

Measuring Social Intelligence

Reference:

Messmer, R., & Barchard, K. (2001). *Measuring Social Intelligence*. Poster presented at the annual NorthWest Cognition and Memory conference, May, Vancouver, BC.

I was unable to locate an electronic copy of the content of this poster. It was therefore re-typed by reading the poster itself. The poster content follows:

ABSTRACT

O'Sullivan and Guilford created several tests of Behavioral Cognition. Four of these – Expression Grouping, Cartoon Predictions, Missing Cartoons, and Social Translation – are still used to measure Social and Emotional Intelligence. However, the internal consistencies of these tests are sometimes low. Using 150 undergraduates, items that detract from internal consistency were eliminated. The internal consistency and validity of the new short forms were examined using a second sample of 99 undergraduates.

INTRODUCTION

Expression Grouping (EG), Cartoon Predictions (CP), Missing Cartoons (MC), and Social Translations (ST) have been used to measure Social Intelligence for Many years. Some researchers have found low internal consistencies within each test. In other words, they are not very reliable. For example, using Part I of each test, Barchard (2001) found internal consistencies of .31 for EG, .44 for CP, .55 for MC, and .64 for ST.

The purpose of this research was to create shorter versions of each test with better internal consistencies. The strategy was to examine responses to the individual items of each test and select the best items. The reliability and validity of each shortened test was analyzed using a second sample of participants.

METHOD

Participants: Two hundred and forty-nine undergraduates were administered the four tests. They were then randomly assigned to two groups. Group 1 consisted of 150 subjects (102 females, 48 males; mean age 19.5). Group 2 consisted of 99 subjects (67 females, 32 males; mean age 19.3). There were no significant differences in the composition of the two groups.

Measures: EG asks subjects to select the gesture, posture, or facial expression on the left that represents the same thought, feeling, or intention as a set of three pictures on the right. CP asks subjects to select the cartoon that show what will happen next in a story. MC asks subjects to select the cartoon that feels in the missing space in a series of cartoons, to complete the story. ST asks subjects to assess the meaning behind words that are spoken between two people.

Data Analysis: Based on the data obtained from Group 1, the best 12-15 items were selected from each test. Items were discarded based on the following criteria: a mean less than .10 or greater than .90; a low or negative corrected item-total correlation; an increase in coefficient alpha if the item was deleted; and a loading of less than .30 on the first unrotated principal

component. Differences in responses based on the sex and language of the subject was also considered. See Table 1.

Group 2 was then used to examine the short forms of each test. Reliability was examined using coefficient alpha. Validity was measured by calculating correlations among the four tests.

RESULTS

Reliability: The reliabilities for short forms of each test are given in Table 2.

Validity: There is a significant positive correlation between CP and each of the other tests. None of the remaining correlations were significant. See Table 3.

CONCLUSION

The internal consistency of each new short test was an improvement from the results of Barchard (2001). The coefficient alphas for the shortened MC and ST tests were quite good. However, the values of the coefficient alpha for the shortened EG and CP tests still need more work. The validity results are disappointing. There is no convincing evidence for the convergent validity of CP with other measure of Social Intelligence, but the other tests failed to intercorrelate.

REFERENCES

Barchard, K.A. (2001). Unpublished Doctoral Dissertation, University of British Columbia, Vancouver, British Columbia.

O'Sullivan, M., & Guilford, J.P. (1976). *Four factor tests of social intelligence (behavioral cognition): Manual of instructions and interpretations*. Orange, C.A.: Sheridan Psychological Services.

AUTHOR CONTACT

Radha Messmer: forgetmenot_28@hotmail.com

Kim Barchard: kane@interchange.ubc.ca

Table 1

Short forms of the O'Sullivan and Guilford Social Intelligence Tests

Test	Items Retained				
Expression Grouping	4	5	6	7	8
	11	13	17	19	20
	21	26	27	28	29
Cartoon Predictions	4	7	8	9	10
	11	14	16	18	19
	20	21	26		
Missing Cartoons	1	2	3	7	9
	13	14	16	18	19
	20	22	23	24	25
Social Translations	1	2	3	4	5
	6	9	13	14	15
	17	19	20	21	22

Table 2

Coefficient alpha for the short form of each test

<u>Test</u>	<u>Coefficient Alpha</u>
Expression Grouping	.46
Cartoon Predictions	.52
Missing Cartoons	.71
Social Translations	.90

Table 3

Intercorrelations between the new short forms of the tests

<u>Test</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. Expression Grouping	--	.25	.13	.02
2. Cartoon Predictions	--	--	.35	.38
3. Missing Cartoons	--	--	--	.17
4. Social Translations	--	--	--	--