CHAPTER-V
DISCUSSION, CONCLUSION & RECOMMENDATIONS

This chapter summarizes the research findings and discusses the conclusions that were reached as a result of the study. The chapter begins with a summary of the findings relating to all the variables of the spirituality that were detailed in previous chapters. It continues with a discussion of the conclusions reached by the researcher from an interpretation of the data, including the difficulty of operationalizing a definition of spirituality that might be acceptable to all cultures within India.

Before creating an instrument to measure spirituality, one must arrive at an operational definition for the term. The complexity of spirituality, as indicated earlier, makes this definition difficult. The challenge of defining spirituality becomes evident in reviewing the myriad of definitions and attributes ascribed to this concept. Clearly, consensus on how to define such a subjective and elusive phenomenon continues to be an ongoing struggle (Larson et al., 1998). Definitions of spirituality range from the perspective of organized religion with associated predefined beliefs and practices to seeing spirituality as a rather elusive and subjective human experience (Thoresen, 1999). Definitions include those provided by Vaughan et al. (1996), who defined spirituality as “a subjective experience that exists both within and outside of traditional religious systems” and by Sussman et al. (1997), who defined spirituality as “subjectively experiencing a life force”. A slightly different approach to spirituality was taken by Emblen (1992) who
conducted an analysis of existing definitions of spirituality to formulate the following definition: “Personal life principle [which] animates transcendent quality [of] relationship [with] God or god being”. A collection of other definitions of spirituality cited by Aldridge (1993) exemplifies the various conceptualizations in relation to experiential, relational and existential phenomena and healing practices associated with spirituality (Thoresen, 1999). Despite the diversity in the conceptual definitions of spirituality, several common defining characteristics can be extracted. The conceptual definitions generally involve a relationship to something that lies beyond physiological, psychological or social human perception or experience. This relational object of spirituality may be described as “divinity”, “a higher power”, “divine being”, “ultimate reality”, “God” or “god-being” (Burkhardt, 1989; Dyson et al., 1997; Emblen, 1992; Larson et al., 1998; Reed, 1993; Thoresen, 1999). The experience associated with this relational aspect of spirituality can be described as transcendent or transpersonal in nature (Emblen, 1992; Reed, 1993; Vaughan et al., 1996).

With the increased acknowledgement of spirituality as a construct within its own right independent of religion, research has begun to focus on measurement. Previously constructed spirituality measures have been acknowledged as “reasonably effective” and “available in sufficient variety for most any task in the psychology of religion (Gorsuch, 1984)”. While this is good news, Hill and Pargament (2003) state that there is still a need for more “theoretically and functionally” defined spirituality measures. Suggestions have included more culturally sensitive measures, alternatives to self report measures, measures related to religious and
spiritual outcomes and measures pertaining to spiritual change and transformation (Hill and Pargament, 2003).

Slater et al., (2001) state that “a number of theoretical and empirical complexities are yet to be resolved.” Issues such as ceiling effects, social desirability and bias effects along with a lack of precision in definitions and issues of illusory spiritual health (those who appear spiritually healthy but are not) have been indicated as problematic spirituality measurement. All of these issues describe difficulties related to identification, change over time, impression management, self deceptive positivity, separation and categorisation.

Conceptually, religion or religiosity is often viewed in terms of the various organized, individual, and attitudinal manifestations of different faith traditions, and spirituality connotes and expresses a sense of meaning, purpose, or power from within or from a transcendent source (Wulff, 1997). There is no shortage of instruments that measure dimensions of either construct, and researchers from the fields of sociology (Johnstone, 1997), psychology (Wulff, 1997), and pastoral theology and chaplaincy (Fitchett, 1999) have developed a variety of scales of religion and spirituality (Hill and Hood 1999). It remains unclear, however, whether these constructs can be extended to sports context or whether these instruments are applicable and useful as measures of individual or population sports.

Assessment of spirituality and religiousness has been an indispensible topic for psychologists interested in spiritual issues. This is reflected by the number of various measures augmented to assess spirituality and related constructs. Hill and Hood (1999) published a compendium reviewing 125 measures of religiosity and spirituality. The
fact that there is a number of existing measures raises the question of whether there is a need for a new measure of the spirituality/religion domain. Gorsuch (1984) has argued that new measures of religiosity should demonstrate incremental validity and that researcher should establish a define need before creating a new instrument (Gorsuch, 1990). This has been echoed by others with respect to religion (Gorsuch and Miller 1999) and spirituality (Pargament, 1999). Despite this interest, the absence of operational definitions of spirituality and religion, the contamination of spirituality items with measures of religion, and the lack of valid and reliable instruments that gauge these constructs continue to be major limitations to work in this area (Sloan et al., 1999).

**DISCUSSION OF THE RESULTS**

The findings support the Spiritual Well-being Scale as a pragmatic, reliable, and valid measure of spirituality. The item content suggests good Factorial Validity 0.81 and the reliability of correlation co-efficient of 0.83 with Objectivity of the Test 0.82.

**Advantages of the Spiritual Well-being Scale**

Compared with other available instruments, the Spiritual Well-being Scale appears to have certain advantages. It is inclusive, assessing aspects of spirituality not covered by other instruments, yet it is easily administered and scored. Furthermore, the Spiritual Well-being Scale uses "generic" wording whenever possible to avoid as much cultural and religious bias as possible. The researcher acknowledges that it is impossible to develop a scale that avoids all bias and that is equally applicable across all religious traditions. However, based on the pretesting and formal testing described above, the Spiritual Well-being
Scale appears to be well accepted and easily understood by people from several different spiritual backgrounds.

**Acceptability of Instrument**

In both the pretesting and formal testing stages, the scale was well received by study participants. Only very few participants (0.20%) declined to complete it and rest of the participants reported no difficulty, understanding or answering the questions. The reading skill of the Spiritual Well-being Scale is very lucid and any one can get the exact meaning very easily.

**Item Analysis**

The data filled by the sportspersons were analyzed and descriptive statistics were computed using an SPSS statistical package (Version 16) to factor analyze the scale items and to determine the mean, and SD for each scale variable. Only the items with loadings of 0.50 and above were considered in three factor analysis. An item was selected for the factor on which it had the highest loading. Items, which had more or less equal loadings on two or more factors, were not included in any factor.

As in Factor I thirty six items were showing loadings above 0.50. Likewise, in Factor II and Factor III thirty four and twenty nine items were showing loadings above 0.50. From the three factor analysis, a large number of items were reported. Therefore, to minimize the number of items researcher selected the items having the highest loadings from each factor. The items, which were showing loading higher in II and III factor, were not included in Factor I and vise-versa. Therefore only items having similar meanings were included in each factor. By this way of item selection, fourteen items were selected with their original item number from Factor I that were 7, 10, 21, 31, 34, 45, 56, 62, 71, 78, 86, 91, 98
and 107 shown in Table-4. Similarly, fourteen items were selected along with their genuine item number from Factor II and Factor III, which were as follows 5, 15, 18, 29, 37, 46, 55, 64, 68, 74, 85, 93, 102, 111 shown in Table-5, and 1, 9, 23, 27, 35, 47, 53, 63, 67, 80, 82, 94, 97, 106 shown in Table-6. Finally, three items from each variable were selected from the three factor analysis along with retaining their original item number by the researcher. In this way, total forty two items were finalized after rigorous statistical procedures.

**Stability and Sensitivity**

The Spiritual Well-being Scale demonstrates excellent stability over time, with a test-retest reliability coefficient of 0.85 over a 2 to 4 month interval, suggesting that a sportsperson's score on the Spiritual Well-being Scale is highly reproducible. That the scores were stable over such a long interval suggests that most sportspersons’ spiritual beliefs remained relatively constant over this time. In the researcher’s experience, most change in spiritual belief comes in infrequent but relatively dramatic bursts ("spiritual moments" or "awakenings"), superimposed on a background of very gradual drift. If this is the case, most sportspersons’ scores would be quite constant over a 2 to 4 month period. An alternative interpretation is that the scale may be relatively insensitive to change in spiritual beliefs. The scale's sensitivity would be crucial if it is to be used to assess the impact of programs designed to change participants’ spiritual status, such as sports programs of physically handicapped sportspersons. However, the instrument's ability to discriminate between sportspersons who are strongly spiritual and those who are less so would be more important than its sensitivity in studies that examine the relationship between spiritual status and health. The
wide range of scores received by subjects in this study and the stability of these scores suggests that the Spiritual Well-being Scale has the potential to discriminate between sportspersons who are strongly spiritual and those who are less so.

### Validity for Three-Factor Structure

The Factor Analysis was performed using alpha factor analysis as the initial method followed by both orthogonal (varimax) and oblique (promax) factor rotations. The test-retest reliability of each factor was assessed by summing the scores of the items that clustered under each factor and correlating the sum of these items on the initial and subsequent administration.

The factor analysis indicated that participants tended to answer certain groups of questions similarly, suggesting that the Spiritual Well-being Scale measures fourteen somewhat distinct variables of spirituality. The similarities in content among items that cluster together under each factor provide further validity for the three-factor structure. The validity of factors 1, 2, and 3 is further supported by the high test-retest correlations and Cronbach's Alpha correlations for each. Test-retest reliability all fourteen variables of spirituality yielded a coefficient of stability of 0.80 to 0.93 along with the mean of 0.85 as shown in Table-9. If future research confirms this three-factor structure, it may be possible to use the items in each factor as subscales to investigate the association between each factor (aspect of spirituality) and sports status.

### DISCUSSION ON HYPOTHESES

The hypotheses noted in chapter-1 were as follows: “to construct the spiritual well-being scale in sports context” and “to set the norms and scores for the sportspersons for comparison”. The findings of this study
will contribute meaningfully to sportspersons up to the age of 25 years by providing Spiritual Well-Being Scale protocols as well as norms and scores for future comparisons. Therefore, both the hypotheses of this study have been achieved.

NOMENCLATURE OF THE SCALE

Each and every scale had been named by the researcher either on his/her name or geographical location or on his/her ancestors/predecessors. Hereby too, the researcher feels, by default, to give name to the test he had proposed in sports context. From now onwards this test undertaken as the Ph.D. thesis would be called by the name of his parents ‘SHAHIDA-SHARIF SPORTS SPIRITUAL WELL-BEING SCALE’.

The name ‘SHAHIDA’ given to the scale is the name of researcher’s mother. This is an Arabic word which means ‘testimony of something’. The second name ‘SHARIF’ is the name of the researcher’s father that means ‘a person, free from all impurities’ and both the words are one of the qualities of a spiritual person. Hence the test constructed and standardized in sports context has been christened as: ‘SHAHIDA-SHARIF SPORTS SPIRITUAL WELL-BEING SCALE’.
CONCLUSION OF THE STUDY

The prime object of the researcher was to undertake the study of construction and standardization of the spiritual well-being scale in sports context.

The following objectives of the study were determined:

(1) The primary objective of the study was to construct and standardized the spiritual well-being scale for sportspersons upto the age of 25 years of chronological age.

(2) Secondary objective was to develop norms for sportspersons upto the age of 25 years of chronological age.

To accomplish the objectives of the study, 5,000 sportspersons upto the age of 25 years were randomly selected from major games and sports of intervarsity competitions and other similar state and national tournaments of India approved by All India Universities (AIU). In the selection of subjects, a proper care was taken that sample truly represents the total population belonging to the specified level. Subsequently, the scale battery developed by the use of factor analysis, has standardized item for each variable of spirituality of the targeted sample of sportspersons up to the age the ages of 25 years.

The data and information collected for the study was rich, both in content and magnitude. It was perhaps not possible to carry out an exhaustive analysis in the time frame available. The findings presented in the preceding chapters, therefore, cover only those crucial aspects which were in accordance with the scope and objectives of the study.

Due consideration had been given to the diverse characteristics of the state in regards to location, community, socio-economic structure, etc. sports in order to select the subject as true representative of all segments.
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of the society. All sections of the society have been accommodated and the subjects for the study have been selected randomly with the help of random groups design.

By reviewing the standard scale batteries available, the most prominent scale variables which have been used by well known spiritual well-being scale batteries, 14 scale variables, which were predicted to measure the different aspects of spiritual well-being Scale in sports context. Male sportspersons were selected from a wide variety of variables of scale items.

At the outset, the selected 14 scale variables were administered to 5000 sportspersons from all games and sports of intervarsity competitions and other similar state and national tournaments of India with fullest care and serious attention. The data so collected were subjected to factor analysis in IBM PC AT, Computer having SPSS package (version16), at Computer Centre, Aligarh Muslim University, Aligarh. Since factor analysis starts with the correlation matrix, correlation matrix was initially obtained. Then principal Components Analysis method was used to extract factors, which general fever factors. Then factor matrix was extracted to have rotated factor loading.

By considering the administrative feasibility, logistic interpretation with respect to the pertinent field of application, rotated factor loadings, and communality a scale battery of forty two items was developed to measure the spiritual status of sportspersons in India.

Furthermore, the objectivity and reliability were measured by using Cronbach’s Alpha (1951) and Mc Donald (1985) Omega tests. The reliability was taken by undertaking the test-retest reliability co-efficient and inter-item reliability co-efficient.
Further this scale has been administered to, those selected 5000 sportspersons from all games and sports of intervarsity competitions and other similar state and national tournaments of India and the norms have been developed by using the percentile ranking.

RECOMMENDATIONS FOR FUTURE RESEARCH:

The Spiritual Well-Being Scale, as constructed from the research described in this study, is the first step in a long process of validation aimed at development of an instrument for the measurement of individual spirituality in sports context. Valid spiritual scales are developed through many administrations and much iteration. Beyond the Scale itself, however, future research should be concerned with the larger question of what constitutes spirituality and what its role might be in sports context. Research data is sorely lacking in this area. For the most part, it is anecdotal where it exists at all. Spirituality as a legitimate concern of the field of sports is in such infancy from a research standpoint that it is open to many approaches and offers many opportunities.

In the light of conclusions drawn, following recommendations worthy of consideration are made.

1. Administer the proposed Scale of the study to selected samples to determine its more applicability to the sports population as a whole.

2. Development of sports specific quantitative instruments for measuring prayer and spirituality in sports.

3. Cross-cultural studies to investigate differences in the use of prayer and spiritual observances in sports in other countries.

4. Due to constraint of time framed for this study only major aspects of spirituality and rather small number of scale variables
were included. Therefore, it is recommended that a same study may be conducted considering all the aspects of spirituality and a larger number of variables.

5. Same study may be conducted on female sportspersons.

6. Similar study may be conducted in regards to sportspersons of both sexes, belonging to below and above adulthood level, so as to understand their spiritual level.

7. The utility of the Shahida-Sharif Sports Spiritual Well-being Scale for each application will become clearer after future studies assess its sensitivity.

8. Further studies may be taken on variables of spirituality in relation to sports such as transcendent dimension, meaning and purpose in life, mission in life, sacredness of life, material values, idealism & nurturance.

9. A study may be taken up considering the sportspersons of all segments of society. Further, the study may be conducted in particular to a segment so that comparison may be done among the segments of society.

10. The study may also be taken up in other cultural and geographical context.

11. In order to bring improvement in identification process of spirituality pertaining to sportspersons more similar studies may be conducted, which will enable the physical educationists, coaches, sports scientists & teachers with much wider vision to place individuals in correct sports and games.

12. Every school, district or agency should establish its own local norms—norms based on the total population.
13. Student test scores should be viewed as a ‘means to an end’, rather than as an ‘end in, and of themselves’. In other words, test results should furnish a partial basis for providing an individualized-personalized program rather than as a basis for a grade.

14. The present study should be replicated and data bank should be expanded.

15. The present study was based on chronological age, future studies should be directed towards developing spiritual scale and norms while taking into consideration of other ages like mental age, skeletal age, dental age etc.

16. Future researchers should thoroughly investigate the area of tests and measurement and their relation to the handicapped. Viable, psychological scale batteries are needed to assess the spirituality of the multi-handicapped sportspersons and other individuals of various age groups.

17. Standard Errors of Measurement were not taken for this study, hence future studies may be taken to establish this aspect of test and measurement which helps in comparison of scores with others sportspersons.

18. Future studies may be taken to develop ‘Criterion-Referenced Standard’ for the same proposed test.

19. Norms have not been developed in relation with each variable of the scale, hence future studies may be taken to develop norms for each variable.