기, 회피하기, 보상하기 등과 같이 의사소통 목적을 달성하기 위한 다양한 전략의 이해와 활용
5.2. 메타인지적 요소	학습자 자신이 무엇을 알고 모르는지에 대한 인지부터, 부족한 부분을 보완하기 위한 계획 수립과 그 계획의 실행 과정을 평가하는 것에 이르는 전반적인 인지적 활동의 조절에 대한 이해와 활용
5.3. 정의적 요소	태도, 정서, 동기 등 학습자 자신의 정의적 요소에 대한 이해와 활용

The Development and Validation of English Communicative Competence Model for High School Students in Korea