**Report on Manipulating “Getting Out the Gunk” Baseline Data**

**Derivation of new variables:**

Firstly the related knowledge variables were recoded as incorrect and correct responses as given criteria. Such as I recoded ‘Cheeseburger’ as ‘Correct’ while ‘Hamburger’ was replaced by ‘Incorrect.’ It was done by derivation of ‘X1ARW’ from ‘x1a’ where I recorded the value ‘1’ as ‘Correct’ and value ‘0’, which replaced previous value ‘2’ labeled as ‘Incorrect.’ Hence some variables like x3a, x4a, x8a, and x10a were replaced as (1=0) (2=1) as those contained correct responses in the opposite direction.

Table 1: Knowledge related variables in response to “Which do you think has more cholesterol.”

|  |  |  |
| --- | --- | --- |
| Variable | Incorrect | Correct |
| X1RW | 55 | 145 |
|  | (27.5%) | (72.5%) |
| X2RW | 63 | 137 |
|  | (31.5%) | (68.5%) |
| X5RW | 93 | 107 |
|  | (46.5%) | (53.5%) |
| X6RW | 87 | 113 |
|  | (43.5%) | (56.5%) |
| X7RW | 99 | 101 |
|  | (49.5%) | (50.5%) |
| X9RW | 132 | 68 |
|  | (66.0%) | (34.0%) |
| X3RW | 66 | 134 |
|  | (33.0%) | (67.0%) |
| X4RW | 84 | 116 |
|  | (42.0%) | (58.0%) |
| X8RW | 108 | 92 |
|  | (54.0%) | (46.0%) |
| X10RW | 137 | 63 |
|  | (68.5%) | (31.5%) |

Then I started working on the categorical variable. I combined the ‘race’ and ‘Latino’ to form the new variable ‘RACEETH’ containing given substantive values.

Continuous variable ‘ldla’ was converted into categorical variable ‘LDLCAT1’ and then ‘LDLCAT2’, which I had labeled as ‘Categorical version of the LDL cholesterol’ and ‘Dichotomized version of the LDL cholesterol’ respectively with given values.

Table 2: Derived categorical variables

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Value labels | n | % |
| RACEETH | Non-Hispanic Black | 61 | 30.5 |
|  | Non-Hispanic White | 52 | 26.0 |
|  | Non-Hispanic Asian | 25 | 12.5 |
|  | Hispanic or Latino | 52 | 26.0 |
|  | Non-Hispanic Other | 10 | 5.0 |
| LDLCAT1 | Borderline High | 37 | 18.5 |
|  | High | 102 | 51.0 |
|  | Very High | 61 | 30.5 |
| LDLCAT2 | Not High | 37 | 18.5 |
|  | High | 163 | 81.5 |

**Establishment of scales:**

Then I attempted creating scales based on the derived knowledge scores. Each respondent scored 1 for every correct response and 0 for an incorrect response. As a result, among a total of 10 each respondent scored their scores. After that, I calculated the mean score along with standard deviation and computed Cronbach’s alpha as a measure of internal consistency.

Variables x11 through x15 and x11 through x15 contain respondents’ self-efficacy and motivation related statements, respectively, of which each had 5 response codes as 1 through 5. Among these four variables as x12, x14, x17, and x20 were reverse coded as they state self-efficacy or motivation in the opposite direction. I summed up the x11 through x15 (or the reverse-coded versions of these) scores and divided by 5 to achieve the self-efficacy scale score. And I performed the same for the motivation variables. Finally, I computed the mean, standard deviation as well as Cronbach’s alpha as a measure of internal consistency.

Table 3: Descriptive statistics with the reliability of the three scale scores

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Variable label | Mean | SD | Cronbach’s alpha |
| Knowledge | Knowledge Scale | 5.38 | 2.94 | 0.813 |
| LCD\_Self\_efficacy | Low-cholesterol Diet Self-efficacy Scale | 3.64 | 0.70 | 0.712 |
| LCD\_Motivation | Low-cholesterol Diet Motivation Scale | 3.54 | 0.68 | 0.641 |