Psychological Well-Being of Rural Women: Developing Measurement Tools

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FOREWORD

Empirical evidence point to a causal relationship between the socioeconomic status of individuals and communities and their health. Indeed improvement in health is expected to follow socioeconomic development. Yet this hypothesis has rarely been tested; at least it has not undergone the scrutiny of scientific inquiry. Even less understood are the processes and mechanisms by which the changes are brought about.

The Rural Development Programme (RDP) of BRAC is a multisectoral integrated programme for poverty alleviation directed at women and the landless poor. It consists of mobilization of the poor, provision of non-formal education, skill training and income generation opportunities and credit facilities. The programme is the result of 20 years of experience through trial and error. However evaluation of its impact on human well-being including health has not been convincingly undertaken.

The Matlab field station of ICDDR,B is an area with a population of 200,000, half of whom are recipients of an intensive maternal and child health and family planning services. The entire population is part of the Center's demographic surveillance system where health and occasionally socioeconomic indicators have been collected prospectively since 1966.

A unique opportunity arose when BRAC decided to extent its field operations (RDP) to Matlab. ICDDR,B and BRAC joined hands to seize this golden occasion. A joint research project was designed to study the impact of BRAC's socioeconomic interventions on the well-being of the rural poor, especially of women and children, and to study the mechanism through which this impact is mediated.

In order to share the progress of the project and its early results, a working paper series has been initiated. This paper is an important addition in this endeavour. The project staff will appreciate critical comments from the readers.

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Abstract

The study was designed with the intention of developing a viable scale, for measuring psychological well-being as an indicator of the quality of life of rural women. A scale was prepared and finalized by applying and analyzing it on married women of Matlab. The eighteen plus (18+) respondents were selected randomly from the villages covering both MCH-FP and BRAC's Rural Development Programmes. The items derived from five domains related to the psychological well-being and were subsequently examined by the authors and a group of experts in the field. Each respondent was requested to judge their own degree of favourable or unfavourable feelings expressed by each statement in terms of five point categories. The total scores, based on the response of the subjects, were then calculated, and correlation (r) of each item with the total score (item total correlation) was also computed. Ultimately, thirty-seven (37) items were selected for the test scale on the basis of correlation coefficient of item and total score. The reliability of the scale was determined by the split half and test re-test methods. The test re-test reliability provided a 71 percent consistency. The instrument when applied to examine the difference in scores among BRAC members, BRAC Eligible non-members and BRAC non-eligible non-members, a statistically significant distance among the three groups was observed.

Introduction

Psychological well-being (PW) is a wide ranging, multifarious concept. It includes different aspects of everyday experience. According to many researchers (Andrews and Withey, 1976; Najman and Levine 1981; Campbell and Converse 1971) psychological well-being is considered to be the composite measure of physical, mental and social well-being as perceived by each individual. In Bangladesh, women's sphere of life is very much different from that of men's. They are allocated to separate roles, and society expects them to abide by them. From all aspects of life they are underprivileged and their psychological well-being has particularly been ignored. Recently, it has been recognised that a rise in the standard of living alone, is not enough. Increased emphasis must be given to social policy, to psychological aspects and the reformulation of societal goals (Nagpal and Sell, 1985: SEARO Paper No. 7). No study has as yet been done in Bangladesh, to assess the compounded effect of socioeconomic status on psychological well-being. Bearing this in mind, it was felt that a standardised and objective scale should be developed to explore the areas of psychological well-being, as an indicator, and in this case, the quality of life of rural women. This could possibly be used by future researchers and even by personnel departments of industries, mills, factories and offices which employ women of this status, for example garments factories.

There are several indicators of well-being of an individual, or a group of individuals, which have both objective and subjective components. The objective components are related to a term generally known as "standard of living", which consists of the following factors: level of education, employment status, financial resources, housing conditions and comfort of living. The parallel term used in the United Nations documents (United Nations, 1961) is "level of living" consisting of nine segments: health, food consumption, education, occupation and work conditions, housing, social security, clothing, recreation and leisure, and human rights. These objective characteristics are believed to influence human well-being (Paramenter, 1994).

It is also believed that an individual's satisfaction or happiness does not depend only on his or her level of living but also on his or her expectation and perception of reality. It is this subjective component which is linked to the function of the degree of congruence between the individual's wishes and need on the one hand and environmental demands and opportunities on the other (Nagpal and Sell, 1985). Thus from all point of view, it can be concluded that psychological well-being is the total assessment of his or her quality of life. An individual is considered to be the best judge of his or her situation and state of well-being.

Keeping with the above stated criteria, the present report hopes to give an insight into some of the issues surrounding PW. However, PW is a multidimensional concept. This report is based on a pilot study carried out on rural women. A tentative step has been taken at this stage, to develop an effective scale for measuring psychological well-being (PW). It is at its experimental phase, and we hope to expand the current study to a larger scale in the near future.

Objective

This exploratory study was undertaken to develop a scale for measuring the Psychological Well-being (PW) of rural women.

Materials and Methods

Study area

The pilot study was conducted in those villages which receive facilities from ICDDR, B and RDP (BRAC), in Matlab, under the auspices of BRAC-ICDDR, B joint research project. Fieldwork was conducted in some selected villages during the middle of 1996.

Matlab is situated about 55 km south-east of Dhaka, the capital of Bangladesh. It is a large sub-district of Chandpur district, intersected by the tidal river, Gumti, and its numerous tributaries, with a population of about 400,000. It is much like the rest of Bangladesh, in terms of the level of socioeconomic development. The majority of Matlab populations are poor. Farming is the dominant occupation. About 89 percent of households depend on agriculture including wage labour, 8 percent on trading and 3 percent on payroll jobs. Forty eight percent of the households are landless. The literacy level stands at only 26 percent (Khan, Bhuiya, and Chowdhury, 1993).

BRAC's Rural Development Programme (RDP) was introduced in Matlab in 1992, where ICDDR, B has been monitoring demographic changes for the last 25 years. The programmes range from credit, savings, training and social awareness.

The two associated goals of RDP are poverty alleviation and empowerment of the rural poor, especially for those women who have less than 0.5 acres of land and those who sell manual labour for more than 100 days in a year. People ascribed to this criteria, are categorized as the Target Group (TG).

ICDDR,B, is an international health research institute. The major field activities are conducted in Matlab, which has the regular Demographic Surveillance System (DSS) and Maternal Child Health and Family Planning (MCH-FP) programmes in operation. This data-bank system has been monitoring vital events such as births, deaths, migration and marriages since 1966. The MCH-FP Programme covers half of the DSS sample population. It provides a range of services, such as, family planning counseling, contraceptive delivery, oral rehydration therapy (ORT), and treatments for mother and children suffering from diseases or malnutrition.

Respondents

The study was confined to rural married women of Matlab, aged eighteen and above (the highest age in our data was found to be 58 years), with at least one child. Divorced and widowed women were not included in this study. During the interview, if a respondent failed to answer a minimum of 3 questions (items), her interview was discontinued and excluded from the study. Conversely, any subject who gave the impression of being non-reliable due to inappropriate sense of

judgement was also excluded.

First, for the item analysis, 103 questions were administered to 50 respondents of different ages. Second, after the item analysis, 37 items (questions) were carried out on 53 subjects. For the test and re-test procedure, 48 respondents were available out of 53, during interview.

Data Source

The main source of data collection was through administrating interviews. Respondents were listed with the help of DSS (Demographic Surveillance System) of ICDDR,B and the Management Information System of BRAC.

Item selection

A literature review and pilot study with the respondents provided the main source of obtaining the attitude statements. In the initial stage, a surplus number of items were drafted under 11 dimensions, namely-

a. Feeling about self competence
b. Feeling of self-esteem
c. Feeling about self control
d. Feeling of self-rated anxiety
e. Knowledge about the environment
f. Critical consciousness about self and surrounding
g. Self related aspiration
h. Self autonomy
i. Determination
j. Problem solving
k. Life satisfaction

These items were constructed with the intention of measuring the psychological well-being of the individual. The statements were edited and initially scrutinised by the authors themselves. Changes were then made on the basis of cross-checking made by experts on first tryouts or by pre-testing. Some old items were eliminated, rephrased or differently ordered. Nevertheless, after further trials some new items were also added, and an effort was made to reduce the dialect barrier. Judges' (university lecturers, who are experts in the field) opinions were sought to select the best items to compose the final test form. The criteria of these best items were that they should incorporate all the needs, factors, and ins and outs encapsulating the concept PW. On the basis of these criteria, 103 items were selected from the above-mentioned 10 dimensions. In turn, these items were checked and subsequently merged into 5 dimensions according to their articulation. Thus, a set of 103 items was retained in this phase for the item-analysis.

For the item analysis, initially, a set of 103 items was administered amongst 50 respondents, to enable a selection to be made on the ones that turn out best in the item statistics. Next, whilst conducting the interviews some modification was made on the language, in accordance to suggestions put forward by the respondents, to make the questions more comprehensible.

An Item total correlation was then calculated for the item analysis. The total score for each individual on the scale was computed by summing the scores of the individual item response. That is why this type of scale is called the method of Summated ratings. Increasing scores indicate a higher degree of positive well-being. A simple correlation was calculated between each item and the total score, called the item total correlation. Finally, those items were selected which made a significant contribution towards the total score. Apart from this, some significant items were also rejected due to ambiguity.

Before reaching this finalized scale, modification was made in different stages as the adequate measurement of psychological state usually requires an iterative process (Warr et at., 1979). After the finalized items were administered for the first time, the reliability was found to be poor. This poor reliability was the result of various reasons for which we had to make some modification. At the primary stage, the mid point or 3 denotes 'undecided'. This factor contributed towards the distortion of results. When the scale was modified, now the midpoint (3) represented 'more or less', that is, 50% of their feelings. This alteration enabled the respondents to reflect their feelings more appropriately. The language of the questionnaire was altered too, for easier comprehension on the part of the respondents. After rearranging both the language of items and the grading system in terms of the 5-point scale, the finalized scale was administered for the second time, among the 53 respondents of different villages. This rearrangement led to considerable improvement in the reliability as well as the validity of the scale.

Scale (Questionnaire) Design

The questionnaire is the core of this study. A number of questions (items) were drafted within the framework of the following five dimensions (areas) namely: self-confidence, self-esteem, conscious thinking, and knowledge about the social environment and life satisfaction. Appropriate care was taken to ensure these items covered all the needs and factors as postulated for the concept of PW. In general, the questions were structured in a manner to permit five response categories, representing the degree of the respondents' feelings. These five-point scales are: very strong agreement, agreement, more or less, disagreement, and strong disagreement. Numerical weights of 5,4,3,2,1 assigned were: very strong agreement (5) - the highest, to strong disagreement (1) - the lowest. This five point thus became the psychological continuum on which the statements were being judged. Furthermore, to grasp the concept of grading, in terms of attitudes and feelings, of the above five points, strong agreement was sometimes explained as 100 percent of their feelings, agreement represented 75 percent, more or less was 50 percent, disagreement was 25 percent and strong disagreement indicated 100 percent negative feelings amongst the less educated respondents. The mid point in each statement being a state without specific feelings. The respondents were requested to answer each question by choosing one of the given categories that appeared to represent their feelings best or closest to their thinking. A Bengali version of this questionnaire was prepared with delicate effort that conveyed the spirit of each item in terms of the local dialect as used and understood by the common people in Matlab (Nagpal and Sell, 1985).

At the final stage, a questionnaire with 37 items was prepared, representing the five critical issues (scales) of concern. These thirty-seven items were then clustered into five dimensions. The first and third dimension (self-confidence and conscious thinking) contained nine questions each, eight items were carried out by the fifth or the last dimension (life satisfaction). The second and the

fourth dimension (self-esteem and knowledge about environment) consisted of only six and five items respectively, as shown in Table 2. Pre-testing revealed that a subject required about 30 minutes to judge all the items of this instrument.

Five Dimensions

In the preliminary form of the scale there were 11 dimensions. In the final form they were compounded into 5 dimensions.

These five dimensions of this scale and their operational definitions are as follows:

1. **Self-confidence (SC):** Items concerning the expression of self and confidence were included in this section. Most items on this dimension referred to the feelings of self-reliance by achieving satisfaction on self-activities, making oneself indispensable to the family, solving problems without any assistance from friends or relatives at the time of difficulty. Self determination also reduces concerns about support (in terms of food, clothing, and shelter) in old age Clegg and Wall, 1981).

2. **Self-Esteem (SE):** Items concerning self-respect, self-image, opportunity to show proficiency, self-support etc. Self respect includes the items like agreement and consultation on spending income, regarding children's future, that is, somewhat more democratic family functioning.

3. **Conscious thinking (CT):** Items concerning ability to reflect ideas on challenging issues- such as, married life, gender issues in social work, economic well-being, control over assets, women's rights, etc. belonged to this dimension. Conscious contemplation on women's rights, control over assets, family condition, married life and so on accelerated their realisation about well-being.

4. **Knowledge about social environment (KE):** Items concerning how much one is concerned about resource and events around them, such as, women's empowerment, social relationship, training, population awareness etc. This factor describes the feeling of well-being generated by the social environment. When an individual becomes more confident in every aspect of her life and more conscious about her status, she will be more aware of social problems, women's empowerment, social relationship, gender equality in employment and so forth.

5. **Life satisfaction (LS):** Items of this dimension were concerned about the quality of life and satisfaction of various personal and social aspects. Life satisfaction is the degree to which a person reports satisfaction with salient features of his/her life. Total life satisfaction is the sum of all separate items like satisfaction on his/her ability to achieve materials and educational facilities; cordial relationship with the family members or other people (e.g. people of same age); family group support in case of severe illness and so on. This, again, seemed to be a valid indicator of well-being -a function of what one expects in the various aspects of life and what one is able to attain out of this, that is the discrepancy or congruence between expectation and achievement (Nagpal and Sell, 1985; Warr, 1978).

Reliability and Validity

Within classical psychometrics, two of the most important aspects of a test are its reliability and its validity. Reliability has been defined as the extent to which the test is effectively measuring anything at all, and validity as the extent to which the test is effectively measuring what it is purported to measure (Anastasi, 1982).

Keeping this in view, to ascertain the extent of consistency of the results obtained by this Psychological Well-being scale the split half and test re-test methods had been exercised.

In the case of the split half method, the scale is divided into two parts, which concerns about the internal consistency of the instrument. Taking even numbers on one side and the odd numbers on the other side, a simple correlation between the scores of these two halves is obtained. Here the correlation actually gives the reliability of only a half test. The resultant correlation itself is not a reliability (Bhatnagar, 1981). However, we obtained the reliability of the whole test by applying the Spearmen-Brown formula to this correlation:

$$r_{spt} = (2r_{half})/(1+r_{half})$$ .... (i)

where r_{spt} = the reliability of the test
and r_{half} = the correlation obtained between the two halves of the test.

Test retest finds the reliability of test scores by repeating the identical test on a second occasion with an interval, say, two weeks, on the same sample. This would yield two measures for each person, the score on the first occasion and the score on the second occasion. A Pearson product-moment correlation coefficient calculated on these data would give us a reliability coefficient directly. This correlation coefficient does not tell us anything about internal consistency. In fact, even the items of a test might inter-correlate zero and yet the retest correlation be high. Thus, the key concept for this procedure is that of stability of the instrument. It answers the question concerning how stable or dependable are the measurements over a period of time (Guilford, 1950). The test retest reliability lies between 0 to 1, but the higher the better.

From the standard error of measurement we get some ideas of the distribution of error about the observed score. This enables us to calculate the confidence limit (reasonable limits) of the true score for persons with any given obtained score. The standard error of measurement and the reliability coefficient are obviously alternative ways of expressing test reliability (Anastasi, 1982). But, it can easily be computed from the reliability coefficient of the test, by the following formula:

$$\sigma_c = sd_t \sqrt{(1-r_{tt})}$$ ....(ii)

Where σ_c = standard error of measurement,
                sd_t = standard deviation of the test score
                r_{tt} = reliability coefficient

The standard deviation of the test score and reliability coefficient were both computed on the same group. If it is assumed that the error of measurement is normal, then the statistical table for normal

curve (z score to a particular probability) can be used to find the confidence limit or reasoning limit.

Instrument validity was measured by adopting the appropriate methods like content validity and intrinsic validity.

Content validity involves essentially the systematic examination of the test content to determine whether it covers the representative sample of the behaviour domain to be measured.

The more the instrument is reliable the more it will be valid. The index of reliability (square root of reliability coefficient) shows the maximum reliability of the scale. Hence, it is also applied to apprehend the validity, called the **Intrinsic validity** (Guilford, 1959).

Besides that a simple correlation analysis was performed among the sub-dimensions and the test as a whole to determine the internal consistency which also determined the instrument (scale) validity.

Limitation of the instruments

Even though all possible efforts had been taken in developing the instrument there were some limitations. These were:

As the sample subjects were either less educated or illiterate, it came across as difficult for them to judge the degree of favourable or unfavourable feelings in terms of the five-point continuum.

Certain other dimensions, which are intrinsic to PW, could not be included in this particular scale because, the concept of these indicators or dimensions would have been too difficult for these less educated and/or illiterate poor rural women to comprehend.

Results

Item selection

In the initial stage 136 items had been constructed on the basis of discussion with the relevant subjects and studying the related literature. These drafted items were given to the judges (experts) for their opinion. On the basis of their weighting, 103 items were found valid for this scale. After items collection, the item total correlation was performed for item analysis. The correlation coefficient of the item total ranged from 0.29 to 0.54, as shown in Table 1, and out of 42 items the correlation coefficient of 30 items lied within 0.30 to 0.449. Only three items had a correlation of more than 0.5. Usually in attitude scales the correlation coefficients of each item with the total score on the instrument do not reach high levels, for example, over 0.70.

Table 1: Distribution of coefficient of item total correlation of the PW scale items

Distribution of Coefficient	Frequency (No.of items)
0.250-0.299	5
0.300-0.349	12
0.350-0.399	9
0.400-0.449	9
0.450-0.499	4
0.500+	3

Forty-two items were retained as they significantly contributed towards the total score. Among them five items were rejected due to ambiguity. Thirty-seven items were found to be retained in the final scale. The highest number of items (9 items each) belonged to the self-confidence and conscious thinking dimensions, as shown in Table 2.

Table 2: Distribution of test items in the scale according to the item total correlation

	Areas (sub-scales) in the PW					
Level of test	Self confidence	Self Esteem	Conscious thinking	Life satisfaction	Knowledge about social environment	Total no. of items
Pre-test items	33	18	22	17	13	103
Final-test items	9	6	9	8	5	37

Reliability and validity of the scale

Reliability

To ascertain the extent of consistency of the results obtained by the Psychological Well-being Scale, a split-half reliability coefficient by odd-even method (Anastasi, 1982), on a sample of 53 ever-married rural women was done. This split-half reliability coefficient implied that 85% of the variance in test scores depended on true variance in the trait measured and only 15% depended on error variance. From this reliability coefficient it can also be inferred that, the whole scale was almost free from internal defects as internal consistency was higher and possesses a fair amount of accuracy in assessing the extent of psychological well-being (Srivastava, 1978).

In the case of the split-half method, the reliability coefficient was measured from a single administration at the same time on the target group or sample. Consequently, the error on score due to time distance, that is, the score instability was not possible to calculate. Hence, the test retest method was used instead to measure the stability of the instrument over a period of time. This test-retest reliability coefficient had been calculated over the 48 rural women after 26 days of the first administration on the same sample, and we have found that our instrument gave us a 71% stable result over the time. Furthermore, this reliability revealed that, only 29% of the individuals' score could not remain uniform because of this time factor or because other things, which do

fluctuate, may have influenced it.

The split half and test retest reliability for the scale as a whole, and its five sub-scales were computed separately. The internal consistency was high (split half reliability, 0.75) for the second dimension (self-esteem), but it fluctuated more due to time distances, as the test retest coefficient was 0.62. The second highest for life satisfaction was 0.72. Its reliability coefficient proved to remain constant when it was tested whether the time factor had any influence on it. The fourth dimension (knowledge about the social environment) had more internal defects as the split half reliability coefficient for this was 0.58. Moreover, it also fluctuated profusely over time (retest reliability coefficient, 0.40) compared to the others.

Table 3: Reliability of the Scale

		N	1	2	3	4	5	The scale as a whole	Standard error of measurement
Split-half	Reliability coefficient (r_{spt})	53	.65	.58	.75	.69	.72	.85	
	Index of reliability		.81	.76	.87	.83	.85	.92	7.37
Retest	Reliability coefficient (r_{tt})	48	.57	.40	.62	.56	.72	.71	

The standard error of measurement (σ_e) was found to be $7.37 = 19.05\sqrt{(1-.85)}$, which clearly indicated that the true scores did not deviate too much from their original value. Only about 7 points on either side of one's true score (Anastasi, 1982). For example, in the data an individual's true score was 135, we would have expected her to score between $127.63(135-16\sigma_e)$ and $142.37(135+1\sigma_e)$, about 68% of the time.

Validity

As the content of the attitude scale gained validation from the literature review and the experts' opinion, as a measure of choice, it was assumed that, the scale was taken as a logical measure of the desired dimension.

The intrinsic validity implies that when the raw score of any individual will be able to measure the true score sensibly the internal validity will be extended. From Table 3, it was found that the instrument was able to measure 92 percent of the true score i.e. what it intended to measure and the rest (8 percent) was due to error. Amongst the sub-scales, the index of reliability indicated that the third dimension (conscious thinking) had the capacity of yielding maximum correlation (0.87), in its present form followed by the fifth dimension (Life Satisfaction, at 0.85) and the fourth dimension (Knowledge about the social environment, at 0.83) and so forth. The second dimension, named, self-esteem, had somewhat a poor consistency and it also had low stability than the others. Moreover, since intrinsic validity is directly and closely related to reliability, the same conditions that had affected reliability also had affected the intrinsic validity (Guilford, 1959). So, there was a clear scope for further improvement.

For determining the relationship amongst the sub-scales included in the Psychological Well-being Scale, that is, within the whole scale, a coefficient of correlation analysis was done on the previous sample of rural women (50 respondents).

Table 4: Relationship with the sub-scales and the whole scale of the PW

Areas (Sub-scales) in the PW							
		1	2	3	4	5	The whole scale
Areas (Sub-scales) in the PW	1		0.27*	0.48***	0.13	0.71***	0.77***
	2			0.46***	0.54***	0.36**	0.63***
	3				0.60***	0.59***	0.84***
	4					0.27*	0.60***
	5						0.85***

From Table 4 it was found that most of the correlation coefficients were significant at the 5 percent level of significance (except one), indicating that more or less all the five sub scales assessed the same phenomenon being manifested in different dimensions of psychological well-being. Life satisfaction had a strong linear relationship (0.71) with self confidence compared to the others. Sub-scale 4 (knowledge about the social environment) was sensitively inter-correlated (0.13 and 0.27 respectively) with sub-scale 1 (self confidence) and sub-scale 5, (Life satisfaction), though, the latter was statistically significant. Self-confidence could not significantly contribute to raising one's knowledge about the social environment. But all of these five sub-scales had a comparatively high association (coefficient of correlation was more than 0.60) with the whole scale (total score), which measured the validity of the dimensions, that is, the validity of the items.

Assessment/Evaluation of the Scale (BRAC Member Vs Non-member)

To measure the impact of socioeconomic interventions on the quality of life of rural women, the finalized instrument was administered on the samples of those who received different types of intervention programmes and those who did not.

Table 5 and Table 6 show the mean scores of the respondents. In order to examine whether psychological well-being differs as a function of the intervention' programme, mean tests were conducted.

Table 5: Mean score of PW by BRAC Membership

BRAC Membership	Total Score	P-value
BRAC Member	134.88*	
BRAC-eligible non-member	125.61	p = .0312
BRAC non-eligible non-member	144.64	

* The difference between BRAC member and Eligible non-member is insignificant

From Table 5 it was observed that BRAC-TG & Non-members mean score was the lowest (125.61) amongst the three groups in the table. BRAC Non-TG & Non Members scored the highest mean (144.64) as it is generally believed that the group with a higher social status and a higher income would have greater satisfaction in respect to at least some aspects of life and would be happier overall. But, the BRAC members could not make a significantly better achievement than the TG non-members, though, they had a little higher score compared to the other group. This reveals that, BRAC's RDP hasn't yet been able to achieve it's goal, that is, raise the socioeconomic status as well as PW of it's target members.

Table 6: Mean score of PW by BRAC Eligibility

BRAC Membership	Total Score	P-value
BRAC-eligible	131.06	$p = 0.033$
BRAC non-eligible	142.58	

Furthermore, from Table 6, it was observed that BRAC eligible respondents were not only poor according to the standard of living, but also lacking in self confidence in personal activities, problem solving, self esteem, conscious thinking about their rights, life satisfaction and so on. This may be expected, as the BRAC Non-eligible sample is better off than the eligible sample, in terms of socioeconomic status (Khan et al., 1993), and therefore, it may be anticipated that their PW will be better too. Though the sample size of the pilot study was small, it still had an indicative result as shown in Table 5 and Table 6. Thus, from the above discussion we can conclude that socioeconomic status has a direct and positive impact on psychological well-being.

Discussion and Conclusion

There are different kinds of development oriented Government and Non-Government organizations for bringing up the socioeconomic status of underprivileged people, especially women. But these organizations only measure the objective aspects of development (for example, employment status, housing condition, standard of living and so on) and ignore the subjective aspects of development (for example, degree of congruence between expectation and achievement), which is just as important. It is true that there is an association between standard of living and PW but, nevertheless, there are other factors, which most likely influence PW, and are not usually being measured by the above-mentioned organizations. These factors are, for instance, life satisfaction, role stress (negative effect on psychological and physical health), family life, self-confidence, self-esteem, quality of working environment and so on. Without measuring these factors along with the various subjective and objective aspects, a development programme cannot achieve its full potential. Furthermore, the results will most probably not be representative, and the programme may not be able to reach its ultimate goal.

The instrument developed in this study is applicable for some of the factors mentioned above, while for the other factors, it can be used as a base or a foundation for further development until it meets the relevant criteria required. This scale was developed especially for the less educated or illiterate, poor rural women. Moreover, most of the facts in the scale are qualitative in nature, and may exhibit a vast difference between the attitude of a person and his/her actual behaviour. Hence, this instrument should be used with proper care and caution to elicit the feelings, views and opinions of individuals, if it is administered amongst different categories of similar subjects.

No tests have yet been developed in Bangladesh to measure PW and therefore, despite its limitations, it could be considered one of the pioneers in this field. In general, the scale was found to have a good reliability and revealed satisfactory item validity, though, there were some sub-scales, which required subsequent improvement. These findings were important because they suggested that, this scale would have general applicability. Further work could be carried out to improve and refine PW in future research, and make it more appropriate for assessing psychological well-being of the target group.

We anticipate the following areas of application of this instrument to asses the various components of well-being:

- to appraise the development activities and the impact of any programme by applying this instrument before and after intervention

- it will be a very important and useful tool to study the empowerment of the desired subjects, especially women

- to register psychological phenomenon of an incumbent group without influencing their feelings or actions

- this instrument can be worthwhile to minimise the selection bias in recruiting the

participants, especially women, incumbent for any development programme. As for example, it can be employed to address the age old issue of selection-bias among the RDP members, i.e. are the already "empowered" coming forward or being selected as VO (Village Organization) members?

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**PILOT STUDY ON MEASURING PSYCHOLOGICAL WELL-BEING
OF RURAL WOMEN**

Identification of Respondent:

1. Name of Respondent:_____   2. Date of birth: _____

3. Village name: _____   4. Village code: _____

5. Bari name: _____   6. Bari code: _____

7. BRAC TG: (1) Yes (2) No   8. BRAC Member: (1) Yes (2) No

9. If yes, how long (days): _____

10. Region of Respondents:

MCH-FP+RDP	1
MCH-FP	2
RDP	3
COMPARISON AREA	4

11. CID No. _____   12. RID No. _____

13. Marital Status: 1) Unmarried 2) Married 3) Widowed 4) Divorced
                        5) Separated 6) Abandoned

14. Respondent's Occupation: _____ 15. No. of children alive: _____

16. Husband's Occupation: _____ 17. Amount of land: _____

18. Respondent's Education:_____

19. Name of interviewer:_____

20. Date of interview:_____

21. Have you got any training? (Such as: Diary and poultry farm, sewing kantha, knitting mat, making bamboo, and cane goods etc.)

    (1) Yes (2) No

22. Have you taken any loan from any organisation or institution?

(1) Yes (2) No

23. Have you any savings?

(1) Yes (2) No

Result of interview: Successful-1, Refused-2, Absent-3.

SELF CONFIDENCE

1. How far are you satisfied with your contribution towards your family? (work e.g. knitting mat, dairy, poultry, cultivation or sale of vegetables, working in machinery firms, or in schools, colleges or in any society or office etc.)

very much satisfied	satisfied	more or less satisfied	not satisfied	not at all
5	4	3	2	1

2. How are you respected or valued by your neighbours?

very much respected	respected	more or less respected	not respected	not at all
5	4	3	2	1

3. Many people are improving their family income by working inside and outside their houses. How much efforts are you putting to improve your family condition?

try very hard	try hard	try more or less	do not try	not at all
5	4	3	2	1

4. How sufficient are you in terms of financial resources to meet the daily expenses of your family?

very sufficient	sufficient	more or less sufficient	not sufficient	not sufficient at all
5	4	3	2	1

5. How concern are you about your old age in relation to food, clothing, health and day to day care?

not at all	not concerned	more or less concerned	often	all the times
5	4	3	2	1

6. How much satisfied are you with your works that have been accomplished inside or outside your house?

very satisfied	satisfied	more or less satisfied	not satisfied	not at all
5	4	3	2	1

7. How much confidence do you have to solve your problems without any assistance from friends or relatives at the time of difficulties (e.g. fire poised to burn out all your belongings, or you are afflicted with undiscloseable disease, or erosion of your lands by river)?

to the full extent	have confidence	more or less confidence	do not have any confidence	not at all
5	4	3	2	1

8. How much dearth of a person do you feel whom you can believe entirely or to whom you can discuss your confidential matters and problems?

never feel	do not feel	feel more or less	feel to some extent	not at all
5	4	3	2	1

9. To what extent do you consider yourself indispensable for your family?

totally indispensable	indispensable	more or less	not indispensable	not at all
5	4	3	2	1

SELF-ESTEEM

10. What is your part or contribution to the income or development of your family?

much contribution	do contribute	more or less	no contribution	not at all
5	4	3	2	1

11. How much satisfied are you with your ability or inability to read or write?

totally unsatisfied	not satisfied	more or less	satisfied	not satisfied at all
5	4	3	2	1

12. To what extent do you consider women should be able to get jobs according to their own choice?

must get	should get	more or less	should not get	must not
5	4	3	2	1

13. According to your opinion how far do you think that women should be able to stand on their own feet inspite of their husband or other guardian who provides family expenditure?

very important	important	more or less important	not important	not at all
5	4	3	2	1

14. How much values is placed on your opinion about the family expenses incurred?

extremely important	important	more or less important	not important	not at all
5	4	3	2	1

15. How much value is placed on your opinion regarding children's future?

much importance	to some extent	more or less	no value	not at all
5	4	3	2	1

CONSCIOUS THINKING

16. How far it is justifiable for girls to get married under the age of eighteen years?

fully unjustified	unjustifiable	more or less justifiable	justifiable	fully justified
5	4	3	2	1

17. How far do you think men and women have equal responsibility in performing their social works (e.g. to advise and assist in clearing up derelict ponds, repairing roads or schools, planting of trees, etc.)?

fully responsible	responsibility	more or less equal	should not be	certainly not
5	4	3	2	1

18. How much moral support do you get from your family for your jobs inside or outside the house?

totally support	supportive	more or less supportive	no support	not at all
5	4	3	2	1

19. How much beneficial it is to be a member of any organization?

to a great extent	beneficial	more or less beneficial	not much	never
5	4	3	2	1

20. How much the economic development and well-being of a family is lessened due to large number of children?

totally reducible	reducible	more or less reducible	not reducible	not at all
5	4	3	2	1

21. To what extent do your husband (or the guardians) assist you in imparting education and discipline to your children?

assists fully	assists	assists more or less	does not assist	never assists
5	4	3	2	1

22. If you have anything of your own (such as: own landed property, cow or goat, jewellery or money and anything else) then how much control or authority do you have over those things to distribute or enjoy?

full authority	much authority	more or less	no authority	note at all
5	4	3	2	1

23. How far do you think it is necessary to enact more stringent laws to protect women from the torture they suffer? (e.g. getting beaten without any reason, get divorce for non-payment of dowry, torture in husband's house or not allowing wife to go to her parent's house, etc.)

must be enacted	should be enacted	more or less	should not be enacted	never
5	4	3	2	1

24. How much better off are you compared to your neighbours in terms of economic condition?

very well-off	well-off	more or less	not better	not better at all
5	4	3	2	1

KNOWLEDGE ABOUT SOCIAL ENVIRONMENT

25. In case of dispute amongst your neighbours, how much initiative do you take to mediate the same?

worked whole heartedly	do works	do more or less	do not work	not at all
5	4	3	2	1

26. How much do you think women should work in office, factory, or in any association side by side with the domestic work?

fully agree	agree	more or less agree	not correct	not at all
5	4	3	2	1

27. How much worry are you about the husband wife relationship?

not worried at all	not worried	more or less	worried	greatly worried
5	4	3	2	1

28. To what extent do you think that the rapid population growth can be checked by taking resort to family planning?

fully checkable	checkable	can check more or less	not checkable	not checkable at all
5	4	3	2	1

29. To what extent do you think women can perform a work equally as men if they get enough training?

definitely equal	equal	more or less equally	not be equal	not be at all
5	4	3	2	1

LIFE-SATISFACTION

30. How far are you satisfied with your ability to purchase household effects and materials by your own liking?

highly satisfied	satisfied	more or less satisfied	not satisfied	not at all satisfied
5	4	3	2	1

31. How happy are you with the quality of clothing for yourself and your family and educational facilities provided for family members?

totally happy	happy	more or less happy	not happy	not happy at all
5	4	3	2	1

32. How far can you relax according to your convenience?

most of the time can	can take rest	can take more or less	cannot	most of the time cannot
5	4	3	2	1

33. To what extent do you suffer from mental stress and anxiety?

not at all	do not suffer	suffer more or less	sometimes	always
5	4	3	2	1

34. How far do you think that your family members will look after and support you in case of severe illness?

to their full extent	will do	will do more or less	may not look after	will not do at all
5	4	3	2	1

35. How is your relationship with the people of your age? (e.g. sister-in-laws, brother's wives, companion)

very good relation	good relation	more or less good	not good	not good at all
5	4	3	2	1

36. How cordial is the relationship between you and your children?

very much cordial	cordial	more or less	not good	not at all
5	4	3	2	1

37. How satisfied are you with your success that have been achieved in your life?

very much satisfied	satisfied	more or less satisfied	not satisfied	not at all
5	4	3	2	1

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