

Motivation and Willingness to Communicate in English (WTCE): Synthesizing Socio-Educational and WTCE Models

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Abstract

This study explores the relationship between factors of language motivation and Willingness to Communicate in English (WTCE). The aim was to test motivation as a causative factor of WTCE by confirming a path from motivation to WTCE through Structural Equation Modeling. It follows an existing tradition whereby both Willingness to Communicate and motivation were studied as causes of each other in exclusive studies (see for example MacIntyre & Charos 1996 and Yashima 2002). The participants of this study consisted of the teachers who were expected to employ English as Medium of Instruction (EMI) while teaching content subjects at secondary school level in Punjab (a province of Pakistan). It was conducted in the wake of a state order issued to make the use of EMI compulsory regardless of the fact that 94% of the teachers were not proficient enough at all. Hybridization of Socio-educational model and WTC model was used as a framework for this study. A questionnaire designed after adaptation from AMTB (Attitude Motivation Test Battery) and WTC (Willingness to Communicate) scales was used for survey. For statistical analysis of data SPSS version 21.0 and Amos version 21.0 were used. A significant path from motivation (as an aggregate of factors selected from socio-educational model) to WTC was found existent while the individual motivational factors from Socio-educational model showed varying trends. The additionally introduced factor i.e. ELLE (English Language Learning Experience) was found not to be a direct cause of WTCE. However, it proved to be a highly significant direct cause of motivation.

Keywords: *motivation, willingness to communicate, anxiety*

1. Introduction

The purpose of this study was to explore the relationship between factors of language motivation used by Gardner in his Socio-educational model (1985) and Willingness to Communicate (WTC) as a construct used in WTC model by MacIntyre (1998). The study was conducted on teachers of Secondary School Level in the rural areas of Punjab (a province of Pakistan). These teachers used vernacular (Punjabi – a language spoken in Punjab province of Pakistan) as medium of instruction or Urdu (Pakistan’s national language) before the imposition of EMI through a state order issued by Government of Punjab. It created an adverse situation for the teachers as 94% of them were not proficient enough (PEELI 2013). The importance of the motivation of teachers to use EMI became unquestionably very important in such a situation. The study of motivation became even more important in view of its significance for the success or failure of this policy.

Affective response of the teachers in terms of motivation and willingness to use English as Medium of Instruction (EMI) was elicited on a scale (questionnaire) designed through the combination of AMTB (Attitude Motivation Test Battery) and WTC after necessary adaptation. The aim was to confirm the existence of a direct path from motivation (measured on the scales of Socio-educational model) to Willingness to Communicate following a study by Yashima (2002). Both the models were synthesized for the purpose of this study following an existing tradition (see e.g. MacIntyre & Charos 1996; Yashima, 2002; Hashimoto, 2002 etc).

Language motivation, in Socio-educational model, is typically subdivided into 6 constructs (see Gardner, 2010) each of which is designed to cover a distinct dimension of motivation. These constructs are used in a standardized scale named Attitude Motivation Test Battery (AMTB) developed and evolved in the research conducted using this framework for more than last fifty years. Following were the constructs selected for this study from the socio-educational model;

1. Interest in Foreign Languages (IFL)
2. Desire to Learn English Language (DLEL)
3. Attitude towards English as Medium of Instruction (ATEMI)
4. Anxiety (ANX)

In WTC model the construct WTC is used as an outcome or effect of Language Apprehension (that equals Gardner's anxiety in its conceptualization) and Self-Perceived Communicative Competence. In this study anxiety to use EMI has been taken as a construct common between both the models while Linguistic Self-Confidence (LSC) has been used as a replacement for Self-Perceived Communicative Competence in view of its suitability to the context of the study. It is because the participants of the study go through the experience of learning English language with the focus solely on literacy skills while the Oracy skills are completely ignored. Therefore, asking about their Self-Perceived Communicative Competence would make no sense which is considered to be the measure of the evaluation of one's own ability to communicate (orally) in a given situation using target language. Linguistic Self-Confidence, on the other hand, stands distinct by involving just confidence in one's ability to be a successful language learner (Gardner 2010) rather than ability to communicate in the given language. English Language Learning Experience (ELLE) was included as an extra construct to see how far it could possibly fit in the adapted model. It was done in response to the proclaimed adaptability of the Socio-educational model (see e.g. Gardner, 2010).

The context of this study differs from the preceding ones in the following respects:

1. The participants of this study were under-proficient or non-proficient teachers who were made to use English language as medium of instruction while teaching English as a school subject or other content subjects. Earlier

studies, on the other hand, were typically conducted on language learners undergoing a formal language learning process.

2. This study measured affective response of the participants towards English in its particular status as medium of instruction in contrast to the earlier studies which dealt with the affective response towards English as a language in general.

1.1. Objectives of the Study

Following were the objectives of this study;

1. To identify the relationship between the constructs selected for this study.
2. To know the extent to which the selected motivational constructs predict WTC.
3. To determine a gross-causative effect of the motivational factors from Socio-educational model on WTC
4. To see significance of the causative effect of ELLE as an extra variable on motivation and WTC.

1.2. Research Questions

Q. 1. To what degree do the motivational constructs taken from socio-educational model i.e. Interest in Foreign Languages, Desire to Learn English Language, Instrumentality and Attitude towards English as Medium of Instruction cause Willingness to Communicate?

Q. 2. How does English Language Learning Experience (ELLE) relate to Motivational constructs taken from socio-educational model and to Willingness to Communicate in English (WTCE) adapted from WTC model?

Q. 3. To what extent can a path from motivation (as an aggregate of the variables adapted from Gardner's socio-educational model) to WTC, as hypothesized by Yashima (2002) - in distinction to the one hypothesized by MacIntyre and Charos (1994) as well as Hashimoto (2002) i.e. from WTC to motivation - be established/confirmed through empirical data?

2. Literature Review

Motivation is seen as one of the core predictors of achievement in L2 learning. It is given importance at par with the most important factors of individual difference in L2 learning. It is considered as significant a factor as language aptitude or intelligence in predicting achievement in L2 as well as its actual use in a given situation (Gardner, 2010). Over the last fifty years a whole plethora of studies in the area of motivation was unleashed. It was found to be one of the most elusive and complex constructs to deal with in research. The field was doomed not due to the lack of theories but due to their abundance instead (Dornyei, 1998). Despite profuse controversies existent in the literature regarding nature, formation, causation and measurement of motivation the significance of its role in language learning remains almost completely uncontroversial.

The outcome of such development and its attendant complexity was seen in the appearance of mutually contending theories, approaches and models. The pioneering and almost the most influential among these being the Socio-educational model (1985) which emerged as a product of almost 25 years of consistent research by Gardner and his colleagues. On the other hand, Willingness to Communicate (WTC) as a construct was first studied in the context of L1. Later on, it was transported to SL and FL situations which yielded WTC model founded by MacIntyre (1996). Later, hybridization of these models was used by a number of studies. The first attempt in this regard was made by the founder of WTC model himself while working together with his colleague. In the following literature related to the selected models has been reviewed.

2.1. Socio-educational Model

It is based on extensive studies conducted by Garner and his associates. Socio-educational model conceived integrativeness and instrumentality as two major reasons of motivation for second language learning while anxiety was seen as a construct having negative effect on motivation (Gardner, 1985). Integrativeness was identified as learner's purpose to learn language as being the desire to be able to have contact with the native speakers of target language while instrumental purpose was conceived as linked with the utility of learning target language in material terms. Attitudes were considered as predispositions towards motivated behavior.

This model went through many phases of its development and contribution, in this regard, was made by a lot many researchers but it maintained its core idea that a complex of cognitive, affective and social factors which define integrative motive predict success in second language learning (Gardner, 1985; Gardner & MacIntyre, 1992; Gardner & Lambert, 1972; Gardner, Tremblay & Masgoret, 1997). After a series of studies Gardner and Smythe (1975) were able to put forth a prototype of this model. This model included four possible categories of the characteristics related to motivated behavior inducing learning effort by the L2 learners, i.e. Motivational indices, attitudes specific to a group, characteristics related to the course and general attitudes.

However, it was modified later by Gardner (1979) where he made a distinction between different components essential to the study of L2 learning motivation. These included Individual differences, the context of second language acquisition, Social milieu and outcomes. In this version of the model he showed attitudes affecting motivation level which in turn had an effect on language learning achievement. He also asserted that success of the learners can be manifested both in linguistic as well as non-linguistic consequences which would affect attitudes and attitudes again would bear on motivation thus giving a cyclical relationship between attitudes, motivation and achievement. The model has gone through a number of revisions and explanations (Gardner, 1985; Gardner, 2001; Gardner & MacIntyre, 1993; Gardner, 2006; Gardner, 2010).

In spite of the fact that the findings of Gardner and his colleagues corresponded to the experiences of language learners in most of the cases many researchers (Crookes & Schmidt, 1991; Dornyei, 1994; Oxford & Shearin, 1994) showed their interest to include variables from educational psychology in the framework of second language learning research. In order to respond to this demand Tremblay and Gardner (1995) added some new variables related to motivation like self-efficacy, expectancy, valence, goal setting and causal attribution in the consideration of the construct of motivation. After this the relationship among these variables was examined through Gardner's socio-educational model developed in 1985. How the measures in psychology developed through other models fit into the studies conducted through socio-educational model became a focus of investigation and it was found that many of these variables coming from other models mediated the relationship between attitudes and motivational behavior established in socio-educational model. The most important mediators among these were found to be valence, goal salience and self-efficacy. It was shown that specification of goals and then frequent references to the goals had a positive effect on motivation. Self-efficacy was found to be influenced by language attitudes and then influenced motivational behavior in its turn.

2.2. Willingness to Communicate (WTC)

It is believed that the origin of the construct of Willingness to Communicate (WTC) can be traced to the literature on interpersonal communication more specifically from the work of Burgoon (1976) giving idea of unwillingness to communicate. The idea was followed by McCroskey and Richmond (1987, 1991) later who assumed a regular pattern existing in the avoidance of communication and other tactics through which an individual devalued the act of communication. They traced the causes of avoidance of communication to both the social and individual factors. However, the major contribution was yet to be made by MacIntyre (1998) who conceptualized WTC in his famous heuristic model more typically known as pyramid model. In this model, he organized the diversity of factors influencing second language WTC. The model captures a wide range of intrapersonal, intergroup, communication, linguistic and situational factors which contribute in the ultimate decision to either communicate in second language or desist doing so.

After entering into the arena of language related studies WTC was primarily used as a construct related to communication in L1. It was seen as the tendency of individuals to involve or keep from communicating in L1 when they were free for both the choices (McCroskey & Baer, 1985). It was believed that people generally differ in their communication behavior regardless of the language. Some are very talkative while others reticent and people vary in their communication behavior while talking to different people, an individual feels free and talks much with some while to others s/he is reserved. It was conceived that WTC is a construct based on personality which happens to be very consistent with

an individual so far as their communication behavior is concerned (McCroskey & Baer, 1985; McCroskey & Richmond, 1987, 1991).

MacIntyre (1994) discovered perceived communicative competence and communication apprehension as the two most important antecedents of WTC. Then it was found through other researches that L1 WTC could incorporate both trait (stable) and state (transient) properties of WTC (MacIntyre, Babin, & Clément, 1999). MacIntyre and Charos (1996) used a combination of both the socio-educational model by Gardner (1985) and the path model by MacIntyre (1994) in order to study the influence of personality variables, attitudes and motivational variables on L2 communication and it was justified that WTC construct is applicable to SLA contexts. It was proposed that L2 communication was dependent both on situational as well as enduring influences which means that WTC encompasses both trait-like as well as situation-based influences. WTC was conceptualized as “a readiness to enter into discourse at a particular time with a specific person or persons, using a L2” (MacIntyre et al. 1998, p. 547).

2.3. Synthesizing Socio-Educational and WTC Models

It can be easily seen from the literature reviewed in the previous sections that the field of language motivation has been fertile so far as studies in this area are concerned. A number of theories have developed over time through a lot of research conducted in the field. Many studies have been conducted by combining socio-educational model of Gardner and WTC model of MacIntyre. In this case, the first step was taken by MacIntyre and Charos (1996) who combined Gardner’s model with MacIntyre’s (1994) path model to see whether the factors of attitudinal motivation used in socio-educational model bear any effect on L2 communication or not and it was found that WTC model applies to the situations of SLA as well as to the situations of L2 communication.

Yashima (2002) combined both of these models in a research on Japanese students with the aim to examine the relationship between L2 learning motivation and its use for communication. It was found in this study through structural equation modeling that motivation, as conceived in socio-educational model, influences self-confidence of communication in L2 which in turn affects willingness to communicate in the target language. Kim (2005) conducted a study with a similar framework to examine the effect of other affective variables on willingness to communicate among Korean students. The study was conducted on university students and it was found that the measure of these students on WTC scale was a strong predictor of the performance of these students in English.

The link of language learning motivation with WTC has been confirmed through many researches. Some researchers find that it plays a role in merely extending the construct of motivation (Dörnyei & Skehan 2003). It was seen as only a new angle provided to look at language motivation study by MacIntyre, MacMaster and Baker (2004). They found in a study based on factor analysis that

L2 learning motivation was strongly correlated to L2 WTC. Dörnyei and his associates (Dörnyei & Kormos, 2000; Kormos & Dörnyei, 2004) used WTC as a background variable in their research on language motivation.

Socio-educational model has been applied to many WTC researches but the results have not been uniform in all the cases. The paths postulated by MacIntyre and Charos (1996) in their study based on Clament's contextual model were not statistically supported. Similarly in the study by Yashima (2002) which was conducted following MacIntyre et al.'s (1998) model the hypothesized direct path from language learning motivation to L2 WTC was found missing in the model developed through structural equation modeling. This relationship was not confirmed in some of the qualitative studies as well (Kang, 2005).

However, the studies conducted by Hashimoto (2002) show converse results. In a study in Japan on 56 students a significant path was confirmed leading from L2 WTC to language learning motivation or motivation as conceived in Gardner's model. Structural equation modeling was used in this study to identify the existing path. Some studies by MacIntyre and associates (MacIntyre et al., 2002, 2003), which are very important in providing ground to the current study dealt with motivation and L2 WTC in immersion programs. A significant correlation was found between integrative motivation and WTC in these researches. The inconsistent findings may be attributed to varying contexts of the studies and different socio-cultural as well as academic backgrounds involved in the studies conducted in different environments.

Gardner's model must be given credit in terms of its accommodative capability and expandability. Many researches, over time, have been conducted which introduced different variables to see their impact on other constructs within the model (see Gardner 2010). In various ways researchers conducted their studies using this model. The constructs and variables used in this model were tested for their correlations in different frameworks guided by socio-educational model. New variables were also included and the resulting models were put to tests for their structural validity through Amos in structural equation modeling which proved the adaptability and viability of this model see (for example Hashimoto, 2002; MacIntyre & Charos, 1996; Yashima, 2002).

3. Research Method

The study was based on survey design involving quantitative methods. The survey was conducted across the Punjab province. Six districts were selected purposively from the list provided in a report published by SPDC (Social Policy and Development Center) wherein all the districts were ordered on the basis of their HDI (Human Development Index) ranking. For the purpose of selection, the list was divided into three groups i.e. the top 11, the middle 11 and the bottom 12. Then, two districts were selected from each of the groups following the convenience technique to conduct the survey.

3.1. Sampling and Population

Multi-stage sampling technique was followed in this study. At the first stage districts were divided into three groups on the basis of their HDI ranking systematically. Then following convenience technique two districts were selected from each of the groups. After that, schools were selected from the rural areas of these districts again on convenience basis. In the last stage, purposive sampling technique was followed in selecting those teachers who were either teaching through EMI at the time or had had the experience of teaching through EMI. One hundred questionnaires were distributed among teachers from each of the selected districts. A total of 600 questionnaires were distributed out of which 407 were returned by the participants. Thus, size of the sample for this study was 407. All the teachers of secondary school level in the rural areas of Punjab who were teaching or had taught through EMI were considered the population of this study.

3.2. Instrumentation

AMTB and WTC measurement scales were adapted to suite this study. It was done through selection of relevant constructs and selection - as well as adaptation - of the items used to operationalize the constructs in these scales by modifying wording of the items so as to suit the participants in the particular situation involved in this study. It was also done by introducing new items where necessary. The questionnaire thus designed had 57 close-ended items with seven point likert scale (as suggested by Gardner 2010) which ranged from strongly agree to strongly disagree. WTC scale was adapted by converting anticipated frequency of using English to communicate from percentage scale to 7-point likert scale. The percentage scale ranged between 0% chances to 100% chances of using English while the scale constructed for the study ranged between chances of using English always to that of using it never. The reliability coefficient of the designed questionnaire was determined as 0.81 on Cronbach Alpha scale. Cronbach alpha value of the individual subscales on the questionnaire is as under:

Table 1: Cronbach Alpha values of subscales of the questionnaire

Constructs	Cronbach's Alpha
IFL (Interest in Foreign Languages)	.76
DLEL (Desire to Learn English Language)	.70
INST (Instrumentality)	.75
ELLE (English Language Learning Experience)	.72
ATEMI (Attitude Towards English as Medium of Instruction)	.46
ANX (Anxiety)	.75
LSC (Linguistic Self-Confidence)	.44
WTCE (Willingness to Communicate in English)	.85

3.3. Data Analysis

SPSS version 21.0 was used for statistical analysis of the survey data. Similarly, Amos version 21.0 was used for analysis through Structural Equation Modeling (SEM).

4. Results and Discussion

4.1. Correlation and Regression Analysis

The equation in the following represents the model that was initially tested for fitness.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon$$

Where:

Y = WTCE (Willingness to Communicate in English)

X_1 = IFL (Interest in Foreign Languages)

X_2 = DLEL (Desire to Learn English Language)

X_3 = INST (Instrumentality)

X_4 = ELLE (English Language Learning Experience)

X_5 = ATEMI (Attitude towards English as Medium of Instruction)

X_6 = ANX (Anxiety)

X_7 = LSC (Linguistic Self-Confidence)

So the above equation can be stated as;

Willingness to Communicate in English = $\beta_0 + \beta_1$ Interest in Foreign Languages + β_2 Desire to Learn English Language + β_3 Instrumentality + β_4 English Language Learning Experience + β_5 Attitude towards English as Medium of Instruction + β_6 Anxiety + β_7 Linguistic Self – Confidence + ϵ

Correlation Structure

Table 2: Correlation Statistics

	WTCE	IFL	DLEL	INST	ELLE	ATEMI	ANX	LSC
WTCE	1	.102	.037	.283	.217	.316	.190	.238
IFL	.102	1	.551	.308	.295	.089	-.219	.292
DLEL	.037	.551*	1	.386	.428	.018	-.282	.363
INST	.283*	.308*	.368*	1	.367	.170	.088	.276

ELLE	.217*	.295*	.428*	.367*	1	.088	.054	.426
ATEMI	.316*	.089	.018	.170	.088	1	-.126	.126
ANX	.190	-.219	-.282*	.088	.054	-.126	1	.031
LSC	.238*	.292*	.363*	.276*	.426*	.126	.031	1

The above table shows the correlation structure of the model. A phenomenon of weak multicollinearity can be observed here. Both the regression and correlation analysis are related as both describe the relationship among the variables. Coefficient of correlation indicates the linear association found between two variables while regression, on the other hand, shows how and to what extent one variable influences the other. Correlation coefficient has value between -1 to +1 where the former indicates a perfectly negative linear association between two variables whereas the later indicates a perfectly positive linear association. However, in case of zero value a complete absence of correlation is concluded. Both, regression and correlation are not used to indicate and measure cause and effect relationship. Structural Equation Modeling (SEM) is used for this purpose.

It can be seen that there are seven correlations which are insignificant. The first among these is between WTCE and DLEL (.037), the second is between IFL and ATEMI (.089), the third between DLEL and ATEMI (.018), the fourth between ELLE and ATEMI (.088), the fifth between INST and ANX (.088), the sixth between ELLE and ANX (.054) and the seventh between LSC and ANX (.031). Here again tendency consolidates the findings whereby a gap was identified as the distinction between English language in general and English as medium of instruction. People have positive attitude towards English in general and have motivation to learn and develop it. They are even wishful of using it but to grapple with it as medium of instruction is seen to be problematic by them and they have shown a low level of motivation and attitudinal positivity. As it is evident from the table that all the weak correlations are between the constructs where one presents English as language in general while the other presents it as medium of instruction.

The first insignificant correlation can be identified between Desire to Learn English Language (DLEL) and Willingness to Communicate in English (WTCE). It is because the situations identified in WTCE naturally involve English as medium of instruction in most of the items while desire to learn English includes items which measure the desire to learn English as a language in general and not as medium of instruction. Similarly, Interest in Foreign Languages (IFL) as a construct has insignificant correlation with WTCE for the same reason as well as all the rest of the measures (variables) mentioned in the preceding paragraph.

Co-linearity Diagnostics

Table 3: Co-linearity Diagnostics

Variable	VIF	Tolerance
IFL	1.7	.59
DLEL	2.0	.51
INST	1.4	.70
ELLE	1.6	.64
ATEMI	1.1	.92
ANX	1.3	.77
LSC	1.3	.74

The table above shows variance inflation factor (VIF) and tolerance statistics which are used to check the strength of multicollinearity. As all the VIF values are below 5, and above 1 it can be concluded that there exists weak multicollinearity. It indicates that the variables used in this study, though related to each other, are, at the same time, sufficiently distinguished from each other. It means that all the variables used in this study measure same phenomenon from distinguished points of reference or various dimensions.

Coefficient of Regression

Table 4: Regression statistics

Variable	Coefficient	Standard Error	T Statistic	P-Value
IFL	.159	.075	2.119	.035
DLEL	-.173	.093	-1.868	.063
INST	.444	.103	4.304	0.000
ELLE	.172	.105	1.628	.1
ATEMI	.707	.102	6.967	0.000
ANX	.347	.079	4.401	0.000
LSC	.667	.190	3.507	0.001
Constant	3.594	4.908	.732	.464

Using the table above, regression equation can be stated as under:

$$\hat{Y} = 3.594 + .159IFL - .173DLEL + .444INST + .172FLLE + .707ATEMI + .347ANX + .667LSC$$

Regression coefficient shows the extent to which a dependent variable changes/varies in response to the change in independent variable/s. P-Value of the given variable shows the level of the significance of any independent variable. Using P-values, it can be concluded that one constant term is not affecting WTCE significantly while all the other variables have a highly significant influence on the dependent variable except ELLE which is significant up to only 10%. It means that in response to a complete change in ELLE, only 1/10th of the WTCE will be changed. DLEL is another variable with its P-Value above .05. The possible reason of it can be the orientation of DLEL which covers desire to learn English from a general perspective and not specifically as medium of instruction. However, all the other variables have their value < .05 which shows that they significantly influence the dependent variable i.e. WTCE.

Diagnostics

Table 5: Regression Coefficient

Indicator	Statistic	P-value (if any)
<i>R</i> ²	.318	-
Adjusted <i>R</i> ²	.306	-
Durbin Watson	1.9	-
Regression Mean Square	2834.298	.000

As P-value of regression mean square is less than 0.05, the model is best fit. However, *R*² and Adjusted *R*² are very low explaining only 31 to 32 percent of variation. It means that independent variables have been found to explain only 31 to 32 percent of the variation in the dependent variable while the remaining variation is explained by other factors. It is due to the variables/constructs dealing with English language in general. As regression is best fit and coefficients are significant also correlations among independent variables are very low, variance inflation factor is near 1 in most cases. We can interpret our regression coefficient as under.

Interpretation of Regression Coefficient

- 1) When IFL increases by one score, WTCE will increase by .159 scores on average.
- 2) When DLEL increases by one score, WTCE will decrease by .173 scores on average.

- 3) When INST increases by one score, WTCE will increase by .444 scores on average.
- 4) When ELLE increases by one score, WTCE will increase by .172 scores on average.
- 5) When ATEMI increases by one score, WTCE will increase by .707 scores on average.
- 6) When ANX increases by one score, WTCE will increase by .347 scores on average.
- 7) When LSC increases by one score, WTCE will increase by .667 scores on average.

The interpretation of coefficients above shows that IFL, DLEL and ELLE group together in having low regression value for the dependent variable i.e. WTCE. It is interesting to note that all these three variables measure the affective response of the participants towards English as a language in general and not English as medium of instruction. On the other hand it can be found that the other four variables eliciting response towards English as Medium of Instruction show a high regression value on WTCE. These variables explain above 50% of the variation in dependent factor (WTCE) which is highly significant.

4.2. Structural Equation Modeling (SEM)

Structural equation modeling (SEM) is also known as analysis of covariance structures, or causal modeling (Arbuckle & Wothke, 1999). It is a statistical methodology through which conceptualized models are verified and/or paths confirmed. It is tested through this how far the hypothesized paths – of cause-effect relationship are coinciding with the data driven paths. Analysis through structural equation modeling have, been given in the following.

Model Fit No 1

Table 6: Analysis through Structural Equating Model

Indicator	Statistic (P- Value)
Chi- SQ	2.245 (.325)
CMIN	2.245 (.325)
GFI	.998
AGFI	.983
CFI	.999
PCFI	.200
RMSEA	0.017 (.620)

Above table shows some indicator relating model fit.

- P – Value for chi-square and CMIN indicates that our model is best fit.
- GFI, AGFI, CFI and PCFI also indicating good fitting
- RMSEA = 0.017 with p – value greater than 0.05 also shows best model fit.

Following is the diagram of fitted model. All the estimates are significant. * shows significance at 10% level, ** for 5% and *** for 1%

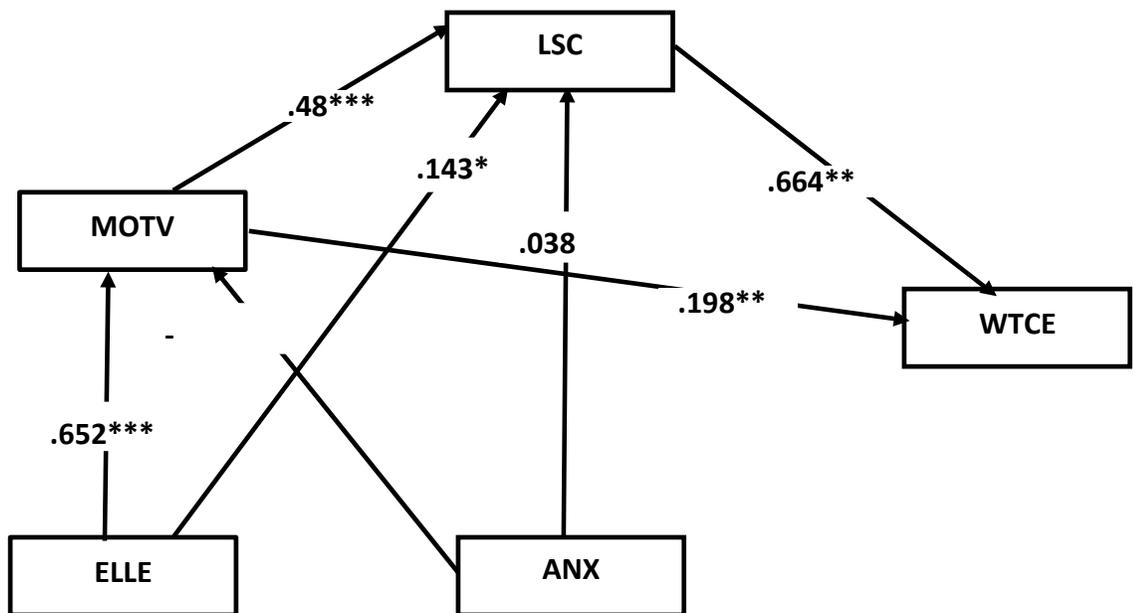


Figure 1: Structural Equation Modeling; Path Analysis 1

The figure above shows the following:

- 1) Motivation (an aggregate/sum of the variables selected from Gardner's socio-educational model i.e. IFL, DLEL, INST, ATEMI) is a highly significant and positively related causal factor to WTCE
- 2) Motivation is a highly significant causal factor to Linguistic Self-Confidence (LSC)
- 3) LSC is a highly significant and positively related causal factor to WTCE
- 4) English Language Learning Experience (ELLE) is a highly significant and positively related causal factor to Motivation
- 5) ELLE is a significant and positively related Causal factor to LSC
- 6) Anxiety shows an insignificant value as a causal factor to LSC
- 7) Anxiety is a highly significant and negatively related causal factor to motivation

Motivation has been found to be significant cause of WTCE (as can be seen in the figure). However, it can be noted that motivation exercises greater influence on WTCE indirectly through LSC. ELLE is found to have its highest influence indirectly through motivation as in the other figure it can be found that ELLE remains completely insignificant in its direct influence on WTCE. This trend shown by ELLE serves as answer to research question no 5. Anxiety also shows its indirect relationship with WTCE as found in earlier studies by MacIntyre and Charos (1996) and Hashimoto (2002). However, the path followed by Anxiety in this study is not through LSC as was expected if it were in line with earlier studies. Instead, it is through motivation which shows that higher the anxiety lower will be the attitudinal motivation (as MacIntyre 2001, would call it) which will lead to lower level of WTCE. This part provides answer to the research question no 6.

However, English Language Learning Experience has proved to be a very important factor in defining motivation on the scales introduced by Gardner (1979, 1985, 2006 & 2010). Nakata (2006) through empirical studies proved Language Learning Experience as an important construct in defining or measuring language motivation which has been confirmed through this research. ELLE has shown a highly significant influence in causing motivation.

Thus it can be concluded that those having good learning experience in any language (English in this case) are expected to show a relatively higher level of motivation to move further in learning that language. However, ELLE has not shown to be a direct cause of WTCE. These findings with regard to ELLE provide answer to research question no 5. Thus, the path hypothesized by Yashima (2002) (from motivation to WTC) that was found not confirmed; has been confirmed in this study as an answer to research question no 4 in this study.

Model Fit No 2

Table 7:

Indicator	Statistic (P- Value)
Chi- SQ	1.358 (.244)
CMIN	1.358 (.244)
GFI	.999
AGFI	.977
CFI	.999
PCFI	.067
RMSEA	0.030 (.452)

Above table shows some indicator relating model fit.

- P – Value for chi-square and CMIN indicates that our model is best fit.
- GFI, AGFI, CFI and PCFI also indicate good fit.
- RMSEA = 0.030 with P – value greater than 0.05 also shows best model fit.

Following is the diagram of fitted model. All the estimates are significant except ELLE to WTCE. * shows significance at 10% level, ** for 5% and *** for 1% level of significance.

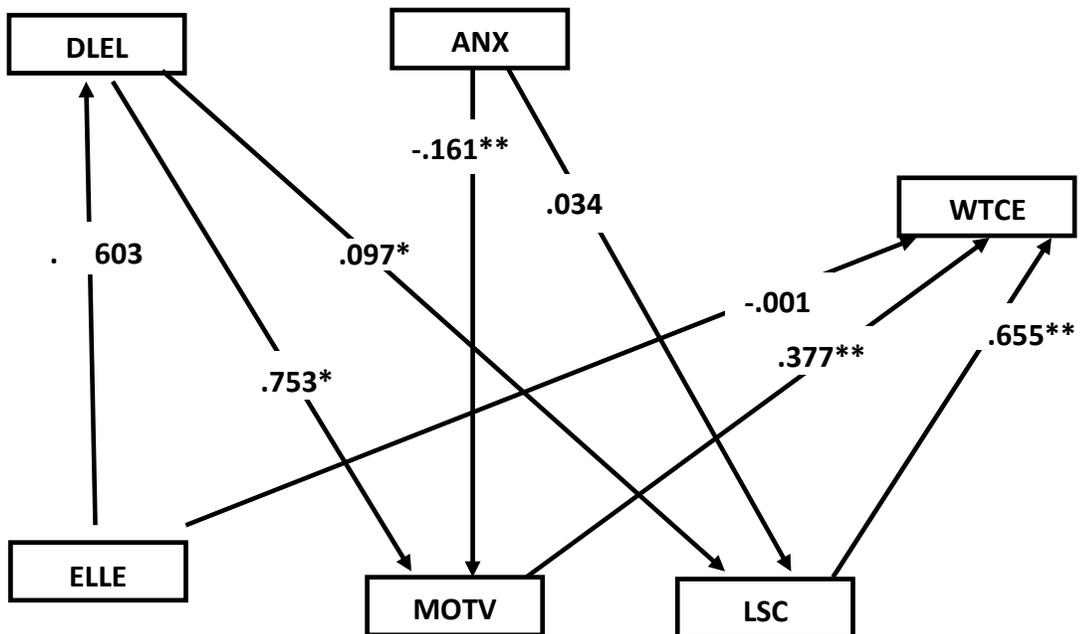


Figure 2: Structural Equation Modeling; Path Analysis 2

The figure above shows that;

1. The value of significance level of motivation in causing WTC has increased to .377*** after exclusion of DLEL in which case it was .198**.
2. DLEL is a highly significant (with the value .753***) causal factor of motivation.
3. DLEL is a completely insignificant causal factor of LSC.
4. ELLE is a completely insignificant causal factor of WTCE.
5. Anxiety has a significantly negative causal relationship with motivation but an insignificant but positive one with LSC.
6. LSC is a highly significant positively related causal factor of WTCE.

The decrease in the value of motivation as causal factor of WTCE is due to the fact that DLEL deals with English as a language in general. It has been noted in this study that such factors (treating English as a language in general and not as MOI) are weakly correlated to the variables which focus English as MOI (medium of

instruction), have low or insignificant regression value with them and have proved to be poor/insignificant causes of WTCE - that also focuses English as MOI. However, DLEL has been found to have a highly significant causal value for other motivational factors from socio-educational model. ELLE has emerged as having no value as direct cause of WTCE; however, it proves to be highly significant indirect factor of influence.

ELLE has shown a highly significant causal relationship with motivational factors taken from socio-educational model. It has also shown highly significant correlation and regression value with the factors from socio-educational model dealing English as a language in general. In view of all this, ELLE can be grouped, in the first place, with the variables dealing English in general in this study while, in the second place, with all the variables of socio-educational model as an expansion of this model for further enquiries which can produce valuable literature as an extension on the existing debate. Such researches would confirm theoretical importance of Nakata's (2006) contribution on one hand while the tenacity of socio-educational model owing to its flexibility on the other. This last point in the preceding discussion adds to the idea of expandability of socio-educational model which was empirically proved by many researches over the time in this field.

Anxiety, in contrast to the study by MacIntyre and Charos (1994) and its replication by Hashimoto (2002) does not emerge as a negatively related direct cause of LSC which has been used as an alternative of Perceived Communicative Competence in the already mentioned studies. However, it has been found to be a significantly related negative cause of motivation (refer to research question no 6). The possible reason for it can be that LSC is not an appropriate replacement of Perceived Communicative Competence. However, such a conclusion without further empirical evidences after necessary modifications will be too careless a jump towards this end.

5. Findings of the Study

The results on ELLE confirm Nakata's (2006) findings for it being a significant construct for language motivation. However, it has been found not to be a direct cause of willingness to communicate. ELLE can successfully be incorporated in Socio-educational model as an expansion of it.

6. Conclusion

Motivation as a sum-total of the constructs used by Gardner in his Socio-educational model has proved to be a significant cause of WTC. It has been found in path analysis through Structural Equation Modeling. However, regression and correlation analysis has provided intriguing insights into the relationship of individual constructs to WTC. All the items designed for WTC scale treated English as Medium of Instruction (EMI). It is interesting to note that those constructs for which the items used in the questionnaire treated English as Medium of Instruction proved to be far more significant causes of WTC than those where it

was treated as a language in general. The systematic trend in the segregation of constructs into two groups i.e. English as a language in general and EMI proves that language motivation is strictly specific to the situation which defines the status and role of the language in question. Finally, the successful introduction of English Language Learning Experience (ELLE) and other adaptations to contextualize the study speak positively about the accommodative capacity of the selected models.

References

- Burgoon, J. K. (1976). The unwillingness-to-communicate scale: Development and validation. *Communications Monographs*, 43(1), 60-69.
- Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language learning*, 41(4), 469-512.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The modern language journal*, 78(3), 273-284.
- Dörnyei, Z., & Kormos, J. (2000). The role of individual and social variables in oral task performance. *Language teaching research*, 4(3), 275-300.
- Dörnyei, Z., & Skehan, P. (2003). 18 Individual Differences in Second Language Learning.
- Gardner R. C. (1979). Social Psychological aspects of second language acquisition. In H. Giles & R. St. Clair (Eds.) *Language and Social Psychology* (pp. 193-220) Oxford; Basil Blackwell.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner, R. C. (2006). The socio-educational model of Second Language Acquisition: A research paradigm. *Eurosla Yearbook*, 6.
- Gardner, R. C. (2010). *Motivation and second language acquisition: the socio-educational model* (Vol. 10). Peter Lang.
- Gardner, R. C., & Lambert, W. E. (1972). Attitudes and motivation in second-language learning.
- Gardner, R. C., & MacIntyre, P. D. (1992). A student's contributions to second language learning. Part I: Cognitive variables. *Language teaching*, 25(04), 211-220.
- Gardner, R. C., & MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language teaching*, 26(01), 1-11.
- Gardner, R. C., & Smythe, P. C. (1975). *Second language acquisition: A social psychological approach*. Department of Psychology, the University of Western Ontario.

- Gardner, R. C., Tremblay, P. F., & Masgoret, A. (1997). Towards a full model of second language learning: An empirical investigation. *The Modern Language Journal*, 81(3), 344-362.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *Second language studies*, 20(2), 29-70.
- Kang, S. J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33(2), 277-292.
- Kim, S. H., & Edwards, P. (2005). Willingness to communicate among Korean learners of English. *Studies in Modern Grammar*, 42, 217-236.
- Kormos, J., & Dörnyei, Z. (2004). The interaction of linguistic and motivational variables in second language task performance. *Zeitschrift für interkulturellen Fremdsprachenunterricht*, 9(2), 1-19.
- MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning*, 52(3), 537-564.
- MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2003). Talking in order to learn: Willingness to communicate and intensive language programs. *Canadian Modern Language Review/La Revue Canadienne des Langues Vivantes*, 59(4), 589-608.
- MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology*, 15(1), 3-26.
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545-562.
- MacIntyre, P. D., MacMaster, K., & Baker, S. C. (2001). The convergence of multiple models of motivation for second language learning: Gardner, Pintrich, Kuhl, and McCroskey. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Technical Report #23, pp. 461-492).
- McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement.
- McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate. *Personality and interpersonal communication*, 6, 129-156.
- McCroskey, J. C., & Richmond, V. P. (1991). *Quiet children and the classroom teacher*. ERIC Clearinghouse on Reading and Communication Skills, Indiana University, 2805 E. 10th St., Suite 150, Bloomington, IN 47408-2698.

- Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *The modern language journal*, 78(1), 12-28. Oxford, UK: Blackwell.
- Tremblay, P. F., & Gardner, R. C. (1995). Expanding the motivation construct in language learning. *The Modern Language Journal*, 79(4), 505-518.
- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, 86(1), 54-66.