Title: TOWARDS A MEASURE OF KINDNESS: An Exploration of a Neglected Interpersonal Trait

Abstract: Although a growing number of studies indicate the psychological benefits of Kindness no clear definition or distinct measure of Kindness is available. A framework for considering kindness was therefore developed and a 40 item self-report questionnaire (the kindness measure) produced from it. This was completed by a sample of 165 people differing in age, gender and occupation. Responses varied enough to indicate the measure is discriminating between people. Multivariate analysis indicated three distinct aspects of kindness: Benign Tolerance (BT), Empathetic Responsivity (ER), and Principled Proaction (PP). Central to these, a more fundamental form of Kindness was also identified, that we propose to call Core Kindness (CK), that contrasts with Psychopathy, as an important aspect of personality. Differences between men and women and younger and older people lend external validity to the kindness scales and bode well for future more detailed studies. Directions for future research are proposed.
Attached are the fully revised components of the paper dealing with all the very supportive and helpful guidelines from the reviewers.

The paper with tables and references is now 5,404 words.
Many thanks

Professor David Canter
We are greatly encouraged by the supportive comments of both reviewers and their agreement that a measure of Kindness would be of value and that this first stage in developing such a measure is worthwhile.

The paper has been thoroughly revised in response to all their comments. As follows:

- Discussion added
- Sections "Scale development" and "Measure" were joined under a general heading "The Scale"
- Section "The Sample" - a more detailed explanation of the sample was added (see p. 6 of the manuscript)
- Sections "The Scale" and "The Sample" were joined under a general heading "2. Method"
- Points "The Structure of Kindness", "A Multidimensional Measure of Kindness", "Anthrophilia", and "Validity" were joined under a general heading "The Structure of Kindness"
- More details of the Factor analysis have been given and the reason for using the orthogonal Varimax rotation rather than an oblique solution has been provided.
- Section "Reliability" now reports scale and item characteristics with the following indicators for the total and the three scales: M, SD; mean inter-item correlation; range of item-total correlations; simple split-half reliability as well as estimates following Guttman and Spearman (see Table 1 in the Figures and Tables document). The intercorrelation of all scales was reported (see p. 10-11 of the manuscript).
- We are grateful for the pointer about using the term ‘anthrophilia’, we also struggled with ‘psychophilia’, which has also been hijacked by forensic psychiatry. So we have used the term Core Kindness instead.
- We appreciate the comment that Kindness may not be the opposite of psychopathy as we hypothesize but more instrumental in avoiding conflict. We take the challenge to this possibility as a further indication of the value of studying Kindness using the appropriate measures and have cited the very interesting study by Eskelinen & Ollenen (2011) as an indication of an alternative hypothesis that can now be explored.
TOWARDS A MEASURE OF KINDNESS:

An Exploration of a Neglected Interpersonal Trait

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Highlights

- A framework for considering kindness was developed.
- Multivariate analysis indicated three distinct aspects of kindness.
- Unkindness is a distinct psychological trait and not the simple opposite of kindness.
- The self-report measure developed has good psychometric properties.
- A more fundamental form of Kindness, *Core Kindness* that contrasts with *Psychopathy*, was identified.
- Age and gender significantly relate to kindness and its various aspects.
TOWARDS A MEASURE OF KINDNESS:

An Exploration of a Neglected Interpersonal Trait
TOWARDS A MEASURE OF KINDNESS

Abstract

Although a growing number of studies indicate the psychological benefits of Kindness no clear definition or distinct measure of Kindness is available. A framework for considering kindness was therefore developed and a 40 item self-report questionnaire (the kindness measure) produced from it. This was completed by a sample of 165 people differing in age, gender and occupation. Responses varied enough to indicate the measure is discriminating between people. Multivariate analysis indicated three distinct aspects of kindness: Benign Tolerance (BT), Empathetic Responsivity (ER), and Principled Proaction (PP). Central to these, a more fundamental form of Kindness was also identified, that we propose to call Core Kindness (CK), that contrasts with Psychopathy, as an important aspect of personality. Differences between men and women and younger and older people lend external validity to the kindness scales and bode well for future more detailed studies. Directions for future research are proposed.

Keywords: kindness; variants of kindness; self-report kindness; positive psychology; individual differences
TOWARDS A MEASURE OF KINDNESS

1. Introduction

Although an increasing number of studies have revealed the benefits of acts of kindness (Lyubomirsky et al., 2005), there is little exploration of what psychological processes underlie kindness and how it can be measured. Even though acts of generosity can inspire greater liking by others, along with appreciation, gratitude (Emmons & Crumpler, 2000; McCullough et al., 2002; Watkins et al., 2003; Peterson & Seligman, 2004; Otake et al., 2006), and prosocial reciprocity (Trivers, 1971) and kind behaviors have been proposed as satisfying a basic human need for relatedness (Baumeister & Leary, 1995), what "kindness" actually is takes on different meanings in different studies. Neff (2003) for example, views Kindness as a form of self-kindness. In contrast Lyubomirsky et al. (2005) see it as a behavior costly to the self that benefit others. Otake et al., (2006) describe it as a motivation to be kind, to recognize, and enact kindness. Yet, Kraus & Sears (2009) see it as a form of love in a non-romantic, friendly sense. This is rather different from Exline et al., (2012) who treat it as a set of social norms and rules of how people are expected to behave within society.

Previous empirical studies have explored kindness by looking at how performing (Otake et al., 2006; Buchanan & Bardi, 2010); recalling (Exline et al., 2012); or observing (Baskerville et al., 2000) kind acts increase positive emotions, such as gratitude (Otake et al., 2006; Exline et al., 2012), sense of being loved, and amazement (Exline et al., 2012). However, these explorations take a specific act or aspect of cognition that is accepted as "kind". They do not develop a measure that clearly differentiates aspects of kindness, thus helping to define it more precisely, or assists in differentiating between people in how kind they are. There is therefore considerable value in establishing a kindness-specific measure.
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So although studies concerning who is kind to whom, confirm that people show more generosity towards close others (particularly family) than distant others (Burnstein et al., 1994; Cialdini et al., 1997), and that acts of kindness may also be expected when helping is part of the benefactor's social role, as in the case of helping professionals (Bryan, 2009) or parents (Davey & Eggebeen, 1998), little is known of how people in general vary across different forms of kindness. The value of measuring such variations also emerges from studies revealing that kindness does not develop equally across all ages (Baldwin & Baldwin, 1970; Shorr & Shorr, 1995) and that women respond more positively to acts of kindness (Baskerville et al., 2000). Such findings indicate the importance of exploring whether variations in amount and variety of kindness may be a distinct interpersonal trait.

In order to develop a measure of Kindness a number of existing studies were consulted. Various self-report methods touch on components of kindness or refer to it as part of a broader concept. The most widely used measure is the Interpersonal Reactivity Index (IRI; Davis, 1983) which assesses individual differences in their ability to feel empathy towards others. The rationale underlying the IRI is that empathy is a set of constructs, related in that they all concern responsivity to others but are also clearly distinct from each other. Kindness as a prosocial behavior, by contrast, has been examined by the Inventory of Strengths (VIA-IS; Linley et al., 2007). It has been positively correlated with other virtues, such as the capacity to love, and receive love and social intelligence. In particular, both scales suggest that there is a clear relationship between empathy and kindness and prosocial behavior and kindness. Further, Yoo et al. (2012) used both scales in a longitudinal study in a family context, finding empathy and prosocial behavior to be linked.
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The present study builds on the previous research by recognizing that whilst empathy is a necessary aspect of Kindness it is not sufficient. Kindness involves actions and reactions to others rather than just the ability to have these responses. It is therefore of value to develop a measure of kindness as a distinct set of aspects in its own right rather than a component of a broader concept or as a single-item (e.g. helping, donating to charity, gift-giving) as has been the case in previous studies. Such a measurement goes beyond earlier research in which respondents typically are asked to perform, recall, or observe an act of kindness over a particular period of time and/or make a judgment of their overall life quality. What is missing in the literature is a measure of overall "kindness"—that is an assessment of the amount and variety of kindness a person exhibits.

2. Method

2.1. The Scale

Drawing on pilot discussions, items used in previous studies and the theoretical issues indicated in the literature, 31 self-report items were generated. In addition nine "unkind" statements were included giving a 40 item questionnaire. Each item was presented as a statement and respondents were asked to indicate on a seven point scale how frequently they carried out such actions.

The kindness measure is thus a 40-items questionnaire of kind and unkind behaviors. The inventory was typically administered online, always anonymously, with an administration time of about 10 minutes. Participants were instructed to answer each statement in relation to "how often they have performed a specific behavior", and responses were fully anchored on a seven-point Likert scale from $1 = \text{"not at all"}$ to $7 = \text{"nearly always"}$. 
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2.2. The Sample

The questionnaire was completed anonymously, by 165 participants, recruited by a team of postgraduate researchers. All participants were members of the general public and were approached on an opportunistic basis in order to avoid selectivity. They were invited either in person or online to participate in a study about human reactions to everyday events. To reduce social desirability bias and inappropriate self-selection participants were informed about the focus of the study on "Kindness" only after they had completed the questionnaire. The sample consisted of 42% male and 58% female, between the ages of 18 and 70 (M=32 years; 25 participants over 40 years), drawn from a range of occupational backgrounds (including 75 professionals, 48 students, 10 laborers) from around the UK, (57% from the North). Mean scores (and standard deviations) for each of the 40 items are presented in Appendix A.

3. Results

Mean scores across all questions ranged from 1.75 to 4.98, indicating that respondents were indeed giving a fruitful range of responses and not giving a high degree of acquiescence that might point to a strong social-desirability response bias. The mean kindness score was 3.49, comfortably in the middle of the seven-point range. Notably, no one scored at the highest extremes of the scale (6 and 7) on average, which also indicates people were not just trying to present themselves in a very strongly positive light (Appendix A). Figure 1, shows the frequencies of the total scores across all 31 kind items with a mean score of 139.42 (SD=23.95), equivalent to a mean of 4.5 averaged across the seven-point scale. The range and mean supports the utility of this scale.
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Insert Figure 1 about here

High scores across the 9 unkind items indicate frequent unkind behaviors. Figure 2 shows the frequency of the sample's total scores on the unkind items with M= 27.78 (SD=6.93), a mean of 3.1 across a seven-point scale. The skewness of both sets of total item scores was well within a tolerable range. The histograms are approximately normal. Thus the scales are appropriate for parametric statistical analyses.

Insert Figure 2 about here

3.1. The Structure of Kindness

In order to explore the main components of Kindness as assessed in the questionnaire the multidimensional scaling (MDS) procedure of Smallest Space Analysis (SSA-I) (Lingoes, 1973) was used. This has been widely employed for many years for revealing structures in assessment instruments covering everything from beliefs and attitudes (Guttman, 1959), to intelligence (Guttman & Levy, 1991), to judgments of social justice (Sabbagh et al., 1994), and even the actions of serial killers (Canter et al., 2004)

Smallest Space Analysis (SSA-I) is a non-metric multidimensional scaling procedure in which the relationships between variables are represented as distances in a Cartesian space. Within the Facet Approach (Canter, 1985), the resulting spatial configuration is examined to determine if meaningful regions can be identified. The SSA-I plot of variables offers a basis for testing and developing hypotheses about the structure of relationships between items in the questionnaire.
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The coefficient of alienation (CoA) (Borg & Lingoes, 1987) indicates how closely the rank orders of the distances between the points in the SSA-I spatial representation relate to the rank orders of the correlations between the variables. The CoA ranges from 0 (indicating a perfect fit) to 1 (indicating no relation at all). A coefficient of 0.20 to 0.25 is considered a reasonably good degree of fit (Borg & Lingoes, 1987).

3.1.1. A New Multidimensional Measure of Kindness

In order to examine the structure of kindness an SSA-I was carried out, omitting the "unkind" items, across the 165 cases, generating a CoA of 0.20 in three dimensions, indicating a reasonable fit for this data (Figure 3). Examination of this configuration gave rise to three aspects of kindness labeled: Benign Tolerance; Empathetic Responsivity; and Principled Proaction.

Insert Figure 3 about here

Benign Tolerance (BT) a live and let live, permissive humanity revealed in an everyday courteousness, acceptance and love of one's fellows (Appendix B, column 1).

Empathetic Responsivity (ER) is more personalized and emotional. It is reactive, a consideration of the specific feelings of other particular individuals (Appendix B, column 2).

Principled Proaction (PP) is driven more by cognition than emotion. It is about behaving honorably towards others and typically proactive rather than reactive. Much of this behavior is altruistic (Appendix B, column 3).

3.1.2. A key aspect of human kindness? Core Kindness (CK)

The structure indicated by the SSA-I revealed a further intriguing aspect of human kindness (Figure 3). Apart from dividing the plot into the three regions, another region of items
TOWARDS A MEASURE OF KINDNESS

that are at the core of all three can be identified. The circle in the centre of Figure 3 indicates that these actions have something in common with all of the others. They can therefore be thought of as the general essence of kindness. This is reflected in the items:

"I feel sorry for other people when they experience problems"

"I like to make other people feel happy"

"People think I have a soft-heart"

It is suggested that this may be regarded as the opposite to psychopathy. A new term for this is offered Core Kindness (CK). It relates to empathy but is more active in dealing with the actions and reactions of a person, rather than just their ability to have these responses; specifically, a tendency towards active gestures motivated by genuine warm feelings for others. There is no expectation of reward or social approbation because these behaviors are anonymous or beyond social proscriptions. These active gestures may operate in a cognitive (PP), behavioral (BT) or affective (ER) mode.

3.1.3. Cross-Validation of Latent Structure

The structure indicated by SSA-I was cross-checked using factor analysis (Appendix A). For although the fundamental matrix algebra for SSA-I and factor analysis are very similar they each model the latent structure in different but complementary ways. Initially, the factorability of the 31 kind items was examined. Several well-recognized criteria for the factorability of a correlation matrix were used. Firstly, 30 of the 31 items correlated at least 0.3 with at least one other item. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .80, and Bartlett’s test of sphericity was significant ($p < .001$). The diagonals of the anti-image
correlation matrix were all above 0.5, supporting the inclusion of each item in the factor analysis. Finally, 30 out of 31 communalities were all around or above 0.3. All together these indicators supported the appropriateness of conducting factor analysis on all 31 items.

Factor Analysis with Varimax rotations was used. This orthogonal solution was preferred to an oblique rotation in order to ensure that the cross-validation was as distinct as possible from the SSA, which represents all elements in a common Cartesian space and thus is inherently an oblique solution.

The three factor solution, which explained 38.17% of the total variance, was preferred. The factor loading matrix for this final rotated solution is presented in Appendix A. The first factor explained 25.04% of the variance, the second factor 6.97% of the variance, and the third factor 6.17% of the variance. For comparison with the SSA results items with high loadings on each factor are identified on the SSA plot. This revealed the same partitioning as indicated in Figure 3, supporting the three-fold solution. The SSA shows that the three aspects of kindness are all reflections of a common core.

3.2. Internal Consistency

One scale was constructed for each of the factors, and one for Unkindness. An overall Kindness scale that is the sum of all "kind" scores was also developed. The internal consistency among the five scales comprising the kindness measure was tested using Cronbach's alpha. In the present sample, the five scales showed good to excellent internal consistency. The alphas ranged from 0.64 to 0.87 (M=0.76). Only one of the five alphas fell below the conventional minimum of 0.70 - the alpha for the Unkindness scale was 0.64. No substantial increases in alpha for any of the scales could be achieved by eliminating any of the items. Table 1 displays the reliability
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coefficients obtained for each scale as well as the means, standard deviations, mean inter-item correlations, range of item-total correlations, simple split-half reliability, and estimates following Guttman and Spearman.

Insert Table 1 about here

The correlations between the scales were moderate, ranging from 0.49 to 0.56 (M=0.52, p<.01) for the three kind scales and indicating a single significant value of -0.28 (p<.01) for the unkind scale. Our findings indicated that while there is a positive significant correlation between all three kind scales, one of them (Benign Tolerance) is negatively correlated to Unkindness. There was no observed relationship between the unkind scale and the other two kind scales. These results confirmed that there was a moderate variation around the line of best fit, further supporting the utility of the scales and that they are not equivalent to each other.

These findings also point to the interesting possibility that admitting to Unkind acts does not inevitably mean that the person will commit no Kind acts. The lack of a strong negative correlation between the two suggests that they are independent aspects of interpersonal interaction.

3.3. External Validity

Total scores across all Kindness scales, were significantly different between men and women (Table 1) but did not differ significantly across age (young<40; Old>40; Table 2) or occupational groups in this sample.

Insert Table 2 here
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Gender differences were found for each of the scales (Table 1). Women scored significantly higher than men on Benign Tolerance and Principled Proaction. Scores for kindness, love, and gratitude have been found to be higher for women in other studies (Linley et al., 2007). Essentially, these finding are compatible with various theories of gender differences, such as the nurturing hypothesis (Eagly & Wood, 2013). Differences in Empathetic Responsivity did not reach significance, however women scored slightly higher than men.

Assessment of associations between the scales and age revealed that scores tend to increase with age (Table 2). Kindness was generally higher in participants over 40 years-old, with significant differences being found in Principled Proaction and Unkindness. These findings were consistent with the idea that there may be a trend for character development over the lifespan (Linley et al., 2007), specifically for kindness (Baldwin & Baldwin, 1970; Shor & Shor, 1995). Such possibilities are indicated in the seminal work of authors, such as Erickson (1959) and Maslow (1970).

Insert Table 3 about here

Potential differences were also explored at the detailed item by item level to highlight any particular points of variation that may exist across gender, age and occupation. Women (M₆=91.10; M₇=90.60; M₈=96.12; p<.001) scored significantly higher than men (M₆=72.27; M₇=72.94; M₈=65.63) on all three items (number 6, 7, and 8 in Appendix A) that were hypothesized as the building blocks of the essence of kindness, here termed Core Kindness. However, when comparisons between young and old were made, the differences did not reach significant levels.

The findings here in regard to Core Kindness and the proposal that it is the opposite of
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psychopathy accords with meta-analytic results which demonstrate that psychopathy may be a poorer predictor of future violence among women relative to men (see Edens et al., 2007; Salekin et al., 1997). Such findings raise questions about the role of kindness in understanding psychopathic individuals. Moreover, it opens the door to an entirely new dimension of research on why some offenders are psychopaths but not all psychopaths are offenders and how kindness may be related to that.

The relationship between Kindness as measured here and psychopathy of course requires further exploration. It is possible that that Core Kindness may be regarded more as a form of ego-defense in order to avoid conflict by neglecting one’s own needs. This possibility is opened up, for example, by consideration of the claims of ‘cancer prone personality’ (Eskelinen & Ollonen, 2011). In such studies there is a higher rate of commitment to a partner and children in people with breast cancer. This does indicate that the ability to measure aspects of Kindness in more detailed could have far-reaching implications.

With respect to age, results also support the findings regarding scale mean scores (Table 2). Younger participants scored significantly higher on the unkind items even when they were analyzed on an item-by-item basis. This suggests that unkindness also may vary across the lifespan.

4. General Discussion

The structure of Kindness emerging in this initial study suggests that unlike personality traits such as Eysenck's extraversion, Piaget's developmental stages such as formal operations, and Heider's social processes such as causal attribution, Kindness is not readily construed as a single, structured concept located "within" the individual. It is rather more like Bowlby's
construct of attachment and McAdams and Aubin's generativity and certain other relational constructs that require consideration of the fit between the person and the environment. Like attachment and generativity, the construct of Kindness links the person and the social world.

However, this link, whether behavioral (BT), affective (ER), or cognitive (PP), is strictly defined by what underlies Kindness e.g. Core Kindness (CK). For comparison with psychopathy, CK is tender rather than the psychopathic tough heartedness (for example, "People think I have a soft heart"), a generalized, genuine empathic response rather than the psychopathic superficial charm (for example, "I feel sorry for other people when they experience problems"), and a protectiveness towards others rather than the psychopathic exploitation or manipulation of others (for example, "I like to make other people feel happy"). Thus, CK and psychopathy could be viewed as two polar opposites, situated on a continuum where the link between individuals and the social world may take on a variety of possibilities. For instance it is suggested that individuals who score high on CK may be particularly interested in professions where helping is part of role, as in the case of helping professionals (Bryan, 2009) or parents (Davey & Eggebeen, 1998). Therefore, future research in the investigation of different forms of kindness typical of different occupational contexts or personal relationships will be of particular interest.

In general, the findings of the present study indicate that the Kindness measures show useful psychometric properties and could be of value in a number of research contexts. This new measure is characterized by high internal consistency and a stable multidimensional structure even when different models of latent structure are used. However, the present relatively small *ad hoc* sample is somewhat limited. Further more detailed studies a larger and more diverse sample is planned.
5. Unexplored Issues: Directions for Future Study

The identification of three forms of kindness Benign Tolerance, Empathetic Responsivity, and Principled Proaction provides the possibility of a more detailed and nuanced exploration of kindness in different contexts. For example are there different forms of kindness typical of different occupational contexts or personal relationships? Each profession may, for example, have a characteristic BT/ER/PP Profile.

Secondly, in contrast to the concept of the psychopath, the present study suggests the presence of a core, fundamental human trait. It is this trait which energizes the various forms of kindness. A test of this core CK trait can now be developed. This will allow exploration of its impact on people's lives. One hypothesis is that, much as psychopathy is argued to be present in many highly successful business people, there may be further distinct subgroups who owe their remarkable success to particularly high levels of CK.

Finally, the intriguing finding that the frequency of Unkind acts is not a simple opposite of the frequency of Kind acts opens up the consideration of the complexity of Kind behavior and the richness of this as an area for future study.
References


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Appendix A

Insert Table 4 here

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Unkind were included with Kind questions in preliminary analyses. Because they were found to be distinct and not just the opposite to the kind ones subsequent analyses kept the two sets of questions
distinct.
### Table 1. Scales and Item Characteristics

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Alpha</th>
<th>M (SD)</th>
<th>Mean Inter-Item Correlation</th>
<th>Range of Item-Total Correlation</th>
<th>Split-Half Reliability</th>
<th>Spearman-Brown Coefficient</th>
<th>Guttman Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>13</td>
<td>0.78</td>
<td>65.74 (11.61)</td>
<td>0.24</td>
<td>0.30 to 0.71</td>
<td>0.60</td>
<td>0.78</td>
<td>0.77</td>
</tr>
<tr>
<td>ER</td>
<td>9</td>
<td>0.75</td>
<td>35.49 (8.41)</td>
<td>0.25</td>
<td>0.20 to 0.74</td>
<td>0.51</td>
<td>0.67</td>
<td>0.67</td>
</tr>
<tr>
<td>PP</td>
<td>9</td>
<td>0.74</td>
<td>39.58 (8.87)</td>
<td>0.26</td>
<td>0.35 to 0.69</td>
<td>0.55</td>
<td>0.72</td>
<td>0.71</td>
</tr>
<tr>
<td>K</td>
<td>31</td>
<td>0.87</td>
<td>140.81 (24.13)</td>
<td>0.21</td>
<td>0.21 to 0.67</td>
<td>0.74</td>
<td>0.84</td>
<td>0.84</td>
</tr>
<tr>
<td>U</td>
<td>9</td>
<td>0.64</td>
<td>27.72 (7.11)</td>
<td>0.19</td>
<td>0.31 to 0.65</td>
<td>0.41</td>
<td>0.58</td>
<td>0.57</td>
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</table>

### Table 2. Comparison of Participants’ Mean Scores for Gender Groups (Independent T-Test)

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean (Standard Deviation)</th>
<th>Total Kindness</th>
<th>Benign Tolerance</th>
<th>Empathetic Responsivity</th>
<th>Principled Proaction</th>
<th>Unkindness</th>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>94</td>
<td>145.12 (23.36)</td>
<td>67.69 (11.05)</td>
<td>35.33 (7.81)</td>
<td>42.09 (8.76)</td>
<td>27.09 (6.86)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>71</td>
<td>135.11 (24.10)</td>
<td>63.69 (12.71)</td>
<td>33.66 (7.99)</td>
<td>37.76 (9.74)</td>
<td>28.55 (7.41)</td>
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</tr>
<tr>
<td>T-Value</td>
<td></td>
<td>2.69**</td>
<td>2.16*</td>
<td>1.34</td>
<td>3.00**</td>
<td>2.21</td>
<td></td>
</tr>
</tbody>
</table>

Equal variances assumed (on basis of Levene’s test for equality of variance).
a Equal variances not assumed (on basis of Levene’s test for equality of variance).
Significance: * p<.05 ** p<.01 *** p<.001

### Table 3. Comparison of Participants’ Mean Scores for Age Groups (Independent T-test)

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean (Standard Deviation)</th>
<th>Total Kindness</th>
<th>Benign Tolerance</th>
<th>Empathetic Responsivity</th>
<th>Principled Proaction</th>
<th>Unkindness</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>111</td>
<td>138.27 (22.31)</td>
<td>65.41 (11.15)</td>
<td>34.02 (7.59)</td>
<td>38.84 (8.83)</td>
<td>28.56 (6.72)</td>
<td></td>
</tr>
<tr>
<td>Old</td>
<td>54</td>
<td>146.04 (26.95)</td>
<td>67.11 (13.41)</td>
<td>35.83 (8.47)</td>
<td>43.09 (10.03)</td>
<td>25.98 (7.64)</td>
<td></td>
</tr>
<tr>
<td>T-Value</td>
<td></td>
<td>-1.96</td>
<td>-.86</td>
<td>-1.39</td>
<td>-2.78**</td>
<td>2.21</td>
<td></td>
</tr>
</tbody>
</table>
Equal variances assumed (on basis of Levene’s test for equality of variance).
a Equal variances not assumed (on basis of Levene’s test for equality of variance).

Significance: * p<.05 ** p<.01 *** p<.001

**Table 4. Means and Standard Deviations for the 40 Individual Items; Factor Analysis for 31 Kind Items. (Varimax Rotated Component Matrix)**

<table>
<thead>
<tr>
<th>Scales/Items</th>
<th>Factor Analysis/Components</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>BENIGN TOLERANCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I admit when I don’t know something</td>
<td>.249</td>
<td>.197</td>
</tr>
<tr>
<td>2. I give up my seat on the bus/train for someone who may need it more</td>
<td>.514</td>
<td>.276</td>
</tr>
<tr>
<td>3. I am kind to others</td>
<td>.607</td>
<td>.270</td>
</tr>
<tr>
<td>4. I try to cheer up people who appear unhappy</td>
<td>.528</td>
<td>.412</td>
</tr>
<tr>
<td>5. I find easy to forgive</td>
<td>.457</td>
<td>.217</td>
</tr>
<tr>
<td>6. I feel sorry for other people when they experience problems</td>
<td>.568</td>
<td>.444</td>
</tr>
<tr>
<td>7. People think I have a soft-heart</td>
<td>.434</td>
<td>.201</td>
</tr>
<tr>
<td>8. I like to make other people feel happy</td>
<td>.571</td>
<td>.426</td>
</tr>
<tr>
<td>9. I open doors to let people through</td>
<td>.642</td>
<td>5.52 (1.64)</td>
</tr>
<tr>
<td>10. I think it is right to give everyone a chance</td>
<td>.622</td>
<td>5.55 (1.47)</td>
</tr>
<tr>
<td>11. Does not like somebody but treats him/her fairly</td>
<td>.369</td>
<td>4.42 (1.63)</td>
</tr>
<tr>
<td>12. I help people when they ask</td>
<td>.628</td>
<td>5.46 (1.59)</td>
</tr>
<tr>
<td>13. I can sense other people's feelings</td>
<td>.337</td>
<td>.533</td>
</tr>
<tr>
<td><strong>EMPATHETIC RESPONSIVITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I try to see things the way my friends do</td>
<td>.508</td>
<td>3.95 (1.59)</td>
</tr>
<tr>
<td>15. I do small favors for friends</td>
<td>.366</td>
<td>.691</td>
</tr>
<tr>
<td>16. I have done something that upset me to help a friend</td>
<td>.569</td>
<td>3.40 (1.63)</td>
</tr>
<tr>
<td>17. I do small favors for friends</td>
<td>.343</td>
<td>.608</td>
</tr>
<tr>
<td>18. I have surprised another person with a party for them</td>
<td>.521</td>
<td>.371</td>
</tr>
<tr>
<td>19. I feel protective towards people who are being taken advantage of</td>
<td>.613</td>
<td>4.84 (1.54)</td>
</tr>
<tr>
<td>20. I give money to beggars in the street</td>
<td>.160</td>
<td>.264</td>
</tr>
<tr>
<td>21. I have given treats to a friend who was ill</td>
<td>.457</td>
<td>.473</td>
</tr>
<tr>
<td>22. I invite people for lunch if I know they will be alone</td>
<td>.403</td>
<td>3.49 (1.83)</td>
</tr>
<tr>
<td><strong>PRINCIPLED PROACTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I give gifts for no particular reason</td>
<td>.269</td>
<td>.506</td>
</tr>
<tr>
<td>24. I give to charity</td>
<td>.723</td>
<td>3.77 (1.78)</td>
</tr>
<tr>
<td>25. I have concerned feelings for people less fortunate than me</td>
<td>.336</td>
<td>.461</td>
</tr>
<tr>
<td>26. Some things that happen really touch me</td>
<td>.256</td>
<td>.402</td>
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<td></td>
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<td>------------------------------------------------------------------</td>
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<tr>
<td>27. I share things even if I do not really want to</td>
<td>.324</td>
<td>.465</td>
</tr>
<tr>
<td>28. I help strangers with small things, for example if they drop</td>
<td>.464</td>
<td>.434</td>
</tr>
<tr>
<td>29. I practice what I preach</td>
<td>.470</td>
<td></td>
</tr>
<tr>
<td>30. I smile at strangers</td>
<td>.281</td>
<td>.573</td>
</tr>
<tr>
<td>31. I buy a poppy to commemorate war heroes</td>
<td>-.331</td>
<td>.572</td>
</tr>
<tr>
<td><strong>UNKINDNESS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. I say nasty things about people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I am greedy</td>
<td></td>
<td></td>
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<tr>
<td>34. I like to gossip</td>
<td></td>
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<tr>
<td>35. I do not forgive a person who has hurt me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. I remember bad attitudes towards me</td>
<td></td>
<td></td>
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<tr>
<td>37. I take advantage of people if I can</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. I hold compliments back</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I say nasty things about people when they are not there</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. I am jealous of other’s good fortune</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Frequency of Kindness Total Scores Based on the Sum of All "Kind" Scales

Figure 2. Frequency of Total Unkindness Scores
Figure 3.1 x 2 projection of 3-Dimensional Smallest Space Analysis: 31 Kindness Items for 165 Cases with Interpretation and Factor Division. CoA = 0.20. Numbers refer to items in Appendix I.
Acknowledgements: We gratefully acknowledge Bob Duffield and Nigel Nicholson of The KissBank Foundation for their encouragement and support of this project.