

## Case Study of Factors Affecting Chinese Students' English Communication Performance

### ETUDES SUR LES FACTEURS AFFECTANT LE NIVEAU D'ANGLAIS DES ÉTUDIANTS CHINOIS PERFORMANCE DE COMMUNICATION

LIU Ping<sup>1</sup>

**Abstract:** For ESL teaching in China's universities, not enough emphasis is put on verbal communication as a yardstick of language mastery and methodological success. Developing student's communication competence is not only concerned with the nature of language learning from linguistic perspectives, but also could be influenced by such exogenous factors as learning environment, learning psychology, and learning strategies. It is necessary to investigate whether these factors have an impact on Chinese university students' English communication performance. This paper tries to examine the relationships among social needs, system inefficiencies, learning objectives, learning strategies, and effort, according to a constructed model. The model's hypotheses are drawn from theories as diverse as person-environment (PE) fit (Caplan, 1987), intrinsic motivation (Ryan and Deci, 2000), conceptions about learning approach (Entwistle, 1990), and "learning strategy" (Biggs, Kember, & Leung, 2001). The sample was collected from one of the Chinese universities in Southeast for a case study to shed light on how to improve English teaching and learning in TESL of China. The quantitative research method is used with SPSS system in this essay to report the statistical analyses of the model. Among the eight hypotheses tested, six were confirmed to be true, and two could not be validated.

**Key words:** communication performance; 5-factor model; person-environment (PE) fit; intrinsic motivation; learning strategies

**Résumé:** Dans les universités chinoises où l'anglais est enseigné comme la deuxième langue, l'accent n'est pas suffisamment mis sur la communication verbale en tant qu'un critère de maîtrise de la langue et du succès méthodologique. Le développement de la compétence communicative des élèves n'est pas seulement

---

<sup>1</sup> Associate Professor, Master Of Educational Management, School of Foreign Languages in Zhongnan University of Economics and Law, Wuhan, 430073, China.

\* Received 19 July 2009; accepted 25 August 2009

concerné par la nature de l'apprentissage des langues du point de vue linguistique, mais pourrait aussi être influencé par des facteurs exogènes comme l'environnement d'apprentissage, la psychologie de l'apprentissage et les stratégies d'apprentissage. Il est nécessaire d'examiner si ces facteurs ont une influence sur la performance de communication en anglais des étudiants chinois. Le présent document tente d'étudier les relations entre les besoins sociaux, l'inefficacité du système, les objectifs d'apprentissage, les stratégies d'apprentissage et des efforts, selon un modèle construit. L'hypothèse du modèle vient de diverses théories, telles que la théorie de l'adaptation personne-environnement-(PE) (Caplan, 1987), la motivation intrinsèque (Ryan et Deci, 2000), les conceptions sur l'approche de l'apprentissage (Entwistle, 1990), et les stratégies d'apprentissage (Biggs, Kember, & Leung, 2001). Les sujets d'études viennent de l'une des universités chinoises situées dans le Sud-est pour montrer la façon d'améliorer l'enseignement et l'apprentissage de l'anglais en tant que la deuxième langue en Chine. La méthode de recherche quantitative est utilisée avec le système de SPSS dans cet essai pour montrer des analyses statistiques du modèle. Parmi les huit hypothèses testées, six ont été confirmées d'être vraies et deux n'ont pas pu être validées.

**Mots-Clés:** performance de communication; modèle de 5-facteurs; le modèle de l'adaptation personne-environnement(PE); motivation intrinsèque; stratégies d'apprentissage

## 1. INTRODUCTION

ESL teaching was introduced into China's higher education more than 20 years ago. The syllabus of Education Ministry elaborates the teaching goals and requirements for college and university students (Chinese Ministry of Education, 1999). According to this syllabus, and as Feng (2003) notes, the emphasis in the teaching process should gradually move from skills training at the sentence level towards communicative training at the discourse level. Yet, most university students do not perform as well in English communication as they are supposed to do. The focus seems to be more on reading and taking exams than on speaking and writing, which detracts from the basic goal of learning a foreign language. As a matter of fact, proficiency in English communication is becoming more than just an educational requirement; it is becoming, for university graduates, a necessary skill to keep a job in a highly competitive market. This paper aims to identify factors impacting students' English communication performance. Understanding these factors and their impact would enable both instructors and schools to improve their teaching environment and methodology.

The research is conducted based on analyzing the statistical data from a questionnaire administered to a sample of sophomores in one university. The questionnaire consists of 24 items forming 6 variables, in addition to 3 nominal questions (See the questionnaire in Appendix). The questionnaire shows that 87.3% of the 102 respondents are in favor of increasing the scoring weight of communication items in English tests, which demonstrates that most students are aware of the importance of English communication.

## 2. HYPOTHESIZED MODEL AND HYPOTHESES

The research is initiated from a model mainly derived from motivational theory, person-environment fit and learning-strategy assertions. The combined model is as Figure 1 in Figures.

The literature review is organized in terms of hypotheses on relationships between various factors such as Social Needs, Objectives, Inefficiencies, Effort, Strategies, and Performance. The theories or the

research on each factor is presented respectively as follows.

### 2.1 Social Needs affect Learning Objectives

Walsh, Craik, and Price (2000) argue that person-environment (PE) fit is assumed to influence people's psychological behavior. This PE Fit was developed by Caplan (1987) who tried to link people's objectives (e.g., participation, income, and self-realization) and environmental demands (e.g., job requirements). Even if it does not establish a causal relationship, this theory explains that people try to fit environmental demands with their own objectives. It can be assumed that such environmental needs as globalization and job market are irresistible forces, so people need to modify their objectives in accordance to the external needs. The intrinsic motivation theory, developed by Ryan and Deci (2000), seeks to distinguish between the origin of motivation as intrinsic or extrinsic. This theory states that extrinsic demands and pressures can influence one's intrinsic motivations. Internalization is the process by which individuals turn these external demands into their own goals. Therefore, these conceptions lead to the hypothesis that social environmental demands for English communication will influence Chinese students' English learning objectives. The trend of globalization accelerates China's economy merging internationally, which increases the demand for English communication in many areas.

**Hypothesis 1:** *The higher social needs students perceive for English communication, the more their objectives are related to English communication.*

### 2.2 Objectives affect Effort

Elliott and Dweck (1988) view motives as the synonym of goals. From their perspective, people's actions are primarily driven by the goals they set for themselves. Goal achievement theorist Skaalvik (1997) explains that there are two types of students depending on their goal orientation: "task-oriented" and "ego-oriented." Task-oriented students adopt learning goals, meaning that they see learning for the sake of knowledge as valuable and enjoyable. However, the ego-oriented students are concerned about the way they are perceived by others and compared to their peers or competitors. This theory supports the reason for learners' different effect of learning, and goal orientation plays a leading role in how much effort they make in developing English communication skills.

In motivation-action relationship, Locke and Latham (2002) argue that conscious and self-established objectives generate human motivation and action. People who have clear and moderately difficult objectives are found to undertake more effort in order to achieve their goals. Their contention is in agreement with Linnenbrink and Pintrich's (2003) proposition. They classify learning goals into "mastery goals" and "performance goals" (p.351). In their investigation, when students with mastery goals have high feelings of efficacy, the students may persist and exert effort because they see that as fruitful in reaching their goal of outperforming others. However, performance-oriented students are generally likely to persist as long as they are successful. "It is when performance-oriented students are faced with a challenge or fail in a task that they are less likely to continue to engage in the situation"(p.369). The students in China will make their effort to achieve their objectives if they set comprehensive English learning as their objectives.

**Hypothesis 2:** *The more students' objectives are related to English communication, the more effort they will make in developing their communication skills.*

### 2.3 Objectives affect Strategies

Biggs and his colleagues did a lot of research on the "learning approach" (Biggs, Kember, & Leung, 2001), referring to a construct of both learning objectives and learning strategies. Biggs *et al.* suggest that students seek congruence between their learning objectives and learning strategies in a set of conditions called presages. The learning strategies (deep or surface) are, therefore, developed purposefully by students to fulfill their objectives (academic or social). Biggs (Biggs, 1987; Biggs, Kember, & Leung, 2001) specifies that students' approaches to learning impact their learning outcomes

and development. The students should be encouraged to surpass surface learning to have deep learning, supported by Entwistle's (1990) learning approaches. In Biggs and Collis's (1982) observation, learning approaches are different in second language acquisition from that in other subjects. They maintain that second language acquisition cannot be described simply as either "the same as first language learning" or "learning by a contrast process with the first language" (p.158). The underlying thought processes require a more complex description that incorporates not only strategies the learner uses but also the method of processing available to him/her, determined by the level of cognitive development at which he/she is operating. Their contention supports that how well Chinese students learn English depends on their objectives.

**Hypothesis 3:** *The more students' objectives are related to English communication, the deeper their learning strategies they have.*

## 2.4 Effort affects Strategies

The main teaching-learning objective of a foreign language program is to train learners to communicate, according to Bygate (2002). Teachers are expected to create substantial practice for students who gradually form a propensity of spoken interaction for an effective way of promoting memorization and accurate speaking. His argument stresses communication to be the chief learning goal and inclination of communication to be an effective strategy in speaking well. Communication skills dominate in learning elements such as reading and writing, so how much effort and in which area the students make effort are likely to be related to their strategies. Wesche and Skehan (2002) make a point of practical use of target language. They agree that "reading, writing, listening, speaking and various kinds of interaction in foreign language learning all have an important place in school" (p. 221). This conception supports that students' efforts in using language determine their strategies in different specific domains. To achieve high communication proficiency, students are supposed to adopt strategies in developing their writing, listening, and speaking. Based on that, it can be hypothesized that the more effort students make in English communication, the more effective learning strategies they will adopt.

**Hypothesis 4:** *The more effort students make in English communication practice, the more effective learning strategies they will adopt.*

## 2.5 Inefficiencies affect learning Strategies

Learning strategies depend on teaching strategies in schooling, which is the conclusion of Wilson and Fowler's (2005) research that the teaching-learning environment affects the learning strategy of university students. They find that a favorable teaching design like the action-based classes (project work, learning groups) encourages students typically with a surface learning strategy in conventional classes (lectures and tutorials) to adopt a deeper learning approach. Schools with emphasis on communication, a supportive teaching environment, and on an adequate assessment system would, therefore, be expected to motivate students to follow a deep learning strategy. A teaching system lacking these attributes would probably push students to take a minimalistic surface learning strategy revolving around memorization and to be more focused on passing exams.

In addition, Gibbs (1995) suggests that students view assessments as the main factor in the curriculum. In other words, students may adopt a learning strategy that depends on what is assessed but not what is, or needs to be, learned. Since students pay attention to what is assessed, it is necessary to evaluate English communication competence in tests as an essential impetus to develop their communication proficiency. Some studies are done in Hong Kong on assessment for learning to maximize the beneficial mutuality between assessment and teaching. The study points out that assessment for learning should be part of effective planning of teaching and learning. Teachers should build strategies ensuring that learners understand the goals of English study they are pursuing and of the criteria that will be applied in assessing their work (Qualifications and Curriculum Authority, 2008). However, the current teaching lacks assessment for learning of communication skills, therefore, curriculum for English communication should be geared up to work with tests about communication proficiency. Statistically, the sample of this research is in favor of increasing testing weight of

communication skills in English tests, which indicates that assessment will lead to spontaneous and active learning, thus linking to English teaching.

The nature of language learning is that speakers are constantly confronted with expressions never met before, but they can produce and understand an unbounded number of linguistic expressions in normal language use (Chomsky, Belletti, & Rizzi, 2002). Also, Chomsky (2007) argues for the infinite use of finite means and production of free expressions, which means that people can store an infinite array of information in a finite mind. These theoreticians agree that any language learner has the potential to speak the target language. When students have formal education about a language in school, the classroom is a means to enhance the input of a language. In this situation, if teachers do not emphasize output practice, students will spend most of their time studying grammatical rules and memorizing vocabulary. Indeed, Bygate (2002) maintains that “rote repetition cannot provide sufficient appropriate practice” (p. 31) and teaching inefficiencies will negatively influence students’ learning strategies.

*Hypothesis 5: The fewer teaching system inefficiencies restrain students from communicating, the more effective learning strategies they will adopt.*

## 2.6 System Inefficiencies affect Performance

Teaching environment is assumed to be linked to learners’ performance. Class teaching is a part of teaching environment. Hinkel (2005) contends that language learning requires learners to make sense of the printed materials in the target language with the mental process of learning involved. It means thinking about the printed materials is the first stage up to complete understanding. However, the mental process of learning is just a basis of the physiological process of maturation. More importantly, he notes (p.xx) in the preface, language learning needs the learner’s practice through mouth, ears, and hands; namely, speaking, listening, and writing to achieve maturation. Ross (1993) claims most English learners in China only experience mental process of learning by reading, understanding, and memorizing without the physiological process of communication, so second language instruction should be firstly built on the notion that learners need to be actively involved in output of language through interaction besides gaining only input of information. The researcher Swain (2001) asserts learners may notice a gap between what they want to say and what they can say when producing the target language, which leads them to recognize what they do not know, or know only partially. In other words, “communication may prompt second language learners to consciously recognize some of their linguistic problems; it may bring to their attention something they need to discover about their target language” (p.126), so teaching inefficiencies will probably hinder the students from discovering their learning problem, thus affecting their performance.

Nowadays learning English most occurs in the classroom of schools in China, so the environment is indispensable to learners’ performance. Naturally educational system about English teaching, with English communication as one essential part of language learning, is supposed to be favorable for students’ learning. Wesche and Skehan (2002) argue that communicative language ability is acquired through communication in large part; thus, instruction is organized around situations such as oral and written texts, skill or knowledge domains, or tasks that require communicative language use of various kinds. The school with a right teaching concept and supportive system will enable students to solve their learning problems and overcome their difficulties. Conversely, an inefficient system probably hinders students from developing their English communication proficiency. It can be hypothesized that a teaching system, namely, its teaching environment and assessment model, is expected to have a relationship with students’ performance in English communication.

*Hypothesis 6: The fewer teaching system inefficiencies restrain students from communicating, the better performance they will achieve in English communication.*

## 2.7 Strategies affect Performance

In terms of language learning strategies, some linguists provide their contention about effective language learning. Cohen (1998) defines strategies of language use to be strategies for retrieving information

about the language already stored in memory, strategies for rehearsing target language structures, strategies for not looking stupid or unprepared in the language classroom, and strategies for communicating in the language despite gaps in target language knowledge. His definition clarifies the learning strategies of language should be communicating in target language. The other linguists such as Gass (1997), Doughty (1991), and Bygate (2002), agree that language learning depends on the effort after learners' taking effective strategies. Students with effective learning strategies might face fewer difficulties in learning.

Language acquisition is more than what is done in class. The learners are expected to extend their practice outside class. Tan (2003) argues that if students are equipped with the means and knowledge to self-direct and manage their own learning beyond the classroom, then they can continue to learn independently of their teacher. Students with a deep-processing approach are more successful in developing their English communication skills with fewer difficulties than their peers with a surface learning. On the other hand, those with a surface learning approach can face repetitious learning challenges and have poor performance resulting from their rote-based and exam-oriented practices. It can be hypothesized that the success of students in mastering a foreign language depends on their learning strategies.

*Hypothesis 7: The more effective learning strategies students adopt, the better performance they will achieve in English communication.*

## 2.8 Effort affects Performance

Learners' performance relies on how much effort they have made. The researcher Meece (1994) has done relevant investigation and concludes that one of the features of learning goal-oriented students is their belief that effort is the main cause of their academic results, and ability depends on effort. For these individuals, more effort usually results in improved learning, and consequently, they become more competent in that related knowledge area. He alleges that causal attributions to high levels of effort lead to high perceived competence (Meece, 1994). In terms of second language learning, the linguist Gass (1997) claims that "there is no better way to test the extent of one's knowledge (linguistic or otherwise) than to have to use that knowledge in some productive way—whether it be explaining a concept to someone (i.e., teaching), writing a computer program or, in the case of language learning, getting even a simple idea across" (p.139). This assumption reveals that making an effort to use the English language is the best way to achieve good communication performance, so learners' effort is hypothesized to impact their communication performance.

*Hypothesis 8: The more effort students make in developing their communication skills, the better performance they will achieve in English communication.*

## 3. CURRENT STUDY

Postsecondary students in China have studied English for 6 years before studying in universities, but most of them cannot communicate in English effectively (Yang, 2006). This problem results from many factors, such as the pressure of the nationwide paper-and-pen College Entrance Examination in high school, crowded English classes, and difficulties in providing equipment or materials to develop students' communication competence. High school students tend to strive for admission into university. Most study English only to prepare themselves for various tests. They only want to meet the compulsory requirements and enough credits in all stages of English study. College-level educators criticize the College Entrance Examination for overemphasizing test scores and training passive students who "seemed to be cut from the same mould," thus students tend to have high scores but low ability (Ross, 1993, p.124).

Based on the preceding researches about each factor alone constituting the hypothesized model in Figure 1, this study investigated the relationships among the factors affecting the development of university students' communication in English and the 8 hypotheses already formulated.

The findings of this study, from the sample of one university in Southeast of China, are expected to help leaders to initiate a program of developing students' communication proficiency so that English teaching can be improved. In addition, the findings can provide English teachers with influential elements of heightening students' interest in English learning.

## **4. RESEARCH METHODS**

### **4.1 Participants selection**

The participants were the second-year students in one university of Southeast of China. They went to that university through College Entrance Examination from all over the country. Some were from big cities with well-equipped language study apparatus, while others had to experience a poorly-conditioned language environment because of their isolated geographical location. A questionnaire was organized in English with a Chinese version attached to as reference for subjects' better comprehension. A mini pilot study was conducted through discussion among the sophomores randomly chosen from the volunteers before data was collected for this study. The final questionnaire was worked out based on these subjects' most relevance to the questionnaire items. After this mini pre-study, the questionnaire was filled out by 104 sophomore participants (but data from 2 respondents are invalid because of their wrong way of filling out the questionnaire).

### **4.2 Measuring Instruments**

The questionnaire is composed of 6 variables (social needs, learning objectives, effort, strategies, system inefficiencies, and communication performance) and 3 nominal questions. Responses to the questionnaire are provided on a 5-point Likert scale anchored by 1 ("strongly disagree" or "never") and 5 ("strongly agree" or "always"). The reason for taking an odd number point Likert scale is that mean scores can be compared across individuals.

The participants studied English for at least 6 years in school before going to university and have another 2-year English study in the same university, which means the 4 sub-questions in each factor of the questionnaire are an echo and real reflection of the participants' learning experiences, thus providing objective and credible data for this research.

This study is aimed to examine, through linear regression, the relationships between the dependent variable (students' performance in communication) and the independent variables (i.e., social needs, learning objectives, effort, strategies, and system inefficiencies). The score for each of the six variables was computed by summing up the scores of the four items composing that variable. Also, some scores on the items that were negatively worded were transformed into positive scores before they were considered in the computation of the variables. The minimum score for each item was 1 and the maximum was 5, so a score was subtracted from 6 to transform the negatively worded item into a positive one (as it is the case for 'Strategies'). Similarly, there are four items in 'Performance', and all of them were worded negatively to embody the problems standing in the way of students' practice in English communication, so transforming the original variable score to a positive score was conducted by 24 minus the sum of items scores. Table 1 provides a summary of the way how computation of the six variables was handled (See Table 1 in Tables).

The statistical analysis starts with the Kolmogorov Smirnov (K-S) test, which is a goodness-of-fit test for any statistical distribution. The test relies on the fact that the value of the sample cumulative density function is asymptotically and normally distributed (Wolfram Research Inc., 2008). It is used to determine whether an underlying probability distribution differs from a hypothesized distribution.

The use of linear regression analysis enables the observation of relationships among the hypothesized variables. The method used in this study yields similar results as the "path analysis" technique which is defined to be a statistical method of finding cause/effect relationships and is used to test the fit of a hypothetical causal model (Alwin & Hauser, 1975). As part of the terminology for linear regression,

“path analysis” makes a distinction between exogenous and endogenous variables. Exogenous variables are those factors that do not depend on other factors, thus with no antecedent cause included in the model. By contrast, endogenous variables are factors that depend on, and caused by, other factors in the model. Following these definitions, in the developed model, both Social Needs and System Inefficiencies would be considered as exogenous variables, whereas Objectives, Effort, Strategies, and Performance are considered endogenous variables.

Linear regression is a statistical procedure widely used to model relationships between one dependent variable and one or more independent variables. The regression procedure allows for mathematically predicting the dependent variable based on the values of the independent variables by estimating a coefficient for each independent variable in the linear equation.

Each regression analysis is aimed to get the coefficient of determination  $R^2$  and the standardized coefficients  $\beta$  for independent variables. The coefficient of determination expresses the proportion of variability in the data that is accounted for by the statistical model – simply put; it shows how well the independent variables have been chosen to explain the dependent variable. The standardized coefficient for each independent variable is the regression coefficient after standardizing the data (mean of 0 and standard deviation of 1). The standardization permits comparison between different coefficients and, therefore, between independent variables. The independent variable with the highest standardized coefficient has the greatest influence on the dependent variable in the regression model.

## 5. RESULTS

As given in Table 2, the K-S test for normal distribution gives  $p$ -values higher than .05 (between .11 and .21) for all six variables. The high  $p$ -values indicate that each of the six variables follows a normal distribution. This is an important finding because most of the statistical tests are based on the normality assumption of the underlying variable to produce meaningful and significant results.

The results from linear regression analysis are presented in Table 3, based on the dependent variable considered.

First, it is found that students' perception about social needs for English communication significantly influences their objectives. From the regression of Objectives on Social Needs, it can be seen that the regression model explains about 26.7% of the variance in the dependent variable ( $R^2 = .27$ ,  $p = .00$  and  $\beta = .52$ ). The more students are aware of social needs for English communication, the more their objectives are based on communication proficiency.

Second, the simple linear regression of Effort on Objectives ( $R^2 = .05$ ,  $p = .03$  and  $\beta = .22$ ) shows there is a significant relationship between these two variables. The more students' objectives are based on English communication proficiency, the more effort they make to improve their communication skills. (See Table 2 in Tables)

Third, the regression of Learning Strategies on Objectives, Effort and System Inefficiencies yields a significant regression model ( $R^2 = .11$ ,  $p = .01$ ). The regression shows that Objectives is the most influential factor in the regression model as indicated by its standardized coefficient ( $\beta = .23$  and  $p = .03$ ). It can be concluded, therefore, that the students with more articulated goals on English communication are expected to develop deeper learning strategies. Effort has the second highest and significant standardized coefficient ( $\beta = .21$  and  $p = .04$ ) in this regression model. The significant positive coefficient means that there is a significant and positive relationship between Effort and Strategies. The students who make more effort into their English communication practice are expected to adopt better and deeper learning strategies. Finally, System Inefficiencies has a low, negative, and insignificant standardized coefficient ( $\beta = -.04$  and  $p = .66$ ). This means that there is no linear relationship between educational system inefficiencies and students' learning strategies.

Fourth, the regression of Performance on Strategies, System Inefficiencies and Effort is significant ( $R^2 = .13$ ,  $p = .01$ ). More specifically, students' learning strategies have the greatest impact on their



English communication performance. The factor Strategies has the highest standardized coefficient ( $\beta = .30$  and  $p = .00$ ). Consequently, students with higher and deeper learning strategies are expected to achieve higher performance in English communication. The second most important factor in the model is System Inefficiencies. This factor yields a significantly negative standardized coefficient ( $\beta = -.19$  and  $p = .05$ ). The significant negative beta means that System Inefficiencies is inversely related to Performance. The students subject to less system inefficiencies are expected to achieve higher English communication performance. It is important to point out that system inefficiencies, which students are subject to, may be real or perceived; the latter is most probably the case for this study. The students, who are attending the same school and are subject to the same efficiencies and inefficiencies of their learning environment, could perceive differently these inefficiencies depending on, among other things, their personality, learning goals, and strategies. In addition, Effort has a negative, low, and insignificant standardized coefficient ( $\beta = -.11$  and  $p = .27$ ). Therefore, there is no significant relationship between students' effort and their ultimate performance.

The research results are presented in the model as in Figure 2 (See Figure 2 in Figures).

## 6. SUMMARY AND MODEL REFINING

The 8 hypotheses are tested one by one through a series of regression analyses. **Hypothesis 1:** The higher **social needs** students perceive for English communication, the more their **objectives** are related to English communication. As was found earlier, the variance of Objectives was influenced by Social Needs ( $R^2 = .27$ ,  $p = .00$  and  $\beta = .52$ ), confirming the above hypothesis. **Hypothesis 2:** The more students' **objectives** are related to English communication, the more **effort** they will make in developing their communication skills. The correlation test in Table 4 (See it in Tables) shows that there is a significant correlation between Social Needs and Effort ( $r = .34$ ,  $p = .00$ ) as is between Social Needs and Objectives ( $r = .27$ ,  $p = .01$ ). Consequently, it is possible that the correlation between Objectives and Effort is spurious and is due to the underlying effect of Social Needs on both variables. A partial correlation of the two variables controlling for Social Needs was conducted to examine the relationship between Objectives and Effort.

A zero-order bivariate correlation is the relationship between two variables, while ignoring the influence of other variables in prediction. A partial correlation, as opposed to a zero-order correlation, measures the degree of linear association of two variables after taking into consideration, or controlling for, the influence from one or more exogenous variables. According to the partial correlation analysis, Objectives and Effort, controlling for Social Needs, are not related ( $r = .05$  and  $p = .60$ ). Thus, the association between the two variables is spurious. The explanation of this is that Social Needs, set as an exogenous variable, simultaneously affects both variables Objectives and Effort ( $r = .27$  and  $p = .01$ ;  $r = .34$  and  $p = .00$ , respectively) in a way that they seem related if we do not consider the exogenous variable.

In conclusion, it should be emphasized that students' Objectives and Effort are related only through their perceptions of social needs. In fact, contrary to what was hypothesized, students' perceptions of social needs do impact their effort directly, not via their objectives. Therefore, a simple regression analysis was conducted on Effort as the dependent variable using Social Needs as the independent variable this time (Note: if Effort on both Social Needs and Objective had been regressed, the latter would have had an insignificant coefficient in the model). As given in Table 4, the relationship between the two variables is significant. In fact, using Social Needs as the independent variable (see Table 5) explains 11.7% of the variance of Effort ( $R^2 = .12$ ,  $\beta = .34$  and  $p = .00$ ). Thus, it can be confidently confirmed that students' perceptions of social needs for English communication significantly influence the effort they put into English communication practice.

**Hypothesis 3:** The more students' **objectives** are related to English communication, the more effective learning **strategies** they will adopt. **Hypothesis 4:** The more **effort** students make in English communication practice, the more effective learning **strategies** they will adopt. **Hypothesis 5:** The fewer teaching system **inefficiencies** restrain students from communicating, the more effective learning

**strategies** they will adopt. The regression of Strategies on Objectives, Effort, and Inefficiencies shown in Table 3 yielded a significant regression model ( $R^2 = .11$  and  $p = .01$ ) where two independent variables had a significant impact, but Inefficiencies did not ( $\beta = -.04$  and  $p = .66$ ). Therefore, the variable Inefficiencies was excluded as an independent variable since Hypothesis 5 was not confirmed. The regression of Strategies on both Objectives and Effort provides the result in Table 6 (See it in Tables), which considers only two factors (Objectives and Effort) with a significant contribution in the explanation of the variance in Strategies ( $\beta = .20$  and  $p = .04$ ;  $\beta = .21$  and  $p = .04$ , respectively). The new regression produced a significant coefficient of determination ( $R^2 = .10$  and  $p = .01$ ).

**Hypothesis 6:** The fewer teaching system **inefficiencies** restrain students from communicating, the better **performance** they will achieve in English communication. **Hypothesis 7:** The more effective learning **strategies** students adopt, the better **performance** they will achieve in English communication. **Hypothesis 8:** The more **effort** students make in developing their communication skills, the better **performance** they will achieve in English communication. The regression of Performance on Inefficiencies, Strategies, and Effort yielded a significant regression model ( $R^2 = .13$  and  $p = .00$ ) (see Table 3) where two independent variables Inefficiencies and Strategies had a significant impact, but Effort did not ( $\beta = -.11$  and  $p = .27$ ). Therefore, the variable Effort was excluded since Hypothesis 8 was not confirmed. The new regression of Performance on Inefficiencies and Strategies produced the results in Table 5. The table considers only two factors (Inefficiencies and Strategies) with a significant contribution to the explanation of the variance in Performance ( $\beta = -.20$  and  $p = .04$ ;  $\beta = .28$  and  $p = .00$  respectively). The regression produced a significant coefficient of determination ( $R^2 = .11$  and  $p = .01$ ).

To sum up, among the eight hypotheses tested, six were confirmed to be true, but two were contradicted. A new refined model was created based on the results of the data analysis in Figure 3.

## 7. DISCUSSION

There are two interesting findings. One finding is that Objectives ( $\beta = .23$  and  $p = .03$ ) is the most influential factor in the regression model when the dependent variable is Strategies (see Table 3). This finding means that the students with goals more based on English communication are expected to develop deeper learning strategies. The finding is in agreement with some relevant preceding research results, mentioned as follows.

Dweck and Leggett (1988) maintain that the students' goals for learning frame the way they interpret and react to events. Linnenbrink and Pintrich (2003) agree that students are aware of this goal of conceptual understanding, and they use some strategies to obtain this goal, which will result in achievement in either mastery goals or performance goals, when they have a goal to actively pursue.

The other interesting finding is that there is no significant relationship between Effort and Performance. Linnenbrink and Pintrich's (2003) assertion provides explanation for this finding. They allege what kind of goals learners will achieve affects what strategies they adopt and how much effort they make. A student with a mastery orientation engages in activities in order to learn, improve, and better understand what is being taught; while a student with a performance orientation takes part in the activities in order to demonstrate his/her ability, often in comparison to others. Moreover, mastery goals are associated with increased persistence and engagement (Elliott & Dweck, 1988) as well as in-depth processing (Graham & Golan, 1991) and self-regulation (Pintrich, 2000a); performance goals are linked to superficial cognitive processing and decreased persistence (Pintrich, 2000b). Therefore, it can be assumed that not all the participants in this research sample have a mastery-oriented learning goal. Those who have a performance-directed goal may not be able to improve their real proficiency even if they make an effort to achieve the goal.

Some other researchers also make contributions to the concept about mastery goals and performance goals. Ames (1992) notes that mastery goals are related to high levels of effort and persistence. The relation of performance goals to effort and persistence may be dependent on students' level of efficacy as well as their perception of their progress toward their goal. When students have high feelings of efficacy,

they may persist and exert effort because they see that as fruitful in reaching their goal of outperforming others. Valle (2003) maintains that learning-goal oriented students engage in learning to acquire knowledge and increase their competence, so they use deep processing strategies more frequently. Performance-goal oriented students are more interested in showing their ability, so they use low-complex level strategies more frequently.

## **8. IMPLICATIONS**

The research results can be used to guide university instructors to design creative classroom practice for communication development, since they are informed of the influential factors of university students' skills cultivation in English communication. Littlewood (1984) believes that communicative need and attitudes towards second language community are important for second language learning. The extent of communicative need depends on the nature of the social community in which the person lives. When the language is being used for external rather than internal communication, people are less likely to sharply or constantly be aware of a communicative need for it. The learner with more favorable attitudes will wish for more intensive contact with the second language community. Crystal (2008) speculates that 500 million Chinese people will have learned English by the end of 2008 if more people are studying English for the Olympic Games. The Olympic Games provided an external need of communication in English, so it is assumed that more students will heighten their awareness of importance of English communication. Communication is established as a two-way process and opens up the classroom as a genuine space for learning (Gardner, 2008). Therefore, English teachers are expected to arouse or strengthen students' interest in English communication. In this case, in the classroom, a sympathetic teacher and co-operative atmosphere may have a supportive effect. Teachers are supposed to provide communicative experience in the classroom which is as similar as possible to communication in the natural environment. "The more realistic this classroom communication becomes and the more frequently it takes place, the more blurred becomes the distinction between natural and formal learning" (p.62, Littlewood, 1984).

The ultimate criterion for judging the usefulness of language activity in the classroom, based on Littlewood (1992), is "not whether it is communication but whether it helps people to learn to communicate" (p.83). Biggs (1990) suggests that the skill of a teacher is that the teaching-learning actions lead to desired outcomes. "Rather like horses, students can easily be led to the trough of knowledge; the problem is to get them to drink" (p. 683). One of the phenomena in students' learning English is presented in Poon's (2006) discovery that correctness is so emphasized in classrooms that it often stifles students' willingness to communicate. Therefore, English teachers are responsible for encouraging students to overcome their fear of making mistakes while speaking English.

Some effective teaching activities are provided by the researchers. Niu, Teng, and Wolff (2007) suggest playing motion pictures to teach English by integrating listening, speaking, and writing into one course. They note that Chinese students are used to being taught through a blackboard with "talk and chalk", to being spoon-fed in class with what they are supposed to explore actively both before and after class (p.42). Their experiment displays the encouraging teaching effect of providing cultural contexts for listening, speaking, and writing.

In addition, communication-orientated curriculums are expected to be designed for university students' improvement in English communication. Celce-Murcia and Olshtain (2000) propose three major language curriculums: a content-based curriculum, a process-based curriculum, and a product-based curriculum. Language learning may be seen as a process which "grows out of the interaction between learners, texts and activities" (p.188). Consequently, a series of changes are needed to enhance China's university students' English communication performance. Spoken English should be assessed by tests; communication practice must be conducted in class; extra-curriculum activities for communication must be advocated such as English corner, English club or English salon; students must be urged to make a clear English learning goal and be pushed towards this goal.

## ACKNOWLEDGEMENTS

I sincerely express my appreciation to the valuable advice from Dr. Patrick O'Neill, Dr. Xiaobin Li, Dr. Michael Kompf, Dr. Renee Kuchapski, and Dr. Sandra Bosacki as well as Abdelfattah Allou.

## REFERENCES

- Alwin, D. F., & Hauser, R. M. (1975). The decomposition of effects in path analysis. *American Sociological Review*, 40(2), 37-47.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84, 261-271.
- Biggs, J. B. (1987). Student approaches to learning and studying (*Hawthornes, Victoria, Australian Council for Educational Research*).
- Biggs, J. B. (1990). Teaching for desired learning outcomes. In Noel Entwistle (General ed.), *Handbook of educational ideas and practices* (pp. 681-693). London and New York: Routledge.
- Biggs, J. B., & Collis, K. F. (1982). *Evaluating the quality of learning: The SOLO taxonomy*. New York: Academic Press.
- Biggs, J. B., Kember, D., & Leung, D. Y. P. (2001). The revised two-factor study. process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology*, 71(1), 133-149.
- Bygate, M. (2002). Speaking. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (pp. 27-38). New York: Oxford University Press.
- Caplan, R. D. (1987). Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31(3), 248-267.
- Celce-Murcia, M., & Olshtain, E. (2000). *Discourse and context in language teaching: A guide for language teachers*. New York: Cambridge University Press.
- Chinese Ministry of Education. (1999). Daxue Yingyu Jiaoxue Dagang [*English Syllabus for Colleges*]. Shanghai: Foreign Language Education Press.
- Chomsky, N., Belletti, A., & Rizzi, L. (2002). *On nature and language*. Cambridge: Cambridge University Press.
- Chomsky, N. (2007). Language and thought: Descartes and some reflections on venerable themes. In A. Brook (Ed.), *The prehistory of cognitive science* (pp. 38-66). New York: Palgrave Macmillan.
- Cohen, A. D. (1998). *Strategies in Learning and Using a Second Language*. Harlow, Essex: Longman.
- Crystal, D. (2008). Two thousand million? *English Today*, 24 (1), 3-6.
- Doughty, C. J. (1991). Second language instruction does make a difference: Evidence from an empirical study of SL relativization. *Studies in Second Language Acquisition*, 13, 431-469.
- Dweck, C., & Leggett, E. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54(1), 5-12.
- Entwistle, N. (1990). Teaching and the quality of learning in higher education. In N. Entwistle (General Ed.), *Handbook of educational ideas and practices* (pp. 669-680). London and New York: Routledge.

- Feng, A. (2003). In search of effective ELT methodology in College English education—The Chinese experience. In L. G. Ling, L. Ho, J.E. L. Meyer, C. Varaprasad, & C. Young (Eds.), *Teaching English to students from China* (pp. 1-20). Singapore: Singapore University Press.
- Gardner, S. (2008). Transforming talk and phonics practice: Or, how do crabs clap? *TESOL Quarterly*, 42 (2), 261-284.
- Gass, S. M. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum.
- Gibbs, G. (1995). *Assessing student centered courses*. Oxford: Oxford Centre for Staff Development.
- Graham, S., & Golan, S. (1991). Motivational influences on cognition: Task involvement, ego involvement, and depth of information processing. *Journal of Educational Psychology*, 83, 187-194.
- Hinkel, E. (2005). *Handbook of research in second language teaching and learning*. Mahwah, NJ: Lawrence Erlbaum.
- Linnenbrink, E. A., & Pintrich, P. R. (2003). Achievement goals and intentional conceptual change. In G. M. Sinatra & P. R. Pintrich (Eds.), *Intentional conceptual change* (pp. 347-374). Mahwah, NJ: Lawrence Erlbaum.
- Littlewood, W. T. (1984). *Foreign and second language learning*. New York: Cambridge University Press.
- Littlewood, W. T. (1992). *Teaching oral communication: A methodological framework*. Cowley Road, Oxford: Blackwell Publishers.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705-717.
- Meece, J. L. (1994). The role of motivation in self-regulated learning. In: Schunk, D. H., and Zimmerman, B. J. (eds.), *Self-Regulation of Learning and Performance: Issues and Educational Applications*, Erlbaum, Hillsdale, NJ, pp. 25–44.
- Niu, Q., Teng, H., & Wolff, M. (2007). China EFL: Teaching with movies. *English Today* 90, 23 (2), 39-46.
- Nunan, D. (2004). *Task-based language teaching*. Cambridge: Cambridge University Press.
- Pintrich, P. R. (2000a). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, 92, 544-555.
- Pintrich, P. R. (2000b). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451-502). San Diego, CA: Academic Press.
- Poon, K. F. (2006). Hong Kong English, China English and world English. *English Today* 86, 22(2), 23-28.
- Qualifications and Curriculum Authority (2008). Ten principles of assessment for learning. Retrieved November 28, 2008, from [http://www.qca.org.uk/qca\\_4336.aspx](http://www.qca.org.uk/qca_4336.aspx)
- Ross, H. A. (1993). *China learns English: Language teaching and social change in the People's Republic*. New Haven and London: Yale University Press.
- Ryan, B. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classical definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.

- Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self perceptions, and anxiety. *Journal of Educational Psychology*, 89(1), 71-81.
- Swain, M. (2001). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics* (pp.125-144). Oxford: Oxford University Press.
- Tan, S. (2003). Strategy training for English language learners from PRC. In L. G. Ling, L. Ho, J. E. L. Meyer, C. Varaprasad, & C. Young (Eds.), *Teaching English to students from China* (pp. 158-173). Singapore: Singapore University Press.
- Valle, A. (2003). Cognitive, motivational, and volitional dimensions of learning: An empirical test of a hypothetical model. *Research in Higher Education*, 44(5), 557-580.
- Walsh, W. B., Craik, K., & Price, R. H. (2000). *Person-environment psychology* (2<sup>nd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum.
- Wesche, M. B., & Skehan, P. (2002). Communicative, task-based, and content-based language instruction. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (pp. 207-228). New York: Oxford University Press.
- Wilson, K., & Fowler, J. (2005). Assessing the impact of learning environments on students' approaches to learning: Comparing conventional and action learning designs. *Assessment and Evaluation in Higher Education*, 30(1), 87-101.
- Wolfram Research Inc. (2008). *A Wolfram Mathworld*. Retrieved March 9, 2008, from <http://mathworld.wolfram.com/Kolmogorov-SmirnovTest.html>
- Yang, J. (2006). Learners and users of English in China. *English Today*, 22(2), 3-10. Cambridge University Press.

## APPENDIX

### Survey Questionnaire

#### Chinese University Students' English Communication Survey

Your co-operation in answering **all** these questions is greatly appreciated.

#### Part A

Strongly disagree					Strongly agree
-------------------	--	--	--	--	----------------

#### The need for English communication proficiency is driven by:

1. the increasingly competitive job market.	1	2	3	4	5
2. the globalization in education, economy, and politics.	1	2	3	4	5
3. a new fashion among some young Chinese influenced by Western culture.	1	2	3	4	5
4. the desired social status of good English speakers.	1	2	3	4	5

#### Improving my English communication can greatly help me achieve my objectives of:

5. studying abroad.	1	2	3	4	5
6. finding a job easily.	1	2	3	4	5
7. interacting with people from different cultures.	1	2	3	4	5
8. having a desirable social image.	1	2	3	4	5

**My communication practice is negatively affected by:**

9. more focus in class on input (reading & memorizing) than on output (speaking & writing).	1	2	3	4	5
10. the big size of English class.	1	2	3	4	5
11. the high prerequisites for taking the Oral Test of College English.	1	2	3	4	5
12. the low scoring weight of communication in overall English tests.	1	2	3	4	5

**Part B**

Never	Rarely	Sometimes	Often	Always
-------	--------	-----------	-------	--------

**I make effort to improve my communication skills by:**

13. taking remedial writing or speaking classes (e.g. New Oriental School).	1	2	3	4	5
14. participating in extra-curricular activities (e.g. English club or English corner).	1	2	3	4	5
15. forming the habit of writing English journal/diary for my own blog.	1	2	3	4	5
16. using available resources (TV programs, movies, music...).	1	2	3	4	5

**As part of my learning English, I:**

17. try to use newly learned expressions in my writings and speeches.	1	2	3	4	5
18. spend my free time on extensive learning for better understanding.	1	2	3	4	5
19. study by rote even if I do not understand the meaning.	1	2	3	4	5
20. prepare for my exams by memorizing answers to possible questions.	1	2	3	4	5

**When speaking or writing in English, I:**

21. tend to think in Chinese, and then translate my thinking into English.	1	2	3	4	5
22. cannot find the proper words.	1	2	3	4	5
23. tend to make a word-by-word translation.	1	2	3	4	5
24. find it hard to structure my sentences.	1	2	3	4	5

**Part C**

25. What do you think of your English communication proficiency?

Low	Fair	Average	Good	Excellent
1	2	3	4	5

26. Are you in favor of giving more scores to communication items in English tests?

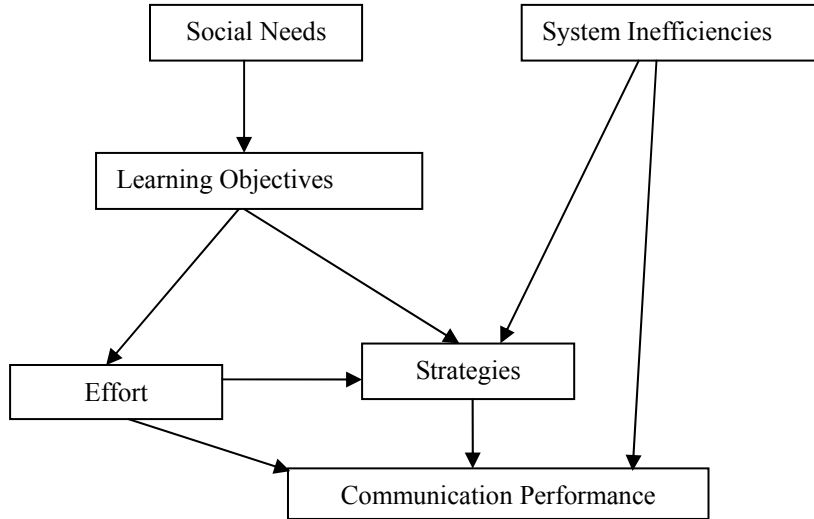
Yes	No
-----	----

27. How often, on average each week, do you spend on communication practice beyond course requirements?

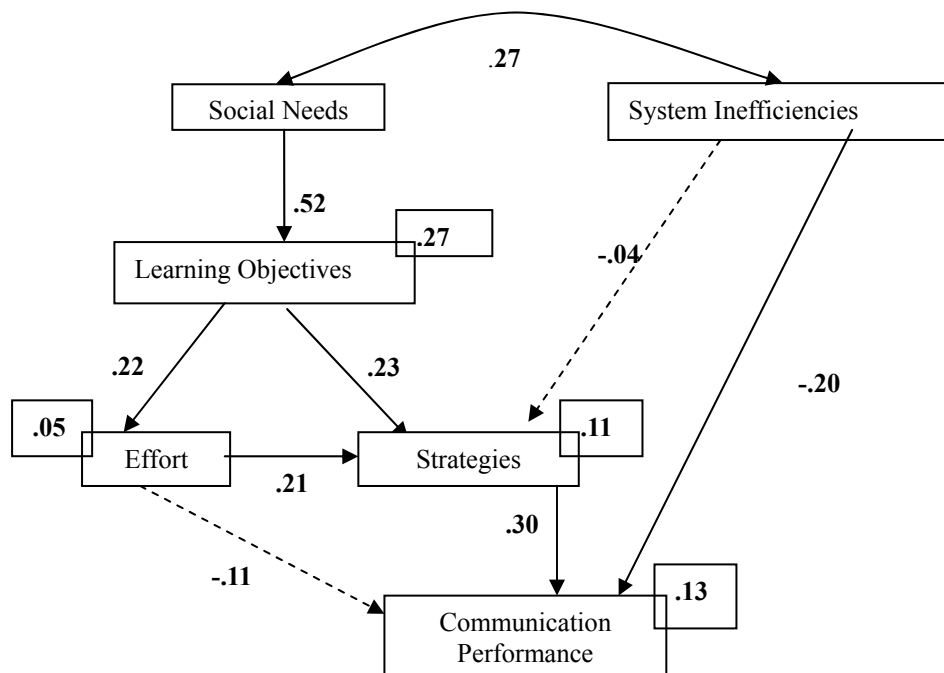
< 1 hour	1 - 3 hours	> 3 hours
1	2	3

**TABLES AND FIGURES**

**Figure Legends**



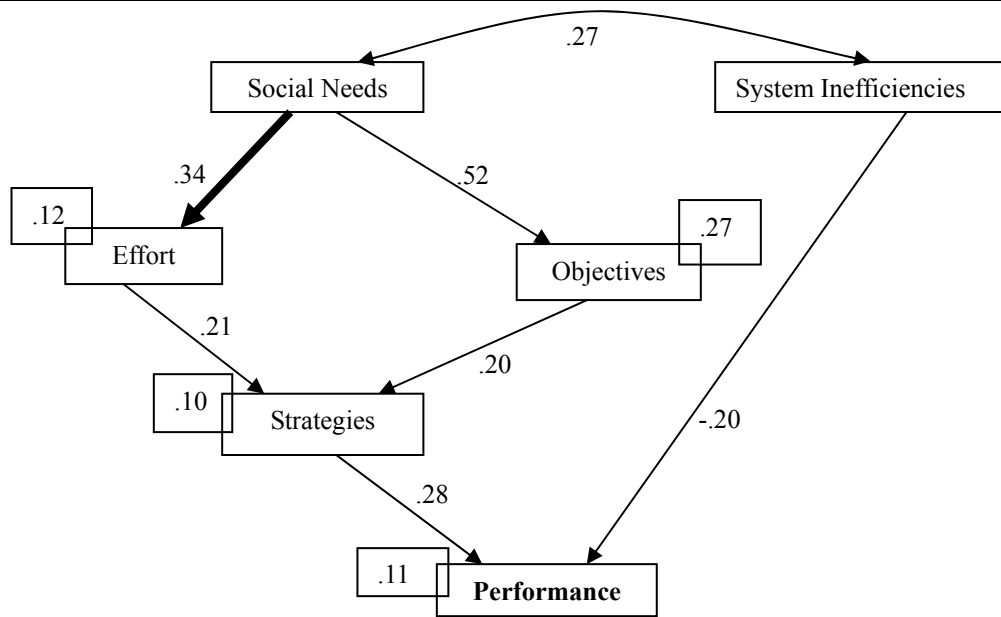
**Figure 1: A 5-factor model**



*Note.* Numbers in the box show  $R^2$ , numbers along the one-way arrows show  $\beta$  and the number along the double headed arrow refers to  $r$ . The dashed arrows show an insignificant relationship between the two variables.

**Figure 2: The result of the constructed model analysis**





Note. Numbers in the box show  $R^2$ , numbers along the one-way arrows show  $\beta$  and the number along the double headed arrow line refers to  $r$ . The bold line shows the new link between two variables (Social Needs and Effort).

Figure 3: A refined 5-factor model

## TABLES

Table 1: Factor Scores Computation

Factors	Formula (item number)
Social Needs	Q1+Q2+Q3+Q4
Objectives	Q5+Q6+Q7+Q8
Inefficiencies	Q9+Q10+Q11+Q12
Effort	Q13+Q14+Q15+Q16
Strategies	Q17+Q18+Q19 <sub>new</sub> *+Q20 <sub>new</sub> *
Performance	24 - (Q21+Q22+Q23+Q24)

Note.\* The items 19 and 20 need to be transformed into positive variables because they are negatively formulated statements. The transformed values are given by the formulas: Q19<sub>new</sub> = 6 - Q19 and Q20<sub>new</sub> = 6 - Q20.

Table 2: Descriptive Statistics of Six Variables

Factor	N	Mean	Std. Deviation	One-Sample K-S Test <sup>a</sup> $p$
Social Needs	102	13.78	2.691	.208
Objectives	102	14.09	2.972	.204
Inefficiencies	103	12.64	2.807	.111
Effort	102	11.43	2.460	.113
Strategies	101	12.90	2.170	.129
Performance	103	11.38	2.815	.127

Note. <sup>a</sup> Kolmogorov-Smirnov test results indicate whether the distribution of the scores is normal.

**Table 3: Result of Regression Analyses**

<b>Dependent Variable</b>		<b>B</b>	<b>Std. Error</b>	<b><math>\beta</math></b>	<b>R<sup>2</sup></b>	<b>p</b>
Objectives	(Constant)	6.219	1.335			.000
	Social Needs	0.571	0.095	.517		.000
	Model		2.557		.267	.000
Effort	(Constant)	8.859	1.168			.000
	Objectives	0.183	0.081	.221		.027
	Model		2.411		.049	.027
Strategies	(Constant)	8.924	1.464			.000
	Objectives	0.165	0.073	.226		.027
	Inefficiencies	-0.034	0.076	-.044		.655
	Effort	0.182	0.087	.207		.039
	Model		2.078		.111	.010
Performance	(Constant)	10.154	2.145			.000
	Inefficiencies	-0.192	0.096	-.191		.049
	Effort	-0.126	0.113	-.11		.269
	Strategies	0.395	0.128	.304		.003
	Model		2.672		.126	.005

Note. \*Correlation is significant at the .05 level.

\*\*Correlation is significant at the .01 level.

**Table 4: Partial and Zero-order Correlations**

<b>Control Variable</b>	<b>Variables</b>	<b>Correlation</b>	<b>Significance</b>
Social Needs	Objective - Effort	.054	.595
-	Objective - Effort	.221*	.027
-	Social needs - Effort	.342**	.000
-	Social needs - Objectives	.271**	.006

Note. \*Correlation is significant at the .05 level.

\*\*Correlation is significant at the .01 level.

**Table 5: Regression Test of Effort on Social Needs, Strategies on Objectives and Effort, Performance on Inefficiencies and Strategies**

<b>Dependent Variable</b>		<b>B</b>	<b>Std. Error</b>	<b><math>\beta</math></b>	<b>R<sup>2</sup></b>	<b>p</b>
Effort	(Constant)	7.162	1.207			.000
	Social Needs	.312	.086	.342		.000
	Model		2.323		.117	.000
Strategies	(Constant)	8.766	1.265			.000
	Objectives	.148	.072	.203		.042
	Effort	.181	.086	.208		.038
	Model		2.068		.103	.005
Performance	(Constant)	9.277	1.265			.000
	Inefficiencies	-.198	.095	-.198		.040
	Strategies	.360	.124	.277		.004
	Model		2.684		.114	.005

Note. \*Correlation is significant at the .05 level.

\*\*Correlation is significant at the .01 level.

**Table 6: Regression Test of Strategies on Objectives and Effort**

	<i>B</i>	Std. Error	$\beta$	<i>R</i> <sup>2</sup>	<i>p</i>
(Constant)	8.766	1.265			.000
Objectives	.148	.072	.203		.042
Effort	.181	.086	.208		.038
Model		2.068		.103	.005

Note. \*Correlation is significant at the .05 level.

\*\*Correlation is significant at the .01 level.

*Editor: David Julien*