CHAPTER 3
THE ALTRUISM SCALE:

Altruism may be broadly referred to as behaviour that benefits other people. To behave altruistically, a person has to understand another person’s needs, desires or goals, and act to fulfil them. The importance of altruism is obviously great. It is questionable whether societies could live together in groups, without at least a modicum of altruism.

In addition to altruistic behaviour being significant for society, the study of altruism is also having significant effects on psychology. Advances in knowledge and theory about altruism are beginning to balance the historically one-sided focus of psychological theorizing and research (Dovidio, 1984). The study of altruism has begun to demonstrate that there is a positive side to human beings and it has begun to provide theories or at least modify existing ones to explain it.

However, research has been restricted to some extent by the lack of an adequate comprehensive measure of altruism. Recognising this lacuna, the present investigator attempts to
construct a scale to measure altruism. This chapter describes the
construction and validation of a measure of altruism.

CONSTRUCTION: A careful survey of the literature revealed
that the definitions on altruism varied quite widely and that there
was little consensus concerning the definition of the term.
Emphasising this difficulty, Underwood and Moore (1982) aptly
summarise the state of affairs: "A problem confronting any research
on altruism is that of definition." (Poplawski, 1986, P.198).

Among the various definitions on altruism, the present
investigator chose McCauley & Berkowitz's (1970) definition, one
that is widely recognised in the social field, as the working definition
for the development of the altruism scale. They define altruism as,
"behaviour carried out to benefit another without anticipation of
rewards from external sources". This definition includes all the
critical dimensions of altruism, namely, consequence, intention, and
the potential source of rewards. Unlike some other definitions (eg
Krebs, 1970; Dawkins, 1976), it is neither so broad that almost any
helping act on the basis of consequence and irrespective of
intention could be termed altruistic nor is it so narrow (e.g. Bar tal
and Rajiv, 1982) that certain altruistic behaviours are excluded
simply on the basis of definition.

The next step in the construction process was to specify
the behaviours, included in the range of behaviours considered
altruistic, in order to make the definition more operational and hence
measurable.

Behaviours that cover the total personality sphere have their
verbal symbols in language. Hence if all the words used by
individuals to describe behaviours are taken, the entire sphere of
personality can be covered (Cattell, 1959). Popular words used to
describe behaviour are reflected in natural language, often by
categorical labels (Smithon and Amato, 1982). Therefore the
Webster’s Collegiate Thesaurus and Dictionary was studied to
extract a list of words or adjectives used to describe altruism. The
meaning of the words were analysed by the aid of the dictionary and
the list was pruned for obvious synonyms, general, and overlapping
words, resulting in a Refined list of three words: Charitable, Humane and Magnanimous- each describing different altruistic behaviours.

The list of words extracted from the dictionary along with their analysis are presented in Table 3.1.

**TABLE 3.1:**

**ALTRUISM WORDS – LIST 1**

A list of words used to describe altruism along with their meanings and analysis.

<table>
<thead>
<tr>
<th>Words</th>
<th>Meaning</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARITABLE</td>
<td>Generous in assistance</td>
<td>Synonymous with</td>
</tr>
<tr>
<td></td>
<td>to all the poor</td>
<td>charitable</td>
</tr>
<tr>
<td></td>
<td>(a friend to all in need)</td>
<td></td>
</tr>
<tr>
<td>BENEVOLENCE</td>
<td>Arising from or prompted by motives of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>charity</td>
<td></td>
</tr>
<tr>
<td>ELEEMOSYNARY</td>
<td>Of or relating to charity</td>
<td>Synonymous with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>charitable</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>GOOD</td>
<td>Something that possesses general desirable qualities</td>
<td></td>
</tr>
<tr>
<td>HUMANE</td>
<td>Marked by compassion, sympathy or consideration for other human beings or animals</td>
<td></td>
</tr>
<tr>
<td>HUMANITARIAN</td>
<td>A person actively concerned in promoting human welfare and especially social reform</td>
<td></td>
</tr>
<tr>
<td>PHILANTHROPIC</td>
<td>Good-will towards one's fellowmen, expressed through active efforts to prompt human welfare</td>
<td></td>
</tr>
<tr>
<td>CONSIDERATE</td>
<td>Observant of the feelings and rights of others: showing through kindness</td>
<td></td>
</tr>
<tr>
<td>KIND</td>
<td>A nature that is gentle, considerate and inclined to benevolent actions</td>
<td>General and overlapping with charitable</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>UNSELFISH</td>
<td>Not selfish, generous</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>BOUNTOUS</td>
<td>Giving or disposed to give freely</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>BOUNTIFUL</td>
<td>Free in giving: liberal in bestowing gifts and favours</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>GENEROUS</td>
<td>Liberality in giving: not stingy or niggardly</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>LIBERAL</td>
<td>Marked with generosity, bounteousness</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>OPEN-HANDED</td>
<td>Generosity</td>
<td>Overlapping with charitable</td>
</tr>
</tbody>
</table>
BIG-HEARTED Generous, kindly General and overlapping with charitable

MAGNAMINOUS Forgiving, suggesting * nobility of feeling

NOBLE-MINDED Having or characteristic General and of an honourable, upright overlapping or superior mind with magnanimity

* Chosen altruism words.

Further, a group of fifty (25 males, 25 females) graduate students belonging to the M.M.K. College of Commerce, affiliated to the university of Bombay were provided with the definition of altruism and asked to describe their concept of a highly altruistic person. The subject's age ranged from 18 to 22 years, with the
mean age being 20 yrs. The various words used by the different members of the group to describe an altruistic person were then grouped together.

An analysis of the list revealed that 1- the group had a common behavioural referent for the concept of altruism and could use the term in a more or less consistent manner. 2- among the list of 16 words used by the group to describe altruism, it was observed that 09 were synonymous or overlapping with the words in the refined list, and 04 were general in meaning. Only one new word 'self-sacrificing' was considered different and not overlapped from the words in the refined list.

The new word 'self-sacrificing' derived from the second list of altruism words was also added in the refined list, increasing the list of words in the refined list from 03 to 04. The refined list thus consisted of four words each clearly distinguishable in meaning from each other. At this point, operational definitions were provided for each of the altruistic behaviours in accordance with the McCauley and Berkowitz (1970) definition, making each behaviour
measurable. The operational definitions given to the altruistic behaviour are:

1: Charity: A spontaneous giving of alms to people in need without anticipation of rewards from external sources.

2: Humanity: A concern for the welfare of all living beings without anticipation of rewards from external sources.

3: Self-sacrifice: A willingness to sacrifice one's own welfare for the sake of another without anticipation of rewards from external sources.

4: Magnanimity: The capacity to forgive negative behaviour to oneself by others, without anticipation of rewards from external sources.

The refined list of words along with their operational definitions are presented in Table 3.2.
TABLE 3.2:

Altruism words: List 2

<table>
<thead>
<tr>
<th>Words</th>
<th>Percentage or persons</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>using the word</td>
</tr>
<tr>
<td>1. Benignant</td>
<td>40</td>
<td>Overlapping with charity</td>
</tr>
<tr>
<td>2. Benevolent</td>
<td>62</td>
<td>Synonymous with charitable</td>
</tr>
<tr>
<td>3. Considerate</td>
<td>70</td>
<td>General</td>
</tr>
<tr>
<td>4. Charitable</td>
<td>100</td>
<td>*</td>
</tr>
<tr>
<td>5. Compassionate</td>
<td>75</td>
<td>Overlapping with humane</td>
</tr>
<tr>
<td>6. Forgiving</td>
<td>80</td>
<td>Synonymous with magnanimous</td>
</tr>
<tr>
<td>7. Generous</td>
<td>100</td>
<td>Overlapping with charitable</td>
</tr>
<tr>
<td>8. Humane</td>
<td>90</td>
<td>*</td>
</tr>
<tr>
<td>9. Humanitarian</td>
<td>60</td>
<td>Synonymous with humane</td>
</tr>
<tr>
<td>10. Helpful</td>
<td>100</td>
<td>General</td>
</tr>
<tr>
<td>11. Kind</td>
<td>100</td>
<td>General</td>
</tr>
<tr>
<td>12. Loving</td>
<td>100</td>
<td>General</td>
</tr>
<tr>
<td>13. Merciful</td>
<td>85</td>
<td>Overlapping with magnanimous</td>
</tr>
</tbody>
</table>
A study of the literature on altruism also revealed that the refined list of words used to describe altruism was a good representation of the different types of altruistic behaviour researched upon.

To check agreement among psychologists and to provide further validity for the concept, five professors of psychology were asked to rate, using the McCauley and Berkowitz’s (1960) definition of altruism, the appropriateness of each of the altruistic behaviours and the definitions given to them. They were also asked to indicate any behaviour they felt were pertinent and excluded by the list.
Among the five psychologists, only one rated all the behaviours in the list as appropriate and inclusive of the domain of altruism. The remaining four psychologists rated charity as inappropriate, describing it as overlapping with humanity. As the behaviour was rated inappropriate by the majority of psychologists, it was decided not to treat it as altruistic behaviour. The other three altruistic behaviours were rated as appropriate by all psychologists and therefore retained. Thus finally, three altruistic behaviours were delineated. In this manner, the domain of altruism was clearly distinguished, delineated and operationalised.

Next, on the basis of intuitive reasoning, a pool of forty-five items, both positive and negative statements (fifteen of each altruistic behaviour) were written for the altruism scale. The items were then given to the same group of five judges to judge whether the items measured the behaviours they purported to measure. They were also asked to judge the items for ambiguity. Only those items considered to be unambiguous and valid by the judges were retained (4 out of 5). Fifteen items did not meet the above criterion
and therefore were rejected. The remaining items were randomly ordered, and the altruism scale, first version was prepared.

The altruism scale, first version consisted of 30 items, with both positively worded and negatively worded items. The scale was administered to 150 male and 150 female undergraduates from colleges (M.M.K College and St. Xavier's College) affiliated to the university of Bombay in small/large group testing sessions. Subjects responded to each item on a five-point scale ranging from strongly disagree to strongly agree. The subject's age ranged from 18 to 22 years, the mean age being 20 years.

Factor analysis (Varimax-method) was conducted on the data collected. Factor analysis of the data revealed the existence of two major factors. The two grouping of the items may be described as follows:

Factor 1- items which measure the respondents concern for others. An inspection of the items revealed that it included within itself, items belonging to the two altruistic behaviours, Humanity and Self-sacrifice. A logical explanation for this could be that both
behaviours are varying degrees of the same construct 'concern for others'. Accordingly, this factor was given the name Fellow-feeling.

Factor 2: Items which measure the capacity of the respondent to forgive negative behaviour to oneself by others. The name magnanimity was retained for this set of items. Although these two factors were the strongest, some small and often less interpretable factors also emerged. In preparing the second version of the altruism scale, it was decided to focus attention on the two primary factors and to use the factor analysis results as a 'heuristic tool' in refining the items to better measure constructs (Comrey, 1978).

A 20 item version of the altruism questionnaire was next constructed, utilizing 1- items taken intact from the first version of the altruism scale 2- items adapted from the first version of the altruism scale 3- new items written to conform to the two items listed above. The items from the above item pool were randomly ordered to produce the 20 item altruism scale, second version.

150 males and 150 females undergraduates from colleges (St. Xavier's college and M.M.K. college) affiliated to the university of
Bombay were administered the altruism scale, second version in small/large group testing sessions. The subjects responded to each item on a 5 point scale ranging from 1- strongly agree to 2- strongly disagree. The subject’s age ranged from 18 to 22 years with 20 being the mean age.

Factor analysis (Varimax method) was conducted on the data collected. Analysis revealed a two factor structure. To be retained an item was required to load at a .30 level or above on only one factor and also an item had to have a difference in loading of original twenty items, 06 were eliminated for one or a combination’s for the following reasons: 1- the loading of an item on both factors was less than .30 2- the items loading on both factors was relatively high. Of the remaining 14 items, the two- factor structure, accounted for the 29% of the common factor variance.

Factor 1 contained seven items and accounted for 14.6% of the total variance. Items mentioned on this factor measured altruism without reference to the magnanimity behavioural domain.
Accordingly, the seven items comprising this factor was named the fellow-feeling sub-scale.

The seven items of factor 2 accounted for 14.5% of the total variance. These items reflected magnanimous behaviour and were named the magnanimity sub-scale.

The end result of the instrumental construction process then, was a fourteen item scale consisting of two discrete, seven item sub-scales, each of which taps a separate aspect of the global concept 'altruism.' The items from the two subscales were randomly ordered to produce the final version of the fourteen item altruism scale (refer after references) which has a Likert-type response format ranging from 1- strongly agree to 5- strongly disagree.

The Final Altruism Scale is shown in Table 3.3.

Reliability: In order to assess the reliability of the altruism scale, an independent sample (50 male, 50 female), of undergraduates from the Chennai College, affiliated to the university of Bombay,
completed the questionnaire twice. The age group of the students ranged from 18 to 22 years, with the mean age being 20 years. The relapsed time between the first and second administration of the questionnaire to a respondent ranged from 30 to 45 days. The test-retest reliability was found to be 0.89.

Validity: The test of validity was made by finding the difference between the mean altruism scores of groups of persons that would be regarded by people as likely to possess different degrees of altruism. A group of 50 social work students were compared with a group of business management students from the Tata Institute of Social Sciences and KC College of Management Studies respectively. It is expected that the social work students will score high on altruism as compared to the business management students. The mean score of the social work students was found to be 64.72 and the mean score of the business management students was found to be 40.98. A significant difference (t = 2.62; p < .01) was found between the mean altruism score of the two groups.
Clearly, the altruism scale discriminated sharply between the average scores of the two different educational groups and further more, the scale differentiated in accordance with expectations, providing criterion-related validity for the altruism scale.

Thus, a comprehensive, reliable and valid measure of altruism was constructed. The measure appeared to have good psychometric properties and therefore was quite well-suited for use as a research tool in studying altruism. Having constructed the scale, the present investigator used the altruism scale to study individual differences in altruism, in effect, also providing norms for the altruism scale. The scale was also used by the researcher to study the relationship of altruism with empathy, social desirability and self-esteem.
Table 3.3:
The Final Altruism Scale:

1. It is quite easy for me to forgive people who insult me.
2. One should be willing to give up ones pleasure if it is inconvenient to others.
3. I am quiet a revengeful person by nature.
4. I frequently find myself concerned about the future of mankind.
5. I find it almost impossible to refuse a person in need.
6. I go out of my way to harm people who have harmed me.
7. One should always try to help people in need.
8. One should think of the welfare of others before one thinks of one's own welfare.
9. There is not much I can do about world peace, so I don't waste time thinking about it.
10. No insult to our honour should be forgiving.
11. One must forgive one's enemies.
12. I am quite forgiving by nature.
13. I find it almost impossible to forgive those who hurt me.
14. There is nothing wrong in using other people as tools to get what you want.