**Parallel analysis suggests 9 factors, so I started from 9.**

General approach. I will start with running EFA with “Oblimin” rotation with all items and the specified number of factors. Later, I will trim out all the items that does not have good loading to any factor (loading < 0.3) to make sure the I get a clearer picture of all the item loadings. After obtaining a matrix of items loading, I will start inspecting items in each factor separately and see if they make sense conceptually.

9 factors model was abandoned because after inspection the6th, 8th, and 9th factors are not conceptually distinguishable: they mostly talk about treating other people equally. Therefore, I decided to drop the 9 factors model.

1. Factor 1
   1. 7,13,15,17,18,19,22,30,32,33,36,49,56,60,61,73,75
   2. This cluster of items are talking about **prosocial values**.
2. Factor 2
   1. 5,10,15,26,41,47,54,57,69,72,74
   2. This cluster of items are talking about **perception of reciprocal norms.**
   3. Note that the items in this cluster are mostly reverse coded items.
3. Factor 3
   1. 9,20,27,29,46,51,52
   2. This cluster of items are talking about **empathy**.
4. Factor 4
   1. 1,21,44,63,65
   2. This cluster of items are talking about **attitudes toward social problems**.
5. Factor 5
   1. 20,24,28,35,48,68
   2. This cluster of items are talking about **attitude toward prosocial spending (relates to effective altruism).**
6. Factor 6
   1. 45,67,70
   2. This cluster of items are talking about **fairness (categorical imperative).**
7. Factor 7
   1. 2,11,48
   2. This cluster of items are talking about **behavioral elements relating to prosocial spending** which seems to overlap with factor 5. Indeed, the 48 have good loading on both factors.
8. Factor 8
   1. 38,-57,-63,71,73,-74 (negative signs indicate negative loading)
   2. After inspection, this cluster seems to contain multiple elements such as **care for strangers (fairness which relates to factor 6)** and **disbelief about small effort combined to make big changes (relates to factor 2 and 4).**
9. Factor 9
   1. 6,-9,19,39,55
   2. This cluster seems to talk about **fairness and care for strangers (relates to factor 6).**

Looking at the results, I reckon that factors 6,8, and 9 seem to overlap in their conceptual meaning. Therefore, I explore whether they could be combined into a more general laten variable. Through a 7 factors EFA model with “Oblimin” rotation, I want to see if all the variables relating to fairness will merge. In this model, I followed the same procedure that I indicated above (trimmed out loading <0.3). The result supported my thoughts: all items relating to fairness merge into single factor in the 7 factors model.

1. Factor 1 (ML1)
   1. 4,7,12,15,17,18,19,22,25,30,32,33,34,36,37,-38,49,55,56,57,58,59,60,61,-62,63,64,-71,74,75
   2. High loading items (>0.45): 4,12,15,17,19,22,32,33,49,56,60,75
   3. This cluster of items are talking about **prosocial values and seems to include 3 subcomponents, 1) urge to help (proactiveness), 2) selfless orientation, and 3) insight in helping**.
   4. Due to the complexity of this factor, I further explore its subcomponents using EFA and CFA later.
2. Factor 2 (ML7)
   1. 3,5,8,10,15,26,33,41,44,45,47,54,57,58,69,72,74
   2. High loading items (>0.45): 10,26,41,54,57,69,72
   3. This cluster of items are talking about **perception of reciprocal norms and seems to include 3 subcomponents: 1) reciprocal norms, 2) activists’ ideology, and 3) social norms.**
   4. Note that the items in this cluster are mostly reverse coded items.
3. Factor 3 (ML4)
   1. 9,27,29,46,51,52
   2. High loading items (>0.45): 9,27,29,46,51,52
   3. This cluster of items are talking about **empathy**.
4. Factor 4 (ML6)
   1. 1,21,44,63,65,69
   2. High loading items (>0.45): 1,21,44,65
   3. This cluster of items are talking about **attitudes toward social changes**.
5. Factor 5 (ML2)
   1. 20,24,28,35,-47,48,64,68
   2. High loading items (>0.45): 20,28,35,48,68
   3. This cluster of items are talking about **attitude toward prosocial spending (relates to effective altruism).** This cluster seems to contain **affective and reflective components**.
6. Factor 6 (ML5)
   1. 6,18,38,39,45,55,62,67,70,71
   2. High loading items (>0.45): 6,38,39,45,67,70,71
   3. This cluster of items are talking about **fairness (categorical imperative).**
7. Factor 7 (ML3)
   1. 2,5,11,13,48,66,73
   2. High loading items (>0.45): 2,11
   3. This cluster of items are talking about **behavioral elements relating to self-sacrifice.**

7 factor solution seems to provide a good conceptual as well as statistical illustration for the factor structure in the do-gooder scale (CFI = 0.93, RMSEA=0.04). Therefore, I adopted this model.

To figure out if there is upper or lower-level structure for the 7 factors model, I ran some more EFAs and CFAs.

In particular, for exploring the upper-level factors, I looked at the correlation between 7 factors.

Text

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No factors correlate strongly with others (by strongly I mean r>0.5). Therefore, I did not further explore the upper-level structure since the correlation matrix indicates it may not exist.

For the lower-level factors, I ran some EFA in each latent factor to see if they are unidimensional.

Factor 1 (ML1)

1. Sub-factor 1 (ML1)
   1. 12,15,17,18,30,33,34,57,58,61,63,74
   2. This one seems to **reflect proactiveness and urge to do good**.
2. Sub-factor 2 (ML3)
   1. 4,7,19,22,25,32,37,49,55,56,59,64,75
   2. This one reflects **insight in helping**.
3. Sub-factor 3 (ML4)
   1. 17,32,36,56,60
   2. This one reflects **selfless orientation**.
4. Sub-factor 4 (ML2)
   1. 38,62,71
   2. This one reflects **care for strangers** which overlaps with factor 6.Also, considering the low loading (<0.4) in the original 7 factors EFA, I decided to drop this sub-factor.

Also, depending on the requirements of conciseness, I decided to create a more accurate and concise version of the DGS by trimming out factors with relatively low factor loading or make little conceptual sense for each latent variables.