

The Impact of Linguality on Cognitive and Metacognitive Reading Strategies Awareness

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Abstract

One major issue in discussions about cognitive versus metacognitive strategies involves separating what is cognitive from what is metacognitive. Cognitive strategies are used to help an individual achieve a particular goal (e.g., understanding a text) while metacognitive strategies are used to ensure that the goal has been reached (e.g., monitoring one's understanding of that text). The major aim of this study having an ex-post facto design was to find out whether linguality has any impact on the awareness and use of metacognitive, cognitive and total cognitive/metacognitive strategies in respective of students proficiency levels. Throughout this study the researchers found that dominant and balanced bilingual students differed significantly in their cognitive, metacognitive as well as total cognitive/metacognitive strategy scores, meaning that balanced bilinguals had significantly higher scores than dominant bilingual students. Furthermore, students with high proficiency had significantly higher scores than students with low proficiency in their cognitive, metacognitive and also total cognitive/metacognitive strategies. However, the interaction effect between linguality and proficiency is found to be non-significant in the aforementioned strategies, indicating that the pattern of cognitive strategy scores are similar for students with low and high proficiency irrespective of the lingual background they have.

Key words: Cognitive/metacognitive reading strategies, dominant bilingual and balanced bilingual

Abstracto

Uno de los asuntos principales en la discusión sobre estrategias cognitivas versus las metacognitivas implica separar aquello que es cognitivo de lo metacognitivo. Las estrategias cognitivas se utilizan para asistir a un

individuo en alcanzar una meta en particular (ie. el entendimiento de un texto), mientras que las estrategias metacognitivas se utilizan para asegurarse que la meta haya sido alcanzada (ie. monitoreo del entendimiento personal de ese texto). La meta primordial de este estudio es deducir si el lingüismo tiene impacto en la conciencia y el uso de estrategias metacognitivas, cognitivas y metacognitivas/cognitivas con respecto a los niveles de destrezas de los estudiantes. A través del estudio los investigadores descubrieron que las puntuaciones de los estudiantes bilingües dominantes y balanceados diferenciaron significativamente en las pruebas cognitivas, metacognitivas y cognitivas/metacognitivas. Quiere decir que los estudiantes bilingües y balanceados obtuvieron puntuaciones significativamente mayores que los bilingües dominantes, Asimismo, los estudiantes con destrezas mayores obtuvieron puntuaciones significativamente mayores que los estudiantes con pocas destrezas en sus estrategias cognitivas, metacognitivas y cognitiva/metacognitivas. Sin embargo, el efecto de interacción entre lingüismo y destrezas se encontró poco significativo en las pruebas de las estrategias mencionadas anteriormente, indicando de esta manera, que el patrón de puntuaciones de estrategias cognitivas son similares entre estudiantes con bajas y altas destrezas independientemente de su trasfondo lingüístico.

Palabras clave: *Estrategias cognitivas/metacognitivas de lectura; bilingüe balanceado y bilingüe dominante*

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Introduction

Answers to the questions “Who is bilingual?” and “What is bilingualism?” are not simple.

Bilingual or bilingualism is the ability to speak, communicate, and understand two languages. It is not to be confused with biliteracy, which is the ability to read and write in two languages.

Dewaele and Li (2003) believe, the very elastic definition of bilingualism is, “the presence of two or more languages, which reflect the awareness of the interdisciplinary nature of studies in bilingualism.

In the last decade or so as knowledge of the breadth of bilingualism has grown, discussions of bilingualism have concentrated on “the many kinds and degrees of bilingualism and bilingual situations” (Crystal, 2003, p. 51), leading to in depth descriptions of the varied circumstances involved in bilingualism, anticipating the recent call for understanding the bilingual situation through its context and its purpose (Edwards, 2004).

As far as linguality is concerned, in a study aimed at describing and understanding the metacognitive knowledge and strategic reading processes of proficient and less proficient bilingual readers, Jimenez et al. (1995) reported that proficient English and Spanish biliterate readers, like expert monolingual readers, demonstrated remarkable strategic abilities when reading. They also found that bilingual readers tended to have a unitary view of reading and conceive many similarities between reading in Spanish (L1) and English (L2). On the other hand, the less successful readers were found not to have a unitary view of reading. Finally, they found that the successful bilingual readers were aware of the transfer of knowledge across languages.

Cognitive and metacognitive strategies are relevant to L2 reading performance. Metacognitive strategies are sequential processes that one uses to control cognitive activities, and to ensure that a cognitive goal (e.g., understanding a text) has been met. According to Sheorey and Mokhtari (2001, p. 433) “the reader’s metacognitive knowledge about reading includes an awareness of a variety of reading strategies and that the cognitive enterprise of reading is influenced by this metacognitive awareness of reading strategies”. When encountering comprehension problems, accomplished readers take immediate steps by

carefully monitoring their reading process. They are aware of their own cognitive and linguistic resources, and are capable of directing their attention to the appropriate clues in anticipating, organizing and retaining text information. Such readers are strategic readers and their reading behavior is referred to as “strategic reading” (Koda, 2005, p. 204). Strategic readers are aware of the nature of the problem, its possible solutions, and available resources to determine what works best. Koda (ibid, p. 218) posits that the acquisition of strategic reading depends on the development of cognitive and metacognitive capabilities.

Hoang (1999) found more proficient learners use more strategies and more effectively than the ones with lower levels. However, some research findings reveal a different story regarding the relationship between strategy use and proficiency. Green (1991, in Bedell and Oxford 1996, p.49) studied 213 students of English and found that high proficiency students used more strategies than low proficiency ones, but moderately proficient students used more strategies than either high or low proficiency students. Anderson (1991), in Singhal, (2001) carried out a study to investigate the individual differences in reading strategy use and found that there was no single set of processing strategies that significantly contributed to success. Both high and low scoring readers appeared to be using the same kinds of strategies, while high scoring students seemed to be applying strategies more effectively and appropriately than low scoring students. This finding indicates that strategic reading is not only a matter of knowing which strategies to use, but also the reader must know how to successfully apply strategies.

However, what seems to have been under-researched is the impact of proficiency and linguality on the awareness and use of cognitive/metacognitive reading strategies and the

combination of both in an ESL context. Therefore, the following hypotheses are formulated for the present study:

1. *Dominant and balanced bilingual students differ significantly in metacognitive, cognitive and total cognitive strategies.*
2. *Students with high and low proficiency in General English Knowledge differ significantly in metacognitive, cognitive and total cognitive strategies.*
3. *There will be significant interaction between linguality and proficiency in metacognitive, cognitive and total cognitive strategies.*

Methodology

Subjects

A sample of male and female first year pre-university students (number=157) from private and governmental pre-universities colleges (ST. Philomena's, J.S.S., Chinnmaya, Mahajana and Vivekanada colleges) with English as medium of instruction in the city of Mysore, India comprised the participants of the present study. They were of 16 to 18 years of age. These colleges were randomly selected.

Through a self-evaluation questionnaire two groups of students in terms of linguality participated in this study:

Group A (47 male and 30 female dominant bilinguals)

Group B (53 male and 27 female balanced bilinguals)

In the present study a *dominant bilingual* is a person being more proficient in one of the two languages (in most cases native-like), in this particular case, those participants who are able to communicate in Kannada and English but are more dominant in Kannada. While a *balanced bilingual* is someone who is more or less equally proficient in both languages, but will not

necessarily pass for a native speaker in both languages. In this study those participants whose mother tongue is Kannada and also are native-like in English, have been considered as balanced bilinguals. That is, albeit they are not native speakers in English, they competently use it in their daily conversations. Participants, in all groups were homogenous, in terms of their age, methodology used at schools, and the number of hours devoted to the teaching of English.

Materials

The following instruments were used:

Language proficiency test (Nelson, series 400 B). This test comprised of multiple-choice cloze passage, vocabulary, grammar and pronunciation sections. In order to test the reliability of the proficiency test, a pilot study was carried out on 15 students. Its reliability through the K-R21 formula turned out to be .71, which was appropriate to take the next step.

Test of reading comprehension in English. The test of reading comprehension in English was from the reading component of the *Cambridge Preparation for the TOEFL Test* (Gear, J, 1993. pp. 416-421). The time allowed was 30 minutes as determined at the piloting stage. The reading passages used in this study contained a general content, which were of interest to the students. Readability of the text is an objective, but not necessarily a very valid, measure of the difficulty of a text. Readability formulae look at texts only as products. There is no recognition that each reader creates meaning as the reader engages with the text. Even leaving aside issues of social context and individual motivation, and looking at texts as products, the criteria used by readability formulae are doubtful. Factors other than word and sentence length are not accounted for. For example, reduced clauses, which tend to shorten sentences, can create greater difficulty for the reader than longer sentences, which are easier to ‘unpack’. Where this is not used, intuition may be relied on. If materials are perceived as boring or as too easy or too difficult, learners will be

unmotivated to do the task (Scarcella & Oxford, 1992). A text that is too easy to comprehend furnishes few opportunities for strategy use and in this case students will probably fail to grasp the value of strategy use. On the other hand, a text that is too difficult to understand may not be comprehensible even with the employment of a variety of strategies. “Metacognitive capabilities become operative only in reading task perceived as hard but attainable. Tasks that offer minimal challenge will not be incentive enough for readers to make extra efforts to manipulate their cognitive resources” (Koda, 2005, p. 211).

Going through K-R21 formula, it was indicated that reading comprehension test was reliable enough (.68) for the respective goal in the present study. Then after calculating the correlation coefficient (.75) between the Nelson test of proficiency and the test of reading in English in the piloting stage for the purpose of having a valid test, the test of reading turned out to be suitable for this study.

Reading strategies questionnaire. Strategic approach, or the process of comprehension, was measured by means of a five-point Likert scale questionnaire (Never/ Seldom/ Sometimes/ Usually/ and Always *true of me*). All the 27 items (out of which 14 items were metacognitive and 13 items were cognitive in nature) in this study were adopted from different related questionnaires in research validated studies (e.g., Baker & Boonkit, 2004; Oxford, et al. 2004; Sheorey & Mokhtari, 2001; Taillefer & Pugh, 1998) and adapted for the purpose of this study (See Appendix 1). The reason behind selecting the aforementioned items refers to their highly common use in a variety of research articles, importance in reading comprehension, and the teaching experience of the present investigators. This instrument offered an immediate retrospective picture of reading behavior. The instrument measures two broad categories of reading strategies, namely, metacognitive strategies that are “intentional, carefully planned techniques by which learners monitor or manage their reading”, and cognitive strategies that are “the actions and procedures

readers use while working directly with the text (Sheorey & Mokhtari, 2001, p. 436). In order to ensure the internal consistency reliability coefficient of the instrument at the piloting stage it was administered to 15 students of the similar group taking part in the study. Based on the data gathered, the reliability coefficient alpha was calculated to be 0.78. The present researchers also asked two experts in the field to rate the instrument in terms of how effectively it samples significant aspects of its purpose for providing an estimate of content validity.

Background questionnaire. In order to elicit information about participants, a background questionnaire was developed by the investigators. It covered issues such as the subjects' age, gender, name of college, and medium of instruction (see Appendix 2).

Self-evaluation proficiency scale. In order to measure the degree of bilinguality of the participants, and also to classify them into *Dominant* and *Balanced bilinguals* they were requested to rate their abilities in Kannada, English, Hindi, Tamil, Urdu and Telugu (the subjects were also asked to specify if there is any language not mentioned in the questionnaire) on 4-points in each language. To gain this aim the investigators developed a questionnaire included five tables; inside each table the subjects were provided with different languages and also different skills, therefore they were requested to have a self- evaluation on their own level of proficiency in different languages based on Likert scale ranging from excellent (1) to very weak (4) (see appendix 3). To ensure the internal consistency reliability coefficient of the instrument at the piloting stage it was administered to 15 students of the similar group taking part in the study. The reliability coefficient alpha was calculated to be 0.65. There are some controversies regarding the reliability of self-evaluation proficiency scales. That is, those who feel that any type of evaluation should be the responsibilities of some one in authority, question the students' capacity to provide meaningful information about their ability in using the language. On the

contrary, LeBlanc and Painchaud (1985) and Strong-Klause (2000) consider self-assessment tests as valuable and reliable measures of student's language proficiency that can even be used for placement purposes. They reported a correlation coefficient of .58 between a self-assessment questionnaire and a standardized proficiency test. Based on this finding they argued then not only could students adequately assess their level of performance, but also a well construct questionnaire seemed to produce high quality result. As a conclusion to study they listed some of the advantageous that are offered by self-assessment questionnaires and claimed that self-evaluation questionnaires take less time to complete compared with a proficiency tests, eliminate the need for safe guards against cheating which are most taken into account when standardized tests are administered and also self-evaluation is cost and time efficient.

Procedure

To achieve the objectives of this study the following procedures were adopted. At the very beginning of the research, the background questionnaire and the self-evaluation proficiency scale after being critically read by the advisor of the study and under going some necessary modifications were administered to the participants.

As it was mentioned in the present article, the subjects were classified into *Dominant/Balanced bilinguals* (see appendix 4) according to their feedback on respective items of self-evaluation report. Then the reading comprehension test was administered among the students who have been also identified into high and low in general English language proficiency through Nelson Proficiency test.

Soon after completing the reading comprehension test the subjects were given the cognitive and metacognitive reading strategies questionnaire, which was a retrospective measure of their reading strategy awareness and use.

Results and Discussion

The two-way ANOVA was employed to analyze the data. Statistical representation of analyzed data is given in the following tables:

Table 1
Mean scores on cognitive, metacognitive and total cognitive strategy scores of Dominant and Balanced bilingual subjects with high and low proficiency in General English Knowledge

Parameters	Proficiency	Linguality				Total	
		Dominant Bilingual		Balanced Bilingual			
		Mean	S.D	Mean	S.D	Mean	S.D
Cognitive	Low	28.96	6.86	32.97	8.29	61.76	13.98
	High	33.27	6.68	34.22	9.01	70.77	12.30
	Total	30.42	7.06	33.68	8.67	65.83	13.95
Meta Cognitive	Low	29.51	9.09	33.29	7.26	31.05	8.55
	High	35.96	6.78	37.16	6.74	36.72	6.73
	Total	31.69	8.88	35.46	7.19	33.61	8.26
Total Cognitive strategies	Low	58.47	13.61	66.54	13.27	30.59	7.69
	High	69.23	11.83	71.67	12.60	33.87	8.20
	Total	62.10	13.93	69.42	13.07	32.08	8.07

Table 2
Results of two-way ANOVA for mean scores on cognitive, metacognitive and total strategy scores of Dominant and Balanced bilingual subjects with high and low proficiency in General English Knowledge

Parameters	Source of variation	F value	Df	P vale
Cognitive	Between linguality (A)	3.692	1, 153	.057 (NS)
	Between Proficiency (B)	4.631	1, 153	.033 (S)
	Interaction (A x B)	1.401	1, 153	.238 (NS)
Meta Cognitive	Between linguality (A)	3.828	1, 153	.050 (S)
	Between Proficiency (B)	16.510	1, 153	.000 (S)
	Interaction (A x B)	1.033	1, 153	.311 (NS)
Total Cognitive strategies	Between linguality (A)	6.030	1, 153	.015 (S)
	Between Proficiency (B)	13.778	1, 153	.000 (S)
	Interaction (A x B)	1.735	1, 153	.190 (NS)

Note: S-significant; NS-Non-significant

Regarding the first research hypothesis (Dominant and Balanced bilingual students differ significantly in metacognitive, cognitive and total cognitive strategies) as indicated in table 2, Dominant and Balanced bilingual students differed significantly in their total cognitive strategy scores as the obtained F value of 6.03 was found to be significant at .015 level. From the mean values it is clear that Balanced bilingual students had significantly higher scores than Dominant bilingual students (means 69.42 and 62.10 respectively). Further, students with high proficiency (mean 70.77) had significantly ($F=13.778$; $P<.000$) higher scores than students with low proficiency (mean 61.70). However, the interaction effect between linguality and proficiency is found to be non-significant ($F=1.735$; $P<.190$) indicating that the pattern of cognitive strategy scores are similar for students with low and high proficiency irrespective of the lingual background.

Therefore, the first hypothesis is accepted for total cognitive and metacognitive strategies and rejected for cognitive strategies.

As far as the second research hypothesis is concerned (Students with high and low proficiency in General English knowledge differ significantly in metacognitive, cognitive and total cognitive strategies) Dominant and Balanced bilingual students differed significantly in their metacognitive strategy scores as the obtained F value of 3.828 was found to be significant at .05 level. From the mean values it is clear that Balanced bilingual students had significantly higher scores than Dominant bilingual students (means 35.46 and 31.69 respectively). Further, students with high proficiency (mean 36.72) had significantly ($F=16.510$; $P<.000$) higher scores than students with low proficiency (mean 31.05). However, the interaction effect between linguality and proficiency is found to be non-significant ($F=1.735$; $P<.190$) indicating that the pattern of cognitive strategy scores are similar for students with low and high proficiency irrespective of the lingual background they have (see table 2). Therefore, the second hypothesis is accepted for metacognitive, cognitive and total cognitive/metacognitive strategies.

With regard to the third hypothesis (there will be significant interaction between linguality and proficiency in metacognitive, cognitive and total cognitive strategies), Dominant and Balanced bilingual students did not differ significantly ($F=3.692$; $P<.057$) in their cognitive strategy scores indicating that the mean scores were statistically equal. Students with high proficiency (mean 33.87) had significantly ($F=4.631$; $P<.033$) higher scores than students with low proficiency (mean 32.97). However, the interaction effect between linguality and proficiency is found to be non-significant ($F=1.401$; $P<.238$) indicating that the pattern of cognitive strategy scores are similar for students with low and high proficiency irrespective of the lingual background they have. Therefore, the third hypothesis is rejected for metacognitive, cognitive and total cognitive/metacognitive strategies.

Conclusion and Recommendations

Data analysis in this study indicated that linguality as well as general English language proficiency had effect on the reading strategy awareness. Therefore, the following conclusions and recommendations are taken into account.

Conclusions

This study indicated that Dominant and Balanced bilingual students differed significantly in their metacognitive as well as their total cognitive/metacognitive strategy scores, meaning that Balanced bilinguals had significantly higher scores than Dominant bilinguals, while no significant difference was found between Dominant bilinguals and Balanced bilinguals in cognitive strategies. Further, students with high proficiency had significantly higher scores than students with low proficiency in their cognitive, metacognitive as well as their total cognitive/metacognitive strategy scores. However, the interaction effect between linguality and proficiency is found to be non-significant in cognitive, metacognitive as well as total cognitive/metacognitive strategies.

Recommendations

Data analyses of the present study indicated that students with high proficiency had significantly higher scores in cognitive, metacognitive and also the combination of both than students with low proficiency. Sheorey and Mokhtarib (2001, p. 433) have also found that the reader's metacognitive knowledge about reading may be influenced by a number of factors, including previous experiences, beliefs, culture-specific instructional practices, and, in the case

of non-native readers, proficiency in L2”. A rich body of empirical studies has investigated the relationships between learners’ L2 proficiency and strategy use with the majority indicating that conscious, “tailored” use of strategies is related to language achievement and proficiency, and successful learners employ a wider variety of strategies to improve their language skills and performance (Oxford 1996, p. xi). Regarding the relationship between the use of cognitive and metacognitive strategies and language proficiency Meichenbaum and Biemiller (1998), (in Hartman, 2001) showed that high achieving students possess more metacognitive awareness and engage in more self-regulatory behavior than low achieving students and that metacognition is an important characteristic of expertise. More proficient language learners also use a greater variety and often a greater number of learning strategies (Bruen, 2001; Chamot & El-Dinary, 1999; Green & Oxford, 1995; O’Malley & Chamot, 1990; Wharton, 2000). The study of Jordan high school EFL learners by Kaylani (1996, p.75) revealed that the use of Memory, Cognitive and Metacognitive strategies was significantly higher for successful students than less successful ones. Hoang (1999) found, more proficient learners not only use more strategies but also more effectively than the ones with lower levels.

As far as the results of this study are concerned it is recommended that dominant bilingual students should be familiarized with metacognitive strategies in order to improve their reading performance. It is also recommended, students with low-proficiency level be taught strategic reading. In strategic reading just the knowledge of strategies is not of much effect. Readers should know how to employ strategies effectively.

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Acknowledgements

This paper was a long time in the writing, although the journey was made easier by the help of Dr. Jennifer Bayer who had been a constant source of inspiration and encouragement in this work. Without her help nothing could be done. I value her insights and opinions.

Appendix 1

Reading Strategy Questionnaire

Directions: Depending on your English language learning experience and needs, you may be using different types of pre-/ while-/ post-reading strategies. Show *how often* you use the strategy when reading, by checking the appropriate box. It is important to answer in terms of how well each statement describes you, NOT in terms of what you think you should do. THIS IS NOT A TEST. There are no right or wrong responses to these statements. The scores you obtain will not affect your grades in any course.

COGNITIVE STRATEGIES(C)/ METACOGNITIVE STRATEGIES (MC)

Pre-reading activities

- 1- I preview the text before reading. (MC)
- 2- I use prior knowledge to understand the text. (C)
- 3- I skim for the main idea(s) (MC)
- 4- I read the topic or heading of the passage. (MC)
- 5- I look at the pictures, graphs, maps, diagrams, etc., of the passage. (MC)
- 6- I read the first sentence of the paragraphs first. (MC)

While-reading activities

- 7- I pay attention to the parts of sentences such as phrases and clauses. (c)
- 8- I pay attention to the sentence structure, such as subjects and objects. (c)
- 9- I know what each pronoun refers to. (C)
- 10- I link information in one sentence with information from the preceding ones. (MC)
- 11- I read the whole passage quickly to understand the main idea. (MC)
- 12- I try to figure out the main idea of each paragraph. (MC)
- 13- I continue reading even if I have difficulty. (MC)
- 14- If I don't understand something such as a word or phrase, I guess its meaning using clues from the text such as a noun, verb, adjective, adverb, etc., surrounding words, verb tense, singular and plural, word elements that is affixes and roots, synonyms and antonyms.
- 15- I visualize information read. (C)
- 16- I re-read for better understanding. (C)
- 17- I guess the meaning of unknown words. (C)
- 18- I guess what is coming in the next sentences or paragraphs. (MC)
- 19- I take notes, highlight or underline the important notes while I am reading the passage. (C)
- 20- I Predict or guess text meaning. (MC)
- 21- I confirm predictions. (MC)
- 22- I interpret the text (make inferences, draw conclusions, etc). (MC)
- 23- I use punctuations, capitals, etc.(C)
- 24- I do monitoring and clarifying what I read. (MC)

Post-reading activities

25- I make inferences after finishing reading the passage. (C)

26-- I check or evaluate my comprehension. (C)

27- I go back to read the details of the passage to find the answers of the questions. (C)

Appendix 2

Students Proforma

1-Name of the student:.....

2-Age.....

3-Gender.....

4-Name of college.....

5- Class studying.....

6-Medium of instruction.....

Appendix 3

Measurement of degree of bilingualism

The language or languages that you use (1) and with the groups 2-5. And also place one of the following numbers in each cell to indicate the competence knowledge of yours in these skills of language(s)

Excellent =1

Good =2

Weak =3

Very weak =4

1. Self

Name of language	Understand	Speak	Read	Write
Kannada				
Urdu				
Hindi				
Telugu				
Marathi				
English				
Tamil				
Others (specify):				

2) Language(s) used with Friends

Name of language	Understand	Speak	Read	Write
Kannada				
Urdu				
Hindi				
Telugu				

Marathi				
English				
Tamil				
Others (specify):				

3) Language(s) used with Brothers/sisters

Name of language	Understand	Speak	Read	Write
Kannada				
Urdu				
Hindi				
Telugu				
Marathi				
English				
Tamil				
Others (specify):				

4) Language(s) used with Parents/ and other elder members of family

Name of language	Understand	Speak	Read	Write
Kannada				
Urdu				
Hindi				
Telugu				
Marathi				
English				
Tamil				
Others (specify):				

5) Language(s) used with Neighbors

Name of language	Understand	Speak	Read	Write
Kannada				
Urdu				
Hindi				
Telugu				
Marathi				
English				
Tamil				
Others (specify):				

Appendix 4

Table 1

The percentage of the subjects' competence knowledge in Kannada when speaking to friend

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	80	20	-	-
Speaking	72	24	4	-
Reading	68	28	4	-
Writing	48	40	8	4
Total	100%			

Table 2

The percentage of the subjects' competence knowledge in Kannada when speaking to neighbors

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	92	8	-	-
Speaking	80	20	-	-
Reading	76	20	4	-
Writing	60	28	8	4
Total	100%			

Table 3
The percentage of the subjects' competence knowledge in Kannada when speaking to
brothers/sisters

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	84	12	-	-
Speaking	72	24	-	-
Reading	68	28	-	-
Writing	56	36	4	-
Total	96%			

Table 4
The percentage of the subjects' competence knowledge in Kannada when speaking to
Parents/elder member of family

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	88	8	-	-
Speaking	80	16	-	-
Reading	76	28	-	-
Writing	52	36	8	-
Total	96%			

Table 5
The percentage of the subjects' competence knowledge in Kannada when speaking to self

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	92	4	-	-
Speaking	76	20	-	-
Reading	80	16	-	-
Writing	56	36	4	-
Total	96%			

Table 6
The percentage of the subjects' competence knowledge in Hindi when speaking to friends

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	4	44	-	4
Speaking	24	20	-	8
Reading	16	24	12	-
Writing	12	32	4	4
Total	52%			

Table 7
The percentage of the subjects' competence knowledge in Hindi when speaking to neighbors

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	8	32	-	-
Speaking	24	16	-	-
Reading	12	12	12	4
Writing	12	12	8	8
Total	40%			

Table8
The percentage of the subjects' competence knowledge in Hindi when speaking to
brothers/sisters

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	12	36	-	-
Speaking	4	28	16	-
Reading	16	20	8	4
Writing	12	24	4	8
Total	48%			

Table 9
The percentage of the subjects' competence knowledge in Hindi when speaking to
Parents/elder member of family

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	8	28	-	-
Speaking	-	28	8	-
Reading	8	16	8	4
Writing	8	16	4	8
Total	36%			

Table 10
The percentage of the subjects' competence knowledge in Hindi when speaking to self

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	8	40	-	-
Speaking	-	24	20	4
Reading	24	12	12	-
Writing	20	16	12	
Total	48%			

Table 11

The percentage of the subjects' competence knowledge in English when speaking to friends

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	60	40	-	-
Speaking	36	52	12	-
Reading	60	40	-	-
Writing	60	36	4	-
Total	100%			

Table 12

The percentage of the subjects' competence knowledge in English when speaking to neighbors

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	36	28	-	-
Speaking	20	40	4	-
Reading	24	36	-	4
Writing	24	36	-	4
Total	64%			

Table 13

The percentage of the subjects' competence knowledge in English when speaking to brothers/sisters

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	56	32	-	-
Speaking	32	52	4	-
Reading	52	36	-	-
Writing	48	40	-	-
Total	88%			

Table 14
The percentage of the subjects' competence knowledge in English when speaking to
Parents/elder members of family

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	32	28	-	-
Speaking	20	36	4	-
Reading	24	32	4	-
Writing	24	32	4	-
Total	60%			

Table 15
The percentage of the subjects' competence knowledge in English when speaking to self

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	72	28	-	-
Speaking	28	68	4	-
Reading	52	44	4	-
Writing	44	52	4	-
Total	100%			

Table 16
The percentage of the subjects' competence knowledge in Telugu when speaking to
Parents/elder members of family

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	8	-	-	-
Speaking	8	-	-	-
Reading	4	4	-	-
Writing	-	-	8	-
Total	8%			

Table17

The percentage of the subjects' competence knowledge in Urdu when speaking to self

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	-	-	4	8
Speaking	-	-	4	8
Reading	-	-	4	8
Writing	-	-	4	8
Total	12%			

Table 18

The percentage of the subjects' competence knowledge in Tamil when speaking to neighbors

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	-	8	4	-
Speaking	4	-	4	4
Reading	-	-	4	8
Writing	-	-	4	8
Total	12%			

Table 19

The percentage of the subjects' competence knowledge in Tamil when speaking to brothers/sisters

	Percentage of participants' expertise			
Skills	Excellent	Good	Weak	Very weak
Understand	4	8	-	-
Speaking	4	4	4	-
Reading	4	-	-	8
Writing	4	-	-	8
Total	12%			

Received October 8, 2007

Published June 2008