

Devising and Testing an Instrument for Measuring Distances between Adolescents' Sense of Self and the Concepts Related to Morals

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Introduction

Moral identity is about how strongly our own morality is central to our own self-conception. This moral identity has been regarded as one of the most important psychological constructs that bridge between moral judgment and actual moral behavior. We developed an internet-based measurement of moral identity. This new measurement is more direct, intuitive and visualized than previous text-based measurement.

Method

We asked our subjects to place keywords selected from a pool around the "self" circle at the center, according to the distance and importance felt between their self-conception and the keywords. (See Fig 1.)

We calculated a score showing the centrality of morality to a subject's self-conception, or the degree of the centrality of morality, by measuring the distances between each keyword and the self-circle at the center. After normalizing each distance, we calculated the score of the relative centrality of morality to the subject's self-conception using

$$\text{Score}_m = \sum z_n w_n$$

(z_n : normalized distance, w_n : keyword weight)

If the value is larger than zero, then the subject is more interested in moral values against other self-oriented values. If the value is smaller than zero, then he or she is more interested in non-moral values.

Fig 1. User interface (UI) screen-shot

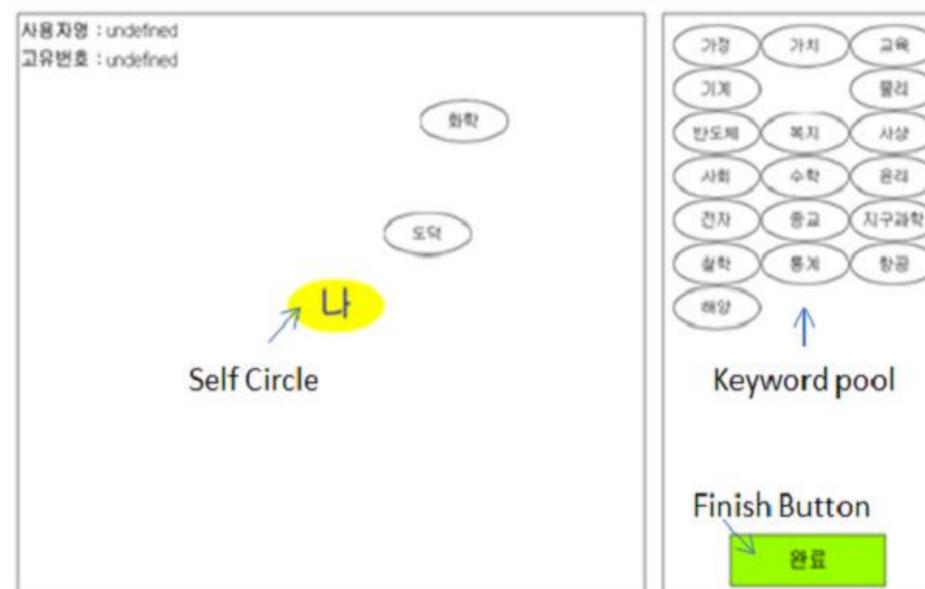


Table 1. Results of t-tests

| I.V. | Group A | Group B | d | t | p |
|--------|-------------------------|-------------------------|-------|--------|-------|
| Grade | 11 th grader | 12 th grader | -1.36 | -1.36 | N.S. |
| | M = 0.65 | M = 2.29 | | | |
| | SD = 8.73 | SD = 8.48 | | | |
| | N = 90 | N = 116 | | | |
| Major | Humanities | Sciences | 9.5 | 10.033 | <.001 |
| | M = 6.75 | M = -3.13 | | | |
| | SD = 7.45 | SD = 6.68 | | | |
| | N = 98 | N = 108 | | | |
| Gender | Female | Male | 4.18 | 3.55 | <.001 |
| | M = 3.51 | M = -0.64 | | | |
| | SD = 8.44 | SD = 8.29 | | | |
| | N = 110 | N = 96 | | | |

Table 2. Results of multivariable regression analyses

| | Model1 Without interactions(β /se) | Model2 With interactions(β /se) |
|----------------|---|--|
| Grade | 2.1851* (0.9486) | 2.3497 (1.5474) |
| Major | -9.8921*** (0.9424) | -10.2184*** (1.6199) |
| Gender | -3.7799*** (0.9419) | -8.9834*** (1.6326) |
| Grade x Major | | -3.9614* (1.8255) |
| Major x Gender | | 5.5201** (1.8164) |
| Gender x Grade | | 8.5868*** (1.2112) |
| β_0 | 7.2904*** (0.9514) | 8.5868*** (1.2112) |
| R^2_{adj} | 0.3868 | 0.4337 |

Note. ~ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Sample

We sampled a total of 206 Korean students from a high school near Seoul. There were 96 male students and 110 female students. 98 of the students were majoring in humanities and social sciences; the remaining 108 students were majoring in natural sciences and engineering. 90 of the students were in the 11th grade; 116 were in the 12th. Our subjects accessed our measurement interface using the internet.

Conclusion

First, students who were majoring in humanities and social sciences and taking more ethics-related subjects showed significantly higher scores than those who were majoring in the natural sciences and engineering. Second, girls scored significantly higher than boys.

Moreover, in the methodological aspect, first, we developed a more visualized, intuitive and interactive computer-based measurement. Second, this web-based measurement would therefore also reduce both the labor required of researchers as well as errors produced during data entry.

Limitations

First, this study did not measure the actual behavioral outcomes of its subjects, and did not investigate the correlation with calculated scores. Second, we did not measure our subjects' moral identity using previously developed tools, and we did not conduct a correlational analysis.

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