The Minimal English Test : Its Correlation with the College Entrance Examination (English Part) 2004

The Minimal English Test: Its Correlation with the College Entrance Examination (English Part) 2004*

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1. Introduction

The purpose of this paper is to investigate the correlation between the scores of the Minimal English Test (MET) developed by Maki, Wasada, and Hashimoto (2003) and the scores of the College Entrance Examination (English Part) 2004 administered by the College Entrance Examination Center. We will call the College Entrance Examination (English Part) 2004 the Center Test (CT) 2004 hereafter. Maki, Wasada, and Hashimoto (2003) showed that there was a statistically significant correlation between the scores of the MET and the scores on the CT 2002 ($r = .68$, $p < .05$, and $n = 154$). Maki, Ito, Miyamoto, Oku, Uchibori, and Ueda (2004) showed that there was a statistically significant correlation between the scores of the MET and the scores on the CT 2003 ($r = .72$, $p < .05$, and $n = 629$). The present research is then a continuation of the research program that was started by Maki, Wasada, and Hashimoto (2003). In the present research, we collected sets of data from the students at Nihon University, Shobi Gakuen University, Gifu University, Hokkaido University, Osaka University, and University of Tokyo at Komaba. Data were collected from 657 subjects. As a result of a correlation analysis, it turned out that the scores of the MET and the scores of the CT 2004 had a strong correlation ($r = .72$).

The organization of this paper is as follows. Section 2 gives an overview of the materials (the Minimal English Test (MET) and the College Entrance Examination (English Part) 2004 (CT 2004)) to be employed in this research. Section 3 analyzes the data, and Section 4 reports the results. Section 5 concludes the paper.

2. The Materials

Section 2.1 gives an overview of the Minimal English Test (MET) developed by Maki, Wasada, and Hashimoto (2003), and Section 2.2 gives an overview of the College Entrance Examination (English Part) 2004 (CT 2004).

2.1 The Minimal English Test (MET)

The MET is a simple test which requires the test taker to write a correct English word with 4 letters or less into each of the 72 blank spaces of the given sentences written on one A4 paper, while listening to the CD on which the sentences are recorded. The MET is based on Lessons 1 and 2 of the textbook for college freshmen written by Sakamoto, Furuya, and Hubenthal (2001) and the CD that accompanies it. The contents of the textbook are essays on the modern society of the United States. The CD lasts about 5 minutes with a speed of 125 words per minute. The MET is shown below.

The Minimal English Test

Name: _____ Date: Month____Day____Year_____ Score: _____/72

The Score of the College Entrance Examination (English Part) 2003: _____/200

Please fill an English word with 4 letters or less into each blank spot, while listening to the CD.

1. The majority of people have at least one pet at (　　) time in their (　　).
2. Sometimes the relationship between a pet (　　) or cat and its owner is (　　) close
3. that (　　) begin to resemble (　　) other in their appearance and behavior.
4. On the other (　　), owners of unusual pets (　　) as tigers or snakes
5. sometimes (　　) to protect themselves (　　) their own pets.
6. Thirty years (　　) the idea of an inanimate (　　) first arose.
7. This was the pet (　　), which became a craze (　　) the United States and
8. spread (　　) other countries as (　　).
9. People (　　) large sums of money for ordinary rocks and assigned (　　) names.
10. They tied a leash around the rock and pulled (　　) down the street just (　　) a dog.
11. The rock owners (　　) talked (　　) their pet rocks.
12. Now (　　) we have entered the computer age, (　　) have virtual pets.
13. The Japanese Tamagotchi---(　　) imaginary chicken (　　)---
14. (　　) the precursor of (　　) virtual pets.
15. Now there (　　) an ever-increasing number of such virtual (　　)
16. which mostly young people are adopting (　　) their (　　).
17. And (　　) your virtual pet (　　),
18. you (　　) reserve a permanent resting place (　　) the Internet in a virtual pet cemetery.

19. Sports are big business. Whereas Babe Ruth, the (　　) famous athlete of (　　) day,
20. was well-known (　　) earning as (　　) as the President of the United States, the average
21. salary (　　) today's professional baseball players is (　　) times that of the President.
22. (　　) a handful of sports superstars earn 100 times (　　) through their contracts
23. (　　) manufacturers of clothing, (　　), and sports equipment.
24. But every generation produces (　　) or two legendary athletes (　　) rewrite
25. the record books, and whose ability and achievements (　　) remembered (　　) generations.
26. (　　) the current generation Tiger Woods and Michael Jordan are two (　　) legendary
27. figures, (　　) of whom (　　) achieved almost mythical status.
28. The (　　) that a large number of professional athletes (　　) huge incomes
29. has (　　) to increased competition throughout (　　) sports world.
30. Parents (　　) their children to sports training camps (　　) an early age.
31. Such (　　) typically practice three to (　　) hours a day,
32. (　　) weekend (　　) during their school vacations
33. in order (　　) better their chances of eventually obtaining (　　) well-paid position
34. on a professional (　　) when they grow (　　).
35. As for the (　　) young aspirants who do (　　) succeed,
36. one wonders if they (　　) regret having (　　) their childhood.

The test taker is verbally given the following 4 instructions in advance.

1. Write the score of the College Entrance Examination (English Part) you took in 2004.
2. Fill an English word with 4 letters or fewer into blank spaces, while listening to the CD.
3. The CD lasts about 5 minutes.
4. There is about a three-second interval between Line 18 and Line 19.

After the above instructions are given, the volume of the CD is checked, and the MET is administered.

2.2 The College Entrance Examination (English Part) 2004 (CT 2004)

The College Entrance Examination Center (2004) provides the summary of the result of the CT 2004 below.

Observations	535,944
The full mark	200
The number of questions	50
The average score	130.11
Standard deviation	37.27
Time limit	80 minutes
Date	January 17th, 2004

The CT 2004 contains questions about pronunciation, grammar, reordering of paragraphs, and reading comprehension, but does not contain questions about listening comprehension.

3. Data Analysis

3.1 Data

The MET was administered at the following institutions during the period from April to July of 2004: Nihon University, Shobi Gakuen University, Gifu University, Hokkaido University, Osaka University, and University of Tokyo at Komaba. The total number of the data was 657, as shown below.

Institution	Number of the Data
Nihon University	27
Shobi Gakuen University	48
Gifu University	393
Hokkaido University	47
Osaka University	107
University of Tokyo at Komaba	35
Total	657

Note that Shobi Gakuen University does not require the applicants to take the CT 2004. Therefore, we obtained the data by letting the 1st year students take the CT 2004 and the MET during the English class in April of 2004.

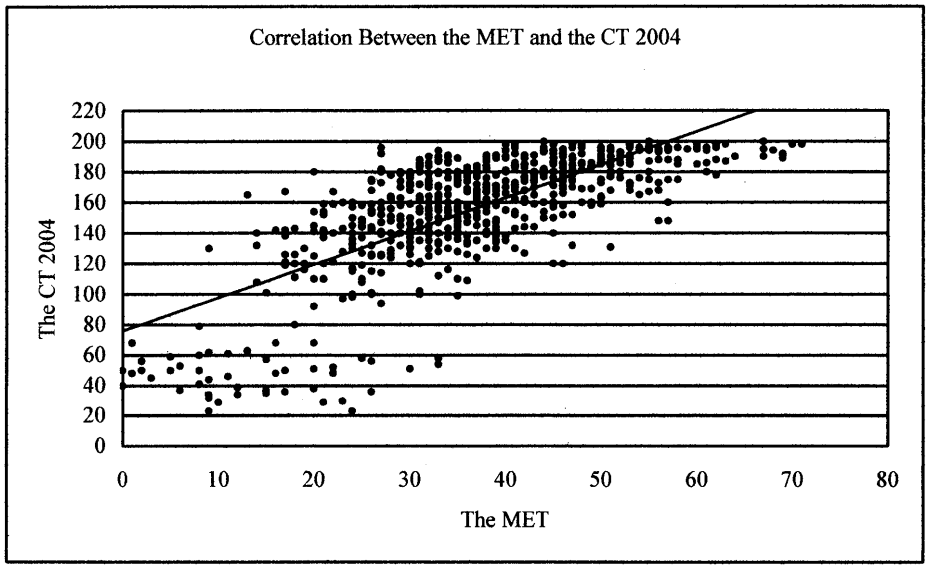
3.2 Data Analysis

We analyzed the data (the scores of the MET and the scores of the CT 2004) by a simple regression analysis (correlation analysis) using Microsoft Excel. The result is shown below.

Regression Statistics	
Correlation Coefficient (R)	0.720504
R Square	0.519126
Adjusted R Square	0.518392
Standard Error	26.76005
Observations	657
P-value	3.17E-106

The result of this analysis is more clearly represented by the following graph. The regression line is y = 2.18x + 75.95.

The Correlation Between the MET and the CT 2004



4. The Results

As the above analysis shows, there turned out to be a strong correlation between the scores of the MET and the scores of the CT 2004 ($r = .72$, $p < 3.17E\text{-}106$).[1]

A comparison of the results of the analyses of the MET and the CT from 2002 to 2004 tells us that the correlation coefficients between the scores of the MET and those of the CT are more or less consistent (from .68 to .72). See the following chart.

Results of the Analyses of the MET and the CT from 2002 to 2004

Year	Observations	Correlation Coefficient (R)	Regression Line
2002	154	.68	y = 1.53x + 82.13
2003	629	.72	y = 2.39x + 67.62
2004	657	.72	y = 2.18x + 75.95

We will continue this research program to determine whether the correlation coefficients between the scores of the MET and those of the CT are consistently around .7.

5. Conclusion

To conclude, we have found that the scores of the Minimal English Test (MET), which Maki, Wasada, and Hashimoto (2003) invented, had a statistically significant strong correlation with the scores of the College Entrance Examination (English Part) 2004 (CT 2004) ($r = .72$, $p < 3.17E\text{-}106$).

References

Maki, Hideki, Hiroaki Wasada, and Ekuko Hashimoto (2003) "Saishoo Eego Tesuto: Shoki Kenkyuu." (The Minimal English Test: A Preliminary Study) Eego Kyooiku (The English Teachers' Magazine) 53.10, 47-50.

Maki, Hideki, Takane Ito, Yoichi Miyamoto, Satoshi Oku, Asako Uchibori, and Yukiko Ueda (2004) "The Minimal English Test: Its Correlation with the College Entrance Examination (English Part) 2003." Bulletin of the Faculty of Regional Studies, Gifu University 15, 39-46.

Sakamoto, Masako, Noriko Furuya, and Charles D. Hubenthal (2001) Thoughts into Writing. Tokyo: Seibido.

The College Entrance Examination Center (2004) http://www.dnc.ac.jp/index.htm/

Yanai, Hisae (1998) 4 Steps Ekuseru Toukei (4 Steps Excel Statistics). Saitama: OMS.

Note

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1 We follow Yanai (1998) in interpreting values of correlation coefficients. She assumes the following correspondence between correlation coefficients and their characteristics.

Correlation Coefficients	**Characteristics**
$0.0 \leq r < \|0.2\|$	almost no correlation
$\|0.2\| \leq r < \|0.4\|$	weak correlation
$\|0.4\| \leq r < \|0.7\|$	moderate correlation
$\|0.7\| \leq r < \|0.9\|$	strong correlation
$\|0.9\| \leq r < \|1.0\|$	extremely strong correlation