

CHAPTER - III
RESEARCH METHODOLOGY

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In this chapter, the Sampling design, questionnaires design, collection of data, formulation of hypothesis and framework of analysis are discussed.

3.1. RESEARCH DESIGN

Kerlinger, F.N (1978) defines ‘a research design as the plan, structure and strategy of investigation purporting to answer research questions and control variance’. Research design provides the ‘glue’ that holds the research project together. It is the conceptual structure within which research is conducted and it constitutes the blue print for the collection, measurement and analysis of data. As such, the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data (**Kothari, 2004**).

Descriptive research design has been applied in this study. The descriptive research will encourage the researcher to acquire an exact and relevant data in regards to an idea association or a practice.

3.2. PILOT STUDY

Before beginning the current study, the researcher performed a pilot study to determine the study's feasibility and significance. As a result, the researcher conducted a pilot study with 50 stakeholders from various national sports Federations in order to assess the significance and legitimacy of the current research project. Since the analysis produced a positive result for the researcher, he took up the current study.

3.3. TYPE OF DATA COLLECTED

The researcher gathered data for the analysis using both primary and secondary sources. Secondary data was gathered from different sources like books, journals, articles, websites etc.

Primary data were gathered from various stakeholders such as players, coaches, officials, and administrators of selected Sports Federations of India. The selected Sports Federations are Athletics, Badminton, National Rifle, Taekwondo, Swimming and Volleyball Federations.

3.4. METHODS OF DATA COLLECTION

The survey method is the most suitable research methodology for descriptive research. Data is obtained from a survey, and the various magnitudes are calculated in relation to the entire population. The researcher used a standardized and validated questionnaire to collect primary data from players, coaches, officials, and administrators at selected National Sports Federations.

3.5. QUESTIONNAIRE DESIGN

The researcher has used, Basic Indicators for Better Governance in International Sport (BIBGIS): An assessment tool for International sport governing bodies by **Chappelet, J. L., & Mrkonjic, M. (2013)** for collecting data from the stakeholders with the objective of identifying the level of good governance. The questionnaire has been structured into two parts. The first part consists of 9 questions related to the demographic background of stakeholders and the second part consists of 63 questions related to identifying their perspective on good governance of National Sports Federations.

Table 3.1
Indicators/Measures of Dimensions/Variables of Sports Governance

Sl.No.	Variables	Indicators
1	Organization Transparency	National Federations (NFs) must publish statutes, bye-laws, sports rules, Organizational Chart, agendas of Legislative body on their Websites.
2	Reporting Transparency	National Federations (NFs) must publish Standing Bodies reports, Financial Report, compensation benefits and/or salary of its president, financial allowances, salaries and benefits of its senior managers, amount of income tax paid and to whom.
3	Democratic Process	NF must address Term limits, Age Limit, Voting Rights, Gender Equality, voting on secret ballots, detailed regulation for the candidatures to its presidency, conflict of interest for vote in its statutes or in internal regulations.
4	Control Mechanism	NF should adopt a code or principles of governance, internal integrated control and risk management system, an audit and remuneration committee, separates regulatory and commercial functions.
5	Sports Integrity	NF should recognize an Ethics/Integrity Code for its organs' members, guidelines for receiving and giving gifts, conflict of interest regulations, confidential reporting mechanism to manage comments and allegations by whistle blowers, integrity awareness / education programmes for its main stakeholders.
6	Solidarity	NF must invest an adequate part of its surplus in its declared non-profit objectives, financial redistribution policy and programmes for its main stakeholders, audits the use of funds given to its main stakeholders and given to its social responsibility programmes.
7	Stakeholder Representation	Athletes, Coaches, Officials, Clubs, Event Organizers, media partners, commercials partners, Sports fans and Supporters are represented in the NF bodies.

3.6. PRE-TESTING OF THE QUESTIONNAIRE DESIGN

A pre-test analysis was conducted to determine i) if the respondents understood all of the questions and ii) if any specific question was left unanswered by the respondents, in order to test the questionnaire's validity. A total of 50 stakeholders from different organizations were surveyed for pre-testing the questionnaire. Based on the pre-test survey, it was determined that the respondents were capable of answering all of the questionnaire's questions.

3.7 RELIABILITY OF QUESTIONNAIRE DATA

The test-retest approach was used to determine the data's reliability. To accomplish this, 50 respondents were chosen at random and the test was given twice after a day's break. During testing and retesting, great care was taken to ensure that all testing conditions were standardized. For the different dimensions of good governance, the scores obtained from 50 respondents of players, coaches, officials and administrators of national sports Federations of India such as Athletics, Badminton, Taekwondo, National Rifle, Swimming and Volleyball. The 'Intra Class Correlation.' Coefficient obtained for test and retest data are presented in table 3.2.

Table 3.2
Reliability Co-Efficient of Correlation of Test-Retest Scores

Sl.No	Dimensions of Good Governance	Co-efficient of correlation 'r' (N=50)
1	Organizational Transparency	0.956*
2	Reporting Transparency	0.924*
3	Democratic Process	0.915*
4	Control Mechanism	0.894*
5	Sports Integrity	0.932*
6	Solidarity	0.906*
7	Stakeholder Representation	0.984*

* Significant at 0.05 levels,

3.8 ADMINISTRATION OF QUESTIONNAIRE

3.8.1. Purpose

The aim was to assess the level of good governance in the National Sports Federations.

3.8.2. Questionnaire Used

Basic Indicators for Better Governance in International Sport (BIBGIS):

An assessment tool for International Sport Governing Bodies (**Chappelet, J. L., and Mrkonjic, M, 2013**).

3.8.3. BIBGIS Suitability & Modification

In 2013, **Jean-Loup Chappelet and Michael Mrkongjic** created the Basic Indicators for Better Governance in International Sports (BIBGIS), a governance assessment tool for International sports organizations. The tool used Scholar's Principles of sport governance, Council of Europe's Principles of Good Governance in Sport and IOC 's Basic Universal Principles of Good Governance of the Olympic and Sports Movement to establish its indicators aligned with the following seven (7) broad dimensions of governance: Organizational Transparency, Reporting Transparency, Stakeholders' Representation, Democratic Process, Control Mechanisms, Sport Integrity, and Solidarity.

National Sports Organizations are hybrid organizations because they are nationalized versions of International Sports Governing Bodies. As **Andreff (2006) and Parrish (2001)** suggested, International sports governing bodies are hybrid organizations that are largely non-profit organizations but act like corporations due to increased commercialization; the same applies to national sports organizations.

Since no governance measurement tool is readily available to measure governance in national sports organizations, as established in the second chapter's literature review, this research used BIBGIS governance dimensions and indicators to develop a modified version of the instrument that is applicable in the Indian sports system, owing to the fact that most of the associations are autonomous bodies. BIBGIS is a good instrument to be focused on, since autonomous bodies have similar systems and constitutions.

3.8.4. DIMENSIONS OF BIBGIS

The dimensions of BIBGIS are as follows,

- 1. Organizational Transparency:** To what extent the main documents and official information of the sports organization are published on its website can be measured from Organizational Transparency dimension.
- 2. Reporting Transparency:** To what extent the main annual reports and financial information of the sports organization are published on its website or in traditional form (reports) can be identified from Reporting Transparency.
- 3. Stakeholders' Representation:** To what extent the main stakeholders of the sports organization are represented in the organizations of different bodies can be known from this dimension.
- 4. Democratic Process:** To what extent democratic processes are in place in the sports organization can be identified from this dimension.
- 5. Control mechanisms:** This dimension assess whether the sports organization has established controls and appropriate procedures in its activities and decisions.

6. **Sport integrity:** It examines and measures the sports organization whether it has put in place for guaranteeing the integrity of its sport and main Stakeholders.
7. **Solidarity:** To what extent the sports organization supports its main stakeholders, notably through ad-hoc programs and revenue redistribution can be examined from this dimension.

The questionnaire was administered to measure the level of good governance variables as shown in the table 3.3.

Table 3.3
Components of Good Governance

S. No	Variables	Tests	Units
1	Organizational Transparency	BIBGIS Questionnaires Chappelet, J. L., &Mrkonjic, M. (2013)	In Scores
2	Reporting Transparency		
3	Democratic process		
4	Control Mechanisms		
5	Sport Integrity		
6	Solidarity		
7	Stakeholders' Representation		

3.9. SAMPLING DESIGN

A sample design is a structure, or road map, that guides the selection of a survey sample while also influencing many other important aspects of the survey. The sample population, sample size, and sampling method used for identifying potential respondents for collecting the desired data for the analysis are all part of the sampling design.

3.9.1. Sample Unit

In order to find the level of Good Governance at National Sports Federations in India, out of the thirty-six recognized National Sports Federations of Indian

Olympic Committee, Six National Sports Federations were chosen by the researcher from six types of sports i.e, the Individual games, Racquet Sports, Martial Arts, Target Sports, Water Sports and Team games. The details of National Sports Federations are given in table 3.4.

Table 3.4
Study Organizations

Sl.No	Types of Sports	Total number Sports Federations	Number of Sports Federations Selected	Name of the Selected Sports Federations
1	Individual Games	11	1	Athletic Federation of India
2	Racquet Sports	3	1	Badminton Association of India
3	Martial Arts	7	1	Taekwondo Federation of India
4	Target Sports	2	1	National Rifle Association of India
5	Water Sports	4	1	Swimming Federation of India
6	Team Games	9	1	Volleyball Federation of India

(Source: Indian Olympic Committee)

From the table 3.3 it can be seen that, in **Individual Sports**, there are eleven Sports Federations affiliated under the Indian Olympic Committee, out of which Athletic Federation of India is selected for the study. Athletics is very prominent in India and has several elite players participating at the International level compare to the other Individual Sports. It also has a broad area where data collection can be made easily. Therefore, Athletic Federation of India was selected for study.

Similarly, for **Racquet sports**, the total number of Sports Federation affiliated under the Indian Olympic Committee is three, out of which Badminton Association of India has been selected as a research area. Since Badminton is a popular sport and has numerous prominent players participating in the International Level every year, the

probability of receiving the data needed is high. Therefore, Badminton Federation was selected.

For the **Martial Arts Sports**, the total number of Federations affiliated under the Indian Olympic Committee is seven, out of which the Taekwondo Federation of India was selected as the research area. Since the taekwondo Federation is more established compared to the other Martial Arts organizations in India and the number of athletes who participated at the international level is vast, therefore Taekwondo Federation of India was selected.

For **Target Sports**, there are only two Federations affiliated under the Indian Olympic Committee. The National Rifle Association of India was selected as a research area because it has numerous athletes participating at the International level every year and the mode of communication through the federation bearers is feasible.

There are four **Aquatic Sports Federations** affiliated with the Indian Olympic Committee, out of which the Swimming Federation of India is selected as the research area. Swimming is one of the most popular water sports in India holding many international records by the players. Apart from that, it is also a very prominent sport yielding several players participating at the international level every year. This has motivated the researcher to select Swimming as one of the study organizations where the collection of data can be made handily.

For the **Team games**, the total number of Sports Federations affiliated with the Indian Olympic Committee is nine, out of which the Volleyball Federation of India was selected as one of the research areas. Since the Volleyball Federation office is located in the reachable region, the mode of communication is easy and the data to be obtained is feasible. Therefore, it has been selected as the study area for the research.

3.9.2 Sample Population

For the research, the population is defined as the stakeholders such as Players, Coaches, Officials who have participated in the International level competitions during the year 2019-20 and the Administrators who are holding the term limit of the same year in the study organizations. The population of the study is 544 stakeholders during the study period in the study organizations. The distribution of sample population is shown in table 3.5.

Table 3.5
The Distribution of Sample Population

Sl.No	Name of NF's	Players		Officials		Coaches		Administrators		Total	
		Total Population	Sample Size	Total Population	Sample Size	Total Population	Sample Size	Total Population	Sample Size	Total Population	Sample Size
1	Athletics	70	58	18	15	10	8	29	4	127	85
2	Badminton	40	32	12	10	11	9	27	5	90	56
3	Taekwondo	27	25	11	9	9	6	17	8	64	48
4	National Rifle	44	37	10	7	15	12	23	4	92	60
5	Swimming	39	31	11	6	14	11	29	5	93	53
6	Volleyball	28	28	12	9	7	5	31	6	78	48
7	Total	248	211	74	56	66	51	156	32	544	350

(Source: South Asian Games 2019)

3.9.3. Sample Size

Though maximum efforts were taken by the researcher to collect data from all the 544 respondents, the researcher could collect data only from 350 respondents, which is 65% of the sample population. As the sample size is 65% of the population and as maximum efforts were made by the researcher to collect data through questionnaires directly from the respondents, this would very well represent the population and the study findings could also be generalized. Therefore, the sample size (350 respondents) drawn from the population based on the availability is authentic.

3.9.4. Sampling Method Used

As it was difficult to identify the stakeholders' address and contact details, convenience sampling method has been used. *“Convenience sampling is a non-probability sampling technique in which subjects are chosen based on their availability and ease of access to the researcher”*. In order to maximize the participation in the study and thus variety among respondents, a letter was sent to the Federations through email and requested them to forward the questionnaires to all the required stakeholders. The letter introduced the study and explained its benefits and invited all stakeholders to participate and fill the questionnaires.

3.10. COLLECTION OF DATA

Maximum effort was taken by the researcher for collecting data directly from the respondents by issuing them the selected standardized and validated questionnaires. In addition to this, the questionnaires were made as a Google Form and sent to the respondent's mail address requesting them to send their responses.

3.11 RESEARCH HYPOTHESES

The following research hypotheses are framed on the basis of the objectives set for the study:

1. There is a significant difference between the opinions of the players of all the Federations with regard to various dimensions of good governance.
2. There is a significant difference between the opinions of the coaches of all the Federations with regard to various dimensions of good governance.
3. There is a significant difference between the opinions of the officials of all the Federations with regard to various dimensions of good governance.
4. There is a significant difference between the opinions of the Administrators of all the Federations with regard to various dimensions of good governance.
5. There is a significant difference between the opinions of stakeholders of all the Federations with regard to various dimensions of good governance.
6. There is a significant difference between the opinions of stakeholders on good governance with regard to all the Federations.
7. There is a significant difference between the demographic characteristics (Age, Gender, Qualification and Experience) of all stakeholders on each National Sports Federation with regard to Good Governance.

3.12. FRAME WORK OF ANALYSIS

The following methods were used to analyze the data obtained from the stakeholders:

The mean, standard deviation, weighted average, and intensity values of the ranking and rating scales were used in this descriptive analysis. For the purposes of analysis, the following weightages are provided for dimensions 1 to 5 on the rating scale:

Conditions	Indicator not fulfilled at all	Indicator partially fulfilled	Indicator Fulfilled	Indicator well-fulfilled	Indicator totally fulfilled
Score	1	2	3	4	5

For the rating scale, the following weightages are given for the purpose of analysis for dimension seven that is Stakeholder Representation:

Conditions	Stakeholder not represented in any body of the NF	Stakeholder represented in 1 category of body of the NF	Stakeholder represented in 2 categories of body of the NF	Stakeholder represented in 3 categories of body of the NF	Stakeholder represented in 4 categories of body of the NF.
Score	1	2	3	4	5

The scores for the tests are determined using the above weightages. Higher scores indicate greater agreement among respondents on the factor under consideration, and vice versa.

The following parametric tests were used in the research as part of inferential analysis.

1) One Way Analysis of Variance (ANOVA)

It is used to know the significant difference among the groups (more than two) with regard to a particular factor.

2) Scheffe's Post-hoc Test:

It is used to know the significant difference between two groups from the larger ANOVA.

3) 't' test:

It is used to know the significant difference between the selected two groups with regard to a particular factor.

4) Correlation test:

Correlation test is used to evaluate the association between two or more variables.

