

SUPPORTING STATEMENT – PART B

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

If the collection of information employs statistical methods, it should be indicated in Item 17 of OMB Form 83-I, and the following information should be provided in this Supporting Statement:

1. Description of the Activity

Describe the potential respondent universe and any sampling or other method used to select respondents. Data on the number of entities covered in the collection should be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate the expected response rates for the collection as a whole, as well as the actual response rates achieved during the last collection, if previously conducted.

This study examines the effectiveness of a cognitive assessment which requires no prerequisite knowledge or skills. The universe of respondents includes all college graduates with normal color vision, located within the US, and of ages 18 to 55. Data will be collected from 100 Amazon Mechanical Turk workers and no subgroups or strata will be examined. It is expected that at least half (50 people) complete the full study.

2. Procedures for the Collection of Information

Describe any of the following if they are used in the collection of information:

- a. Statistical methodologies for stratification and sample selection;

NA

- b. Estimation procedures;

NA

- c. Degree of accuracy needed for the Purpose discussed in the justification;

Sample size requirements were calculated using .80 as the required level of power and .05 as the type 1 error rate.

- d. Unusual problems requiring specialized sampling procedures; and

NA

- e. Use of periodic or cyclical data collections to reduce respondent burden.

NA

3. Maximization of Response Rates, Non-response, and Reliability

Discuss methods used to maximize response rates and to deal with instances of non-response. Describe any techniques used to ensure the accuracy and reliability of responses is adequate for intended purposes. Additionally, if the collection is based on sampling, ensure that the data can be generalized to the universe under study. If not, provide special justification.

MTurk workers respond only to the assignments that they are interested in. Respondents to this study will be compensated at a rate of approximately \$10.00 per hour. All data will be cleaned and screened for careless responding. Descriptive statistics and psychometrics will be calculated for the assessment measures and game evaluation questions.

4. Tests of Procedures

Describe any tests of procedures or methods to be undertaken. Testing of potential respondents (9 or fewer) is encouraged as a means of refining proposed collections to reduce respondent burden, as well as to improve the collection instrument utility. These tests check for internal consistency and the effectiveness of previous similar collection activities.

Longer versions of both the reaction questions and the demographics questions were used in previous research. These instruments were shortened for the present research based on information needs and the need to reduce burden.

5. Statistical Consultation and Information Analysis

- a. Provide names and telephone number of individual(s) consulted on statistical aspects of the design.

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- b. Provide name and organization of person(s) who will actually collect and analyze the collected information.

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