PERCEPTION OF SCIENTISTS OF ANAND AGRICULTURAL UNIVERSITY TOWARDS ORGANIZATIONAL CLIMATE

A

THESIS

SUBMITTED TO

THE ANAND AGRICULTURAL UNIVERSITY

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE AWARD OF THE DEGREE

OF

Doctor of Philosophy

IN

AGRICULTURAL EXTENSION

BY

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M.Sc. (Agri.)

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ANAND AGRICULTURAL UNIVERSITY

ANAND-388110, GUJARAT, (INDIA)

2016

Reg. No.: 04-2145-2013

MOHMMAD YUNUS Ph.D. AGRICULTURAL EXTENSION 2016

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ABSTRACT

Organizations in the 21st century are facing more challenges than ever before. These challenges are not unique to any specific organization or industry, but affect all organizations, regardless of their structure or size. Organizational climate in particular is constantly being challenged by changes impacting organizations today (Nair, 2006). To survive and exceed their competitors, organizations are constantly seeking to improve their performance. Authors such as Brown and Leigh (1996) thought that the organizational climate is becoming more important than ever before because organizations need to ensure that those individuals who add value to the bottom line will want to stay in the organization and will want to continue pouring their efforts into their work to the benefits of the organization.

The nature of organizational climate differs from one university to the other. Organizational climate serves as a measure of individual perceptions or feelings about an organization. Organizational climate includes management or leadership styles, participation in decision making, provision

of challenging jobs to employees, reduction of boredom and frustration, provision of benefits and personnel policies, provision of good working conditions and creation of suitable career ladder for academics.

The scientist working in agricultural universities performs three fold functions namely teaching, research and extension activities. The contribution of the scientific community is not always steady since there will be several ups and downs due to multi dimensional personal, socio psychological and organizational factors. In other words, the academic contribution of the farm scientists in the field of teaching, research and extension education is greatly determined by their surroundings, promotional opportunities, procedures followed for recognizing good work, freedom enjoyed, superior-subordinate relationship, loyalty to the institution, its security, respect in the society and so on so forth.

Any organization small or big needs constant studies and evaluation with a view to ascertain the measures necessary to improve areas of deficiency, So as to faster rate of growth and development towards achieving goals. With all these views in mind, the present research study entitled **"PERCEPTION OF SCIENTISTS OF ANAND AGRICULTURAL UNIVERSITY TOWARDS ORGANIZATIONAL CLIMATE"** was thought essential to be undertaken with the following specific objectives:

1. To study the profile of the scientists.
2. To develop the scale to measure attitude of scientists towards organizational climate.
3. To study the organizational climate as perceived by scientists.

4. To study the organizational commitment as perceived by scientists.
5. To study the relationship between profile of scientists and their attitude towards organizational climate.
6. To study the relationship between profile of scientists and their perceived organizational commitment.
7. To study the problems experience by the scientists in organizational climate.
8. To seek suggestions from the scientists to improve organizational climate.

The study was conducted in the Anand Agricultural University, Anand of Gujarat state. A list of all the scientists doing teaching, research and extension activities under the Anand Agricultural University of Gujarat state was obtained from the office of the Registrar, Anand Agricultural University, Anand. Thereafter, the scientists from each of the activities were selected randomly in such a manner that there would be proportional to total size of the scientists in respective activities. In all, 150 scientists comprising 90 Assistant Professors, 42 Associate Professors and 18 Professors were selected to serve as the respondents for the study. The data were collected through structural interview schedule. The "*Ex-Post-Facto*" research design was employed for conducting the proposed study.

In order to measure the attitude of the scientists towards organizational climate, a scale was developed for the purpose was used. The other dependentand independent variables were measured with the help of suitable scales and structured schedules adopted by various researchers. The

collected data were then transferred to master table and analyzed in order to make the findings meaningful. For analysis of the data, the statistical measures such as frequency, percentage, mean score, rank order, coefficient of correlation, stepwise multiple regression and standard partial regression coefficientanalysis were used.

MAJOR FINDINGS:

The important findings of the study were as under:

1. The study revealed that more than half (58.67 per cent) of the overall scientists were found in middle to old age group.
2. Slightly less than three-fourth (74.00 per cent) of the overall scientists had education up to doctoral level.
3. Slightly more than half(52.67 per cent) of the overall scientists had rural native.
4. Slightly more than half (51.33 per cent) of the overall scientists were having more than 10 years of total service experience.
5. A vast majority (93.33 per cent) of the overall scientists had annual income more than ₹ 5.01 lakhs.
6. A great majority (87.34 per cent) of the overall scientists had medium tohigh level of job involvement.
7. An overwhelming number(97.33 per cent) of the overall scientists had high to very high level of job performance.
8. More than half (58.66 per cent) of the overall scientists had medium to high level of job satisfaction.
9. A vast majority (92.00 per cent) of the overall scientists had low to medium level of job stress.

10. A great majority(85.34 per cent) of the overall scientists had medium to high level of achievement motivation.
11. A great majority(84.66 per cent)of the overall scientists had positive to highly positive attitude towards their job.
12. Slightly more than half (50.67 per cent) of the overall scientists had most favourable perception about organizational design.
13. A great majority (83.33 per cent) of the overall scientists had high to very high level of trust on their staff and university authority.
14. An overwhelming number(90.00 per cent) of the overall scientists were having good to very good perception about their superiors' leadership skill.
15. A vast majority(83.34 per cent) of the overall scientists had good to very good level of overall communication.
16. A great majority(89.33 per cent) of the overall scientists had favourable to most favourable perception about their organizational culture.
17. A vast majority(85.33 per cent) of the overall scientistsperceived that teamwork within the organization was good to very good level.
18. A great majority (85.34 per cent)of the overall scientists were having high to very high level of motivation from their superiors.
19. A great majority (88.67 per cent) of the overall scientistshad favourable to most favourable overall perception about their organizational climate.
20. Slightly more than four-fifth (82.67 per cent) of the overall scientists of Anand Agricultural University had positive to highly positive attitude towards organizational climate.

21. A vast majority (91.33 per cent) of the overall scientists had high to very high level of affective commitment.
22. A great majority (86.00 per cent) of the overall scientists had medium to high level of continuance commitment.
23. Nearly three-fourth (72.67 per cent) of the overall scientists had high to very high level of normative commitment.
24. An overwhelming number of the overall scientists engaged in teaching, research and extension activity had medium to high to level of overall organizational commitment.
25. The variables namely age and experience of the scientists had positive and significant relationship with their attitude towards organizational climate. Whereas, three variables namely education, native place and annual income did not exhibit any significant relationship with their attitude towards organizational climate.
26. Scientists' job involvement, job performance and job satisfaction had positive and significant relationship with their attitude towards organizational climate, while job stress of the scientists had exhibited negative but significant relationship with their attitude towards organizational climate.
27. Scientists' achievement motivation and attitude towards job had positive and significant relationship with their attitude towards organizational climate.
28. There was positive and significant relationship between experience of the scientists and their perception about organizational commitment, while native place of the scientists had exhibited negative but

significant relationship with their perception about organizational commitment. Whereas, three variables namely age, education and annual income did not exhibit any significant relationship with their perception about organizational commitment.

29. Scientists' job involvement, job performance and job satisfaction had positive and significant relationship with their perception about organizational commitment. While, job stress of the scientists had exhibited negative but significant relationship with their perception about organizational commitment.

30. Scientists' achievement motivation and attitude towards job had positive and significant relationship with their perception about organizational commitment.

31. The major problems of organizational climate experienced by the scientists engaged in teaching, research and extension education activity of Anand Agricultural University in sequential order were: lack of willingness towards work (Rank I), lack of accountability among staff members(Rank II), indifferent attitude of administrators (Rank III), absence of periodical check and objective assessment of work (Rank IV), suffering from heavy workload other than mandatory work (Rank V), lack of provision for international training programme (Rank VI), lack of conveyance facility for field and institutional visits (Rank VI), lack of laboratory facilities (Rank VII), non-availability of well-equipped classrooms (Rank VIII), inordinate delay in proper settlement of service matters (Rank VIII) and lack of teamwork among staff members (Rank VIII).

32. The major suggestions offered by the scientists engaged in teaching, research and extension education activity of Anand Agricultural University to improve the organizational climate in sequential order were: the willingness of the employees towards their work should be increased(60.67 per cent), employees of the university should not be engaged in non-mandatory work (59.33 per cent), accountability for all employees should be fixed (57.33 per cent), regular follow up and check of assessment of work should be done (54.67 per cent), attitude of the administrators or superiors should be concerned or sympathetic (51.33 per cent), permission should be given to the employees for international training programme (48.67 per cent), employees' placement should be based on their area of interest (45.33 per cent), provisions of rewards or incentives should be made for their work (39.33 per cent) and communication system should be honest at all the levels to develop trust among staff members (37.33 per cent).

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CERTIFICATE

This is to certify that the thesis entitled**"Perception of Scientists of Anand Agricultural University towards Organizational Climate"** submitted by **Mr. MOHMMAD YUNUS (Reg. No. 04-2145-2013)** in partial fulfilment of the requirements for the degree of **Doctor of Philosophy** in the subject of **Agricultural Extension** of the Anand Agricultural University is a record of bonafide research work carried out by him under my personal guidance and supervision and the thesis has not previously formed the basis for the award of any degree, diploma or other similar title.

Place: Anand **(C. P. DESAI)**
Date: /10/2016 **Major Guide**

DECLARATION

This is to certify that whole of the research work reported in the thesis in partial fulfilment of the requirements for the award of the degree of **Doctor of Philosophy** in the subject of **Agricultural Extension** is the result of investigation done by the undersigned under the direct guidance and supervision of **Dr. C. P. DESAI**, Director, Extension Education Institute, Anand Agricultural University, Anand and no part of research work has been submitted for any other degree so far.

Place: Anand **(MOHMMAD YUNUS)**

Date: /10/ 2016

Countersigned by

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ACKNOWLEDGEMENT

***F**irst of all I give thanks to Almighty **ALLAH**, who gave me the wisdom and ability to be who I'm today and made me able to do this task.*

*Sometimes words are not enough to express one's emotions and expressions. This memorable occasion provides me a unique opportunity to express my profound sense of gratitude and reverence to my Respected Major Guide **Dr. C. P. Desai,** Director, Extension Education Institute, Anand Agricultural University, Anand. I have no words to express my heartfelt thanks to him for his illuminating guidance, unfailing encouragement, scholarly suggestions, unique supervision, constructive criticism, sympathetic attitude and keen interest throughout my academic record development of higher vision and also for preparation and submission of my research work as a whole. I consider myself extremely fortunate for being blessed with the opportunity to work under his esteemed scholastic guidance.*

*At this auspicious juncture, I am wordless to thank my Advisory Committee members, Co-Guide **Dr. R. A. Patel,** Assistant Research Scientist, Directorate of Research, AAU, Anand; **Dr. N. B. Chauhan,** Professor & Head, Department of Extension Education, B.A. College of Agriculture, AAU, Anand, **Dr. J. B. Patel,** Associate Professor, Department of Extension Education, B.A. College of Agriculture, AAU, Anand and **Dr. V. B. Darji,** Associate Professor, Department of Agricultural Statistics, B.A. College of Agriculture, AAU, Anand for their precious guidance, concrete suggestions and immediate technical assistance during the entire course of my study.*

*I wish to express my gratitude to **Dr. K. P. Patel,** Principal, B. A. College of Agriculture for providing me all the facilities needed during the course of my studies.*

I am highly obliged to my teachers Dr. Meenaben C. Patel, Dr. J.K. Patel, Dr. A. S. Saiyyad, Dr. S. N. Shah, Dr. K. M Gediya, Dr. S.R. Patel, Dr. R. S. Parmar, Dr. R. S. Jat, Dr. N. S. Parekh, Dr. Hemlata Saini, Dr. K. D. Gulkari and Dr. Vinay Kumar for instilling me with clairvoyant confidence and for their constructive criticism to make me sail on the right path during my entire course and research work. To me, research is not a single person's endeavor. So I wish to accord my sincere thanks to all the faculty and staff members of Department of Extension

Education and Extension Education Institute, DEE, ATIC, Anand for their valuable help and cooperation during my research survey.

I also extend my sincere gratefulness thanks to all the scientists of Anand Agricultural University, Anand, for their help and co-operation during data collection. I am happy to extend my gratitude and sincere thanks to Sh. Manish Bhai for his ever willing co-operation, encouragement and care.

The limited world of words hampers me to express the feeling of my indebtedness towards my friends whose love and affection always makes me feel at home here in the Anand Agricultural University. I would like to thank my seniors Dr. Lalit Krishan Meena, Dr. Dharmendra Patidar, Dr. Noushad Parvez, Dr. Jugal Malav, Dr. Amarjeet Singh, Dr. T. Ramesh, Dr. Pankaj Tiwari and Dr. Mayur Shitap for their direct and indirect help to assist me reach this pinnacle. My friends' Anil, Tarak, Shukla, Deepak, Bittu, Sagar, Sangram, Khatri, Mansi, Sumiran, Nilofer, Altaf Bhai, Rakesh Bhai, Dinesh and my all colleagues, juniors & all whose name is not listed here.

I particularly express my larger debt and devotion to my Grandfather ***Sh. Yusuf Mohammed****, my Grandmother* ***Smt. Sharifan Begam****, my Father* ***Dr. Ishaq Mohammed Khan****, my Mother Smt.* ***Gulsan Begam****, my Uncle* ***Sh. Yaqub Mohammed****, my Aunt* ***Smt. Nazma Begam****, my younger brothers* ***Iliyas****,* ***Asif****,* ***Sameer****,* ***Shahid*** *and younger sister* ***Shagufta*** *and other family members, whose selfless love, filial affection, constant encouragement, obstinate sacrifices, expectation and blessing have always been the most vital source of inspiration and motivation in my life. Their memories gave me a sense of relief after hours of tedious work during my research.*

Words are quite inadequate to express my gratitude and indebtedness to my adorable wife ***Mehjabeen*** *and beautiful daughter* ***Samayra*** *for their patience, love, affection and moral support during the study period.*

I gratefully acknowledge the award of Maulana Azad National fellowship by the University Grants Commission (UGC), New Delhi during the tenure of my study.

Place : Anand

Date : / / 2016 ***(MOHMMAD YUNUS)***

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I. INTRODUCTION

Agricultural education existed in India even during mediaeval period. Agriculture was included in curricula of Nalanda and Takha shila Universities as one of the eighteen arts. However, the organized courses in agricultural education were started in the beginning of 20th century, when six agricultural colleges were established in India at Kanpur, Lyalpur, Coimbatore, Nagpur, Pune and Sabar (Bihar). Education plays the role as a means for human development, for sensitizing one's perceptions, awareness and for motivating and changing one's behaviour to suit arising needs, demands and opportunities for survival, growth and development.

Agricultural universities occupy a central position among the research organizations for the improvement of agriculture and allied areas. As an organization grows and develops more and more problems are manifested such as competitions, power struggle, inter-personal conflicts, low job motivation, union management relations which calls for formal study of behaviour of personnel in the organization (Hammer and Organ, 1978).

Organization is a social arrangement consisting of a number of individuals, with different tasks for each individuals, interdependence and interaction of these individuals and aiming at the achievement of prefixed objectives. The behavioural scientists had a longstanding concern with the impact of specific behaviour of individuals and groups on the effectiveness of the organization.

Organizations that are able to create environment that employees perceive as benign and in which they are able to achieve their full

potential are seen as a key source of competitive advantage (Brown and Leigh, 1996). Organizational climate can therefore be regarded as a key variable in successful organizations.

Organizations that have goals to achieve would require satisfied and happy staff in their workforce (Oshagbemi, 2000). The university being an institution of higher learning that provides manpower needs to advance national development through both the public and private sectors must itself be capable of ensuring adequate manpower planning and development, could therefore not afford to neglect need and essentials of workforce satisfaction.

Organizations in the 21st century are facing more challenges than ever before. These challenges are not unique to any specific organization or industry, but affect all organizations, regardless of their structure or size. Organizational climate in particular is constantly challenged by changes impacting organizations today (Nair, 2006). To survive and outdo their competitors, organizations are constantly seeking to improve their performance. Authors such as Brown and Leigh (1996) thought that the organizational climate is becoming more important than ever before because organizations need to ensure that those individuals who add value to the bottom line will want to stay in the organization and will want to continue pouring their effort into their work to the benefit of the organization.

Much confusion exists about the difference between organizational climate and organizational culture which can be defined as the values, beliefs and assumptions, symbols and rituals that are shared by almost all members of the organization and which constitute a pervasive context for everything we do and think within an organization (Smirich, 1983).

Climate has been described as an experientially based description of the work environment and, more specifically, employees' perceptions of the formal and informal policies, practices and procedures in their organization (Schneider, 2008).

Organizational climate comprises of cognate sets of attitudes, values and practices that characterize the members of a particular organization.

Organizational climate encompasses all those behaviours that permit cordial interpersonal relationships among staff of an organization or institution. It permits cooperative human activities in which members of staff both academic and non academic, interact for the purpose of realizing set goals and objectives. Hence, the perception of academic staff in universities may depend on some external and internal factors.

In an organization like the university, the climate as perceived by those who work in it determines to a large extent their level of contribution and the degree of attainment of its set goals and objectives. This opinion is predicated on the understanding that whatever is the output of an individual in an organization depends on those factors that encourage him/her to put in his/her best. Therefore, positive interactive behaviour, reinforced by effective leadership, motivation and communication could further accelerate the accomplishment of goals.

According to Watkin and Hubbard (2003), high-performing organizations have climates with particular measurable characteristics, which have shown how organizational climate can directly account for up to 30 per cent of the variance in key business performance measures. This is supported

by researches that examined the relationship between the way in which employees describe their work environments and the relative performance success of these environments (Wiley and Brooks, 2000).

Watkin and Hubbard (2003) contend that climate does make a difference to organizations' performance because 'it indicates how energizing the work environment is for employees'.

Researchers have been interested in understanding how employees' perceptions of the work environment influence their level of job satisfaction since Mayo's (1933) studies at Western Electric. These studies found that environmental factors influence worker productivity and morale.

According to Osia (1993), the academic staffs again are of the opinion that communication and decision-making problems exist in their institutions because the superiors take certain decisions without involving them which in turn creates additional negative work environment. In addition to the above, it was also observed that unhappiness results from academic staff job structure and compensation ranging from lack of feedback regarding personnel evaluation reports, management emphasis on particular administrative style, workload and lack of support from superior in terms of mentoring to salary package which further increased job dissatisfaction among employees.

The nature of organizational climate differs from one university to the other. Organizational climate serves as a measure of individual perceptions or feelings about an organization. Organizational climate includes management or leadership styles, participation in decision making, provision of challenging jobs to employees, reduction of boredom and frustration,

provision of benefits and personnel policies, provision of good working conditions and creation of suitable career ladder for academics (Nicholson and Miljus, 1992).

Organizational climate and organizational commitment are the most important issues in any organization. Commitment can be promoted or improved through a specific selection of employees, monitoring job, educational reasoning and organizational socialization (Reilly *et al.*, 1991). Organizations are considered as major parts of today's society and human being, needs for survival and living are planned through. In fact, many people state our society as an organizational society where people are born, educate, work and die (Baugh and Roberts, 1994; Saburi, 2004).

Security is one of the most important components of organizational commitment and lack of organizational commitment could create job stress, inefficient and long working days. In the context of increasingly unstable economic conditions, it is important for managers to setup good background for improving organizational commitment. On the other hand, low levels of discipline, confidence and responsibility are created in organization under the circumstances of the contemporary world, which influence employee's commitment. In other words, it is important to build a mutual trust between employer and employee to increase organizational commitment. Human resources are the primary component of any organizations and it is important to make any changes within the organizations to increase their commitment.

Azad and Sadeghi (2012) indicated four factors influencing organizational commitments. The first factor is associated with cultural factors,

the second issues are human resource based factors while the third factor is related to the behaviour based factors and finally empowerment based factors are the last item. They used structural equation modeling and the results showed that the third factor i.e. behaviour based components, was the most important factor followed by the second factor, human resource factor. In addition, the third important factor was cultural issues followed by empowering factors.

The opinion of employees' about authentic leadership serves as the intoxicating analyst of employee job satisfaction and organizational commitment (Abid *et al.*, 2012).

The scientists working in agricultural universities performs three fold functions namely teaching, research and extension education activities. The contribution of the scientific community is not always steady since there will be several ups and downs due to multi dimensional personal, socio psychological and organizational factors. In other words, the academic contribution of the farm scientists in the field of teaching, research and extension education is greatly determined by their surroundings, promotional opportunities, procedures followed for recognizing good work, freedom enjoyed, superior-subordinate relationship, loyalty to the institution, its security, respect in the society and so on so forth (Jhansi, 1985).

The academic staff indicates that there is some form of dissatisfaction. Academic staffs' view about their organizational climate as characterized by the following factors: Unchallenging jobs, shortage of personnel where lecturers are expected to perform responsibilities, which were supposed to be performed by other employees, lack of feedback about

performance, lack of recognition for work done well through merit or announcements in meetings, lack of material resources which make it difficult for employees to carry out duties, poor communication where there is no two-way communication between managers and subordinates and lack of staff development activities which prevent personnel from being equipped with knowledge and skill that they need in order to provide quality service (Fajana, 2002).

An understanding of the organizational climate helps to discover how the organization serves as a psychologically meaningful environment to its members. As reported by many researchers, the perception of organizational climate has major influence on motivation, productivity and satisfaction of scientists.

1.1 STATEMENT OF THE PROBLEM:

Management of human resources involves several important and complex issues in the form of multidimensional reactions involving employees' perception of the organizational climate, their personality background, the objective realization of organization culture, leadership systems and intergroup relationship. This concept has changed drastically since the days of scientific management (Heyel, 1973).

Today the impact of modern behavioural sciences has new insights and approaches to the management of human resources. This new insight has highlighted the concept of motivating people in the organization as an important strategy. The main concern in the management of human resources is the improvement in the performance of the people working in the organization with a view to increasing their efficiency through motivation.

Organizational commitment is one way to measure the quality of organizational climate. Inspite of the numerous climate studies, there is a dearth of research that explains how organizational climate and organizational commitment constructs relate.

Researchers in organizational behavior have long been interested in understanding employees' perceptions of the work environment and how these perceptions influence individuals' work- related attitudes and behaviours. Early researchers suggested that the social climate or atmosphere created in a workplace had significant employees' perceptions of the work context purportedly influenced the extent to which people were satisfied and perform up to their potential, which in turn, was predicted to influence organizational productivity. The construct of climate has been studied extensively and has proven useful in capturing perceptions of the work context.

The scientists working in the agricultural universities perform three fold functions, viz., teaching, research and extension education activities, and responsible for managing under graduate, post graduate, doctoral programmes, research programmes and extension education activities programmes. Scientific studies on scientists and their working environment may prove to be not only the most basic but also among the most fruitful that can be accomplished in science, since it can yield important implications for the entire scientific venture.

In both developed and most developing countries, there have been several job satisfaction studies of which very few have been focused on

the job satisfaction of the university teachers in relation to their organizational climate.

Keeping all above facts in consideration the present study entitled **"Perception of Scientists of Anand Agricultural University towards Organizational Climate"**, was undertaken with following specific objectives.

1.2 OBJECTIVES OF THE STUDY:

1. To study the profile of scientists
2. To develop the scale to measure attitude of scientists towards organizational climate
3. To study the organizational climate as perceived by scientists
4. To study the organizational commitment as perceived by scientists
5. To study the relationship between profile of scientists and their attitude towards organizational climate
6. To study the relationship between profile of scientists and their perception about organizational commitment
7. To study the problems of organizational climate encountered by scientists and seek suggestions to overcome them

1.3 SCOPE AND IMPORTANCE OF THE STUDY:

There has been dearth of research studies dealing with organizational aspect and problems of scientists in agricultural universities in India particularly in Gujarat state. Therefore, the present study was one of the pioneering attempts for providing basic information and findings on the above lines in Gujarat state. The outcome of the study may act as guidelines for

scientists to perform their job / duties more effectively and help officials of the universities in understanding the psychology of scientists.

This study would enable the programme planners and policy makers to gear up their activities towards improving perceived organizational climate of the scientists. The different activities in which scientists are participating more and also the activities for which they are not contributing much will be known so as to facilitate policy makers and programme planners act suitably.

In addition, this study would facilitate in knowing the organization related characteristics which will serve as guideline for policy makers and programme planners in choosing the scientists for various posts in state agricultural universities of Gujarat and to formulate effective programmes for implementation in future.

Besides, the study will also contribute in evolving a criterion for classification of scientists and a methodology for ranking, classifying and comparing the group of their scientific productivity. In future, the findings will be applicable to other agricultural universities, since the nature of the job of scientists is more or less similar in all state agricultural universities.

1.4 LIMITATIONS OF THE STUDY:

In accordance with time and other resources available with the investigator, the study was conducted with following limitations.

1. The area of the study was restricted to only Anand Agricultural University of Gujarat state.
2. The developed scale was tested and implemented only on the scientists working in Anand Agricultural University.

3. Some of the selected characteristics of the scientists were studied.

4. The study was based on individual perception and expressed opinion of the scientists.

II. REVIEW OF LITERATURE

The main purpose of this chapter is to recapitulate the findings of past studies, which are related to the present investigation. A comprehensive review of literature is an essential part of any scientific investigation. The literature reviewed so far clearly indicated that a few studies on some of the aspects under present investigation are available. No such systematic study has so far been conducted in the areas of present investigation.

The review of literature leads the researcher to conclude his finding with reference to past studies. It is also necessary in developing conceptual framework and selection of appropriate design for the study. As the literature, having direct bearing on different aspects of the present study is limited and hence, the literatures having indirect bearing were also reviewed. A brief account of such literature reviewed has been presented under the following heads:

2.1 Profile of the scientists

2.2 Perception about organizational climate

2.3 Attitude of the scientists towards organizational climate

2.4 Perception about organizational commitment

2.5 Relationship between profile of the scientists and their attitude towards organizational climate

2.6 Relationship between profile of the scientists and their perceived organizational commitment

2.7 Problems of organizational climate experienced by the scientists

2.8 Suggestions to improve the organizational climate

2.1 PROFILE OF THE SCIENTISTS

It is revealed that little work has been carried out about the objectives under study. However, the brief description of related literature reviewed is presented as under.

2.1.1 PERSONAL – ECONOMIC VARIABLES

2.1.1.1 Age

Apage (2002) found that the agricultural scientists involved in teaching, research and extension education were mostly belonged to relatively higher (old) age group.

Tondare *et al.* (2005) reported that slightly more than half (52.00 per cent) of respondents were ranging in age group of 49 to 58 years. Whereas, 42.00 per cent respondents were in age group of 38 to 48 years and only 6.00 per cent respondents were in age group ranging from 27 to 37 years.

Kiran (2007) reported that more than half (58.13 per cent) of the overall scientists belonged to middle age group, followed by 21.25 per cent and 20.63 per cent of scientists belonged to old and young age group, respectively.

Parmar (2009) reported that majority (66.68 per cent) of the agricultural scientists belonged to middle age group (35 to 50 years).

Sutthianlal (2010) observed that almost half (45.19 per cent) of the AAU teachers belonged to middle age group i.e. 36 to 50 years.

Tayade *et al.* (2011) showed that majority (63.33 per cent) of the KVK scientists were belonged to middle age group (36 to 50 years), while

26.67 per cent and 10.00 per cent of them were belonged to young age group (Up to 35 years) and old age group (51 years and above), respectively.

Lad *et al.* (2013) revealed that slightly less than half (49.41 per cent) of the overall scientists were belonged to middle age group, while 28.23 per cent and 22.35 per cent were belonged to young and old age group, respectively.

Suthar (2013) reported that more than two fifth (53.84 per cent) of the agricultural scientists were found in the old age group, followed by 36.16 per cent in middle age group and 10.00 per cent of the agricultural scientists were in young age group.

Khamoushi and Gupta (2015) revealed that slightly less than two-fifth (39.61 per cent) of the agricultural extension scientists were belonged to the middle age group, followed by 31.17 per cent and 29.22 per cent were belonged to young and old age categories, respectively.

2.1.1.2 Education

Apage (2002) observed that majority (73.50 per cent) of the scientists were having Ph.D. degree and remaining were postgraduate in agriculture.

Tondare *et al.* (2005) reported that majority (60.67 per cent) of respondents were holding Ph.D. degree, followed by 39.33 per cent who were M.Sc. holders.

Sandic (2006) in his study revealed that slightly more than half (51.00 per cent) of VOs belonged to medium level of educational qualification, while 20.00 and 29.00 per cent of VOs belonged to high and low level of educational qualification, respectively.

Shah (2006) described that majority (73.33 per cent) of the AAU teachers had Ph.D. level of academic qualification.

Kiran (2007) found that a vast majority (86.25 per cent) of overall scientists were holding Ph.D. degree and other higher education level category, followed by 13.75 per cent of overall scientists were M.Sc. holders.

Parmar (2009) found that more than half (57.50 per cent) of the agricultural scientists were educated up to doctorate degree followed by 39.17 per cent of them having post-graduate degree.

Shah (2009) reported that majority (63.33 per cent) of the teachers of AAU had Ph.D. level of academic qualification.

Sutthianlal (2010) observed that slightly more than half (50.96 per cent) of the AAU teachers were educated up to master degree, whereas slightly less than half (49.04 per cent) of the respondents were holding Ph. D. degree.

Tayade *et al.* (2011) showed that majority (83.33 per cent) of the KVK scientists were having M.Sc. degree, whereas 16.67 percent of them were possessing Ph. D. degree.

Lad *et al.* (2013) revealed that majority (60.58 per cent) of the overall scientists were having Ph. D. degree, whereas 39.42 percent of them were having M.Sc. degree.

Suthar (2013) reported that less than two third (81.54 per cent) of the agricultural scientists were having doctorate degree, while 18.46 per cent of them were having master degree.

Khamoushi and Gupta (2015) observed that majority (83.12 per cent) of the Agricultural Extension Scientists were having Ph.D. degree.

2.1.1.3 Native place

Tondare *et al.* (2005) found that slightly more than half (51.33 per cent) of respondents had rural background, whereas 48.67 per cent respondents belonged to urban area.

Patel (2007) reported that slightly more than half (52.00 per cent) of the internet user research scholars were belonged to urban background.

Patil (2007) found that the majority (62.65 per cent) of the facilitators were oriented from rural farming family.

Pawar (2008) found that majority (84.48 per cent) of the family background of Agriculturist Assistants (AAs) were from rural background.

Garhwal (2010) revealed that majority (69.41 per cent) of the male agricultural students and 60.71 per cent of female agricultural students were from rural background.

Yunus (2011) observed that majority (82.14 per cent) of the internet-utilizing Sardarkrushinagar Dantiwada Agricultural University's (SDAU) boy students and 76.67 per cent SDAU girl students were from rural background.

2.1.1.4 Job experience

Apage (2002) showed that maximum number of scientists in agricultural university were more experienced in their service.

Sukhadia (2005) mentioned that exactly three fifth (60.00 per cent) of the respondents had medium length of service, whereas 21.82 per cent had low and 18.18 per cent had wide length of service.

Tondare *et al.* (2005) reported that slightly more than half (53.33 per cent) of respondents had high (between 23 to 31 years) service experience, whereas 38.67 per cent of respondents had medium service experience (between 11 to 22 years) and only 08.00 per cent of respondents had low service experience.

Shah (2006) reported that majority (69.00 per cent) of the AAU teachers exposing computer to be connected with internet had medium to high level of teaching experience.

Kiran (2007) found that slightly more than half (52.50 per cent) of overall scientists had medium job experience, followed by 25.00 per cent and 22.5 per cent had low and high level of job experience, respectively.

Patel (2009) concluded that nearly three fourth (73.34 per cent) of the respondents had above 15 years of experience, whereas 26.66 per cent of them had less than 15 years of experience.

Shah (2009) reported that majority (69.00 per cent) of the AAU teachers had high to medium level of teaching experience.

Sutthianlal (2010) revealed that more than half (56.73 per cent) of the teachers of Anand Agricultural University had high teaching experience of more than 10 years.

Tayade *et al.* (2011) showed that majority (60.00 per cent) of the KVK scientists had medium level of service experience (06 to 20 years), while 20.00 per cent of KVK scientists were having low (Up to 5 years) and 20.00 per cent were having high (above 20 years) levels of service experience.

Lad *et al.* (2013) revealed that exactly two fifth (40.00 per cent) of the overall scientists were belonged to medium level of experience category

in the university, while 32.00 per cent and 28.00 per cent of overall scientists had low and high level of experience, respectively.

Suthar (2013) revealed that slightly more than two fifth (40.77 per cent) of the agricultural scientists had average job experience followed by 40.00 per cent and 19.23 per cent of them who had more and less experience in their job, respectively.

Khamoushi and Gupta (2015) observed that slightly less than two-fifth (38.00 per cent) of the respondents were in medium category of experience (125 – 251 months), while around 36.00 per cent of them were in low experience category (less than 125 months) and only 25.00 per cent of them were in high category (more than 251 months) of service experience.

2.1.1.5 Annual Income

Tondare *et al.* (2005) found that the majority (82.00 per cent) of respondents were in middle income group, while 9.33 per cent in low income group and 08.67 per cent belonged to high income group.

Shah (2006) reported that majority (60.00 per cent) of the computer user AAU teachers to be connected with internet had above Rs.3.00 lakh of annual income.

Kiran (2007) found that majority (65.00 per cent) of overall scientists belonged to medium annual income category, while 20.00 per cent and 15.00 per cent were found in high and low annual income category, respectively.

Parashar (2009) observed that slightly less than half (49.33 per cent) of the respondents were found in medium annual income group (i.e. ₹ 1,00,001 to ₹ 3,00,000). Whereas, 30.00 per cent of them were in low (i.e.

below ₹ 1,00,000) and 20.67 per cent were in high (i.e. above ₹ 3,00,000) annual income group.

Parmar (2009) opined that exactly two fifth (40.00 per cent) of the agricultural scientists and teachers had high annual income of more than Rs. 5 lakh.

Patel (2009) reported that majority (61.36 per cent) of the respondents were having medium level of income, while 28.00 per cent of them had high annual income.

Sutthianlal (2010) found that more than two-third (69.23 per cent) of the respondents were having medium (Rs. 2,00,001 to Rs. 5,00,000) level of annual income.

Lad *et al.* (2013) revealed that majority (67.05 per cent) of the overall scientists were belonged to low income group (₹ 4,00,000 to ₹ 8,00,000), while 22.94 per cent of them belonged to high income group (more than ₹ 12,00,000) and only 9.70 per cent were belonged to medium level of income group (₹ 8,00,000 to ₹ 12,00,000).

Suthar (2013) revealed that an overwhelming number of agricultural scientists (95.38 per cent) had ₹ above 4.00 lakhs of annual income, whereas 3.08 per cent of them had ₹ 2.50 to ₹ 4.00 lakhs and only 1.54 per cent of them had below ₹ 2.50 lakhs of annual income.

2.1.2 JOB RELATED VARIABLES

2.1.2.1 Job involvement

Manjunath (2004) revealed that majority (66.67 per cent) of extension workers belonged to medium category of job involvement, followed

by 23.81 and 9.52 per cent of them belonged to high and low category of job involvement, respectively.

Raut (2006) found that majority (67.33 per cent) of the Agriculturist Assistants (AAs) has exhibited above average level of job involvement. The percentages of AAs expressing good and below average involvement with their job were 30.67 and 2.00, respectively. None of the AAs were observed in poor job involvement category.

Pawar (2008) found that majority (68.97 per cent) of the Agriculturist Assistants (AAs) had medium level of job involvement. The percentages of AAs expressing high and low involvement were 27.59 and 3.44, respectively.

Bagate (2009) found that majority (73.45 per cent) of the respondents had exhibited average level of job involvement. While 26.55 per cent has expressed good involvement with their job. None of the respondents were observed in poor job involvement category.

Lad *et al.* (2013) revealed that an overwhelming number (95.00 per cent) of the overall scientists were belonged to medium level of job involvement category, while 2.35 per cent and 2.64 per cent of them were belonged to high and low level of job involvement category, respectively.

2.1.2.2 Job performance

Mohan (2000) reported that majority (85.36 per cent) of AAO's working under KSDA belonged to medium job performance category, while only 14.63 per cent were in high job performance category.

Nagananda (2005) found that the majority (76.70 per cent) of Assistant Directors of Agriculture and majority (63.30 per cent) of Agriculture Officers belonged to medium job performance category.

Kiran (2007) found that slightly more than half (55.00 per cent) of scientists belonged to medium level of job performance category. Similarly, 65.30 per cent of Teachers, 35.41 per cent of Researchers and 50.00 per cent of Extension Workers belonged to medium level of job performance category.

Shah (2009) reported that slightly less than half (47.34 per cent) of the teachers of Anand Agricultural University had high level of role performance.

Lad *et al.* (2013) revealed that an overwhelming number (94.70 per cent) of the overall scientists were belonged to medium level of job performance category, while 2.94 per cent and 2.35 per cent of them were belonged to low and high level of job performance category, respectively.

2.1.2.3 Job satisfaction

Shah (2006) reported that more than two fifth (42.50 per cent) of the respondents were with medium, 30.83 per cent with low and only 26.67 per cent of them were with high degree of perception about job satisfaction.

Kiran (2007) found that majority (62.50 per cent) of the scientists belonged to medium level of job satisfaction category, similarly 63.27 per cent of Teachers, 64.59 per cent of Researchers and 50.00 per cent of Extension Workers belonged to medium level of job satisfaction category.

Joshi (2009) mentioned that more than two fifth (42.00 per cent) of the respondents had medium degree of satisfaction with their job, while

32.67 per cent of them were with high degree of job satisfaction and 25.33 per cent of them were with low degree of satisfaction with their job.

Patel (2009) found that majority (69.17 per cent) of the employees had medium to high level of job satisfaction.

Lad *et al.* (2013) revealed that slightly less than half (48.52 per cent) of the overall scientists were belonged to medium level of job satisfaction category, while 44.70 per cent and 6.76 per cent of them were belonged to high and low level of job satisfaction category, respectively.

Suthar (2013) revealed that majority (64.61 per cent) of the agricultural scientists had medium degree of job satisfaction, while 24.62 per cent and 10.77 per cent of them had high and low job satisfaction, respectively.

2.1.2.4 Job stress

Mohan (2000) observed that majority (64.63 per cent) of Assistant Agriculture Officers (AAOs) were found to experience medium level of job stress, while 20.73 per cent and 14.63 per cent of AAOs were found to experience high and low level of job stress, respectively.

Adesope and Agumagu (2003) reported that majority (69.03 per cent) of the respondents had medium level of job stress.

Manjunath (2004) in his study revealed that majority (80.95 per cent) of Extension Workers belonged to medium level of organizational job stress, while 14.29 and 04.76 per cent of them experienced high and low level of organizational job stress, respectively.

Mishra (2005) reported that majority (62.86 per cent) of the man Extension Officers experienced medium level job stress. Likewise, 65.38 per

cent of the woman Extension Officers experienced medium level stress in their job.

Sandic (2006) in his study revealed that majority (62.00 per cent) of VOs belonged to medium level of job stress category, while 24.00 and 14.00 per cent of VOs belonged to high and low level of job stress category, respectively.

Kiran (2007) reported that majority (73.80 per cent) of overall scientists, 73.47 per cent of Teachers, 81.25 per cent of Researchers and 50.00 per cent of Extension Workers belonged to medium level of job stress category, while as 08.13 per cent of overall scientists, 10.20 per cent of Teachers, 02.08 per cent of Researchers and 14.29 per cent of Extension Workers belonged to low level of job stress category.

Lad *et al.* (2013) revealed that slightly more than half (54.00 per cent) of the overall scientists were belonged to low level of job stress category, while 42.00 per cent and 4.00 per cent of them were belonged to medium and high level of job stress category, respectively.

2.1.3 PSYCHOLOGICAL VARIABLES

2.1.3.1 Achievement motivation

Manjunath (2004) reported that majority (66.67 per cent) of Extension Workers belonged to medium level of achievement motivation, whereas 28.57 per cent and 04.76 per cent of them belonged to high and low level of achievement motivation, respectively.

Tondare *et al.* (2005) reported that slightly less than half (46.00 per cent) of respondents were in the category of medium achievement motivation, whereas 28.67 per cent respondents were in category of high

achievement motivation and 25.33 per cent were observed in low achievement motivation category.

Patel (2006) reported that exactly half (50.00 per cent) and slightly more than one third (34.00 per cent) of the extension personnel were in the category of medium and high achievement motivation, respectively. Only 16.00 per cent of them had low achievement motivation.

Kiran (2007) found that majority (80.63 per cent) of overall scientists, 84.70 per cent of Teachers, 77.08 per cent of Researchers and 64.29 per cent of Extension Workers belonged to medium level of achievement motivation category, while 08.12 per cent of overall scientists, 07.14 per cent of Teachers, 06.25 per cent of Researchers and 21.42 per cent of Extension Workers belonged to low level of achievement motivation category.

Lad *et al.* (2013) revealed that slightly less than half (48.23 per cent) of the overall scientists were belonged to medium level of achievement motivation category, while 32.05 per cent and 19.70 per cent of them were belonged to high and low level of achievement motivation category, respectively.

2.1.3.2 Attitude towards job

Brewer (2003) reported that slightly more than half (54.00 per cent) of the respondents were found to have medium level of attitude towards job ,while 18.00 per cent and 28.00 per cent of them were in high and low level of attitude towards job, respectively.

Michaels (2004) revealed that majority (76.00 per cent) of the teachers were found to have medium level of attitude towards job ,while 06.50

per cent and 17.50 per cent of them were in high and low level of attitude towards job, respectively.

Kiran (2007) found that majority (60.00 per cent) of the overall scientists had favorable attitude towards job. Similarly, 21.88 per cent and 18.12 per cent of overall scientists had less favorable and most favorable attitude towards job, respectively.

Lad *et al.* (2013) revealed that slightly more than half (53.21 per cent) of overall scientists had favorable attitude towards job, followed by 44.96 per cent and 1.83 per cent had most and less favourable attitude towards their job, respectively.

2.2 PERCEPTION ABOUT ORGANIZATIONAL CLIMATE

Souvik and Vijayaragavan (2001) revealed that majority (72.00 per cent) of the Extension Personnel perceived existing organizational climate as below average or poor and they were hardly satisfied with their job.

Philipa (2006) in his study reported that the academic staff of universities in Edo state considered all the four dimensions viz. Intimacy, Morale, Consideration and Thrust of organizational climate investigated as favourable perception.

Sandic (2006) in his study revealed that more than half (55.00 per cent) of Veterinary Officers (VOs) belonged to medium level of organizational climate, whereas 15.00 per cent and 30.00 per cent of VOs experienced high and low level of organizational climate , respectively.

Kiran (2007) revealed that slightly more than half (57.30 per cent) of overall scientists perceived the organizational climate as favourable, similarly majority (70.42 per cent) of Teachers, slightly more than one third

(39.58 per cent) of Researches and only 28.57 per cent of Extension Workers had perceived organizational climate as favorable. Whereas, 13.26 per cent of Teachers, 43.75 per cent of Researchers and 50.00 per cent of Extension Workers were belonged to most favourable perception category, respectively.

Bakir (2010) reported that the perception of the participants with regards to faculty's organizational climate was in an average level. Among faculty employees, academic personnel and female employees had a more positive climate perception than administrative personnel and male employees.

Lad *et al.* (2013) revealed that slightly more than half (55.96 per cent) of the overall scientists perceived the organizational climate as moderately favourable, followed by 38.53 per cent perceived the organizational climate as favourable.

2.2.1 Organizational Design

Fauziah *et al.* (2010) in their study revealed that employees were aware about the organizational design of the company. They had a moderately clear view on the organization's objectives with the 3.71 mean score, followed by establishment of clear reporting structure (mean score = 3.70), organization's goals (mean score = 3.67), and their roles and responsibilities towards the organization (mean score = 3.67). In addition, the employees were moderately agreed to a certain extent with the 3.61 mean score, that they have the right skills to perform their job function.

2.2.2 Trust

Castro (2008) revealed that the majority of South-African Information and Technology organization's subordinates had trust on their

managers, were perceived positively by the respondents with a mean of 3.67. She further reported that the factor 1 i.e. 'Interaction with management' accounted for 22.55 per cent of the total variance after extraction and consisted of items such as "I trust my immediate manager", "I believe what my immediate manager says" and "My immediate manager does a good job of sharing information".

2.2.3 Leadership

Chandargi and Sundarswamy (1999) in their study on leadership style and their impact on job performance of extension personnel revealed that around 20.00 per cent of the respondents perceived their superiors as non democratic in all dimensions of leadership.

Bhole (2002) revealed that relatively higher proportion of the respondents (60.00 per cent) had adopted selling leadership styles and only 8.57 per cent respondents adopted delegating styles of leadership.

Castro (2008) revealed that the employees perceived the leadership in the organization extremely positive with a mean of 3.83. She further reported that the leaders in the organization were trusted, gave subordinates guidance and feedback, exhibited strong leadership skills and supported their subordinates.

Fauziah *et al.* (2010) in their study revealed that the employees understood clearly what their manager expected from them (mean score = 3.69), they considered manager's actions consistent with the company values (mean score = 3.59), they were inspired by manager (mean score = 3.55) and their supervisors encouraged them to speak up when they disagree with the decision (mean score = 3.51). They further reported that the mean values for

all leadership measures were above 3.5. This means that the employees moderately agree that the leadership in the company is at fair and acceptable level for them to perform their work routine.

2.2.4 Communication

Patel (2001) reported that majority (60.77 per cent) of the extension personnel working as head of Krishi Vigyan Kendra's (KVKs) had medium level of interpersonal communication, whereas 23.85 per cent and 15.38 per cent of them had high and low level of interpersonal communication, respectively.

Rao (2004) revealed that majority of the Agricultural Officers (76.34, 60.00 and 62.37 per cent) had average communication with superiors, colleagues and sub-ordinates, respectively. Further an equal number of them (11.83 per cent) had good and poor communication with superiors. While in case with colleagues, 20.43 and 12.90 per cent and in case with subordinates, 20.43 and 17.20 per cent of them had good and poor communication, respectively.

Raut (2006) found that more than half (52.00 per cent) of the Agriculture Assistants (AAs) had medium level of communication with their superiors, followed by 35.33 per cent had low level of communication and only 12.67 per cent of them had high level of communication with the superiors.

Castro (2008) revealed that the communication in the organization was positively perceived by the employees of South-African Information and Technology organization with a mean of 3.50. It was further inferred that employees perceived information on changes and future plans to be readily available and communicated by management.

Jahagirdar and Balasubramanya (2008) reported that in case of communicating feedback to the higher officer, majority of the extension personnel (76.00 per cent) belonged to 'medium communication' category, followed by 13.00 per cent who were found in 'low communication category'. Only 11.00 per cent of the extension personnel had high communication in respect of giving feedback to the higher officer. It was further revealed that 70.00 per cent of the government extension personnel informed extension programmes to higher officers and 63.00 per cent of them shared in monthly meetings. Feedback with UAS scientists was observed only in case of 'Agriculture problems' in order to get possible solutions to solve the problems.

Fauziah *et al.* (2010) in their study revealed that the communication elements among employees were at a moderate level, with the mean scores ranging from 3.54 to 3.92, with an average mean score of 3.77.

2.2.5 Organizational Culture

Fauziah *et al.* (2010) in their study revealed that employees felt that they are not valued enough by the organization (mean score = 3.47). The employees believed that they can, to a certain extent, balance the work and their personal life (mean score = 3.65). In addition, they felt that the morale of the employees in the company (mean score = 3.64) and working environment (mean score = 3.62) was at moderate level.

2.2.6 Teamwork

Rao (2004) reported that slightly more than half (59.14 per cent) of the Agricultural Officers had medium level of teamwork, followed by 21.51

and 19.35 per cent of them with high and low level teamwork, respectively. Similar trend was also observed in case of Assistant Directors of Agriculture.

Fauziah *et al.* (2010) in their study reported that teamwork among the employees was at moderate level with the 3.55 mean score.

2.2.7 Motivation

Fauziah *et al.* (2010) in their study revealed that the level of motivation was at moderate level with 3.62 mean score.

2.3 ATTITUDE OF THE SCIENTISTS TOWARDS ORGANIZATIONAL CLIMATE

Mohan (2000) found that majority (73.17 per cent) of Assistant Agriculture Officers (AAOs) perceived the organizational climate as facilitating, while 12.15 and 14.63 per cent perceived it as highly facilitating and not facilitating, respectively.

Rao (2004) reported that in case of attitude towards organization, more than three-fifth (63.44 per cent) of the Agriculture Officers (AOs) were found to have moderately favourable attitude followed by less favorable (19.35 per cent) and more favorable (17.21 per cent). Almost similar trend was observed in case of Assistant Directors of Agriculture also.

Manjula and Naraynagouda (2005) found that slightly more than half (52.50 per cent) of Farm Scientists perceived the organizational climate as “Favourable”, while 30.00 per cent of them perceived the climate as “Less favourable” and rest (17.50 per cent) perceived it as “Most favourable”.

Mishra (2005) reported that majority (71.43 per cent) of the male Extension Officers perceived organizational climate as facilitating, while 17.14 per cent perceived it as highly facilitating and 11.43 per cent perceived it as

least facilitating. Whereas, nearly three-fourth (73.00 per cent) of the female Extension Officers perceived organizational climate as facilitating, while 07.69 per cent and 19.23 per cent of them perceived it as highly facilitating and least facilitating, respectively.

Nagananda (2005) found that majority (73.30 per cent) of the Assistant Directors of Agriculture and slightly more than half (53.30 per cent) of Agricultural Officers perceived the organizational climate as favorable, while exactly two-fifth (40.00 per cent) of Agricultural Officers and only 08.30 per cent of Assistant Directors of Agriculture perceived it as less favourable.

Mihail and George (2009) in their study revealed that the general attitude towards the organizational climate showed a moderate global appreciation of the climate in the organization. The employees noticed both positive and negative aspects in connection with the organization of their work, interpersonal relationships, management styles and the motivational system in their organization. Most of them tended to perceive the organization as a whole in a positive way, but there were also employees who noticed certain deficiencies.

2.4 PERCEPTION ABOUT OGANIZATIONAL COMMITMENT

Mohan (2000) reported that majority (73.17 per cent) of Assistant Agriculture Officers (AAOs) had medium level of organizational commitment, whereas 12.19 and 14.63 per cent belonged to high and low category of organizational commitment, respectively.

Manjunath (2004) revealed that majority (80.96 per cent) of Extension Workers belonged to medium level of organizational commitment,

while 14.29 and 04.76 per cent of them experienced high and low level of organizational commitment, respectively.

Mishra (2005) reported that majority (71.43 per cent) of the male Extension Officers had medium level of organizational commitment, followed by 17.14 per cent had high and 11.43 per cent had low organizational commitment. Whereas, it was found that majority (76.92 per cent) of the female Extension Officers had medium level of organizational commitment, while 15.38 per cent and 07.69 per cent had high and low organizational commitment, respectively.

Kiran (2007) revealed that slightly more than half (51.87 per cent) of overall scientists, and its categories 58.16 per cent of Teachers, 41.66 per cent of Researchers and 28.51 per cent of Extension Workers belonged to medium level of organizational commitment. Most favorable organizational commitment perception was noticed among 29.38 per cent of scientists, and its categories 28.50 per cent of Teachers, 29.16 per cent of Researchers and 35.71 per cent of Extension Workers.

Lad *et al.* (2013) observed that slightly more than half (54.13 per cent) of overall scientists belonged to medium level of organizational commitment, followed by 34.86 per cent and 11.01 per cent belonged to high and low level of organizational commitment category, respectively.

2.4.1 Affective commitment

Fauziah *et al.* (2010) in their study revealed that employees appeared to have a moderate level of affective commitment with mean values ranging from 3.34 to 3.49, with average mean score of 3.39. This indicated

that employees did not have a high emotional attachment to the company, in other words, they work there not because they really want to.

Bakan *et al.* (2011) in their study reported that more than half of the employees (50.90 per cent) were agreed regarding their 'happiness to spend rest of their career in the organization', 60.70 per cent were 'really feeling the organizational problem as their own', 63.50 per cent were agreed to 'feel like part of the family at the organization', 59.40 per cent were 'feeling emotionally attached to the organization' 58.00 per cent were agreed that 'their organization had a great deal of personal meaning for them' and 50.00 per cent were 'feeling a strong sense of belonging to the organization'. Only 36.50 per cent employees were 'enjoyed in discussing their organization with outside people' and 44.10 per cent were 'not thinking to easily become attached to another organizations'. It means, in general, the respondents had high level of affective commitment.

2.4.2 Continuance commitment

Fauziah *et al.* (2010) in their study revealed that employees appeared to have a moderate level of continuance commitment with mean values ranging from lowest of 2.71 to the highest of 3.55, with average mean score of 3.22. It seems that the employees would not hesitate to leave the company in the future.

Bakan *et al.* (2011) in their study reported that slightly more than half (50.20 per cent) of the employees were agreed to have a moderate level of continuance commitment in the organization.

2.4.3 Normative commitment

Fauziah *et al.* (2010) in their study revealed that employees appeared to have a moderate level of normative commitment measure with mean values ranging from 3.32 to 3.84, with the average mean score of 3.46. This indicated the employees perceived job hopping do take place, but not rampantly, and that people do not really believe in being loyal to just one organization.

Bakan *et al.* (2011) in their study reported that slightly less than half (47.80 per cent) of the employees were agreed to have a moderate level of normative commitment in the organization.

2.5 RELATIONSHIP BETWEEN PROFILE OF THE SCIENTISTS AND THEIR ATTITUDE TOWARDS ORGANIZATIONAL CLIMATE

Manjula and Naraynagouda (2005) revealed that out of seven selected independent variables, only education had exhibited positive and significant relationship with the attitude of overall scientists. While other variables like; age, cadre in organization, job experience, attitude towards job, job involvement and perception of workload had shown no relationship with the attitude of the scientists towards organizational climate.

Nagananda (2005) reported that out of selected independent variables, four variables *viz.* availability of facilities and resources at work, job involvement, job satisfaction and job performance exhibited positive and significant relationship with perceived organizational climate by Assistant Directors of Agriculture and Agriculture Officers. Similarly, perceived work load and job stress exhibited negative significant relationship. On the other hand,

the variable like age, education, job experience, training and mass media participation did not show any relationship with organizational climate as perceived by Assistant Directors of Agriculture and Agriculture Officers.

Tondare *et al.* (2005) found that variables viz. service experience, income, existing organizational climate, level of aspiration and job satisfaction were positively and significantly contributing in perception of organizational climate.

Sandic (2006) reported that out of selected independent variables, six variables *viz.* age, education, job experience, training, job involvement and job satisfaction exhibited positive and significant relationship with organizational climate as perceived by Veterinary Officers, whereas job stress showed negative significant relationship. On the other hand variables namely Information seeking behaviour, perceived workload and availability of facilities and resources did not show any relationship with organizational climate as perceived by Veterinary Officers.

Kiran (2007) revealed that out of selected independent variables, five variables namely job involvement, job satisfaction, attitude towards job, job performance and achievement motivation exhibited positive and significant relationship with organizational climate perception of overall scientists. Whereas variables namely age, education, experience and annual income did not show any relationship, while job stress showed negatively significant relationship with organizational climate as perceived by the scientists.

2.6 RELATIONSHIP BETWEEN PROFILE OF THE SCIENTISTS AND THEIR PERCEPTION ABOUT OGANIZATIONAL COMMITMENT

Michaels (2004) reported that out of selected variables, variables namely age, education, experience, annual income, job involvement, job satisfaction, attitude towards job, job performance and achievement motivation exhibited significant relationship with organizational commitment of teachers. Whereas, job stress was the only variable which was established negative and significant relationship with organizational commitment of teachers.

Kiran (2007) revealed that two variables namely age and education didn't exhibit any significant relationship with organizational commitment of scientists. Whereas seven variables namely; experience, annual income, job involvement, job performance, job satisfaction, attitude towards job, and achievement motivation exhibited significant relationship with organizational commitment of overall scientists as well as its categories, teachers, researchers and extension workers. On the contrary job stress established a negatively significant relationship with organizational commitment of overall scientists.

2.7 PROBLEMS OF ORGANIZATIONAL CLIMATE EXPERIENCED BY THE SCIENTISTS

Mohan (2000) revealed that non-availability of vehicles (28.12 per cent), political interference (21.87 per cent), interest of farmers in physical inputs rather than technology (21.87 per cent), lack of interest in adoption of technology by the farmers (15.62 per cent), lack of freedom for decision

making (12.50 per cent) and lack of co-operation and interest from farmers (2.12 per cent) as major problems expressed by the Assistant Agricultural Officers while performing their duties.

Nagananda (2005) revealed that inadequate conveyance facilities, lack of promotional opportunities and political interference in implementing programmes, lack of recognition for good workers, discrimination between different cadres of officers were important problems expressed by both officers in the departments.

Sandic (2006) reported that major constraints expressed by the majority (85.71 per cent) of VOs were; inadequate training, inadequate facilities such as chemicals, medicines and other facilities (85.71 per cent). Further, majority (71.42 per cent) of VOs indicated that lack of reward, recognition and appreciation for special achievements, relatively low salary increment and salary (62.85 per cent) and lack of appropriate promotion scheme as other major constraints (57.14 per cent).

Kiran (2007) found that overall load of work in the area of corporate objectives of the university, followed by non-availability of well-equipped classrooms and Indifferent attitude of administrators were the major problems observed among overall scientists.

Sutthianlal (2010) reported that environmental constraints ranked first as the major constraints faced by 90.38 per cent of the respondents. The technical constraints were faced and reported by 81.73 per cent of the respondents and was ranked second as the major constraints. While in general, 53.85 per cent of the teachers faced the personal-psychological constraints. Therefore, it was ranked as third major constraint.

Lad *et al.* (2013) revealed that the major problems experienced by most of the overall scientists were: indifferent attitude of administrators, inordinate delay in proper settlement of service matters, absence of cordial atmosphere, more importance given to administrative work than actual work, absence of mutual trust and respect of each other, absence of periodical checks and objective assessment of work, lack of laboratory facilities and dominance of casteism, nepotism etc.

2.8 SUGGESTIONS TO IMPROVE THE ORGANIZATIONAL CLIMATE

Ingle *et al.* (1993) offered major suggestions *viz.* the teachers should be trained in advanced education technology (86.81 per cent), AV aids should be made available (61.90 per cent), class room should be well equipped (38.09 per cent), adequate funds (34.80 per cent), academic schedules be strictly adhered (23.80 per cent) and teachers should involve more in teaching and library work than non-academic work (23.74 per cent).

Sontakki (1995) reported that majority of the respondents (72.50 per cent) put forth the suggestion viz., to give more emphasis for extension work, followed by 65.00 per cent and 61.25 per cent of them suggested for separate office facility for ADFs (Grad II) at taluka level and provision of technical, clerical and supporting staff at taluka level, towards improving the organizational climate of KSDF. Further, equal percentage (58.75 per cent) have given their suggestions like provision of infrastructure facilities like vehicle, laboratory, library and extension materials at taluka level, give more authority and timely promotion for ADFs (GRAD II). As much as 56.25 per cent of them has suggested for in-service/refresher training programme, while

52.50 per cent of them suggested for appointment of Agricultural Assistants to work at village level under ADFs (GRAD II).

Madhusudhana Rao (2000) revealed that as many as 60.00 per cent of Agricultural Assistants suggested for adequate input supply and slightly more than half (51.66 per cent) of Agricultural Assistants expressed that farmers should be motivated to take more interest in agricultural innovations by ensuring support price, crop insurance and adequate supply of quality inputs. Further, conducting more literacy campaigns (43.63 per cent), making organization system more encouraging to work (33.33 per cent), updating technical knowledge (26.66 per cent) and more powers should be given to Agricultural Assistants (23.33 per cent) were the other suggestions expressed by the respondents.

Nagananda (2005) reported that providing opportunities for the subordinates to plan programme at grass root level and encouragement of subordinates by their superiors and considering subordinates suggestions were the major suggestions given by ADAs and AOs to improve the organizational climate of the KSDA. Further, timely promotion, providing good audio visual aids, transport facilities and implementing an appropriate reward system (reward through money or certificate) were the other suggestions made by them.

III. THEORETICAL ORIENTATION

In this chapter, an attempt has been made to evolve systematically a theoretical framework related to the objectives of the study. This would provide a sound basis and direction to the study. It consists of certain important theoretical considerations in relation to the perception of organizational climate and organizational commitment, out of which sub-level concepts and traits related to the study, would be developed through logical derivation. The review of literature related to the study given in the preceding chapter, helped in theoretical orientation and selection of variables for the study and operationalization of the concepts. This chapter has been divided and presented under the following heads:

3.1 Concept and meaning of perception

3.2 Concept and meaning of perception about organizational climate

3.3 Concept and meaning of perception about organizational commitment

3.4 Identification of variables

3.5 Definitions of selected variables/common terms

3.6 Derivation of hypotheses

3.7 Conceptual model of the study

3.1 CONCEPT AND MEANING OF PERCEPTION

Perception is defined as a process by which respondents (scientists) organize and predict their sensory impressions in order to give meaning to other environment.

Perception (from the Latin perceptio, percipio) is the process of attaining awareness or understanding of the environment by organizing and interpreting sensory information. Perception is defined as the experience of objects and events based on the information provided by the senses. Perception is the first event in the chain, which leads from the stimulus to action.

All perception involves signals in the nervous system, which in turn result from physical stimulation of the sense organs. For example, vision involves light striking the retinas of the eyes, odor molecules mediate smell and hearing involves pressure waves. Perception is not the passive receipt of these signals, but can be shaped by learning, memory and expectation. Perception involves these "top-down" effects as well as the "bottom-up" process of sensory input. Perception depends on complex functions of the nervous system, but subjectively seems mostly effortless because this processing happens outside conscious awareness.

Since the rise of experimental psychology in the late 19th century, psychology's understanding of perception has progressed by combining a variety of techniques. Psychophysics measures the effect on perception of varying the physical qualities of the input. Sensory neuroscience studies the brain mechanisms underlying perception. Perceptual systems can also be studied computationally, in terms of the information they process. Perceptual issues in philosophy include the extent to which sensory qualities such as sounds, smells or colors exist in objective reality rather than the mind of the perceiver.

Although the senses were traditionally viewed as passive receptors, the study of illusions and ambiguous images has demonstrated that the brain's perceptual systems actively and pre-consciously attempt to make sense of their input. There is still active debate about the extent to which perception is an active process of hypothesis testing, analogous to science, or whether realistic sensory information is rich enough to make this process unnecessary.

The perceptual systems of the brain enable individuals to see the world around them as stable, even though the sensory information may be incomplete and rapidly varying. Human and animal brains are structured in a modular way, with different areas processing different kinds of sensory information. Some of these modules take the form of sensory maps, mapping some aspect of the world across part of the brain's surface. These different modules are interconnected and influence each other.

Perception is the true beginning of knowledge and it can be studied on the following consequences

a) Perception is a process: Perception is essentially process rather than being a product and outcome of some psychological phenomenon.

b) Perception is the information extractor: Our sensory receptors are bombarded continuously by various stimuli present in our environment. Perception performs the duty by extracting relevant information.

c) Perception is preparation to response: Perception is the first step towards active behavior of an organism. Our sensory receptors

are just receiving and transmitting centers of the sensory information.

d) Perception involves sensation: The relationship between sensation and perception are directive what we do have in sensation is a part of perception.

e) Perception provides organization: In addition to the help provided in deriving meaning to sensory impressions, perception also helps in its proper arrangement and organization.

f) Perception is highly individualized: Different individuals do not perceive objects, events or relationship in much the same way. Even individual perceptions of the same event may vary.

3.2 CONCEPT AND MEANING OF PERCEPTION ABOUT ORGANIZATIONAL CLIMATE

Organizational climate defined as the set of characteristics that are specific to a particular organization that may be induced from the way that organization deals with its members and its environment. For the individual members within the organization, climate takes the form of a set of attitudes and expectancies, which describe the organization in terms of both static characteristics and behaviour outcome and outcome-outcome contingencies (Forehand and Gilmer, 1964).

According to Koehler *et al.* (1976), individual's can respond to the organizational climate only in terms of their perception of it, whether or not the perception is accurate.

Chattopadhyaya and Agarwal (1979) tried to understand the concept of organizational climate by examining the various available models.

They explained organizational climate as a psychological environment prevailing in the organization, which is an outcome of a number of variables in the social system, organization and also of the individual members.

According to Chung and Megginson (1981) organizational climate refers to the psychological make-up of a group or an organization and is composed of members' perception of various group dimensions.

The essence of the meaning and usefulness of organizational climate, as quoted by Massie (1985) is the degree and quality of the environmental factors essentially reflected by members' perceptions.

Gogoi and Talukdar (1992) in the research study on organizational climate of the State Department of Agriculture, Assam considered the organizational climate as the measurable property of work environment prevailing in that organization.

According to Prasad (2000) organizational climate serves as the guideline for dealing with people and has a major influence on motivation and productivity of individuals as well as total work group.

Above review on the concept of organizational climate would give numerous definitions. While, majority of the concepts indicated that various element dimensions of the organizational climate viz., organizational situation, members cognitions, attitudes, feelings, behaviours, facilities, co-workers, leadership, organizational procedures, policies, practices, programme planning, communication, decision making, supervision and guidance, programme implementation, organizational structure and personnel management etc.

3.2 CONCEPT AND MEANING OF PERCEPTION ABOUT ORGANIZATIONAL COMMITMENT

Organizational commitment may be defined as “an individual employees’ attachment to the organization, characterized by an intention to remain in it; an identification with the values and goals of the organization; and a willingness to exert extra effort on its behalf”. Individuals consider the extent to which their own values and goals relate to that of the organization as part of organizational commitment; therefore, it is considered to be the linkage between the individual employee and the organization.

According to Sheldon (1971) organizational commitment is an attitude or an orientation towards the organization, which links or attaches the identity of the persons to the organization.

Buchanan (1974) defined organizational commitment as “willingness of an employee to exert high levels of efforts on behalf of the organization, strong desire to stay with the organization”. Further, he indicated that the commitment to the organization, profession and role has wide attention in recent organizational behavior literature.

Most of the scholars cited commitment as means of involving some form of psychological bond between people and organization.

3.4 IDENTIFICATION OF VARIABLES

In the present study, considering review of literature, some of the personal, economic, job related and psychological variables of the scientists, which were found most relevant, were selected in the present study to determine the perception of the scientists of Anand Agricultural University

towards organizational climate. The variables selected for the present study were as under.

3.4.1 Dependent variables

3.4.1.1 Organizational climate

Different components of organizational climate

1. Organization design
2. Trust
3. Leadership
4. Communication
5. Organizational culture
6. Teamwork
7. Motivation
8. Attitude towards organizational climate

3.4.1.2 Organizational commitment.

Different components of organizational commitment

1. Affective commitment
2. Continuance commitment
3. Normative commitment

3.4.2 Independent variables

I. Personal-economic characteristics

1. Age
2. Education
3. Native place
4. Experience
5. Annual income

II. Job related characteristics

6. Job involvement
7. Job performance
8. Job satisfaction
9. Job stress

III. Psychological characteristics

10. Achievement motivation
11. Attitude towards job

3.5 DEFINITIONS OF SELECTED VARIABLES/COMMON TERMS

3.5.1 Age

It refers to actual age of the scientists in completed years i.e. chronological age of the respondents.

3.5.2 Education

It refers to the formal education attained by the selected scientists individually.

3.5.3 Native place

It is the rural or urban background of the scientists where they passed their childhood.

3.5.4 Job Experience

Experience refers to the number of years of service of the scientist in the university.

3.5.5 Annual income

Annual income of each scientist was determine by considering the total income earned from all the sources in one year and expressed in terms of rupees.

3.5.6 Job involvement

Job involvement is the degree to which a person has identified himself / herself psychologically with his/ her work, or the importance of work in his/ her total self-image.

3.5.7 Job performance

Job performance is operationalized as the perception of degree of accomplishment of tasks that make up a job.

3.5.8 Job satisfaction

It is degree to which the scientist is satisfied or dissatisfied with different aspects of his/her job.

3.5.9 Job stress

It is operationalized as the degree to which a respondent felt psychological and physical stress or pressure in his / her job.

3.5.10 Achievement motivation

It is conceptualized as the desire which drives an employee to excel in his / her activities and thereby attain a sense of personal accomplishment.

3.5.11 Attitude towards job

It is conceptualized as the degree of affect that individuals associate with his work.

3.5.12 Organizational Climate

Organizational climate refers to the perception of an employee about his work place, facilities, co-workers etc.

3.5.13 Organizational Design

It is refers to the process of constructing and adjusting an organization's structure to achieve its goals.

3.5.14 Trust

It refers to the strong and honest relationships between subordinates and their managers. It is the mutual understanding between employee and manager with respect to their honesty and openness.

3.5.15 Leadership

It refers to influencing and directing the employees or organizational members to achieve particular organizational goals within the given time and place, using the leader's or superior's capability and skills to make people working together.

3.5.16 Communication

Communication refers to the evoking of a shared or common meaning in another person.

3.5.17 Organizational culture

Organizational culture is conceptualized as a pattern of basic assumption that are considered valid and that are taught to new members as the way to perceive, think, and feel in the organization.

3.5.18 Teamwork

Teamwork is a process of working collaboratively with a group of people, in order to achieve a goal.

3.5.19 Motivation

Motivation refers to as an internal state or condition that activates behaviour and gives direction and it develops desire or want that energizes and directs goal-oriented behaviour.

3.5.20 Attitude towards organizational climate

Attitude refers to the "degree of positive or negative feelings associated with some psychological object''. In the present study attitude is conceptualized as positive or negative feelings of scientists towards the organizational climate.

3.5.21 Organizational Commitment

Organizational commitment refers to the extent to which an employee has a strong belief in acceptance of organization's goal and values and is willing to exert a considerable effort on behalf of the organization and has a strong desire to stay in the organization.

3.5.22 Affective Commitment

Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organization.

3.5.23 Continuance Commitment

Continuance commitment refers to an awareness of the costs associated with leaving the organization. Individuals' link to the organization is based on the belief that they need to do so.

3.5.24 Normative Commitment

Normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization.

3.6 DERIVATION OF HYPOTHESES

Based on the objectives of the study and theoretical framework, the following statistical hypotheses in null form (Ho) were formulated as per the procedure recommended by Kerlinger (1976).

Ho_1 There is no relationship between age of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_2 There is no relationship between education of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_3 There is no relationship between native place of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_4 There is no relationship between experience of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_5 There is no relationship between annual income of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_6 There is no relationship between job involvement of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_7 There is no relationship between job performance of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_8 There is no relationship between job satisfaction of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_9 There is no relationship between job stress of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{10} There is no relationship between achievement motivation of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{11} There is no relationship between attitude towards job of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{12} There is no relationship between age of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{13} There is no relationship between education of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{14} There is no relationship between native place of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{15} There is no relationship between experience of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{16} There is no relationship between annual income of the

scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{17} There is no relationship between job involvement of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{18} There is no relationship between job performance of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{19} There is no relationship between job satisfaction of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{20} There is no relationship between job stress of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{21} There is no relationship between achievement motivation of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{22} There is no relationship between attitude towards job of the scientists of Anand Agricultural University and their perception about organizational commitment.

3.7 CONCEPTUAL MODEL OF THE STUDY

The conceptual framework given in preceding section may be presented paradigmatically which has been developed during the course of study. The model depicted in Fig.1 is tentative and generalized. The final format of such model is suggested at the end of this thesis in the chapter of

summary and conclusions. The model shows postulated relationship between variables based on discussion and assumption made earlier.

In the tentative model given in Fig. 1, there are independent variables, which demonstrated the nature of relationships and help to understand attitude of the scientists towards organizational climate. In the present investigation, independent variables considered for study were personal-economic, job related and psychological variables of respondents. They were; age, education, native place, experience and annual income as personal-economic variables. Job involvement, job performance, job satisfaction and job stress as job related variables, whereas, achievement motivation and attitude towards job as psychological variables. Understanding review of literature, it was assumed that such independent variables might have relationship with scientists' attitude towards organizational climate and perception about organizational commitment.

From forgoing discussion it can be conclude that the perception is the entry point, while attitude towards organizational climate is the process which helps to explore the opinion of organizational climate by the scientists of Anand Agricultural University, Anand.

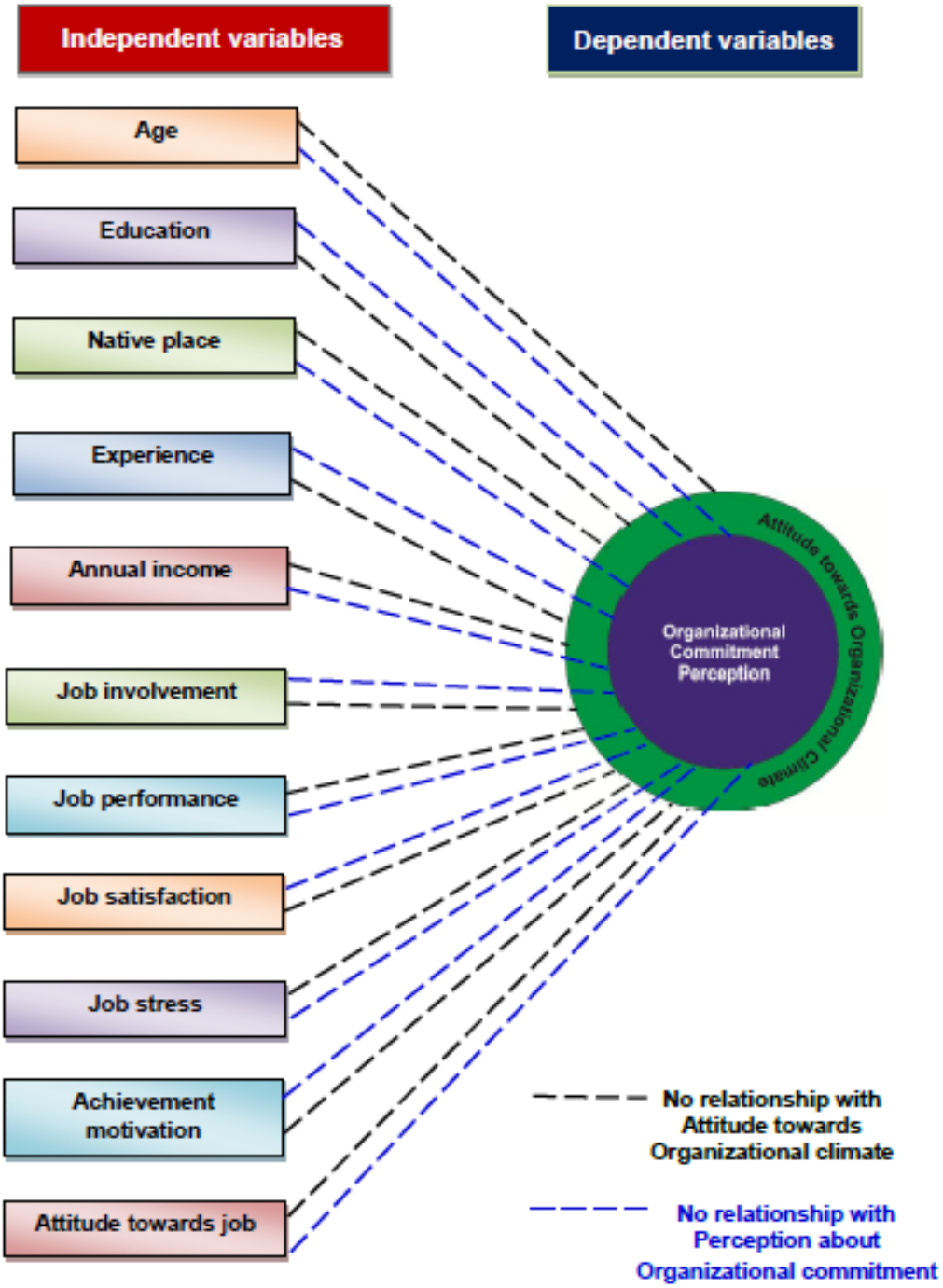


Fig. 1: Conceptual model for delineating the relationship between independent and dependent variables

IV. RESEARCH METHODOLOGY

The present chapter deals with the research design, techniques and construction of tools for data collection, selection of respondents as well as methods used for measuring the dependent and independent variables. The selections of proper sampling techniques for investigation as well as devices for the analysis of data have been discussed in this chapter. Hence, this chapter gives information about scientific procedure adopted for the present investigation to draw rational, logical and meaningful conclusions.

The methodology is described under the following heads:

4.1 LOCALE OF THE STUDY

The present study “Perception of Scientists of Anand Agricultural University towards Organizational Climate” was conducted in Anand Agricultural University, Anand of Gujarat state. It was purposively selected for the study because of the following reasons:

i. Such type of study has not been undertaken in this university.

ii. Anand Agricultural University (AAU) is the sole agricultural university in Gujarat state, which has maximum number of colleges as compared to other agricultural universities in Gujarat state.

iii. The University is performing all three fold activities *viz.* teaching, research and extension education since its inception in Middle Gujarat Region.

iv. Being a student, the researcher is familiar to the university, which helped him in rapport building with the respondents, resulting in collection of credible information and completing the research project timely.

4.2 SELECTION OF THE RESPONDENTS

A proportionate stratified random sampling procedure was adopted for the selection of scientists of Anand Agricultural University of Gujarat state. A list of all the scientists doing teaching, research and extension education activities under the Anand Agricultural University of Gujarat state was obtained from the office of the Registrar, Anand Agricultural University, Anand.

Thereafter, the scientists from each of the activities were selected randomly in such a manner that there would be proportional to total size of the scientists in respective activities. In all, 150 scientists comprising 90 Assistant Professors, 42 Associate Professors and 18 Professors were selected to serve as the respondents for the study. Activity-wise distribution of

the scientists selected and interviewed for the present study has been presented in Table 1 and depicted in Fig. 2.

Table 1: Activity-wise distribution of the scientists selected and interviewed

No.	Activity	Designation of scientists	Number of scientists	Scientists selected and interviewed
1.	Teaching (326)	Assistant Professor	214	70
		Associate Professor	76	25
		Professor	36	12
2.	Research (85)	Assistant Professor	42	14
		Associate Professor	29	9
		Professor	14	5
3.	Extension Education (44)	Assistant Professor	18	6
		Associate Professor	22	8
		Professor	4	1
Total			**455**	**150**

4.3 RESEARCH DESIGN

As the study was concerned to find out the perceived organizational climate and organizational commitments by scientists of Anand Agricultural University, which might be influenced by several personal-economic, job related and psychological characteristics.

According to Kerlinger (1976), "*Ex-Post-Facto"* research design is a systematic empirical enquiry in which the scientists do not have any direct control on independent variables because their manifestations have already occurred or because they cannot inherently be manipulated. Thus, the inferences about the relationships among the variables are made without direct intervention from concomitant variation of independent and dependent variables.

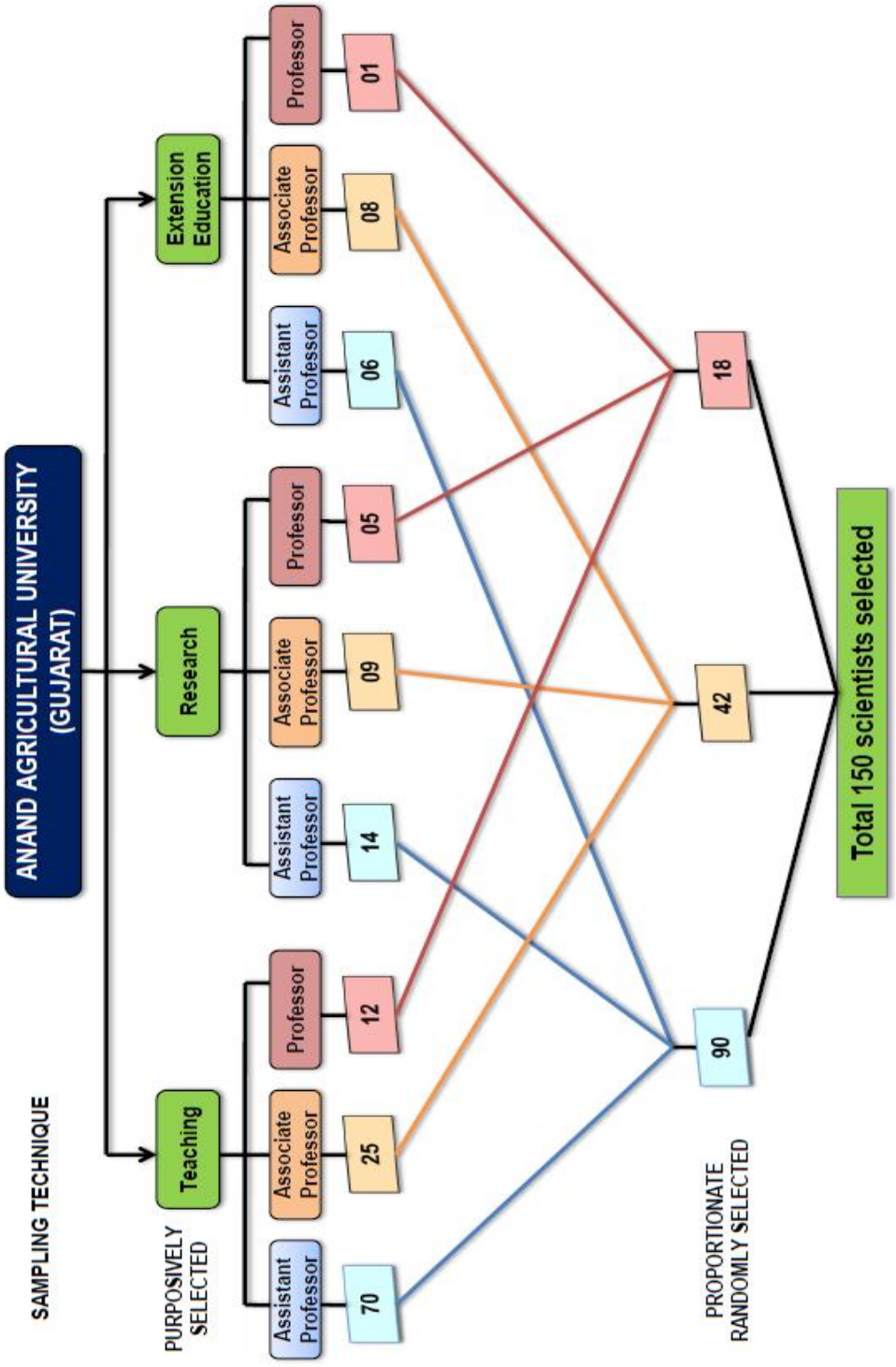


Fig. 2: Locale of the study and selection of the scientist respondents

Since the things have already occurred and are out of manipulation of the researches, the "*Ex-Post-Facto"* research design was employed for conducting the proposed study.

4.4 CONSTRUCTION OF AN INTERVIEW SCHEDULE

The data were collected through the personal interview. The personal interview schedule was considered as the most important tool and the researcher was able to get most authentic first hand information personally from the respondents. The interview schedule was prepared by keeping in view the objectives of the study and was common for all the respondents. In formulating the questions and statements for the schedule, the investigator sought the opinion and guidance of the major advisor, members of advisory committee and experts of Department of Extension Education of Anand Agricultural University. While preparing the interview schedule, available literature and internet sources were also reviewed.

4.5 PRE-TESTING OF INTERVIEW SCHEDULE:

Before actual collection of data, it is very necessary to test the schedule. Pre-testing of interview schedule was carried out to determine whether the respondents had any difficulty in responding the statements, questions included in the schedule. The pre-testing of interview schedule was carried out by interviewing fifteen non-sampled respondents. At the time of pre-testing, the purpose of interview and study was explained to the scientists. On the basis of pre-testing, necessary modifications were made in the final draft and were used as the instrument for data collection from the selected respondent scientists (Appendix II).

4.6 METHOD OF DATA COLLECTION

The data were collected through the personal interview. The interview schedule was prepared by keeping in view the objectives of the study and common for all the respondents. In order to test the administration suitability of each question and statement, pre-testing was carried out with fifteen non-sampled scientists. Taking into consideration the results of pre-testing, suitable modifications were made in the schedule and it was used for final data collection. The respondents were contacted using final format of interview schedule at their work place for the collection of the information. Before interview, the investigator introduced himself to the respondents and then the objectives of the study were explained to them with a view to facilitating free responses. Every possible care was taken to establish good rapport with the respondents to secure full cooperation for gathering reliable and valid information. The secondary data and other relevant information to the study were gathered from the reference books, bulletins, reports and periodicals, journals, paper published by different authors and post-graduate theses pertaining to more or less similar study.

4.7 MEASUREMENT OF VARIABLES

The variables under study were selected on the basis of extensive review of literature on the subject in consultation with the experts and only most relevant variables were selected. Further, they were discussed and finalized at the time of synopsis presentation in the department of extension education.

4.7.1 Operationalization and measurement of independent variables

4.7.1.1 Personal-economic characteristics

4.7.1.1.1 Age

It referred to the chronological age of the scientists in completed years at the time of investigation. The data regarding age of the scientists were collected and they were divided into three groups as under:

No.	Category	Score
1.	Young age group	(Up to 35 years)
2.	Middle age group	(36 to 50 years)
3.	Old age group	(51 to 62 years)

4.7.1.1.2 Education

It referred to academic qualification of the scientists in terms of their formal educational degree attained by them. The data in this regard were sought from the scientists and on that basis, the classification was made based on the procedure followed by Chandargi (1996) into two categories as follows:

No.	Category	Score
1.	Post-graduate	1
2.	Ph. D.	2

4.7.1.1.3 Native place

It was operationalized as the rural or urban background of the scientists where they passed their childhood. It was measured by a schedule developed by the investigator in light of the suggestions of the experts and the responses of the scientists were collected in two categories as under:

No.	Category	Score
1.	Rural	1
2.	Urban	2

4.7.1.1.4 Experience

Experience of the scientists is an important variable as it helps to make them learn new things and teaches them how to move towards perfection. It was operationalized as total number of years of service of scientists in the Agricultural University. To quantify this variable one score for each year of experience was given. The procedure for categorization followed by Chandargi (1996) was used as follows:

No.	Category	Score
1.	Low	(Up to 10 years)
2.	Medium	(11 to 20 years)
3.	High	(Above 20 years)

4.7.1.1.5 Annual income

Annual income of each respondent was determined by considering the total income earned from all the sources in one year and expressed in terms of rupees. One score to each fifty thousand rupees income was given to quantify this variable.

No.	Category
1.	Up to ₹ 5.00 lakhs
2.	₹ 5.01 to ₹ 7.50 lakhs
3.	Above ₹ 7.50 lakhs

Based on level of annual income respondents were classified in to three groups: Up to ₹ 5.00 lakhs, ₹ 5.01 to ₹ 7.50 lakhs and Above ₹ 7.50 lakhs.

4.7.1.2 Job related characteristics

4.7.1.2.1 Job involvement

This variable was operational as the degree to which a person has identified himself / herself psychologically with his/ her work, or the importance of work in his/ her total self-image.

The variable was measured by using the scales developed by Lodhal and Kejner (1966) used with slight modifications in this study. The scale consisted of 14 statements, against each statement five response categories are provided namely strongly agree, agree, undecided, disagree and strongly disagree with the scores of 5, 4, 3, 2, and 1 for positive statements. The scoring system was reverse for the negative statements. The scores against all the statements were added to get individual respondent scores. The maximum and minimum scores an individual could obtain were 70 and 14, respectively. The higher scores levels shows the greater job involvement of the respondent (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as under:

No.	Category	Score
1.	Very low	(Up to 25.20 score)
2.	Low	(25.21 to 36.40 score)
3.	Medium	(36.41 to 47.60 score)
4.	High	(47.61 to 58.80 score)
5.	Very high	(Above 58.80 score)

4.7.1.2.2 Job performance

This variable operationalized as the perception of degree of accomplishment of tasks that make up a job. Schedule was developed to measure the job performance of scientists. The schedule consisted of 14

statements, against each statement five response categories were provided namely strongly agree, agree, undecided, disagree and strongly disagree with a scoring procedure of 5, 4, 3, 2 and 1 for positive statements and it was reverse for negative statements. The maximum and minimum obtainable score was 70 and 14 respectively. The scores against all the statements were added to get individual respondent scores. The higher scores levels shows the greater job performance of the respondent (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as under:

No.	Category	Score
1.	Very low	(Up to 25.20 score)
2.	Low	(25.21 to 36.40 score)
3.	Medium	(36.41 to 47.60 score)
4.	High	(47.61 to 58.80 score)
5.	Very high	(Above 58.80 score)

4.7.1.2.3 Job satisfaction

This variable referred to the degree to which the scientist was satisfied or dissatisfied with different aspects of his /her job. This variable was measured by using the scale developed by Kherde and Sahay (1972) with slight modifications. The scale consisted of 9 statements. The scale was presented to the respondents on a five-point continuum namely, very much satisfied, much satisfied, satisfied, less satisfied and not satisfied, with weightage of 5, 4, 3, 2 and 1, respectively for all the statements. The scores against all the statements were added to get individual respondent scores. The maximum and minimum scores for each respondent were 45 and 9, respectively. The higher score means higher job satisfaction level of the

respondent. The higher scores levels shows the greater job involvement of the respondent (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as follows:

No.	Category	Score
1.	Very low	(Up to 16.20 score)
2.	Low	(16.21 to 23.40 score)
3.	Medium	(23.41 to 30.60 score)
4.	High	(30.61 to 37.80 score)
5.	Very high	(Above 37.80 score)

4.7.1.2.4 Job stress

It was operationalized as the degree to which an individual feels psychological and physical pressure in his/ her job. Schedule was developed to measure the job stress of scientists. The schedule consisted of 18 statements. The respondents were asked to indicate their degree of stress on a four point continuum namely; always a source of stress, sometime a source of stress, rarely a source of stress and not a source of stress with a scoring procedure of 4, 3, 2 and 1, for positive statements and it was reverse for negative statements. Job stress score of the respondent was calculated by adding the scores of all 18 statements given by the individual. The maximum and minimum scores that could be obtainable by a respondent were 72 and 18, respectively. The higher scores reveal higher job stress of the respondent (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as under:

No.	Category	Score
1.	Very low	(Up to 28.80 score)
2.	Low	(28.81 to 39.60 score)
3.	Medium	(39.61 to 50.40 score)
4.	High	(50.41 to 61.20 score)
5.	Very high	(Above 61.20 score)

4.7.1.3 Psychological characteristics

4.7.1.3.1 Achievement motivation

It referred to the social value associated with an individual, which drives him/ her to excel in his/ her activities and there by attains a sense of professional accomplishment. This variable was measured by adopting a scale developed by Prasad (1983) with slight modifications. The scale consisted of 9 statements, against each statement five response categories were provided namely strongly agree, agree, undecided, disagree and strongly disagree with a scoring procedure of 5, 4, 3, 2 and 1 for positive statements and it was reverse for negative statements. The maximum and minimum obtainable score was 45 and 9 respectively. The higher score reveals the higher achievement motivation of the respondents (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as follows:

No.	Category	Score
1.	Very low	(Up to 16.20 score)
2.	Low	(16.21 to 23.40 score)
3.	Medium	(23.41 to 30.60 score)
4.	High	(30.61 to 37.80 score)
5.	Very high	(Above 37.80 score)

4.7.1.3.2 Attitude towards job

This was operationalized as the degree of affect that individuals associate with his work. This was measured by the workers attitude scale developed by Hafeez and Subbaraya (1974) with slight modifications. The scale consisted of 8 statements, the responses for which were obtained on a five-point continuum. The response alternatives used in the scale were strongly agree, agree, undecided, disagree, and strongly disagree with weightage of 5, 4, 3, 2 and 1, respectively for positive statements and it was reverse for negative statements. The scores against all the statements were added to get individual respondent scores. The maximum and minimum obtainable score was 40 and 8, respectively (Appendix II). Based on arbitrary method the classification of respondents was grouped into five categories as under:

No.	Category	Score
1.	Highly negative	(Up to 14.40 score)
2.	Negative	(14.41 to 20.80 score)
3.	Neutral	(20.81 to 27.20 score)
4.	Positive	(27.21 to 33.60 score)
5.	Highly positive	(Above 33.60 score)

4.7.2 Operationalization and measurement of dependent variables

The methods followed for operationalization and measurement of dependent variables were as follows:

4.7.2.1 Organizational climate

It referred to the perception of an employee about his work place, facilities, co-workers etc. This variable was divided into seven

components viz., organizational design, trust, leadership, communication, culture, teamwork and motivation. Schedule was developed in the present study. The schedule consisted of 48 items representing the all seven organizational climate dimensions, which were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively for positive statements and it was reverse for negative statements. The final score was worked out by summing scores obtained by the respondents for all the statements regarding all seven components to obtain perception of individual respondent about organizational climate. The maximum obtainable score was 240 and minimum score was 48 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Most unfavourable	(Up to 86.40 score)
2.	Unfavourable	(86.41 to 124.80 score)
3.	Neutral	(124.81 to 163.20 score)
4.	Favourable	(163.21 to 201.60 score)
5.	Most favourable	(Above 201.60 score)

4.7.2.1.1 Organizational design

It referred to the process of constructing and adjusting an organization's structure to achieve its goals. Schedule was developed in the present study which consisted of six items, which were all positive items. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 30 and

minimum was 6 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as under:

No.	Category	Score
1.	Most unfavourable	(Up to 10.80 score)
2.	Unfavourable	(10.81 to 15.60 score)
3.	Neutral	(15.61 to 20.40 score)
4.	Favourable	(20.41 to 25.20 score)
5.	Most favourable	(Above 25.20 score)

4.7.2.1.2 Trust

Schedule was developed in the present study which consisted of five items, which were all positive items. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 25 and minimum score was 5 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Very low	(Up to 9.00 score)
2.	Low	(9.01 to 13.00 score)
3.	Medium	(13.01 to 17.00 score)
4.	High	(17.01 to 21.00 score)
5.	Very high	(Above 21.00 score)

4.7.2.1.3 Leadership

It referred to influencing and directing the employees or organizational members to achieve particular organizational goals within the given time and place, using the leaders' or superior's capability and skills to

make people working together. Schedule was developed in the present study which consisted of ten items, from which nine were positive and one item was negative. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 50 and minimum score was 10 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as under:

No.	Category	Score
1.	Very poor	(Up to 18.00 score)
2.	Poor	(18.01 to 26.00 score)
3.	Average	(26.01 to 34.00 score)
4.	Good	(34.01 to 42.00 score)
5.	Very good	(Above 42.00 score)

4.7.2.1.4 Communication

Communication is a crucial component for organizational development and for making a better organizational climate. Communication referred to the evoking of a shared or common meaning in another person. Schedule was developed in the present study which consisted of ten items, which were all positive. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 50 and minimum score was 10 (Appendix II). The respondents

were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Very poor	(Up to 18.00 score)
2.	Poor	(18.01 to 26.00 score)
3.	Average	(26.01 to 34.00 score)
4.	Good	(34.01 to 42.00 score)
5.	Very good	(Above 42.00 score)

4.7.2.1.5 Organizational culture

Organizational culture is described as a pattern of basic assumption that are considered valid and that are taught to new members as the way to perceive, think, and feel in the organization. Schedule was developed in the present study which consisted of four items, which were all positive. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 20 and minimum score was 4 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as under:

No.	Category	Score
1.	Most unfavourable	(Up to 7.20 score)
2.	Unfavourable	(7.21 to 10.40 score)
3.	Neutral	(10.41 to 13.60 score)
4.	Favourable	(13.61 to 16.80 score)
5.	Most favourable	(Above 16.80 score)

4.7.2.1.6 Teamwork

Teamwork is a process of working collaboratively with a group of people, in order to achieve a goal. Schedule was developed in the present study which consisted of eight items, from which seven were positive and one item was negative. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 40 and minimum score was 8 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Very poor	(Up to 14.40 score)
2.	Poor	(14.41 to 20.80 score)
3.	Average	(20.81 to 27.20 score)
4.	Good	(27.211 to 33.60 score)
5.	Very good	(Above 33.60 score)

4.7.2.1.7 Motivation

Motivation referred to as an internal state or condition that activates behaviour and gives direction and it develops desire or want that energizes and directs goal-oriented behaviour. Schedule was developed in the present study which consisted of five items, which were all positive items. The response were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for always true, usually true, sometimes true, rarely true and never true, respectively. The final score was worked out by summing scores obtained by the respondents. The maximum obtainable score was 25 and

minimum score was 5 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as under:

No.	Category	Score
1.	Very low	(Up to 9.00 score)
2.	Low	(9.01 to 13.00 score)
3.	Medium	(13.01 to 17.00 score)
4.	High	(17.01 to 21.00 score)
5.	Very high	(Above 21.00 score)

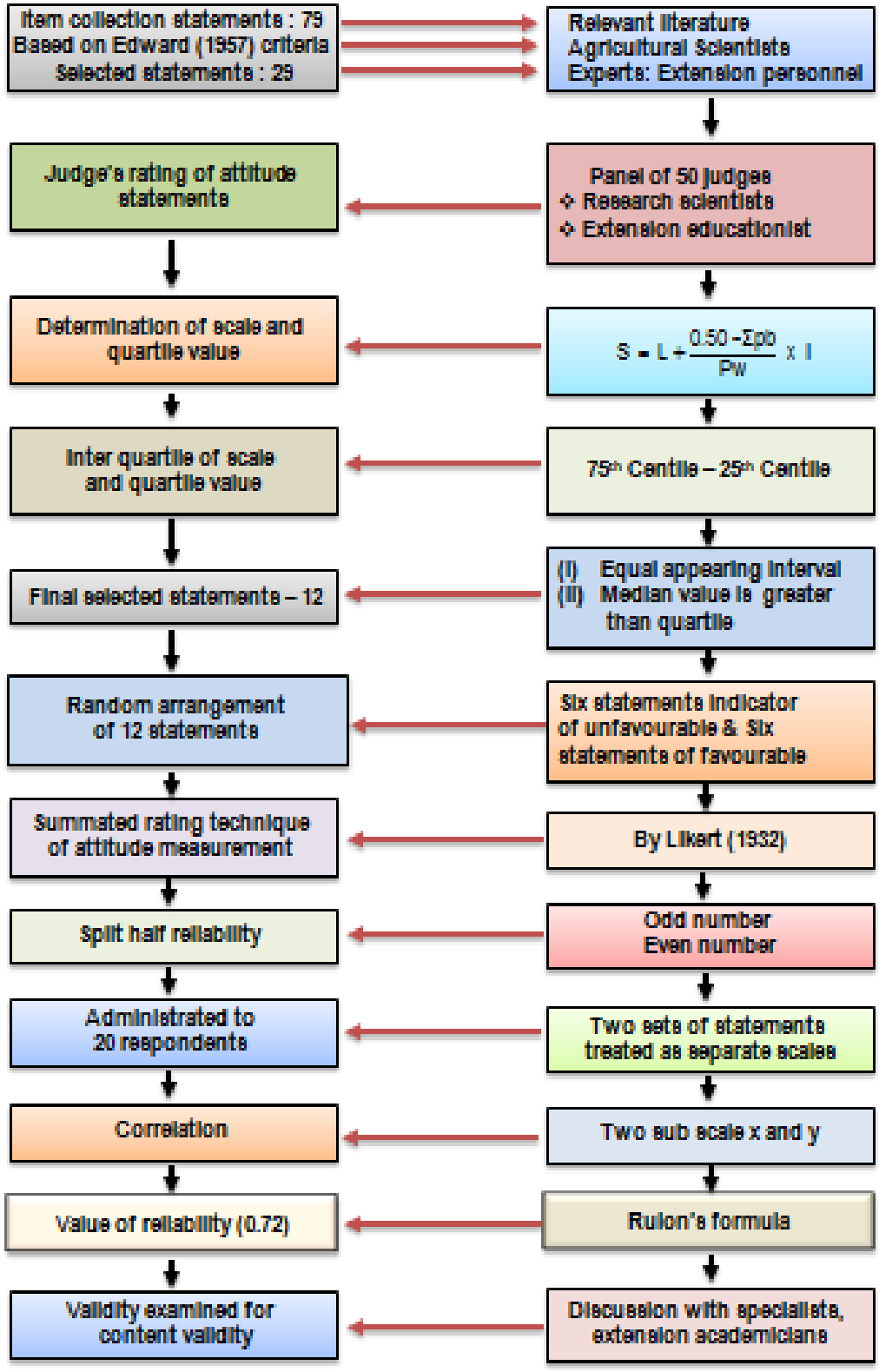
4.7.2.2 Attitude of scientists towards organizational climate

Development of scale to measure attitude of the scientists towards organizational climate

Attitude refers to the "degree of positive or negative affect associated with some psychological object" (Thurstone, 1946). In this study, an attempt has been made by researcher himself to develop a scale, which can scientifically measure attitude of the scientists of Anand Agricultural University towards organizational climate. Among the techniques available for the construction of the scale, the Thurston's equal appearing interval scale (1929) and the Likert's summated rating scale (1932) are quite well known. However, both the methods suffer from the limitations, the first one in getting discriminating response and second one in selection of items.

Thus, technique chosen to develop attitude scale was "Scale Product Method" which combines the Thurston's technique of equal appearing interval scale for selection of the items and Likert's techniques of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949).

Fig. 3: Methodology used for the development of attitude scale



Steps in development of attitude scale

The steps in development of the attitude scale is presented in Fig. 3 and discussed as below:

1. Item Collection

The items making up an attitude scale are known as statements. In initial stage of developing the scale large number of statements about organizational climate were collected from the relevant literature as well as constructed through discussion with experts, major guide and extension personnel. The statements, thus selected were edited on the basis of the criteria laid down by Edward (1957). In all, 29 statements were selected as they were found to be non-ambiguous and non factual.

2. Item Analysis

One hundred and twenty slips of these statements were handed over to the 120 selected extension educationists and scientists working in different colleges of Anand Agricultural University. In order to judge the degree of “Un-favorableness” to “Favorableness” of each statement on the five-point equal appearing interval continuum i.e. ‘Strongly agree’, ‘Agree’, ‘Undecided’, ‘Disagree’ and ‘Strongly disagree’ (Appendix I). Out of these experts, only 50 experts returned the statements after duly recording their judgements and were considered for the analysis.

3. Determination of Scale and Quartile values

The data collected from 50 judges were arranged in the form as shown in Table 2. The table shows, as an example, the frequency distribution of judgments made by the judges for the statement number 5 on five point continuum.

Table 2: Frequency distribution of judgement made by judges on five point continuum for statement number 5 n=50

No.	Category	Frequency of responses	
1.	Strongly agree	𝍸	05
2.	Agree	𝍸 𝍸 III	13
3.	Undecided	𝍸 𝍸	10
4.	Disagree	𝍸 𝍸 𝍸 𝍸	20
5.	Strongly disagree	II	02
Total			**50**

As shown in the Table 3, three rows were used for each statement. The first row gives the frequency (f) with which the statement was placed in each of the five categories. The second row gives these frequencies as proportions (p).

The proportions are obtained by dividing each frequency by n i.e. the total number of the judges (here it is 50). The third row gives the cumulative proportions (Cp), that is, the proportion of the judgments in a given category plus the sum of all the proportions below the categories.

Table 3: Summary of judgments made by judges on five point continuum for Statement No. 5 n=50

Statement No. 5	Sorting categories					Scale value	Q value
	1	2	3	4	5		
F	5	13	10	20	2		
P (P_w)	0.10	0.26	0.20	0.40	0.04	**3.20**	**1.90**
Cp ($\sum P_b$)	0.10	0.36	0.56	0.96	1.00		

If the median of the distribution of the judgment for each statement is taken as the scale value of the statement, then the scale values can be found from the data arranged in Table 4 by means of the following formula.

$$S = L + \frac{0.50 - \sum Pb}{Pw} \times i$$

Where,

C_{50} = the median or scale value of the statement

L = the lower limit of the interval in which the 50th centile falls

P_b = the sum of the proportion below the interval in which the 50th centile falls

P_w = the proportion within the interval in which the 50th centile falls

i = the width of the interval and is assumed to be equal to 1.0 (one).

Substituting the values in the above formula to find out the scale value for the statement number 5 in Table 3, we have

$$S = 2.5 + \frac{0.50 - 0.36}{0.20} \times 1$$

S = 2.5 + 0.7

S = 3.20

(The interval represented by the number assigned to the given category is assumed to range from 0.50 of a unit below to 0.50 of a unit above the assigned number. Thus, lower limit of the interval represented by the category assigned the number 3 is 2.5 and the upper limit is 3.5).

The scale value can be found in the same manner for the other statements.

Thurstone and Chave (Edwards, 1957) used the inter-quartile range Q as a means of the variation of the distribution of the judgments for a given statement. To determine value of Q, two other points were measured, the 75th centile and 25th centile. The 25th centile was obtained by the formula.

$$C_{25} = L + \frac{0.25 - \sum Pb}{Pw} \times i$$

Where,

C_{25} = the median or scale value of the statement

L = the lower limit of the interval in which the 25th centile falls

P_b = the sum of the proportion below the interval in which the 25th centile falls

P_w = the proportion within the interval in which the 25th centile falls

i = the width of the interval and is assumed to be equal to 1.0 (one).

For the statement number 5 in Table 3, we have

$$C_{25} = L + \frac{0.25 - \sum Pb}{Pw} \times i$$

$$C_{25} = 1.5 + \frac{0.25 - 0.10}{0.26} \times 1$$

C_{25}=1.5 + 0.58

C_{25} = 2.08

The 75th centile was obtained by the following formula.

$$C_{75} = L + \frac{0.75 - \sum Pb}{Pw} \times i$$

Where,

C_{75} = the median or scale value of the statement

L = the lower limit of the interval in which the 75th centile falls

P_b = the sum of the proportion below the interval in which the 75th centile falls

P_w = the proportion within the interval in which the 75th centile falls

i = the width of the interval and is assumed to be equal to 1.0 (one).

For the statement number 5 in Table 3, we have

$$C_{75} = L + \frac{0.75 - \sum Pb}{Pw} \times i$$

$$C_{75} = 3.5 + \frac{0.75 - 0.56}{0.40} \times 1$$

C_{75}= 3.5 + 0.48

C_{75}= 3.98

Then, the interquartile range would be given by taking the difference between C_{75} and C_{25}, thus,

$Q = C_{75} - C_{25}$

Substituting the values

Q = 3.98 – 2.08

Q = 1.90

In this manner, the inter quartile range (Q) for each statement was worked out for determinations of ambiguity involved in the statements. Only those statements were selected whose median values were greater than Q value. In case of statement number 5, S = 3.20 and Q = 1.90, hence the statement number five was selected.

Thurstone and Chave (Edwards, 1957) described another criteria in addition to Q as a basis for rejecting statement in scales constructed by the method of the equal appearing interval. Accordingly, when a few statements had the same scale values, the statement having lowest Q values were selected. To understand this procedure, the statements for the scale in Table 4 can be examined.

Table 4: Selection of the statements for the attitude scale based on scale value and inter-quartile range

No.	Statements / Items	S Value	Q Value	Remark
1.	I think management style in my university supports the academic atmosphere (+)	1.90	0.72	Rejected
2.	I think impression created by management in my university supports the research activity (+)	1.90	0.68	Selected
3.	I believe that existing climate in my university supports extension movement (+)	2.00	0.75	Rejected
4.	I feel that leadership style of my organization is encouraging (+)	2.00	0.86	Rejected
5.	I believe that vertical communication between senior and junior employees is discouraging (-)	3.20	1.90	Selected
6.	I consider that horizontal communication within the employees is cheering (+)	2.16	1.02	Selected
7.	I think that efficiency of employee in my organization is considerable factor in delegating the power (+)	2.50	1.36	Selected
8.	I believe that my university maintains the high standard of working climate (+)	1.90	0.86	Rejected
9.	I am unsatisfied with the working conditions of my university (-)	3.00	2.12	Selected
10.	I am unhappy with the style of planning adopted in my university (-)	3.00	2.27	Rejected
11.	I am pleased with the staffing pattern adopted in my university (+)	2.10	1.22	Rejected
12.	I am unsatisfied with the work culture of my university (-)	2.75	2.48	Rejected
13.	I feel that authority of my university creates motivating environment for all (+)	2.10	1.04	Rejected
14.	I think that my university provides necessary resources to execute duties (+)	2.10	0.89	Rejected
15.	I think working climate of my university is impractical (-)	2.75	2.13	Selected
16.	I believe that level of discipline in my university is well maintained (+)	2.00	0.68	Selected
17.	I believe that climate provided to develop carrier in my university is discouraging (-)	3.50	1.96	Selected

18.	I think that the working atmosphere of my university is pleasant (+)	2.00	0.89	Rejected
19.	I believe that trustworthiness between superiors and subordinates in my university is reliable (+)	2.16	1.06	Rejected
20.	I believe that level of commitment amongst the employees of my university is superior (+)	2.00	0.81	Rejected
21.	I think that authority is failed in creating conducive working climate in my university (-)	3.64	2.41	Selected
22.	I think that critical decisions are taken in my university by participatory approach (+)	2.44	1.80	Selected
23.	I think creative ideas of employees are valued by decision makers of university (+)	2.04	1.14	Rejected
24.	I believe that infrastructural facility made available at my university is discouraging (-)	3.87	2.21	Selected
25.	I feel lucky getting favourable climate of my university (+)	2.04	1.44	Rejected
26.	I think that climate created in my university is encouraging to perform duties (+)	2.10	0.92	Rejected
27.	I think organizational environment of my university is adaptive (+)	2.10	0.86	Selected
28.	I feel that organizational setting of my university is stressful (-)	3.00	2.26	Rejected
29.	I believe that organizational culture of my university is productive (+)	2.10	1.21	Rejected

4. Final statements for attitude scale towards organizational climate

When there was a good agreement among the judges, in judging the degree of agreement or disagreement of a statement, Q was smaller as compared to the scale value obtained. Thus, only those statements were selected whose median (scale) values were greater than Q values. However, when a few statements had the more or less similar scale values,

statements having lowest Q value were selected. Based on the median and Q values, 12 statements numbering 2, 5, 6, 7, 9, 15, 16, 17, 21, 22, 24 and 27 of the original list were finally selected to constitute attitude scale.

5. Method of scoring to find reliability

The selected 12 statements for the final format of the attitude scale were randomly arranged to avoid response biases, which might contribute to low reliability and detraction from validity of the scale. Out of the 12 selected statements, six statements were the indicators of the unfavourable attitude and six statements were the indicators of favourable attitude. Against these 12 statements, there were five columns representing five point continuums of agreement and disagreement to the statements as followed by Likert (1932) in his summated rating technique of attitude measurement. The five points on continuum were strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favourable statements and with the respective weights of 1, 2, 3, 4 and 5 for the unfavourable statements. The weights of Likert's technique and the scale value of Thurstone's technique were combined in the form of a product and the total score for an individual was the sum of the product.

6. Reliability of the scale

A scale is reliable when it consistently produces the same results when it applied to the same sample. In the present study, due to limited time and resources available to the researcher, split-half method of testing reliability was used.

Table 5: Reliability of the scale

No.	Score of Odd Statements	Score of Even Statements	D	d^2	T	t^2
	X_0	X_e	$X_0 - X_e$	d × d	$X_0 + X_e$	
1.	15	21	-6	36	36	1296
2.	26	20	6	36	46	2116
3.	26	23	3	9	49	2401
4.	24	22	2	4	46	2116
5.	26	26	0	0	52	2704
6.	23	23	0	0	46	2116
7.	23	21	2	4	44	1936
8.	22	18	4	16	40	1600
9.	28	27	1	1	55	3025
10.	19	22	-3	9	41	1681
11.	29	27	2	4	56	3136
12.	25	24	1	1	49	2401
13.	22	22	0	0	44	1936
14.	28	30	-2	4	58	3364
15.	26	22	4	16	48	2304
16.	22	24	-2	4	46	2116
17.	26	24	2	4	50	2500
18.	23	24	-1	1	47	2209
19.	22	24	-2	4	46	2116
20.	23	24	-1	1	47	2209
Total	**∑x = 478**	**∑y = 468**	**10**	**154**	**946**	**45282**

The 12 statements were divided into two halves with 6 odd numbered in one half and 6 even numbered statements in the other. These were administered to 20 non-respondent scientists. Each of the two sets of statements was treated as a separate scale and then these two sub-scales were correlated. The coefficient of reliability was calculated by the Rulon's formula (Guilford, 1954), which came to 0.72. Reliability is directly related with the length of the scale when we split the scale on odd and even number

items. Thus, the scale developed was found highly reliable. To understand this procedure, the statements for the scale in Table 5 can be examined.

Rulon's Formula

$$rtt = 1 - \frac{\sigma^2 d}{\sigma^2 t}$$

Where;

$$\sigma^2 d = \frac{\sum d^2 - \frac{(\sum d)^2}{20}}{20}$$

$$\sigma^2 t = \frac{\sum t^2 - \frac{(\sum t)^2}{20}}{20}$$

Calculation

$\sum d$ = 10

$\sum d^2$ = 154

t = 946

$\sum t^2$ = 45282

n = 20

$$\sigma^2 d = \frac{\sum d^2 - \frac{(\sum d)^2}{20}}{20}$$

$$\sigma^2 d = \frac{154 - \frac{(10)^2}{20}}{20}$$

$$\sigma^2 d = \frac{154 - 5}{20}$$

$$\sigma^2 d = \frac{149}{20}$$

$\sigma^2 d$ **= 7.45**

$$\sigma^2 t = \frac{\sum t^2 - \frac{(\sum t)^2}{20}}{20}$$

$$\sigma^2 t = \frac{45282 - \frac{(946)^2}{20}}{20}$$

$$\sigma^2 t = \frac{45282 - 44745.8}{20}$$

$$\sigma^2 t = \frac{536.2}{20}$$

$\sigma^2 t$ **= 26.81**

$$rtt = 1 - \frac{\sigma^2 d}{\sigma^2 t}$$

$$rtt = 1 - \frac{7.45}{26.81}$$

$rtt = 1 - 0.277$

rtt = 0.72

7. Content validity of the scale

The validity of the scale was examined for content validity by determining how well the content of the scale represented the domain subject matter under study. Since as many items covering the area as possible were selected by discussion with experts, reviewing the literature and adherence to the judges' ratings, it was presumed that the instrument satisfied the content validity.

8. Administering the developed scale

The final attitude scale consisted of 12 statements was administered on the selected 150 sampled scientists. The responses were

collected in five-point continuum viz. strongly agree, agree, undecided, disagree and strongly disagree with weightage of 5, 4, 3, 2 and 1, respectively for positive statements and reverse scoring for negative statements. The total attitude score for each respondent was obtained by adding all the scores of their responses of all the statements. The maximum obtained score was 60 and minimum was 12. Then, using arbitrary method of classification the respondents were grouped into five categories as under:

No.	Category	Score
1.	Highly negative	(Up to 21.60 score)
2.	Negative	(21.61 to 31.20 score)
3.	Neutral	(31.21 to 40.80 score)
4.	Positive	(40.81 to 50.40 score)
5.	Highly positive	(Above 50.40 score)

4.7.2.3 Organizational commitment

This was related to the extent to which an employee has a strong belief in acceptance of organizations goal and values, is willing to exert a considerable effort on behalf of the organization, and has a strong desire to stay in the organization. This variable was divided into three components viz., affective commitment, continuance commitment and normative commitment. For quantifying this variable, the scale developed by Matteson and Ivancevich (1982) was used with slight modifications. The scale consisted of 21 items which were representing the all three dimensions of organizational commitment and were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for strongly agree, agree, undecided, disagree and strongly disagree, respectively for positive statements and it was reverse for negative statements. The final score was worked out by summing scores obtained by

the respondents for all the statements regarding all three components to obtain perception of individual respondent about organizational commitment. The maximum obtainable score was 105 and minimum score was 21 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Most unfavourable	(Up to 37.80 score)
2.	Unfavourable	(37.81 to 54.60 score)
3.	Neutral	(54.61 to 71.40 score)
4.	Favourable	(71.41 to 88.20 score)
5.	Most favourable	(Above 88.20 score)

4.7.2.3.1 Affective commitment

Affective commitment referred to the scientist's emotional attachment to identification with and involvement in the organization. For quantifying this component, the scale developed by Matteson and Ivancevich (1982) was used with slight modifications. The scale consisted of seven items, which were all positive. The responses were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for strongly agree, agree, undecided, disagree and strongly disagree, respectively. The final score was worked out by summing scores obtained by the respondents for all statements. The maximum obtainable score was 35 and minimum score was 7 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Very low	(Up to 12.60 score)
2.	Low	(12.61 to 18.20 score)
3.	Medium	(18.21 to 23.80 score)
4.	High	(23.81 to 29.40 score)
5.	Very high	(Above 29.40 score)

4.7.2.3.2 Continuance commitment

This variable refers to an awareness of the costs associated with leaving the organization. Individuals' link to the organization is based on the belief that they need to do so. For quantifying this component, the scale developed by Matteson and Ivancevich (1982) was used with slight modifications. The scale consisted of seven items, from which two items were positive and five were negative. The responses were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for strongly agree, agree, undecided, disagree and strongly disagree, respectively and it was reverse for negative statements. The maximum obtainable score was 35 and minimum score was 7 (Appendix II). The respondents were categorized into five groups using arbitrary method of classification as follows:

No.	Category	Score
1.	Very low	(Up to 12.60 score)
2.	Low	(12.61 to 18.20 score)
3.	Medium	(18.21 to 23.80 score)
4.	High	(23.81 to 29.40 score)
5.	Very high	(Above 29.40 score)

4.7.2.3.3 Normative commitment

Normative commitment reflects a feeling of obligation to continue employment. Scientists with a high level of normative commitment

feel that they ought to remain with the organization. For quantifying this component, the scale developed by Matteson and Ivancevich (1982) was used with slight modifications. The scale consisted of seven items, from which six items were positive and one was negative. The responses were assessed on five-point continuum with a weightage of 5, 4, 3, 2 and 1 for strongly agree, agree, undecided, disagree and strongly disagree, respectively and it was reverse for negative statements. The maximum obtainable score was 35 and minimum score was 7 (Appendix II). Based on arbitrary classification the respondents were categorized into five groups as under:

No.	Category	Score
1.	Very low	(Up to 12.60 score)
2.	Low	(12.61 to 18.20 score)
3.	Medium	(18.21 to 23.80 score)
4.	High	(23.81 to 29.40 score)
5.	Very high	(Above 29.40 score)

4.8 MEASUREMENT OF PROBLEMS ENCOUNTERED BY SCIENTISTS

It referred to the problems of organizational climate encountered by the scientists. The problems obtained from each respondent were measured in term of mean value and rank order was given from highest to lowest mean value. The problems offered were ranked on the basis of number and percentage of respondents who reported respective problem. To know their degree of importance, the respondents were asked to give their responses on a three point continuum *i.e.* most important, important, and not important. The score assigned were 3, 2 and 1 for most important, important and not important responses, respectively. Finally, the mean score was

worked out for each problem for ranking them in terms of their importance. There were many problems on the part of the scientists in organizational climate. Taking this in view, scientists were asked for these problems in organizational climate during the pre-testing of the interview schedule and the major problems found were listed in the interview schedule.

4.9 SUGGESTIONS TO OVERCOME THE PROBLEMS EXPERIENCED BY THE SCIENTISTS

Considering the problems experienced by the scientists in organizational climate and to overcome the same in organizational climate successfully, they were asked to give their valuable suggestions. The suggestions obtained from the respondents were measured in terms of frequency, percentage and rank order was given from highest to lowest percentage.

4.10 STATISTICAL FRAMEWORK FOR ANALYSIS OF DATA

The collected data were classified, tabulated and analyzed in order to make the findings meaningful for interpretation and drawing meaningful conclusions. For this, following statistical tools were used.

4.10.1 Frequency and percentage:

Simple interpretations were made on the basis of frequency and percentage.

4.10.2 Arithmetic mean:

Arithmetic mean was obtained by dividing total score by the number of respondents. The mean was calculated by using following formula.

$$\bar{X} = \frac{\sum Xi}{n}$$

Where,

$\overline{X}$ = mean.

n = total number of respondents.

ΣXi = sum of total observation score.

4.10.3 Standard Deviation:

The standard deviation was obtained by the square root of the average of the square deviation from mean. It was calculated by using the following formula:-

$$S.D. = \sqrt{\frac{\sum(Xi - \overline{X})^2}{n-1}}$$

Where,

S.D. = standard Deviation.

X_i = individual score.

$\overline{X}$ = mean of the sample.

n = total number of respondents.

4.10.4 Arbitrary method for categorization:

Generally arbitrary method is use on ad hoc basis and designed largely through researcher's own subjective selection for formulation of groups of different variables. In this study different variables were categorized based on division of difference between maximum and minimum possible scores of respective variables with its numbers of categories.

4.10.5 Pearson's Co-efficient of correlation (r):

It was computed to find the relationship between each of the independent variables and the dependent variable by employing following formula.

$$r = \frac{\sum(xy)}{\sqrt{\left[\sum x^2\right]\left[\sum y^2\right]}}$$

Where,

r = coefficient of correlation.

x = independent variable.

y = dependent variable.

Σxy = sum of the product of the deviation of X and Y from their mean.

Σx^2 = sum of square of the deviation of X and from their mean.

Σy^2 = sum of square of the deviation of Y and from their mean.

4.10.6 Stepwise regression analysis:

The stepwise regression (multiple regressions) analysis was employed to predict the extent of interpersonal conflict and consequences by independent variables. In the stepwise method, the regression analysis was started with regression of y and x_1,….., x_k taken singly. The variable giving the highest accountability in sum of squares of y is first selected. Then the bivariate regression in which x_1 appeared were worked out. The variate which gives the highest additional accountability in sum of squares in y after fitting x_1 variable was selected. All the trivariate regression that includes both x_1 and x_2 were computed. The analysis was continued till the last variate of which additional contribution was the least of all variables. The prediction equation used as:

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 + \ldots\ldots\ldots\ldots + b_kx_k$$

Where,

y = predicted dependent variable.

a = intercept.

$b_1,\ldots, b_k$ = partial regression co-efficient of respective independent variables.

$x_1,\ldots, x_k$ = independent variables.

After the regression equation, the partial regression co-efficients were tested for their significance by 't' test.

4.10.7 Standard partial regression coefficient (SPRC):

The various independent variables had their own unit of measurement which did not permit a comparison of the partial regression coefficient (byi.j) values. To facilitate comparison, the partial regression coefficient (byi.j) values were converted in to standard partial regression coefficient (b'yi.j) values which were free from the units of measurements.

In order to assign the rank to various selected independent variables, the standard partial regression co-efficient was used. It was calculated by using the following formula (Snedecor and Cochran, 1967).

$$b'yi.j = byi.j \times \frac{\text{S.D. of independent variable}}{\text{S.D. of dependent variable}}$$

Where,

b'yi.j = standard partial regression coefficient or beta weight.

byi.j = partial regression coefficient (byi.j).

S.D. = standard deviation.

A comparison of any two standard partial regressions coefficient indicates the relative importance of the independent variables

involved in predicting the rational behaviour. The significance of the partial regression co-efficient was tested by "t" statistic.

V. RESULTS AND DISCUSSION

The information related to this study was collected from the respondents by means of personal interview schedule. The collected data was classified, tabulated and analyzed in light of the objectives of the study. The facts and findings derived after analyzing the data have been presented in this chapter under following major heads:

5.1 Profile of the scientists

5.2 Perception of the scientists about organizational climate

5.3 Attitude of the scientists towards organizational climate

5.4 Perception of the scientists about organizational commitment

5.5 Relationship between profile of the scientists and their attitude towards organizational climate

5.6 The functional relationship between independent variables and attitude towards organizational climate

5.7 Relationship between profile of the scientists and their attitude towards organizational commitment

5.8 The functional relationship between independent variables and perception about organizational commitment

5.9 Problems of organizational climate experienced by the scientists

5.10 Suggestions from the scientists to improve the organizational climate

5.1 PROFILE OF THE SCIENTISTS

To identify the profile of scientists was one of the objectives of the present study. On the basis of review of literature, some of the important

personal-economic, job related and psychological characteristics of the scientists were selected and studied. The findings have been tabulated, analyzed and presented as follows.

5.1.1 PERSONAL-ECONOMIC CHARACTERISTICS

5.1.1.1 Age

Age is the natural phenomenon in the life of every living thing. It influences the interest and needs of an individual and thus, it plays a vital role on behavioral aspects of the individual. Age is the factor, which may have some influence on perception towards organizational climate. The data collected from the respondents about their age are presented in Table 6 and diagrammatically depicted in Fig. 4.

Table 6: Distribution of the scientists according to their age

n=150

No.	Age group	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Young age group (Up to 35 years)	62 (68.89)	0 (0.00)	0 (0.00)	62 (41.33)
2.	Middle age group (36 to 50 years)	23 (25.56)	21 (50.00)	1 (5.56)	45 (30.00)
3.	Old age group (51to 62 years)	5 (5.55)	21 (50.00)	17 (94.44)	43 (28.67)
Total		100.00	100.00	100.00	150 (100.00)

(Figures in parentheses indicate percentage)

It is evident from the Table 6 that slightly more than two-third(68.89 per cent) of the Assistant Professors were from young age group, followed by middle age group (25.56 per cent) and only 5.55 per cent fall under old age group. In case of Associate Professors, an equal number (50.00 per cent) of them were found in the middle age group and old age group and none were found in the young age group. Whereas in case of

Professors, an overwhelming number(94.44 per cent)of them were from old age group, followed by middle age group (5.56 per cent) and none of them were found in the young age group.

It is quite logical that the scientists must have passed many years to reach up to the upper cadre *viz.* Associate Professors and Professors and hence, majority of them were in the old age group. In case of Assistant Professors, it was observed that recently some new appointments were made by the Anand Agricultural University. It is because of this reason majority of the scientists were found with less than thirty five years of age.

In consideration with overall scientists, it can be concluded that more than half (58.67 per cent) of the scientists engaged in teaching, research and extension education activity were found in middle to old age group, while slightly more than two-fifth (41.33 per cent) were belonged to young age group.

This finding is in conformity with the findings of Apage (2002), Tondare *et al.* (2005), Kiran (2007), Parmar (2009), Sutthianlal (2010), Tayde *et al.* (2011) and Suthar (2013) and partially confirms the finding of Khamoushi and Gupta (2015).

5.1.1.2 Education

Education is generally considered as the process of producing desirable changes in human behavior in respect of knowledge, skill and attitude. An individual's behaviour is influenced by his formal education which leads his mental development and shapes his view points. Keeping this in view, the data pertinent to educational qualification of the respondents were sought and are presented in Table 7 and diagrammatically depicted in Fig. 5.

A perusal of data presented in Table 7 reveals that more than half (57.78 per cent) of the Assistant Professors were Ph. D. degree holders while 42.22 per cent of them were post-graduates. In case of Associate Professors, an overwhelming number (97.61 per cent) of them had doctoral degree, while remaining 2.38 per cent were post graduates. In relation to Professors, all of them were Ph. D. degree holders.

Table 7: Distribution of the scientists according to their educational qualification

n=150

Sr. No.	Educational qualification	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Post-graduate	38 (42.22)	1 (2.38)	0 (0.00)	39 (26.00)
2.	Ph. D.	52 (57.78)	41 (97.61)	18 (100.00)	111 (74.00)
Total		100.00	100.00	100.00	150 (100.00)

(Figures in parentheses indicate percentage)

It is obvious that Ph. D. degree is must for the post of professor and its equivalents. It was perceived that due to the faculty improvement scheme implemented by university authority, majority of the scientists got benefit to get higher qualification i.e. Ph.D. degree. This might be the reason why all the scientists were found with either post graduate or Ph. D. degree.

Overall, it can be inferred that slightly less than three-fourth (74.00 per cent) of the scientists engaged in teaching, research and extension education work had education up to doctoral level, while 26.00 per cent of them were post graduates.

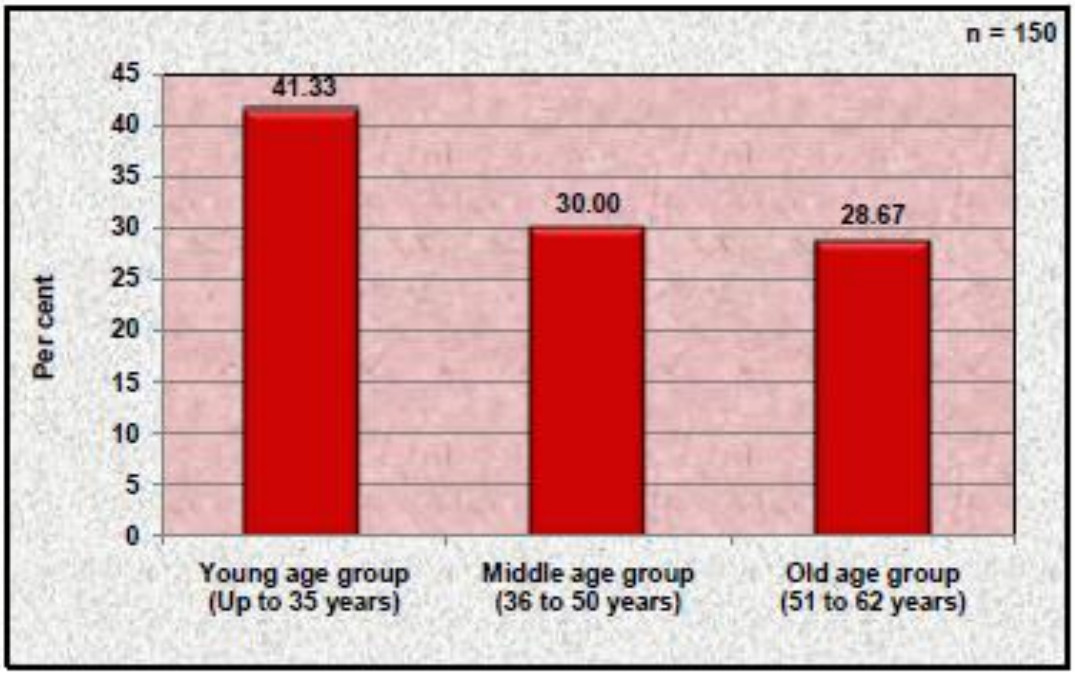


Fig. 4: Distribution of the scientists according to their age

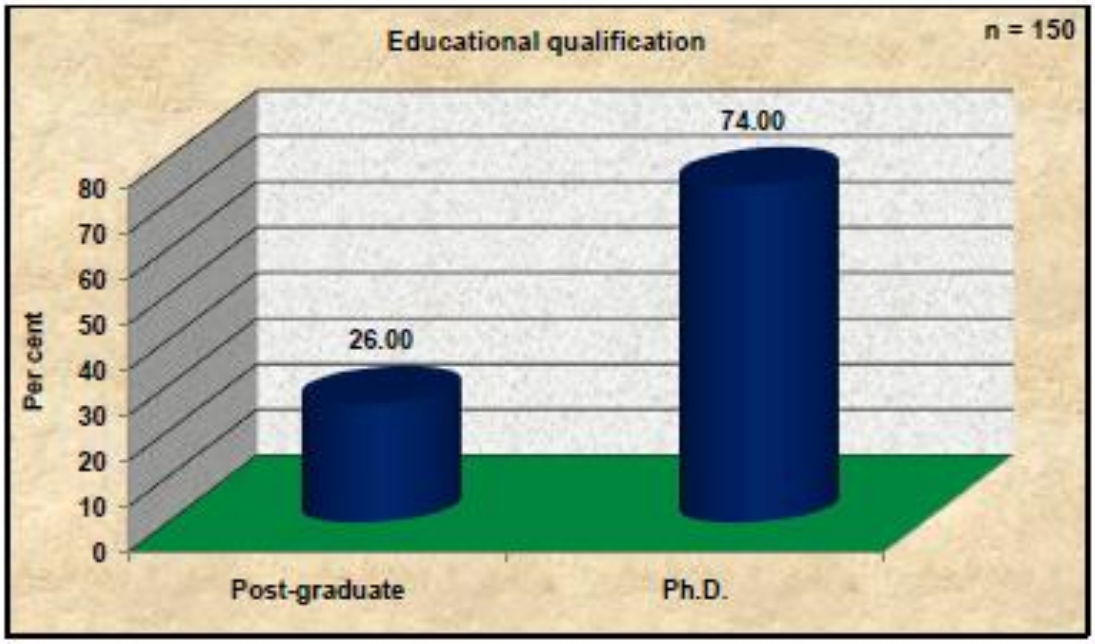


Fig. 5: Distribution of the scientists according to their educational qualification

The findings are in line with the findings of Apage (2002), Tondare *et al.* (2005), Shah (2006), Kiran (2007), Shah (2009) and Lad *et al.* (2013).

5.1.1.3 Native place

It refers to urban or rural birth place of scientists from where they have taken their primary education. The native place of scientists plays an important role on their behavior. Thus, understand the role of this factor on the scientists, information was collected and data with this regard are presented in Table 8 and diagrammatically depicted in Fig. 6.

Table 8: Distribution of the scientists according to their native place

n=150

Sr. No.	Native place	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Rural	42 (46.67)	24 (57.14)	13 (72.22)	79 (52.67)
2.	Urban	48 (53.33)	18 (42.86)	5 (27.78)	71 (47.33)
Total		100.00	100.00	100.00	150 (100.00)

(Figures in parentheses indicate percentage)

A perusal of data presented in Table 8 reveals that slightly more than half (53.33 per cent) of the Assistant Professors had urban native, while remaining 46.67 per cent of them had rural native. In relation to Associate Professors, more than half(57.14 per cent) of them had rural native, whereas remaining 42.86 per cent were belonged to urban native. In context of Professors, majority (72.22 per cent) of them had rural native and remaining 27.78 per cent of them were belonged to urban native.

It can be concluded that a large proportion of the overall scientist were belonged to rural native. The probable reason might be that all the three faculties i.e. teachers, researchers and extension educationists functioning in AAU have been started for the all-round development of rural area and farming community. Thus, before few years, the rural youths were showing more interest to join any of the faculties of AAU for higher education to develop their carrier. This might have played a major role to have rural native among the most of the scientists.

Overall, it can be inferred that slightly more than half (52.67 per cent) of the scientists engaged in teaching, research and extension education activity had rural native, while 47.33 per cent of them were belonged to urban native.

This finding is in line with the findings of Tondare *et al.* (2005) and Patil (2007).

5.1.1.4 Job experience

Job experience refers to total years of past experience of an individual in relation to his job. Experience of an employee is an important socio-personal variable as it helps to make him learn new and new things and teaches him how to move towards perfection. It can also have influential power on behavioral aspects of an individual. With all such considerations, information in relation to experience of the scientists was collected and the results of which are presented in Table 9 and Fig. 7.

The data depicted in the Table 9 indicate that majority (78.89 per cent) of the Assistant Professors had up to 10 years of experience, followed by 12.22 per cent and 8.89 of them with 11 to 20 years and

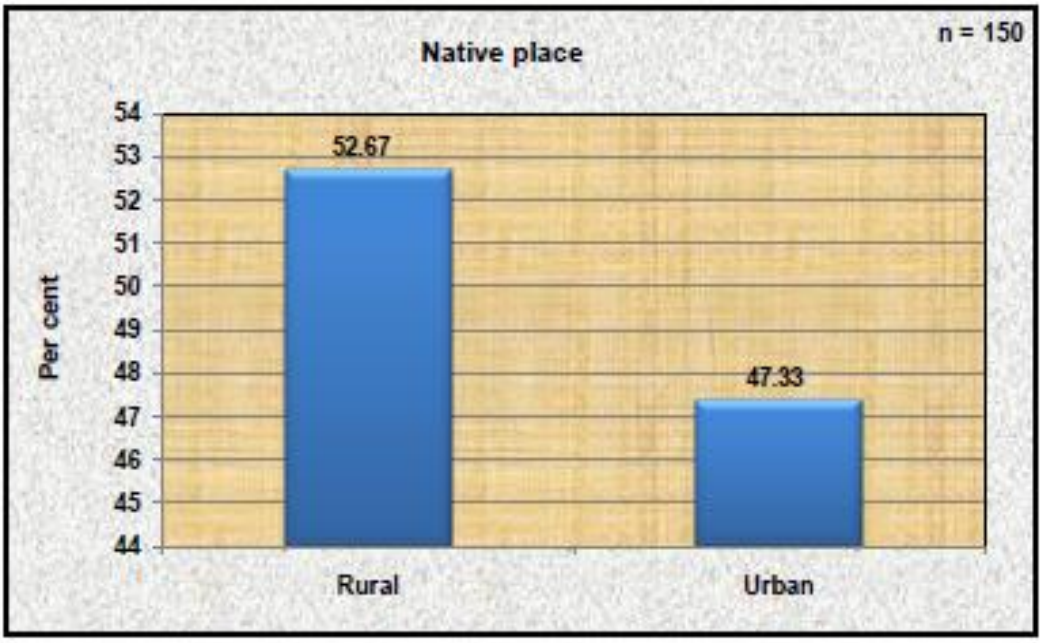


Fig. 6: Distribution of the scientists according to their native place

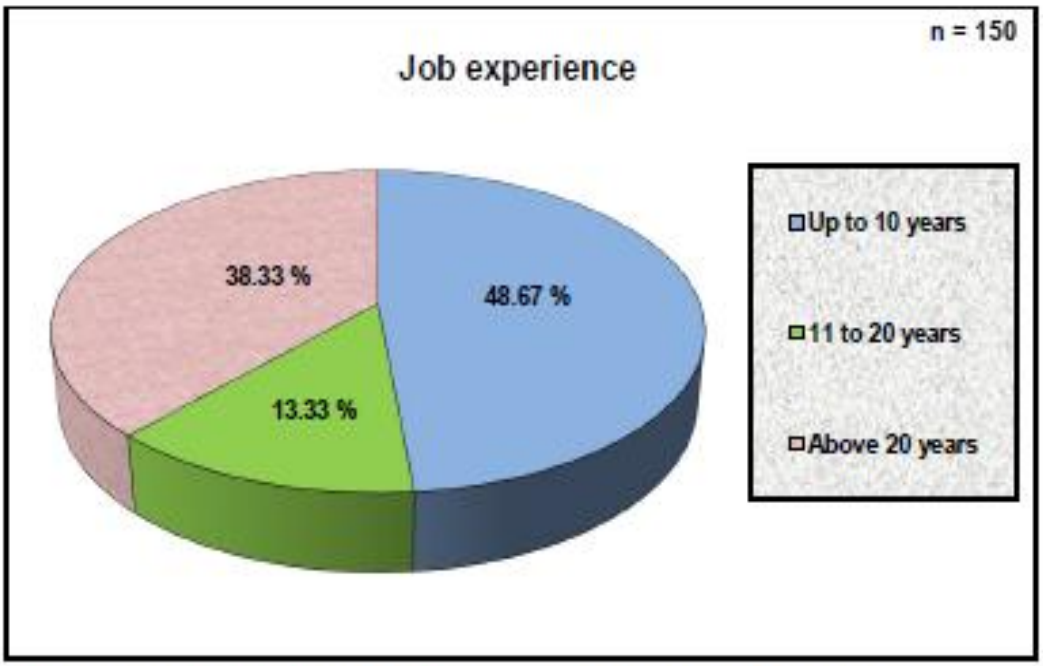


Fig. 7: Distribution of the scientists according to their experience

above 20 years of experience, respectively. In case of Associate Professors, majority (76.19 per cent) of them had above 20 years of experience, followed by 19.05 per cent of them with 11 to 20 years of experience. While only 4.76 per cent with up to 10 years of experience. A look at the Professors, reveals that an overwhelming number (94.44 per cent) of them had experience above 20 years, followed by 5.56 per cent of them had 11 to 20 years of experience and none were possessing up to 10 years of experience.

Table 9: Distribution of the scientists according to their job experience

n=150

Sr. No.	Length of experience	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Up to 10 years	71 (78.89)	2 (4.76)	0 (0.00)	73 (48.67)
2.	11 to 20 years	11 (12.22)	8 (19.05)	1 (5.56)	20 (13.33)
3.	Above 20 years	8 (8.89)	32 (76.19)	17 (94.44)	57 (38.00)
Total		100.00	100.00	100.00	150 (100.00)

(Figures in parentheses indicate percentage)

All in all, it can be concluded that a large proportion (51.33 per cent) of the overall scientists were having more than 10 years of total service experience as a teacher, researcher and extension educationist.

Since Associate Professors and Professors were comparatively older than Assistant Professors, their length of experience was also comparatively more than that of Assistant Professors. The possible reason might be that majority of the scientists being middle to old aged naturally the

total experience gained by them in teaching, research and extension education may be high i.e. more than 10 years.

Similar findings have been reported by Apage (2002), Sukhadia (2005), Tondare *et al.* (2005),Shah (2006) and Sutthianlal (2010).

5.1.1.5 Annual income

It refers to the total amount of rupees earned by scientist in a year from their job. Annual income is an important consideration as now-a day it has become a tendency to judge the things on the basis of monetary output. Hence, it can affect the job related aspects of the employees. Taking this view in mind, the data in relation to annual income were collected and the results of which are presented in Table 10 and diagrammatically depicted in Fig. 8.

Table 10: Distribution of the scientists according to their annual income

n=150

Sr. No.	Annual income	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Up to ₹ 5.00 lakhs	10 (11.11)	0 (0.00)	0 (0.00)	10 (6.67)
2.	₹ 5.01 to ₹7.50 lakhs	70 (77.78)	2 (4.76)	0 (0.00)	72 (48.00)
3.	Above ₹7.50 lakhs	10 (11.11)	40 (95.24)	18 (100.00)	68 (45.33)
Total		100.00	100.00	100.00	150 (100.00)

(Figures in parentheses indicate percentage)

It is evident from Table 10 that majority (77.78 per cent) of the Assistant Professors had ₹ 5.01 to ₹ 7.50 lakhs of annual income, while an equal number (11.11 per cent) of them had up to ₹ 5.00 lakhs and above ₹ 7.50 lakhs of annual income. In context with Associate Professors,

an overwhelming number (95.24 per cent) of them had annual income above ₹ 7.50 lakhs, followed by 4.76 per cent had ₹ 5.01 to ₹ 7.50 lakhs of annual income and none were belonged to up to ₹ 5.00 lakhs of annual income category. In relation to Professors, all of the Professors had annual income above ₹ 7.50 lakhs.

Above discussion inferred that a vast majority (93.33 per cent) of the overall scientists engaged in teaching, research and extension education activity had high economic status, which may be due to the fact that they were engaged in government secure service and possessed higher cadre.

This finding is in consonance with the findings of Tondare *et al.* (2005), Shah (2006), Kiran (2007), Parashar (2009) and Parmar (2009).

5.1.2 JOB RELATED CHARACTERISTICS

5.1.2.1 Job involvement

Job involvement is the degree to which an employee replicates with his job, works actively in his job area and considers his job performance as important thing in order to valorize himself. More involved employees also feel more competent and successful at their work place and believe that their personal and organizational goals are compatible. It is clear that job involvement is one of the most important factors that lead to progress in organizational objectives or goals. Thus, to understand the role of this factor on the scientists, information was collected and data with this regard are presented in Table 11 and diagrammatically depicted in Fig. 9.

It is cleared from the data depicted in Table 11 that almost two-third (65.56 per cent) of the Assistant Professors were belonged to high level of job involvement category, followed by 27.78 per cent of them with medium

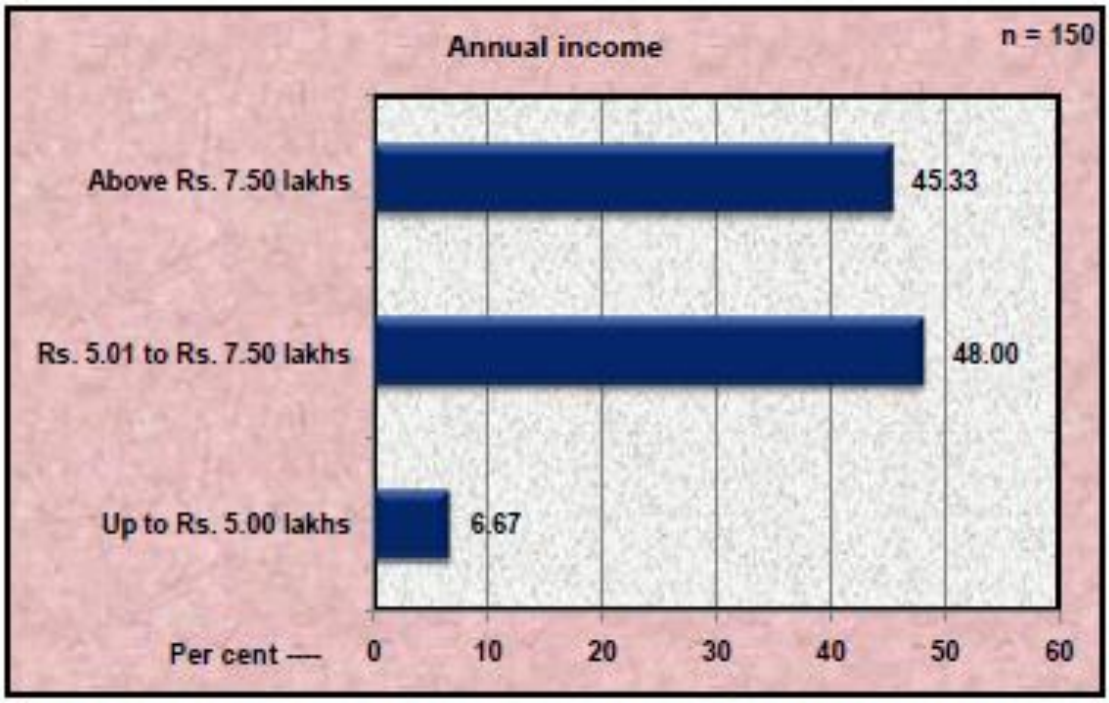


Fig. 8: Distribution of the scientists according to their annual income

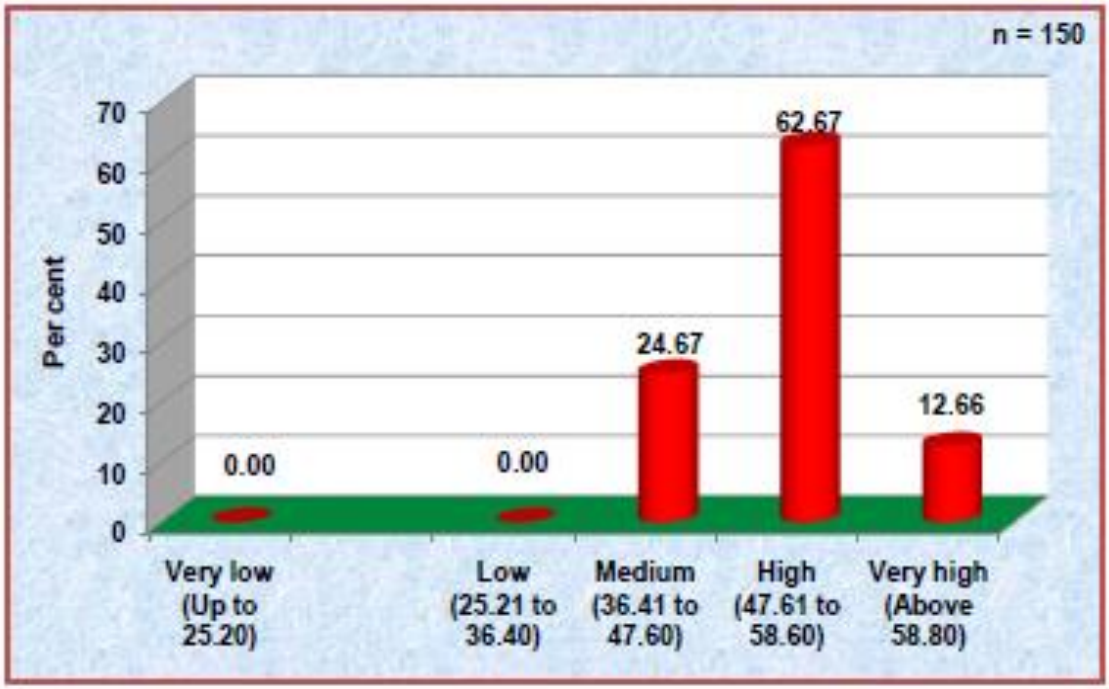


Fig. 9: Distribution of the scientists according to their level of job involvement

level of job involvement and only 6.66 per cent of them had very high level of job involvement. With regards to Associate Professors, slightly more than half (54.76 per cent) of them had high level of job involvement, followed by 23.81 per cent of them with very high level of job involvement and 21.43 per cent of them were belonged to medium level of job involvement category. When looked at the distribution of Professors, it indicates that two-third (66.66 per cent) of them had high level of job involvement, whereas an equal number (16.67 per cent) of them were belonged to medium and very high level category of job involvement.

Table 11: Distribution of the scientists according to their level of job involvement n=150

Sr. No.	Level of Job Involvement	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 25.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [25.21 to 36.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
3.	Medium [36.41 to 47.60]	25 (27.78)	9 (21.43)	3 (16.67)	37 (24.67)
4.	High [47.61 to 58.80]	59 (65.56)	23 (54.76)	12 (66.66)	94 (62.67)
5.	Very high [Above 58.80]	6 (6.66)	10 (23.81)	3 (16.67)	19 (12.66)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

Conclusively in relation to overall scientists, it can be stated that a great majority (87.34 per cent) of the scientists engaged in teaching, research and extension education activity had medium to high level of

job involvement, followed by 12.66 per cent of overall scientist with very high level of job involvement category. While none of them were found in very low to low level category of job involvement.

The possible reason behind these findings might be due to that university authority have started to see the need for effective and efficient management of the human resources of the university system through adequate remuneration of staff, good conditions of service and taking care of staff grievances promptly. Thus a well-managed infrastructural facilities and equipment not only enhances good working conditions but also increases the job involvement of the scientists. These are some motivating factors that can spur scientists to high job involvement and productivity.

The finding gets support from the findings of Manjunath (2004), Pawar (2008) and Lad *et al.* (2013)

5.1.2.2 Job performance

Job performance refers to as the perception of degree of accomplishment of tasks that make up a job. It is cleared that job performance is one of the most important job related variables that leads to progress in organizational objectives and work productivity. Thus, to understand the role of this factor on the scientists, information was collected and data with this regard are presented in Table 12 and diagrammatically depicted in Fig. 10.

The distribution of scientists related to their job performance in Table 12 shows that more than half (55.56 per cent) of the Assistant Professors were belonged to very high level category of job performance, followed by 44.44 per cent of them with high level of job performance.

Table 12: Distribution of the scientists according to their level of job performance n=150

Sr. No.	Level of Job Performance	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 25.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [25.21 to 36.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
3.	Medium [36.41 to 47.60]	0 (0.00)	4 (9.52)	0 (0.00)	4 (2.67)
4.	High [47.61 to 58.80]	40 (44.44)	10 (23.81)	6 (33.33)	56 (37.33)
5.	Very high [Above 58.80]	50 (55.56)	28 (66.67)	12 (66.67)	90 (60.00)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

With regards to Associate Professors, nearly two-third (66.67 per cent) of them had very high level of job performance, followed by 23.81 per cent of them with high level of job performance and only 9.52 per cent of them were found in medium level category of job involvement. When looked at the distribution of Professors, it indicated that nearly two-third (66.67 per cent) of them had very high level of job performance. Whereas, one-third (33.33 per cent) of them were belonged to high level of job performance category.

Conclusively in relation to overall scientists, it can be stated that an overwhelming number (97.33 per cent) of the scientists engaged in teaching, research and extension education activity had high to very high level of job performance, followed by 2.67 per cent of overall scientist with medium

level of job performance. While none of them were belonged to very low and low level category of job performance.

The possible reason behind this might be due to that the university administrators / superiors appreciate the scientists for their job performance and provide adequate recognition to them for their work. It may also be due to that scientists of AAU had high level of involvement in their respective job or activities. Thus a well-managed infrastructural facilities and appreciation from the seniors not only enhanced the job involvement of the scientists but also increased the job performance of the scientists. These may be some motivating factors that can encourage scientists to high job performance and productivity.

This finding is in line with the findings of Shah (2009).

5.1.2.3 Job satisfaction

It is a perception of the scientists in terms of pleasure towards their job. It is more than a simple pleasure or displeasure response and seeing it as a more complex process enhances the sophistication and quality of teaching, research and extension education activity. It was thereby expected that scientists with high degree of job satisfaction has more tendency to perform all those dealings which are precious for him and organizational development. In view of this, the variable job satisfaction was incorporated in the present study to know its function on the scientists' attitude towards organizational climate. The data in regards with job satisfaction from the scientists were collected and the results of which are presented in Table 13 and diagrammatically depicted in Fig. 11.

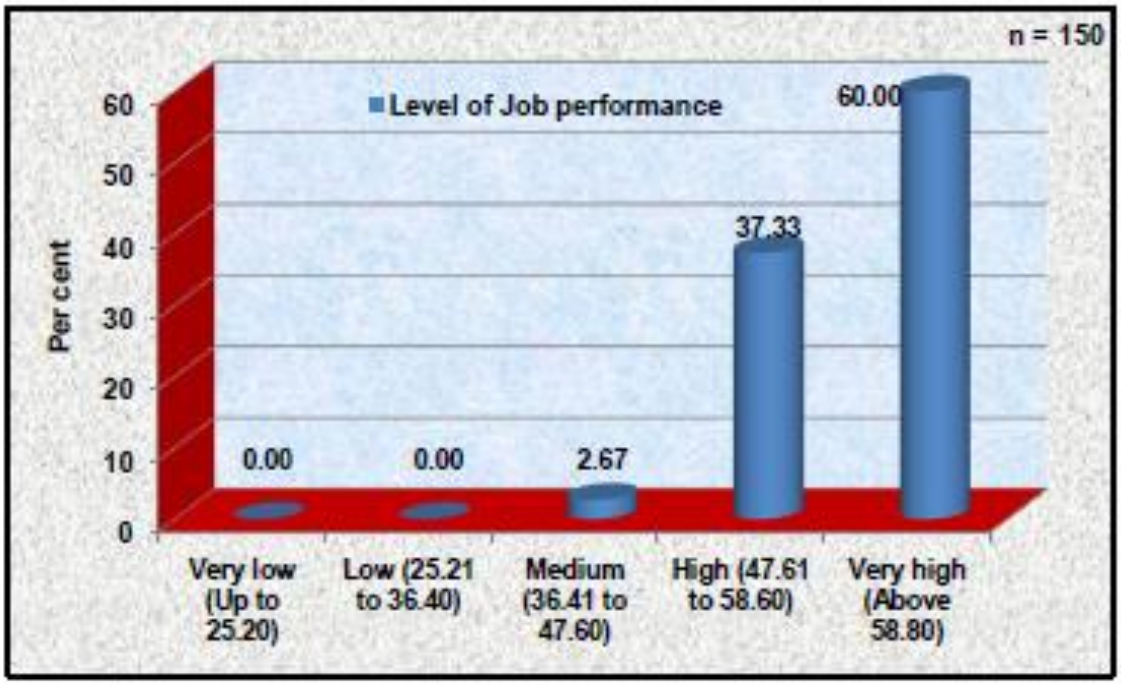


Fig. 10: Distribution of the scientists according to their level of job performance

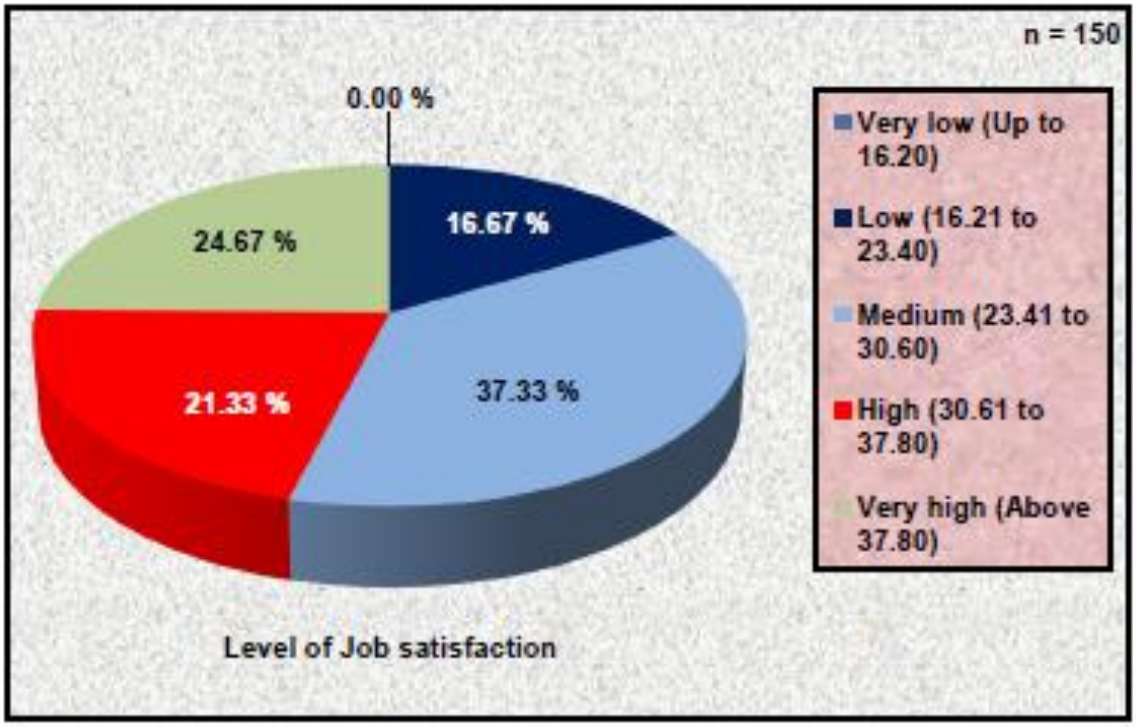


Fig. 11: Distribution of the scientists according to their level of job satisfaction

A look from the data depicted in Table 13 indicates that more than half (54.44 per cent) of the Assistant Professors had job satisfaction at medium level, followed by 25.56 per cent, 11.11 per cent and 8.89 per cent of them with low level, high level and very high level of job satisfaction, respectively.

Table 13: Distribution of the scientists according to their level of job satisfaction n=150

Sr. No.	Level of Job Satisfaction	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 16.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [16.21 to 23.40]	23 (25.56)	2 (4.76)	0 (0.00)	25 (16.67)
3.	Medium [23.41 to 30.60]	49 (54.44)	5 (11.90)	2 (11.11)	56 (37.33)
4.	High [30.61 to 37.80]	10 (11.11)	16 (38.10)	6 (33.33)	32 (21.33)
5.	Very high [Above 37.80]	8 (8.89)	19 (45.24)	10 (55.56)	37 (24.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

When looked at the distribution of Associate Professors, more than two-fifth (45.24 per cent) of them had very high level of job satisfaction, followed by 38.10 per cent, 11.90 per cent and 4.76 per cent of them had high level, medium level and low level of job satisfaction, respectively. In relation to Professors, more than half (55.56 per cent) of them had very high level of satisfaction with their job, followed by 33.33 per cent with high level of job satisfaction. While remaining 11.11 per cent of them were with medium

job satisfaction and none of them were found in low level category of job satisfaction.

Overall, it can be inferred that more than half (58.66 per cent) of the scientists engaged in teaching, research and extension education work had medium to high level of job satisfaction, followed by 24.67 per cent and 16.67 per cent of them had very high and low level of job satisfaction, respectively.

The upper cadre scientists like; Associate Professors and Professors might be happy with different aspects related to job satisfaction such as salary, pension scheme, work opportunity, promotion opportunity, facilities to work, opportunities to participate in training, seminar, conference etc. which might have resulted in their higher job satisfaction. While pervasiveness of despondency for such aspects in the Assistant Professors might be the reason for their low level of job satisfaction. Hence, the present finding is in conformity with the findings of Patel (2009) and partially confirms the finding of Joshi (2009).

5.1.2.4 Job stress

Job stress is the degree to which an employee felts psychological and physical stress or pressure in his / her job. Stress is positive when the situation or working condition offers an opportunity to an employee to gain organizational goal. It acts as a motivator for peak job performance and stress is negative when an employee faces social, physical, organizational and emotional problems at their work place. In view of this, job stress variable was incorporated in the present study to know its function on the scientists' attitude towards organizational climate. The data in

this regards were collected from the scientists and the results of which are presented in Table 14 and diagrammatically depicted in Fig. 12.

The distribution of scientists on job stress in Table 14 shows that exactly half (50.00 per cent) of the Assistant Professors had medium level of job stress, followed by 45.56 per cent of them with low level of job stress and only 4.44 per cent of them had high level of job stress.

Table 14: Distribution of the scientists according to their level of job stress n=150

Sr. No.	Level of Job Stress	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 28.80]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [28.81 to 39.60]	41 (45.56)	22 (52.38)	1 (5.56)	64 (42.67)
3.	Medium [39.61 to 50.40]	45 (50.00)	19 (45.24)	10 (55.55)	74 (49.33)
4.	High [50.41 to 61.20]	4 (4.44)	1 (2.38)	7 (38.89)	12 (8.00)
5.	Very high [Above 61.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

With regards to Associate Professors, slightly more than half (52.38 per cent) of them had low level of job stress, followed by 45.24 per cent of them with medium level of job stress and only 2.38 per cent of them were belonged to high level category of job stress. When looked at the distribution of Professors, it indicated that more than half (55.55 per cent) of them had medium level of job stress, whereas 38.89 per cent of them were

belonged to high level of job stress category and only 5.56 per cent of them had low level of job stress.

Overall, it can be inferred that a vast majority (92.00 per cent) of the scientists engaged in teaching, research and extension education activity were belonged to low to medium level of job stress, followed by 8.00 per cent of overall scientist with high level of job stress category and none of them were found in very low and very high level of job stress in their respective job.

The possible reason behind this might be due to that the majority of the scientists had medium to high level of job satisfaction and they were enjoying their work. But in case of Professors, a large proportion of them had high level of job stress as compared to lower cadre scientists. It might be due to that most of the Professors were holding the position as head of their departments and they were having heavy workload with other responsibilities like; employee management as a leader, tackles employees' relationship well, makes harmony among their subordinates and clarifies their misunderstandings and participation in team activities of department.

Similar findings have been reported by Mohan (2004), Adesope and Agumagu (2003), Manjunath (2004), Mishra (2005) and Sandic (2006).

5.1.3 PSYCHOLOGICAL CHARACTERISTICS

5.1.3.1 Achievement motivation

Achievement motivation of an individual plays a vital role in exerting to achieve the goals which he feels desirable. It helps an employee to attain an inner feeling of personal accomplishment for the sake of personal/social recognition or prestige. The data in this regards were collected

from the scientists were collected and the results of which are presented in Table 15 and diagrammatically depicted in Fig. 13.

Table 15: Distribution of the scientists according to their level of achievement motivation n=150

Sr. No.	Level of Achievement Motivation	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 16.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [16.21 to 23.40]	2 (2.22)	0 (0.00)	0 (0.00)	2 (1.33)
3.	Medium [23.41 to 30.60]	20 (22.22)	11 (26.19)	9 (50.00)	40 (26.67)
4.	High [30.61 to 37.80]	54 (60.00)	27 (64.29)	7 (38.89)	88 (58.67)
5.	Very high [Above 37.80]	14 (15.56)	4 (9.52)	2 (11.11)	20 (13.33)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

The perusal of data presented in Table 15 reveals that slightly less than two-third (60.00 per cent) of the Assistant Professors had high level of achievement motivation, whereas slightly less than one-fourth (22.22 per cent) of them had medium level of achievement motivation and 15.56 per cent of them were belonged to very high level category of achievement motivation. In case of Associate Professors, slightly less than two-third (64.29 per cent) of them had high level of achievement motivation, followed by 26.19 per cent and 9.52 per cent of them had medium and very high level of achievement motivation, respectively. In respect of Professors, exactly half (50.00 per cent) of them had medium level of

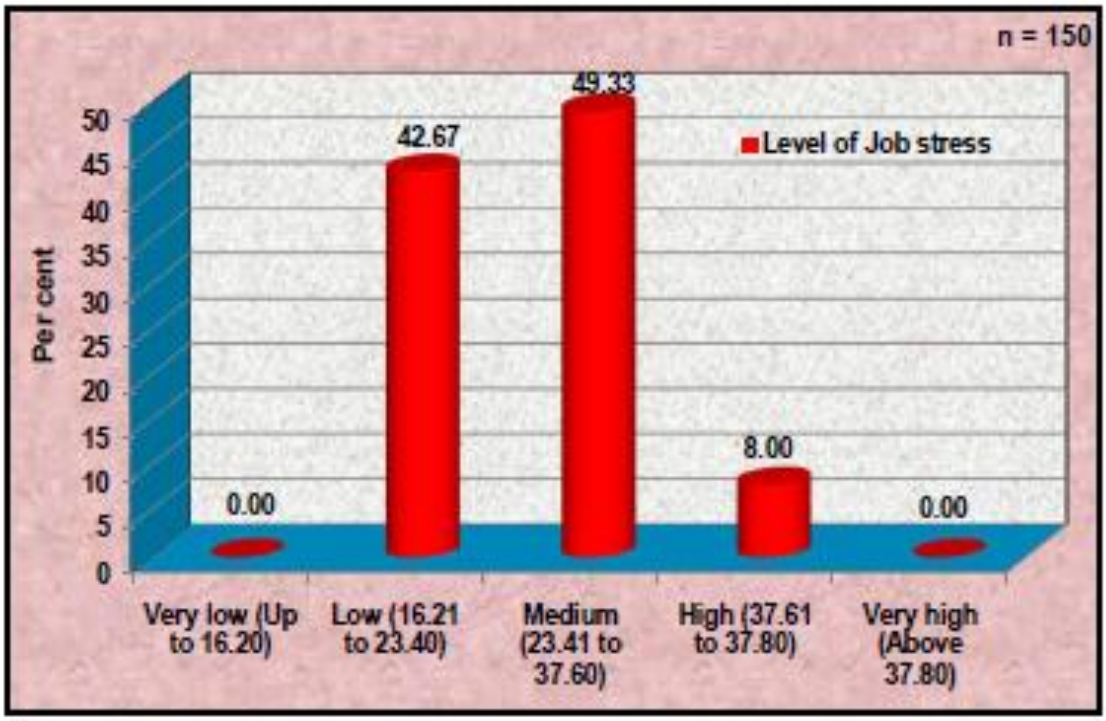


Fig. 12: Distribution of the scientists according to their level of job stress

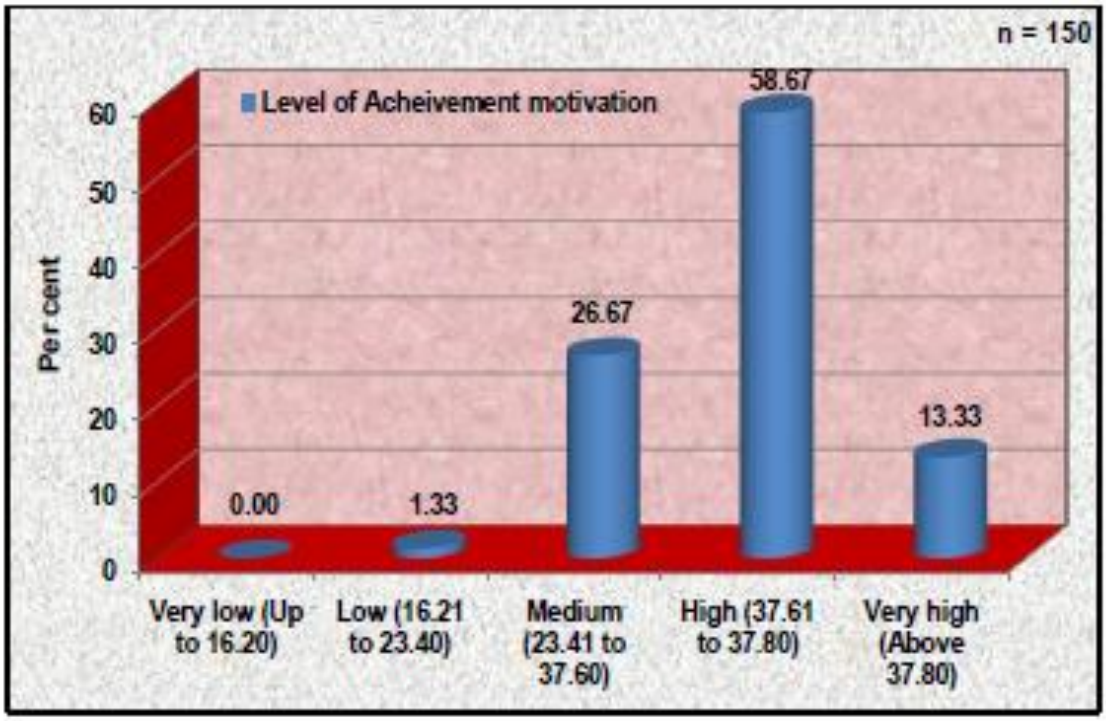


Fig. 13: Distribution of the scientists according to their level of achievement motivation

achievement motivation, while 38.89 per cent and 11.11 per cent were belonged to high and very high level of achievement motivation, respectively. Except 2.22 per cent of the Assistant Professors, not a single Associate Professor and Professor were belonged to low level category of achievement motivation.

The overall results indicated that a great majority (85.34 per cent) of the scientists engaged in teaching, research and extension education activity had medium to high level of achievement motivation, followed by 13.33 per cent of overall scientist with very high level of achievement motivation. While, remaining 1.33 per cent of the scientists were belonged to low level of achievement motivation category and none of them had very low level of achievement motivation.

The possible reason behind this might be due to that the Professors might not have to achieve more as they attained their destination, while for the Assistant Professors and Associate Professors there is agreat hope for further promotions, increments and advancement of their career. This might be the reason why they showed higher level of achievement motivation as compared to Professors. This finding is in consonance with those reported by Patel (2006).

5.1.3.1 Attitude towards job

Attitude of a person is the degree of his positive or negative feelings associated with any object or thing and thus it plays an important role in determining his behaviour. For scientists of Anand Agricultural University of Gujarat, it is worth to know their attitude towards their respective job viz. teaching, research and extension education. With this objective in mind,

the data related to attitude of the scientists towards working pattern of the university were collected and are presented in Table 16 and diagrammatically depicted in Fig.14.

The depiction of data in Table 16 indicates that slightly less than half (47.78 per cent) of the Assistant Professors had positive attitude towards their job, followed by 36.66 per cent of them with highly positive attitude, while 15.56 per cent of them had neutral and none of them were having in highly negative to negative attitude towards their job.

Table 16: Distribution of the scientists according to their attitude towards job n=150

Sr. No.	Attitude towards Job	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Highly negative [Up to 14.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Negative [14.41 to 20.80]	0 (0.00)	1 (2.38)	0 (0.00)	1 (0.67)
3.	Neutral [20.81 to 27.20]	14 (15.56)	8 (19.05)	0 (0.00)	22 (14.67)
4.	Positive [27.21 to 33.60]	43 (47.78)	17 (40.48)	8 (44.44)	68 (45.33)
5.	Highly positive [Above 33.60]	33 (36.66)	16 (38.09)	10 (55.56)	59 (39.33)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

With regards to Associate Professors, two-fifth (40.48 per cent) of them had positive attitude, followed by 38.09 per cent had highly positive attitude towards their job. While, 19.05 per cent and 2.38 per cent of them were having neutral and negative attitude towards their job, respectively.

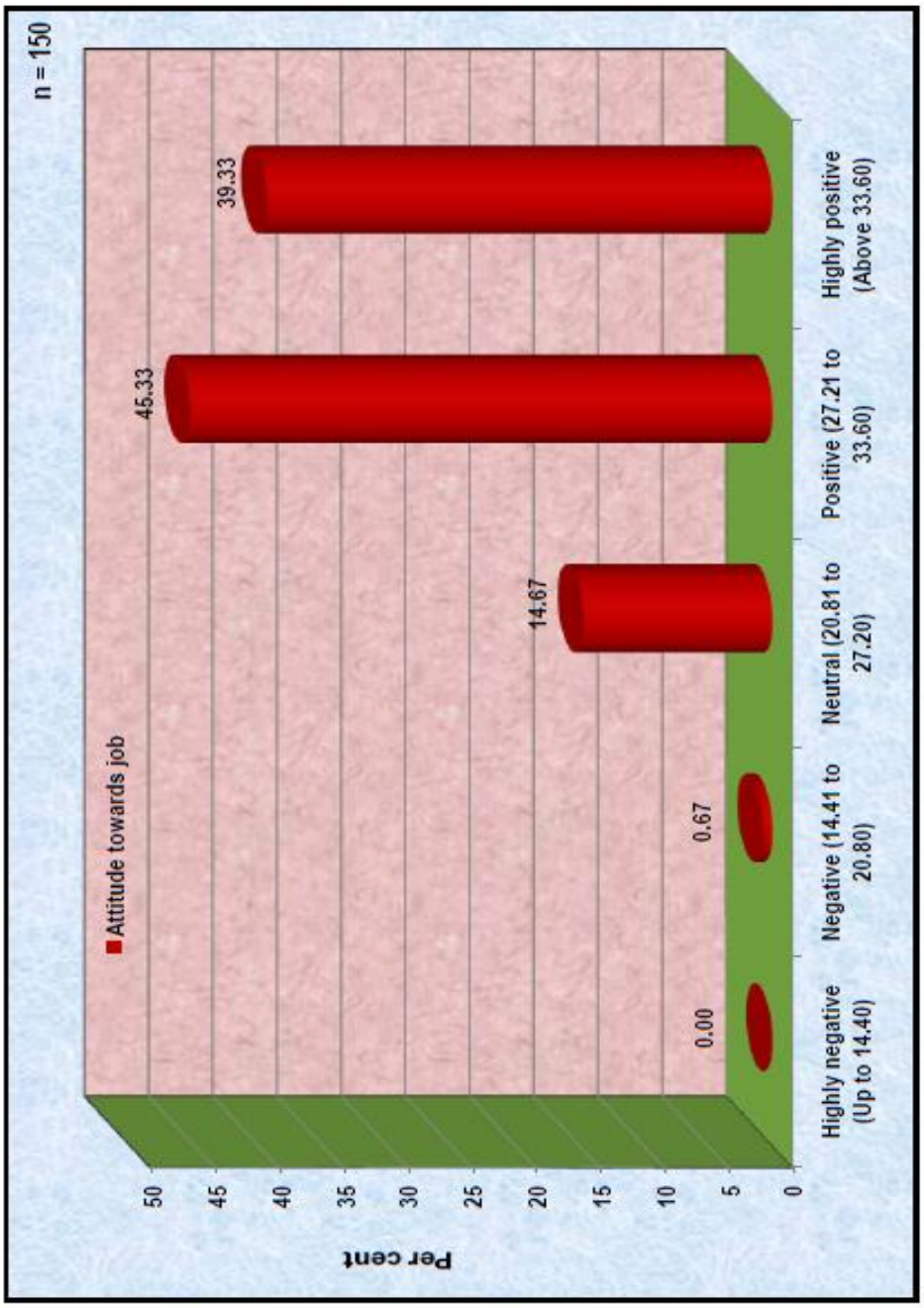


Fig. 14: Distribution of the scientists according to their attitude towards job

In respect of Professors, more than half (55.56 per cent) of them had highly positive attitude towards their job, followed by 44.44 per cent of them with positive attitude and none of them had highly negative, negative and neutral attitude towards their job activities in respective field viz. teaching, research and extension education.

Conclusively in relation to overall scientists, it can be stated that a great majority (84.66 per cent) of the scientists engaged in teaching, research and extension education activity had positive to highly positive attitude towards their job, while 14.67 per cent and 0.67 per cent fell in the category of neutral and negative attitude towards their job, respectively.

This may be because of the placement of scientists by university authority was done based on their liking and capability in respective field viz. teaching, research and extension education.

This finding is in conformity with the findings of Kiran (2007) and Lad et al. (2013).

5.2 PERCEPTION OF THE SCIENTISTS ABOUT ORGANIZATIONAL CLIMATE

An organization is a group of people who work together to achieve a common goal. Climate has been described as an experientially based description of the work environment more specifically, employees' perceptions of the formal and informal policies, practices and procedures in their organization. So, organizational climate refers to the perception of an employee about his work place, facilities, co-workers etc. This variable was divided into seven components *viz.*, organizational design, trust, leadership, communication, culture, teamwork and motivation.

5.2.1 Organizational design

It is the arrangement of workspace so that work can be performed in the most efficient way. The efficient organizational design has a positive effect on employees' performance, work productivity and their satisfaction about job. In view of this, organizational design was incorporated in the present study as a component of organizational climate to know its function on the scientists' perception towards organizational climate. The data in this regard were collected and the results of which are presented in Table 17 and diagrammatically depicted in Fig. 15.

Table 17: Distribution of the scientists according to their perception about organizational design n=150

Sr. No.	Organizational Design	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Most unfavourable[Up to 10.80]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Unfavourable [10.81 to 15.60]	5 (5.56)	0 (0.00)	0 (0.00)	5 (3.33)
3.	Neutral [15.61 to 20.40]	3 (3.33)	5 (11.90)	0 (0.00)	8 (5.33)
4.	Favourable [20.41 to 25.20]	37 (41.11)	15 (35.72)	9 (50.00)	61 (40.67)
5.	Most favourable [Above 25.20]	45 (50.00)	22 (52.38)	9 (50.00)	76 (50.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

A look from the data depicted in Table 17 indicates that exactly half (50.00 per cent) of the Assistant Professors had most favourable

perception about organizational design, followed by 41.11 per cent, 5.56 per cent and 3.33 per cent of them with favourable, unfavourable and neutral perception, respectively. While, none of the Assistant Professors had most unfavourable perception about organizational design. When looked at the distribution of Associate Professors, slightly more than half (52.38 per cent) of them had most favourable perception about organizational design, followed by slightly less than two-fifth (35.72 per cent) of them had favourable perception and 11.90 per cent of them had neutral perception about organizational design. Whereas, none of them were found in most unfavourable and unfavourable perception category. In relation to Professors, an equal proportion (50.00 per cent) of them had most favourable and favourable perception about organizational design, while none of them were found in most unfavourable, unfavourable and neutral perception category.

The overall results indicated that slightly more than half (50.67 per cent) of the scientists engaged in teaching, research and extension education activity had most favourable perception about organizational design, followed by 40.67 per cent of overall scientist with favourable perception about organizational design. While remaining 5.33 per cent of the overall scientists were having neutral perception and only 3.33 per cent of them had unfavorable perception about organizational design.

The possible reason behind this might be that the organizations' structure, infrastructure facilities and arrangement of workspace were better to perform their work in efficient way. It has positive impact on scientist's performance and their work productivity resulted in most favourable

perception about organizational design. This finding is in line with the findings of Fauziah *et al.* (2010).

5.2.2 Trust

Trust is a feeling which develops slowly. It is the mutual understanding between subordinates and superiors with respect to their honesty and openness. Openness of an organization can help to build trust in the mind of employees. Trust within the employees' to the superiors and superiors' trust on employees results in high level of empathy, coordination among staff members, friendly and disciplined atmosphere and higher productivity of work. This kind of atmosphere also reduces the stress. With all such considerations, trust as a component of organizational climate was incorporated in the present study to know its impact on the scientists' perception towards organizational climate. The data in this regards were collected and the results of which are presented in Table 18 and diagrammatically depicted in Fig. 16.

The perusal of data presented in Table 18 reveals that within the organization exactly four-fifth (80.00 per cent) of the Assistant Professors had high to very high level of trust on superiors and their colleagues, whereas 14.44 per cent of them had medium level of trust and only 5.56 per cent of them were belonged to low level category of trust. In case of Associate Professors, a great majority (83.34 per cent) of them had high to very high level of trust, followed by 11.90 per cent and 4.76 per cent of them were with low and medium level of trust on their sub-ordinates, colleagues and superiors, respectively. In respect of Professors, more than half (55.56 per cent) of them had very high level of trust, followed by

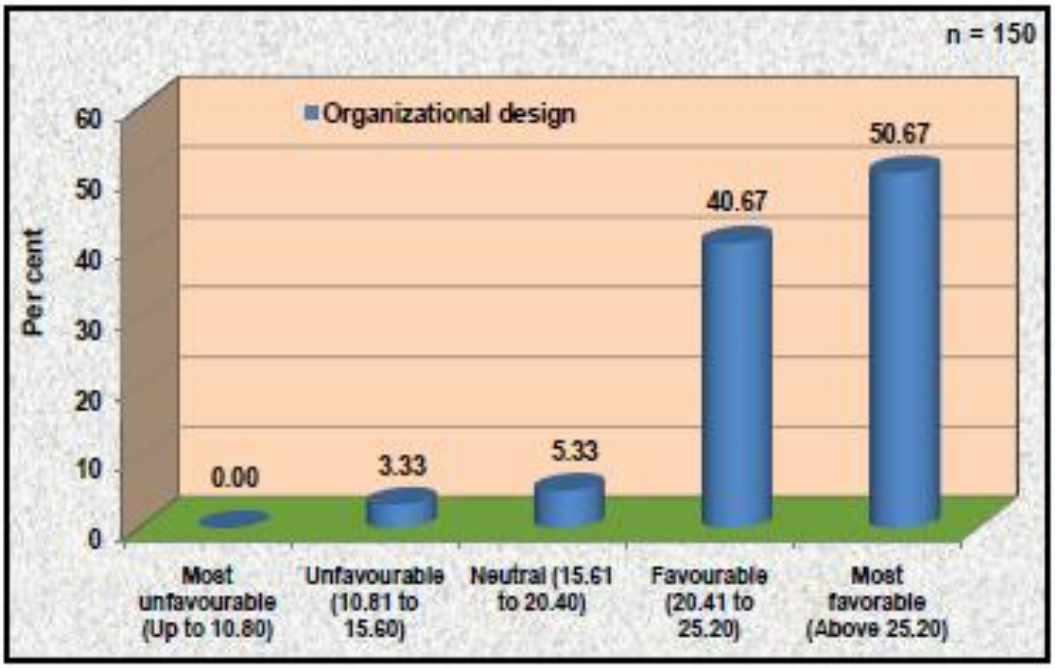


Fig. 15: Distribution of the scientists according to their perception about organizational design

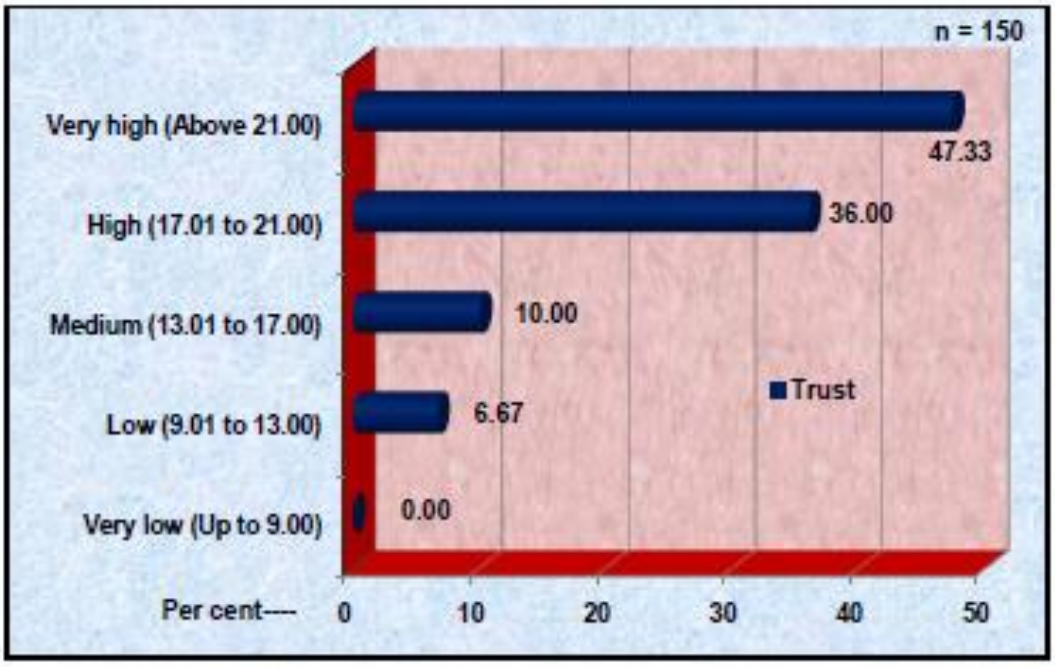


Fig. 16: Distribution of the scientists according to their perception about trust

44.44 per cent of them were having high level of trust within the organization and none of them were found in very low, low and medium level category of trust .

Table 18: Distribution of the scientists according to their perception about trust n=150

Sr. No.	Level of Trust	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 9.00]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [9.01 to 13.00]	5 (5.56)	5 (11.90)	0 (0.00)	10 (6.67)
3.	Medium [13.01 to 17.00]	13 (14.44)	2 (4.76)	0 (0.00)	15 (10.00)
4.	High [17.01 to 21.00]	28 (31.11)	18 (42.86)	8 (44.44)	54 (36.00)
5.	Very high [Above 21.00]	44 (48.89)	17 (40.48)	10 (55.56)	71 (47.33)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

All in all, it can be concluded that a great majority (83.33 per cent) of the overall scientists engaged in teaching, research and extension education activity had high to very high level of trust on their staff and university authority, followed by 10.00 per cent of overall scientists had medium level of trust. While, remaining 6.67 per cent of the overall scientists were having low level category of trust and none of them had very low level of trust within the organization.

The probable reason behind this might be due to that the overall scientists of Anand Agricultural University perceived that their work

environment is very energetic, supportive, motivating, comfortable and productive. Moreover, the high level of job satisfaction and low level of stress within the organization might have resulted in high level of trust among staff members. Its means an organization obviously can't succeed without high level of trust between the subordinates and their superiors. The finding gets support from the findings of Castro (2008).

5.2.3 Leadership

Management of human resources within the organization involves several important and complex issues in the form of multidimensional reactions involving employees' perception towards organizational climate, organizational culture, communication system and leadership systems.

The work productivity of an employee increases under both authoritarian and democratic leadership style, but employee feels comfortable in democratic style of leadership. It is cleared that leadership is one of the most important components that leads to the progress and productivity of an organization. Thus to understand the role of this component on the scientists, information was collected and data with regard to leadership are presented in Table 19 and diagrammatically depicted in Fig. 17.

The data depicted in Table 18 shows that more than half (55.56 per cent) of the Assistant Professors perceived their superiors' leadership skill as very good, while 35.56 per cent perceived it as at good level and an equal number (4.44 per cent) of them had poor and average perception about their superiors' leadership skill. With regards to Associate Professors, nearly one-half (47.62 per cent) of them has perceived their superiors' leadership skill as very good, whereas 35.71 per cent and

16.67 per cent of them were having good and average perception about their superiors' leadership skill, respectively.

Table 19: Distribution of the scientists according to their perception about leadership n=150

Sr. No.	Perception about Leadership	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very poor [Up to 18.00]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Poor [18.01 to 26.00]	4 (4.44)	0 (0.00)	0 (0.00)	4 (2.67)
3.	Average [26.01 to 34.00]	4 (4.44)	7 (16.67)	0 (0.00)	11 (7.33)
4.	Good [34.01 to 42.00]	32 (35.56)	15 (35.71)	6 (33.33)	53 (35.33)
5.	Very good [Above 42.00]	50 (55.56)	20 (47.62)	12 (66.67)	82 (54.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

In context with Professors, nearly two-third(66.67 per cent) of them had very good perception about their superiors' leadership skill, followed by 33.33 per cent of them were with good perception about their superiors' leadership skill and none were found in very poor, poor and average category of perception.

Overall, it can be said that an overwhelming number (90.00 per cent) of the scientists working as a teacher, researcher and extension education worker in the university had good to very good perception about their superiors' leadership skill, while 7.33 per cent and 2.67 per cent of them had perceived their superiors' leadership skill as an average and poor level, respectively.

The superiority of the university was capable to influence and encourage their subordinates to achieve particular organizational goal, which increases we-feelings among subordinate. It has positive impact on scientists' performance and their work productivity. It might be a reason for their good perception about their superiors' leadership skill.

This finding is in conformity with the findings of Chandargi and Sundarswamy (1999), Bhole (2002), Castro (2008) and Fauziah *et al.* (2010).

5.2.4 Communication

Communication refers to evoking of a shared or common meaning in another person. In an organizational, communication occurs between members of different hierarchical positions. Superior-subordinate communication refers to the interactions between organizational leaders and their subordinates and how they work together to achieve personal and organizational goals. Hence, satisfactory upward and downward communication is essential for a successful organization because it closes the gap between superior and subordinates by increasing the levels of trust and the frequency of their interactions. The data in this respect are presented in the Tables 20 and diagrammatically depicted in Fig. 18.

As it is obvious from the Table 20, that slightly more than four-fifth (82.23 per cent) of the Assistant Professors had good to very good level of overall communication, followed by 15.55 per cent and 2.22 per cent were having average and poor level of communication with their superiors and colleagues, respectively. With regards to Associate Professors, slightly more than two-fifth (42.86 per cent) of them had good level of overall communication, followed by 38.89 per cent and 19.05 per cent of them

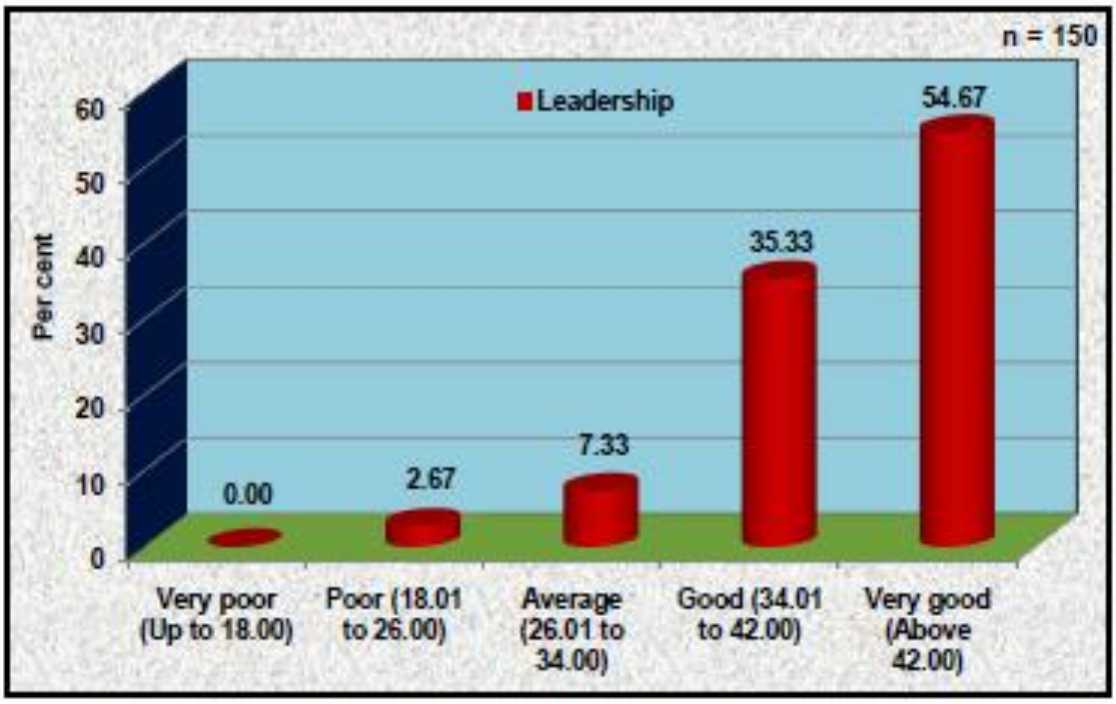


Fig. 17: Distribution of the scientists according to their perception about leadership

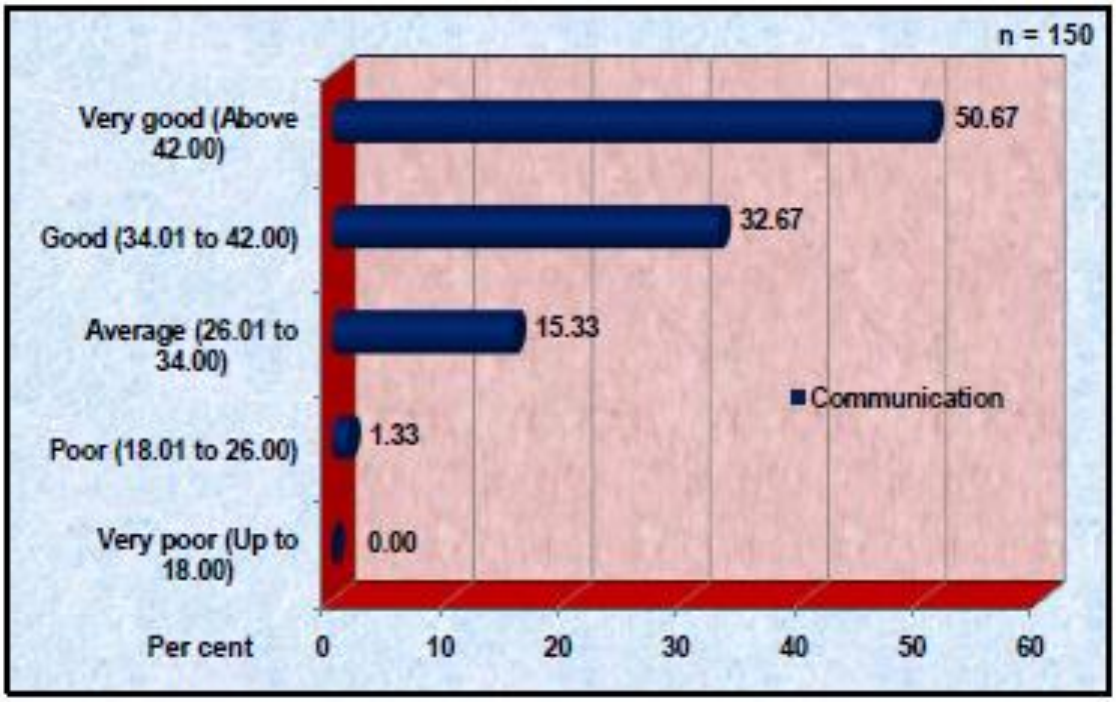


Fig. 18: Distribution of the scientists according to their perception about communication

had very good and average level of overall communication with their subordinates, colleagues and superiors, respectively. While none of them were found in very poor and poor level of category communication.

Table 20: Distribution of the scientists according to their perception about communication n=150

Sr. No.	Level of Communication	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very poor [Up to 18.00]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Poor [18.01 to 26.00]	2 (2.22)	0 (0.00)	0 (0.00)	2 (1.33)
3.	Average [26.01 to 34.00]	14 (15.55)	8 (19.05)	1 (5.55)	23 (15.33)
4.	Good [34.01 to 42.00]	24 (26.67)	18 (42.86)	7 (38.89)	49 (32.67)
5.	Very good [Above 42.00]	50 (55.56)	16 (38.09)	10 (55.56)	76 (50.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

In case of Professors, an overwhelming number (94.45 per cent) of them had good to very good level of overall communication, while only 5.55 per cent of them were with average level of communication and none of them were found in very poor and poor level category of communication.

Overall, it can be concluded that a vast majority (83.34 per cent) of the overall scientists of Anand Agricultural University engaged in teaching, research and extension education had good to very good level of overall communication. This finding gets partial support from the findings of Patel (2001), Rao (2004), Raut (2006) and Castro (2008).

5.2.5 Organizational culture

Organizational culture provides a framework with respect to the behavior of employees in their workplace. An organizational culture where employees are considered an integral part of the growth process of the organization fosters employee commitment towards the organization. Employees' involvement in a bureaucratic organizational culture results in the lowest level of job satisfaction and organizational commitment. Organizational cultures can have varying impact on employees' performance and motivation levels. With all such considerations, information with regard to impact of organizational culture on the scientists was collected and the results of which are presented in Table 21 and diagrammatically depicted in Fig. 19.

A look from the data depicted in Table 21 indicates that nearly two-third (66.67 per cent) of the Assistant Professors had most favourable perception about organizational culture, followed by 21.11 per cent and 8.89 per cent of them were with favourable and neutral perception, respectively. While, only 3.33 per cent of Assistant Professors had unfavourable perception about organizational culture. When looked at the distribution of Associate Professors, slightly less than half (47.62 per cent) of them had favourable perception about organizational culture, while slightly more than two-fifth (40.48 per cent) of them had most favourable perception and remaining 11.90 per cent of them had neutral perception about organizational culture. None of them were found in most unfavourable and unfavourable perception category. In relation to Professors, slightly more than three-fourth (77.78 per cent) of them had most favourable perception about organizational culture, followed by 22.22 per cent of them were with

favourable perception. While none of them were found in most unfavourable, unfavourable and neutral perception category.

Table 21: Distribution of the scientists according to their perception about organizational culture n=150

Sr. No.	Perception about Organizational culture	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Most unfavourable [Up to 7.20]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Unfavourable [7.21 to 10.40]	3 (3.33)	0 (0.00)	0 (0.00)	3 (2.00)
3.	Neutral [10.41 to 13.60]	8 (8.89)	5 (11.90)	0 (0.00)	13 (8.67)
4.	Favourable [13.61 to 16.80]	19 (21.11)	20 (47.62)	4 (22.22)	43 (28.67)
5.	Most favourable [Above 16.80]	60 (66.67)	17 (40.48)	14 (77.78)	91 (60.66)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

Minute observation reveals that a great majority(89.33 per cent) of overall scientists engaged in teaching, research and extension education activity had favourable to most favourable perception about their organizational culture, followed by 8.67 per cent and 2.00 per cent of them with neutral and unfavourable perception, respectively.

The pattern of basic assumption was taught to new members of the organization by their superiors, which provides a framework with respect to the behaviour of employees in their work place. It has positive impact on scientists' performance and their commitment towards organization. This might be a reason for their most favourable perception about organizational culture.

5.2.6 Teamwork

It is a well known fact that teamwork is not only the foundation of all successful managements, but the means of improving overall results in organizational work productivity. As such teamwork is the best tool which can be used in helping employees to achieve the organizational work productivity. In view of this, teamwork was incorporated in the present study as a component of organizational climate to know its function on the scientists' perception towards organizational climate. The data with this regards were collected from the scientists and the results of which are presented in Table 22 and diagrammatically depicted in Fig. 20.

Table 22: Distribution of the scientists according to their perception about teamwork n=150

Sr. No.	Level of Teamwork	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very poor [Up to 14.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Poor [14.41 to 20.80]	2 (2.22)	1 (2.38)	0 (0.00)	3 (2.00)
3.	Average [20.81 to 27.20]	14 (15.56)	5 (11.90)	0 (0.00)	19 (12.67)
4.	Good [27.21 to 33.60]	32 (35.56)	17 (40.48)	9 (50.00)	58 (38.67)
5.	Very good [Above 33.60]	42 (46.66)	19 (45.24)	9 (50.00)	70 (46.66)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

The perusal of data presented in Table 22 reveals that within the organization more than two-fifth (46.66 per cent) of the Assistant

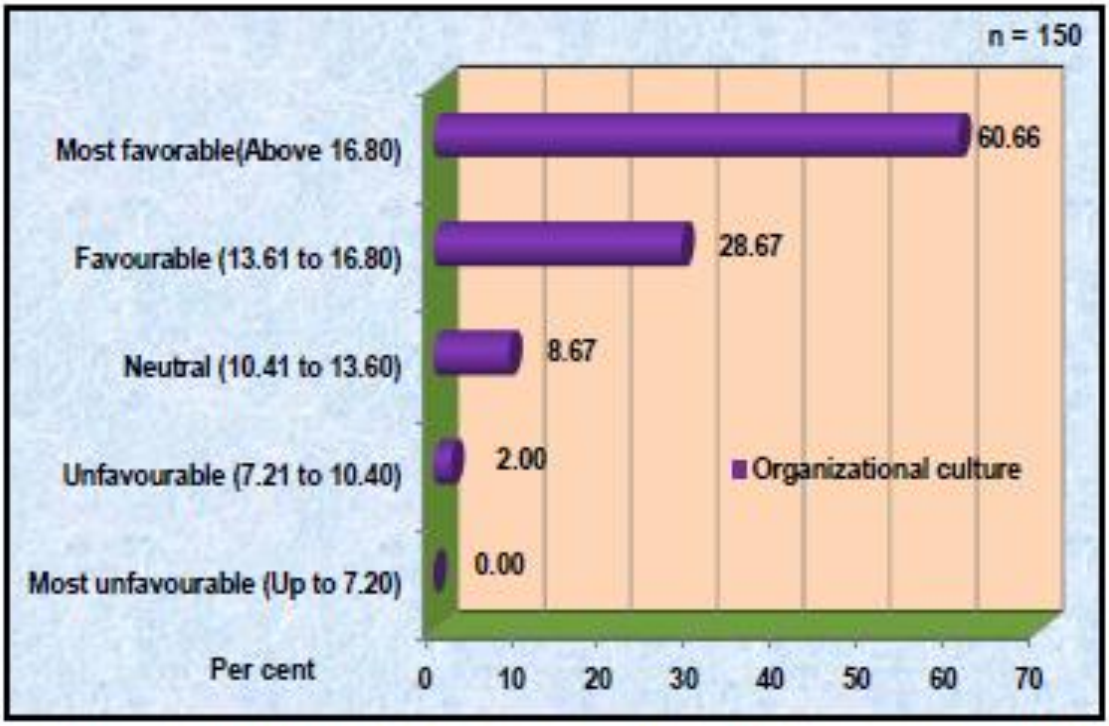


Fig. 19: Distribution of the scientists according to their perception about organizational culture

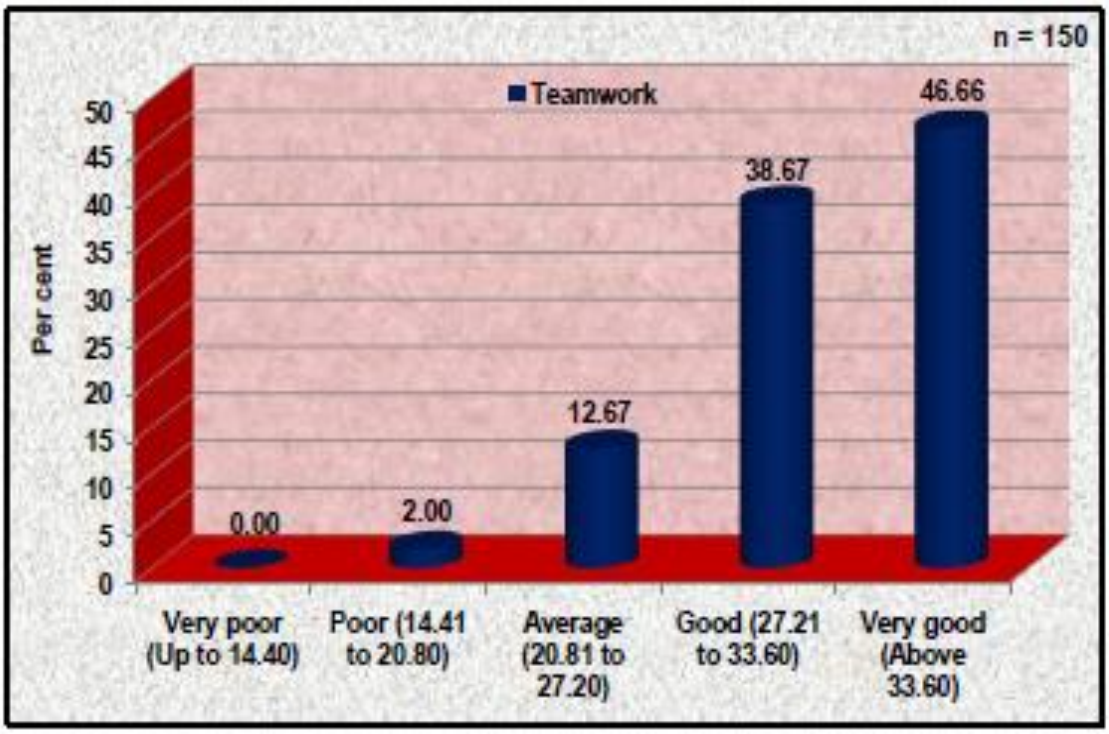


Fig. 20: Distribution of the scientists according to their perception about teamwork

Professors perceived teamwork on very good level, whereas 35.56 per cent and 15.56 per cent of them perceived it as good and average level, respectively. Only 2.22 per cent of them perceived that teamwork within the organization was poor. In case of Associate Professors, a great majority (85.72 per cent) of them perceived teamwork within the organization as good to very good level, followed by 11.90 per cent and 2.38 per cent of them with average and poor level of teamwork within the organization, respectively. In respect of Professors, an equal number (50.00 per cent) of them perceived teamwork within the organization as good to very good level and none of them were found in very poor, poor and average level category of teamwork.

All in all, it can be inferred that a great majority (85.33 per cent) of the overall scientists engaged in teaching, research and extension education activity perceived that teamwork within the organization was good to very good level, followed by 12.67 per cent of overall scientist with average perception about teamwork. While, remaining 2.00 per cent of the overall scientists were perceived that teamwork was on poor level and none of them were perceived it on very poor level.

The probable reason behind this might be due to that the success of organization to coordinate works into work groups and leadership style of the organization possibly most favorable to teamwork. It may also be due to that the presence of designing motivational programs, educational growth, increments and job rotation. Its mean an organization obviously can't succeed without high level of teamwork with coordination between the subordinates and their superiors. This finding gets partial support from the finding of Fauziah *et al.* (2010).

5.2.7 Motivation

Motivation plays an important role in all public and private organizations, without motivating their employees organizations can't run and can't achieve their goals. In view of this, motivation was incorporated in the present study as a component of organizational climate, to know its function on the scientists' perception towards organizational climate. The data in regards with motivation from the scientists were collected and the results of which are presented in Table 23 and diagrammatically depicted in Fig. 21.

Table 23: Distribution of the scientists according to their perception about motivation n=150

Sr. No.	Level of Motivation	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 9.00]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [9.01 to 13.00]	5 (5.56)	0 (0.00)	0 (0.00)	5 (3.33)
3.	Medium [13.01 to 17.00]	7 (7.78)	8 (19.05)	2 (11.11)	17 (11.33)
4.	High [17.01 to 21.00]	31 (34.44)	13 (30.95)	8 (44.44)	52 (34.67)
5.	Very high [Above 21.00]	47 (52.22)	21 (50.00)	8 (44.44)	76 (50.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

As it is obvious from the Table 23, that slightly more than half (52.22 per cent) of the Assistant Professors were very highly motivated, followed by 34.44 per cent of them were highly motivated from their superiors. While, within the organization 7.78 per cent and 5.56 per cent were having medium and low level of motivation from their superiors, respectively.

With regards to Associate Professors, exactly half (50.00 per cent) of them had very high level of motivation, followed by 30.95 per cent of them were highly motivated from their superiors and 19.05 per cent of them were belonged to medium level category of motivation. While, none of them were found in very low and low level category of motivation. In case of Professors, an equal number (44.44 per cent) of them had high to very high level of motivation. While, remaining 11.11 per cent of them were with medium level of motivation and none of them were found in very low and low level category of motivation.

Minute observation reveals that a great majority (85.34 per cent) of the overall scientists of Anand Agricultural University engaged in teaching, research and extension education activity had high to very high level of motivation from their superiors, followed by 11.33 per cent and 3.33 per cent of overall scientists were belonged to medium and low level category of motivation, respectively.

Within the organization subordinates were motivated by their superiors or higher authority which activates their behaviour and gives direction to achieve organizational goal in energetic way. It has positive impact on scientists' performance and their work productivity. This might be a reason for their higher level of perception about motivation.

5.2.8 Overall perception of the scientists about organizational climate

Organizational climate is a measure of the feel about the internal environment of an organization which is perceived by an outsider and/or an employee according to working pattern of the organization. Organizational

climate has a great impact on employees' behavior. If the climate of an organization is open and friendly then employees feels comfortable and if it is very formal then such a comfort level may not be felt. With all such considerations, information with regard impact of organizational climate on the scientists was collected and the results of which are presented in Table 24 and diagrammatically depicted in Fig. 22.

It is evident from the data depicted in Table 24 indicates that more than half (57.78 per cent) of the Assistant Professors had most favourable overall perception about their organizational climate, followed by 31.11 per cent and 6.67 per cent of them were with favourable and neutral perception, respectively. While, only 4.44 per cent of Assistant Professors had unfavourable perception about their organizational climate.

Table 24: Distribution of the scientists according to their overall perception about organizational climate n=150

Sr. No.	Organizational climate perception	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Most unfavourable [Up to 86.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Unfavourable [86.41 to 124.80]	4 (4.44)	1 (2.38)	0 (0.00)	5 (3.33)
3.	Neutral [124.81 to 163.20]	6 (6.67)	6 (14.29)	0 (0.00)	12 (8.00)
4.	Favourable [163.21 to 201.60]	28 (31.11)	15 (35.71)	8 (44.44)	51 (34.00)
5.	Most favourable [Above 201.60]	52 (57.78)	20 (47.62)	10 (55.56)	82 (54.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ]Figures in parentheses indicate the score
( )Figures in parentheses indicate percentage

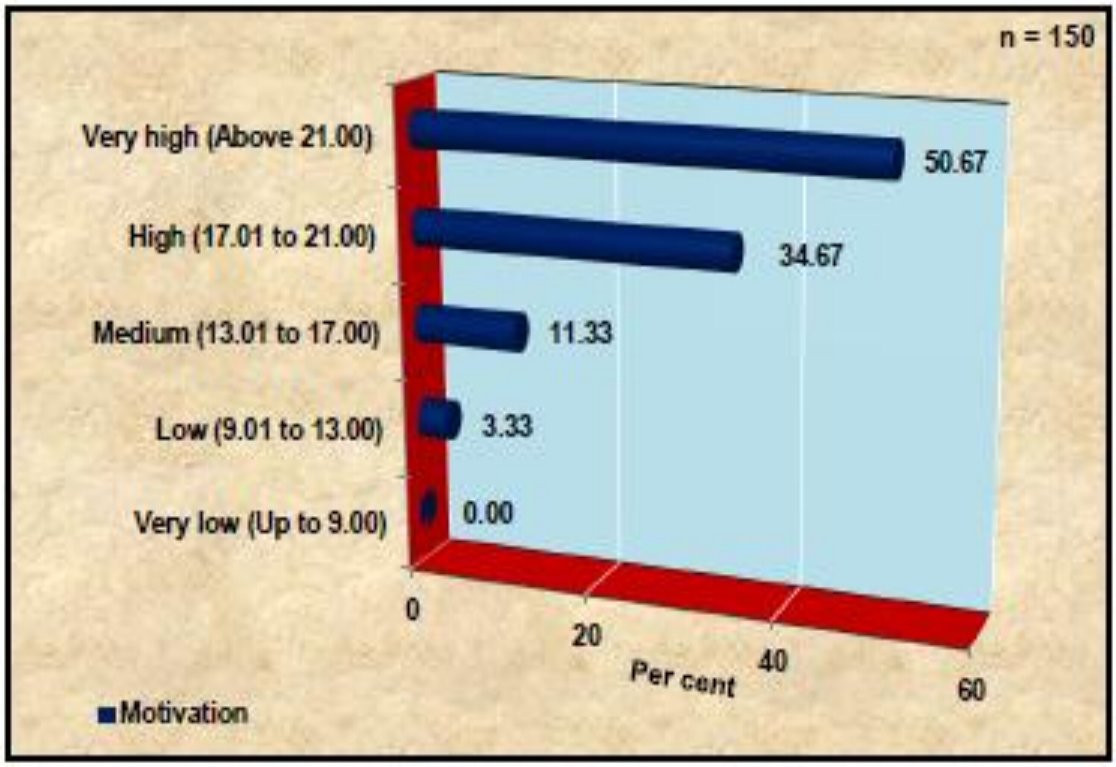


Fig. 21: Distribution of the scientists according to their perception about motivation

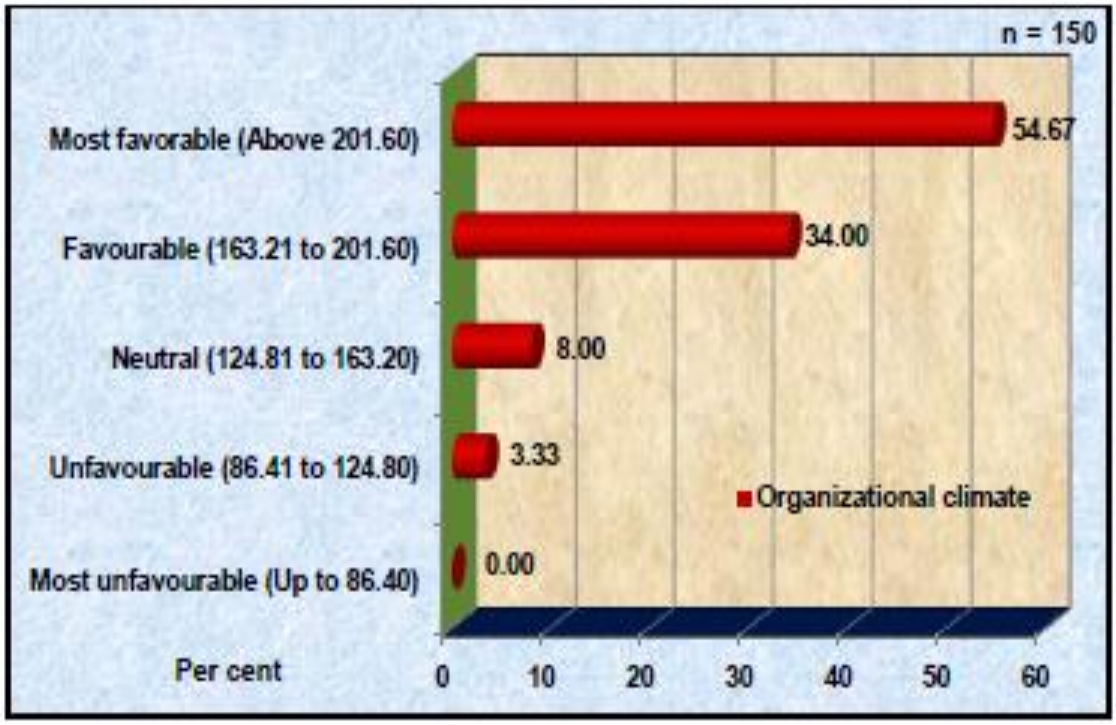


Fig. 22: Distribution of the scientists according to their overall perception about organizational climate

When looked at the distribution of Associate Professors, slightly less than half (47.62 per cent) of them had most favourable overall perception about their organizational climate, followed by slightly less than two-fifth (35.71 per cent) of them had favourable perception. While, 14.29 per cent of them were with neutral perception and only 2.38 per cent of them were having unfavourable overall perception about their organizational climate. In relation to Professors, more than half (55.56 per cent) of them had most favourable overall perception about organizational climate, while remaining (44.44 per cent) of the Professors were having favourable overall perception about their organizational climate and none of them were found in most unfavourable, unfavourable and neutral category of perception.

Minute observation reveals that a great majority (88.67 per cent) of overall scientist engaged in teaching, research and extension education activity had favourable to most favourable overall perception about their organizational climate, followed by 8.00 per cent and 3.33 per cent of them were having neutral and unfavourable perception, respectively. While none of them were with most unfavourable category of perception.

The probable reason behind this might be due to that the climate within the organization was open and friendly in which employees feel comfortable. It may also be because of their favourable perception about organizational design, organizational culture and working pattern of the university. It has positive impact on scientists' performance and their work productivity resulted in most favourable perception about organizational climate.

The finding is being supported by Philipa (2006), Kiran (2007) and Lad *et al.* (2013)

5.3 ATTITUDE OF THE SCIENTISTS TOWARDS ORGANIZATIONAL CLIMATE

Organizational climate comprises of a system of shared action, values and beliefs that develops within an organization and guides the behavior of employees. Organizational climate depends on the employee's attitude how they interpret the climate of the organization. For the scientists of Anand Agricultural University of Gujarat, it is worth to know their attitude towards organizational climate. With this objective in mind, the data related to attitude of the scientists towards organizational climate were collected and are presented in Table 25 and diagrammatically depicted in Fig.23.

Table 25: Distribution of the scientists according to their attitude towards organizational climate n=150

Sr. No.	Attitude towards Organizational climate	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Highly negative [Up to 21.60]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Negative [21.61 to 31.20]	3 (3.33)	2 (4.76)	0 (0.00)	5 (3.33)
3.	Neutral [31.21 to 40.80]	13 (14.44)	6 (14.29)	2 (11.11)	21 (14.00)
4.	Positive [40.81 to 50.40]	42 (46.67)	18 (42.86)	12 (66.67)	72 (48.00)
5.	Highly positive [Above 50.40]	32 (35.56)	16 (38.09)	4 (22.22)	52 (34.67)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

The data depicted in Table 25 shows that nearly one-half (46.67 per cent) of the Assistant Professors had positive attitude

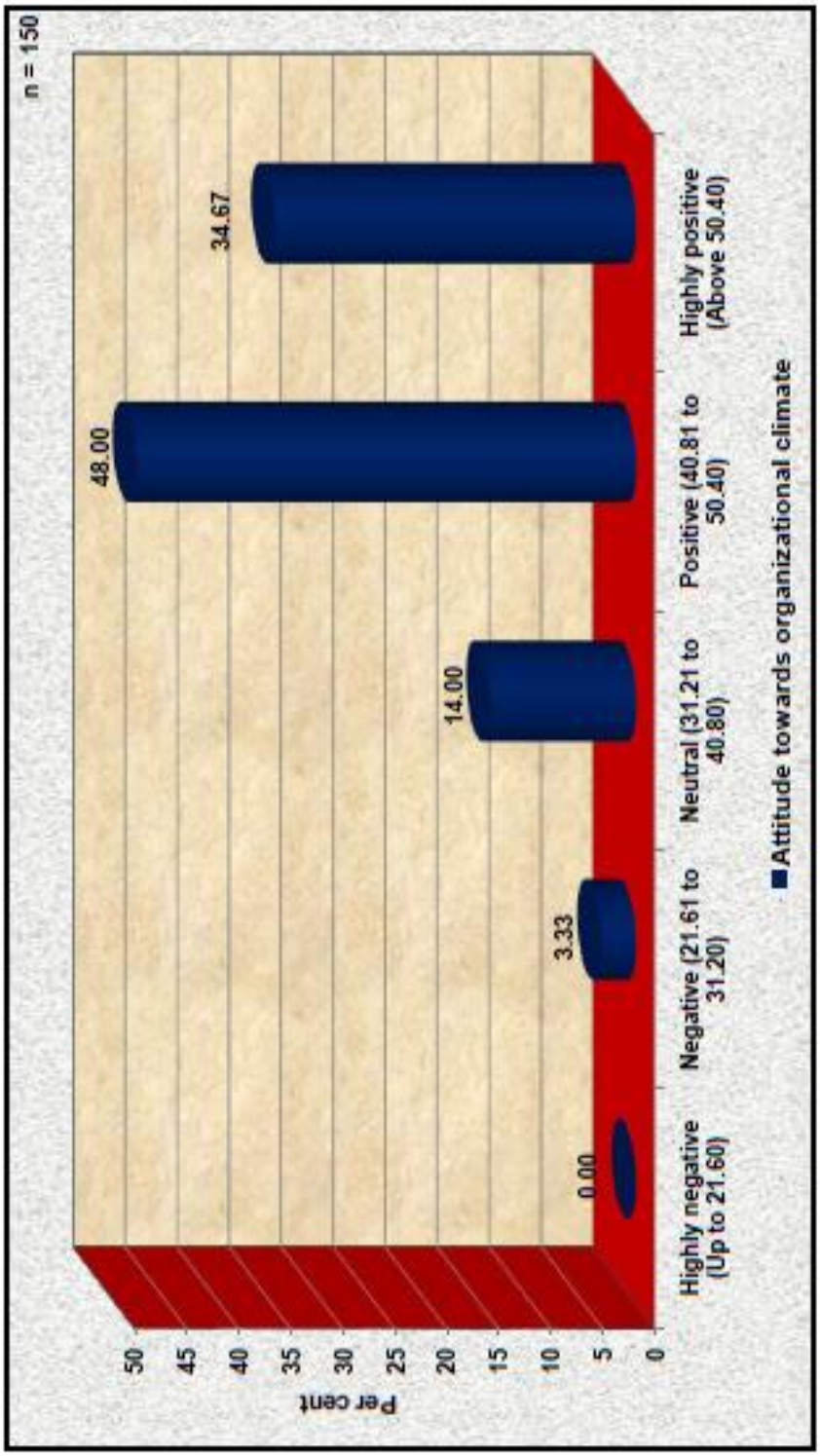


Fig. 23: Distribution of the scientists according to their attitude towards organizational climate

towards organizational climate, followed by 35.56 per cent of them were with highly positive attitude. While, 14.44 per cent and 3.33 per cent of them were having neutral and negative attitude towards their organizational climate, respectively. With regards to Associate Professors, slightly more than two-fifth (42.86 per cent) of them had positive attitude towards their organizational climate, followed by 38.09 per cent of them were with highly positive attitude. While, 14.29 per cent and 4.76 per cent of them were showing neutral and negative attitude towards their organizational climate, respectively. In context with Professors, nearly two-third (66.67 per cent) of them had positive attitude towards organizational climate, followed by 22.22 per cent of them were with highly positive attitude. Whereas, 11.11 per cent of them had neutral and none were found in negative category of attitude.

Minute observation reveals that slightly more than four-fifth (82.67 per cent) of the overall scientists engaged in teaching, research and extension education activity in the university had positive to highly positive attitude towards their organizational climate, while 14.00 per cent and 3.33 per cent of them were having neutral and negative attitude towards organizational climate, respectively.

The scientists of Anand Agricultural University might be satisfied with different aspects related to organizational climate such as organizational design, organizational culture, organizational trust, motivation, teamwork, leadership skill and communication etc. resulted in most favourable perception about organizational climate. It may also be due to their high level of trust among staff members, high level of motivation from their superiors and good level of perception about leadership quality of the superiors,

communication with their subordinates, colleagues and superiors, their low level of job stress and high level of job satisfaction.

The finding gets support by the findings of Mohan (2000), Manjula and Naraynagouda (2005), Mishra (2005) and Nagananda (2005).

5.4 PERCEPTION OF THE SCIENTISTS ABOUT ORGANIZATIONAL COMMITMENT

Organizational commitment is related to extent to which an employee has a strong belief in acceptance of organizational goal and value, is willing to exert a considerable effort on behalf of the organization and has a strong desire to stay in the organization. This variable was divided into three components *viz.* affective commitment, continuance commitment and normative commitment.

5.4.1 Affective commitment

If employees have a high level of affective commitment means they enjoy their relationship with the organization and they are likely to stay. Affective commitment or how much an employee actually likes or feels being a part of an organization has a tremendous effect on employee and organizational performance. High levels of affective commitment in employees will not only affect continuance commitment but also encourages the employee to try to bring others into the talent pool of the organization. With all such considerations, information in relation to affective commitment of the scientists was collected and the results of which are presented in Table 26 and diagrammatically depicted in Fig. 24.

The perusal of data presented in Table 26 reveals that within the organization slightly less than half (48.89 per cent) of the Assistant Professors

had high level of affective commitment, followed by 38.89 per cent and 7.78 per cent of them had very high and medium level of affective commitment, respectively. While, only 4.44 per cent of them were having low level of affective commitment.

Table 26: Distribution of the scientists according to their perception about affective commitment n=150

Sr. No.	Affective Commitment	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 12.60]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [12.61 to 18.20]	4 (4.44)	0 (0.00)	0 (0.00)	4 (2.67)
3.	Medium [18.21 to 23.80]	7 (7.78)	2 (4.76)	0 (0.00)	9 (6.00)
4.	High [23.81 to 29.40]	44 (48.89)	21 (50.00)	10 (55.56)	75 (50.00)
5.	Very high [Above 29.40]	35 (38.89)	19 (45.24)	8 (44.44)	62 (41.33)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

In case of Associate Professors, exactly half (50.00 per cent) of them had high level of affective commitment, followed by 45.24 per cent and 4.76 per cent of them were with very high and medium level of affective commitment, respectively. In respect of Professors, more than half (55.56 per cent) of them had high level of affective commitment, followed by 44.44 per cent were having very high level of affective commitment within the organization. Whereas, none of them were found in low, very low and medium level category of affective commitment.

Minute observation reveals that a great majority (91.33 per cent) of the overall scientists engaged in teaching, research and extension education activity had high to very high level of affective commitment, followed by 6.00 per cent and 2.67 per cent of overall scientist were belonged to medium and low level category of affective commitment, respectively. While, within the organization none of them had very low level of affective commitment.

The affective commitment of an employee is directly proportional to his work experience and a large proportion of the overall scientists of Anand agricultural university were having high experience within the organization and they were enjoy their work which increases their emotional attachment to the organization. This might be a reason for their high level of affective commitment within the organization.

The finding is in conformity with the finding of Bakan *et al.* (2011).

5.4.2 Continuance commitment

Continuance commitment is the degree with which an employee believes that leaving the organization would be costly. If employees have a high level of continuance commitment then employees will stay with an organization because they feel that they must stay. Continuance commitment is driven to a great extent by organizational culture and when an employee finds an organization to be positive and supportive then he/she will have a higher degree of continuance commitment. Important organizational factors like employee loyalty and employee retention are components of continuance commitment. With all such considerations, information with this regard was

collected from the scientists and the results of which are presented in Table 27 and diagrammatically depicted in Fig. 25.

The data depicted in Table 27 indicated that within the organization nearly two-third (65.56 per cent) of the Assistant Professors had medium level of continuance commitment, followed by 23.33 per cent and 11.11 per cent of them were with high and low level of continuance commitment, respectively. In case of Associate Professors, more than half (57.14 per cent) of them had medium level of continuance commitment, followed by 28.57 per cent and 14.29 per cent of them with high and low level of continuance commitment, respectively.

Table 27: Distribution of the scientists according to their perception about continuance commitment n=150

Sr. No.	Continuance Commitment	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 12.60]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [12.61 to 18.20]	10 (11.11)	6 (14.29)	5 (27.78)	21 (14.00)
3.	Medium [18.21 to 23.80]	59 (65.56)	24 (57.14)	7 (38.89)	90 (60.00)
4.	High [23.81 to 29.40]	21 (23.33)	12 (28.57)	6 (33.33)	39 (26.00)
5.	Very high [Above 29.40]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

In respect of Professors, slightly less than two-fifth (38.89 per cent) of them had medium level of continuance commitment,

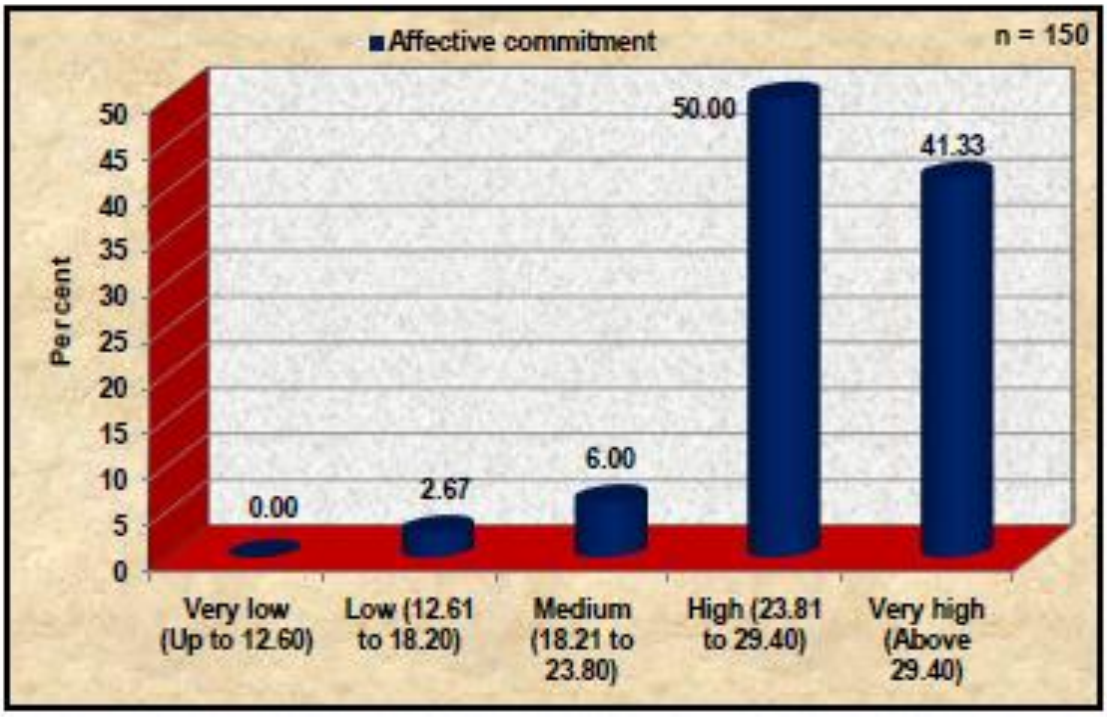


Fig. 24: Distribution of the scientists according to their perception about affective commitment

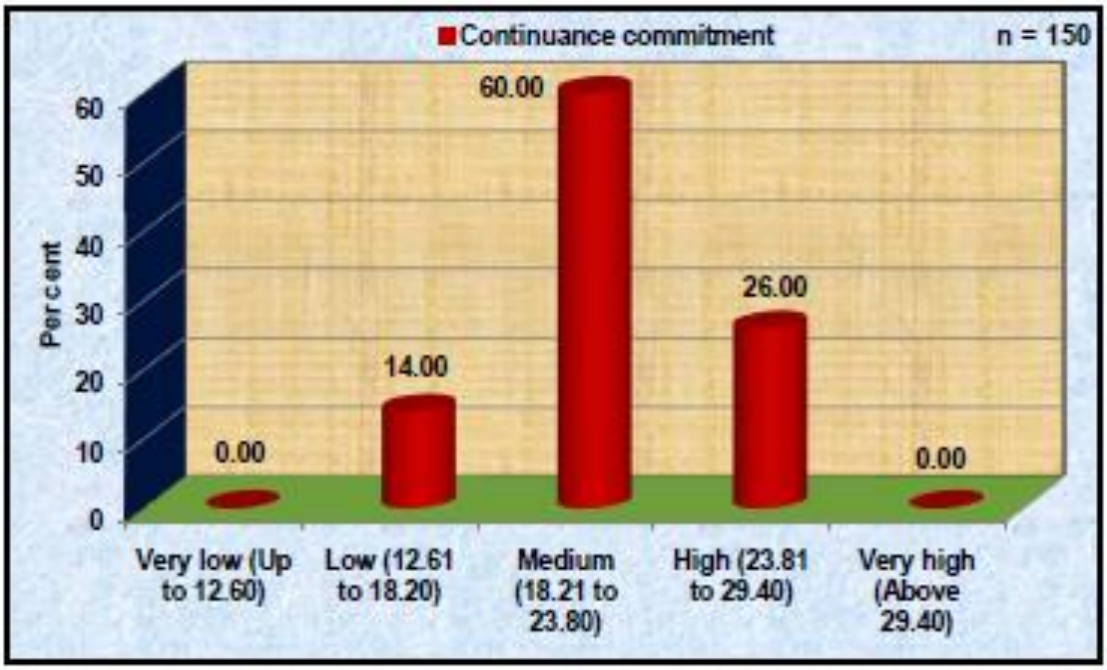


Fig. 25: Distribution of the scientists according to their perception about continuance commitment

followed by 33.33 per cent and 27.78 per cent of them were having high and low level of continuance commitment, respectively. While, within the organization none of them were found in very low and very high level category of continuance commitment.

Minute observation reveals that a great majority (86.00 per cent) of the overall scientists engaged in teaching, research and extension education work had medium to high level of continuance commitment, followed by 14.00 per cent of overall scientist were with low level of continuance commitment. While, within the organization none of them were found in very low and very high level category of continuance commitment.

This might be due to that continuance commitment is driven to a great extent by organizational culture and within the organization overall scientists perceived their work environment as very supportive, motivating, comfortable and productive which increase their loyalty towards organization and they were enjoying their work. It may also be due to that they all were very well aware about their retention in the organization and they were having their job security as a government servant. Thus, the overall scientists were having medium to high level of continuance commitment and they don't want to leave the organization.

The present finding gets support from the findings of Fauziah *et al.* (2010) and Bakan *et al.* (2011).

5.4.3 Normative commitment

Normative commitment builds upon duties and values and the degree to which an employee stays in an organization out of a sense of obligation. Normative commitment comes from a sense of moral duty and the

value system of an organization. It can be a result of affective commitment or an outcome of socialization within the workplace and commitment to their co-workers. With all such considerations, information in relation to normative commitment of the scientists within the organization was collected and the results of which are presented in Table 28 and diagrammatically depicted in Fig. 26.

Table 28: Distribution of the scientists according to their perception about normative commitment n=150

Sr. No.	Normative Commitment	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 12.60]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [12.61 to 18.20]	2 (2.22)	0 (0.00)	0 (0.00)	2 (1.33)
3.	Medium [18.21 to 23.80]	26 (28.89)	9 (21.43)	4 (22.22)	39 (26.00)
4.	High [23.81 to 29.40]	45 (50.00)	30 (71.43)	10 (55.56)	85 (56.67)
5.	Very high [Above 29.40]	17 (18.89)	3 (7.14)	4 (22.22)	24 (16.00)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

It is evident from the Table 28, that within the organization exactly half (50.00 per cent) of the Assistant Professors had high level of normative commitment, followed by 28.89 per cent and 18.89 per cent of them were with medium and very high of normative commitment, respectively. While, only 2.22 per cent of them were having low level of normative commitment. In case of Associate Professors, nearly three-fourth

(71.43 per cent) of them had high level of normative commitment, followed by 21.43 per cent and 7.14 per cent of them were with medium and very high level of normative commitment, respectively. Whereas, none of them were found in very low and low level category of normative commitment. In respect of Professors, more than half (55.56 per cent) of them had high level of normative commitment, while within the organization an equal number (22.22 per cent) of them were having very high and medium level of normative commitment, respectively. And none were found in very low and low level of normative commitment.

All in all, it can be inferred that nearly three-fourth (72.67 per cent) of the overall scientists engaged in teaching, research and extension education work had high to very high level of normative commitment, followed by 26.00 per cent of overall scientist were with medium level of normative commitment. While, only 1.33 per cent of them were having low level of normative commitment and none of them were found in very low level category of normative commitment.

The possible reason behind this might be that the scientists of Anand Agricultural University were having a sense of obligation to the organization and they don't want to leave the organization. This may also be due to that they were systematically communicated by their superiors about rewards policy, incentives and other strategies of the organization resulted in higher level of normative commitment.

This finding is not in conformity with the findings of Fauziah *et al.* (2010) and Bakan *et al.* (2011).

5.4.4 Overall perception of the scientists about organizational commitment

An organizational commitment profile of an employee is the interaction between the components of organizational commitment *viz.* affective, continuance and normative commitment. Organizational commitment plays a vital role in determining whether an employee will stay with the organization and zealously work towards organizational goal. It may be measured by the degree to which an individual is ready to adopt organizational values and goals. The data in regards with organizational commitment from the scientists were collected and the results of which are presented in Table 29 and diagrammatically depicted in Fig. 27.

Table 29: Distribution of the scientists according to their overall perception about organizational commitment n=150

Sr. No.	Overall Organizational Commitment	AAU Scientists			Overall
		Assistant Professor (90)	Associate Professor (42)	Professor (18)	
1.	Very low [Up to 37.80]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2.	Low [37.81 to 54.60]	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
3.	Medium [54.61 to 71.40]	29 (32.22)	9 (21.43)	4 (22.22)	42 (28.00)
4.	High [71.41 to 88.20]	56 (62.22)	31 (73.81)	13 (72.22)	100 (66.67)
5.	Very high [Above 88.20]	5 (5.56)	2 (4.76)	1 (5.56)	8 (5.33)
Total		100.00	100.00	100.00	150 (100.00)

[ ] Figures in parentheses indicate the score
( ) Figures in parentheses indicate percentage

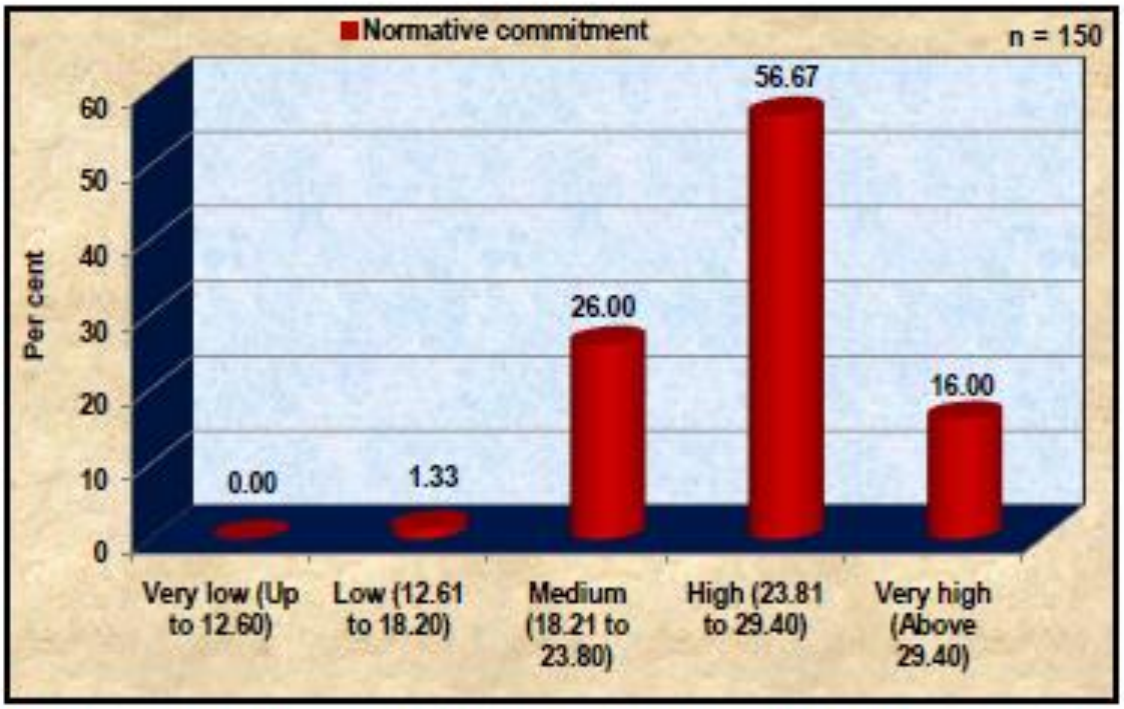


Fig. 26: Distribution of the scientists according to their perception about normative commitment

Fig. 27: Distribution of the scientists according to their overall perception about organizational commitment

A look from the data depicted in Table 29 indicates that within the organization slightly less than two-third (62.22 per cent) of the Assistant Professors had high level of overall organizational commitment, followed by 32.22 per cent of them were with medium level of overall organizational commitment. While, only 5.56 per cent of them had very high level of overall organizational commitment. In case of Associate Professors, nearly three-fourth (73.81 per cent) of them had high level of overall organizational commitment, followed by 21.43 per cent and 4.76 per cent of them were with medium and very high level of overall organizational commitment, respectively. In context with Professors, nearly three-fourth (72.22 per cent) of them had high level of overall organizational commitment, while within the organization, 22..22 per cent and 5.56 per cent of them were having medium and very high level of overall organizational commitment, respectively.

Overall, it can be inferred that an overwhelming number (94.67 per cent) of the overall scientists engaged in teaching, research and extension education activity had medium to high level of overall organizational commitment, while remaining 5.33 per cent of them were having very high level of overall organizational commitment and none of them were found in very low and low level category of overall organizational commitment perception.

All the three components of organizational commitment may have a significant effect on employee retention, work performance and their well-being. In other words, low affective, continuance, and normative commitment increases the likelihood that a member will leave the organization, while high levels of affective, continuance, and normative

commitment are related to high retention rates of the employees which increases their psychological attachment to the organization. This might be a reason for their higher level perception about organizational commitment.

The present finding gets support from the findings of Mohan (2000), Manjunath (2004), Mishra (2005), Kiran (2007) and Lad *et al.* (2013).

5.5 RELATIONSHIP BETWEEN SELECTED CHARACTERISTICS OF THE SCIENTISTS AND THEIR ATTITUDE TOWARDS ORGANIZATIONAL CLIMATE

The attitude of the scientists towards organizational climate is not independent itself, but is rather a complex process which is governed by personal-economic, job related and psychological attributes. It was, in this context felt necessary to study the relationship between the profile of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The relationship was determined and tested with the help of Karl Pearson's Co-efficients of Correlation, the zero order correlations are presented in Table 30 and graphically depicted in Fig. 28 which is discussed under following subheads:

It could be seen from Table 30 that among eleven selected independent variables of the AAU scientists for the study, seven variables had exhibited positive and significant relationship, while one variable had exhibited negative and significant correlation with their attitude towards organizational climate.

The independent variables that had positive and significant relationship were age, experience, job involvement, job performance, job

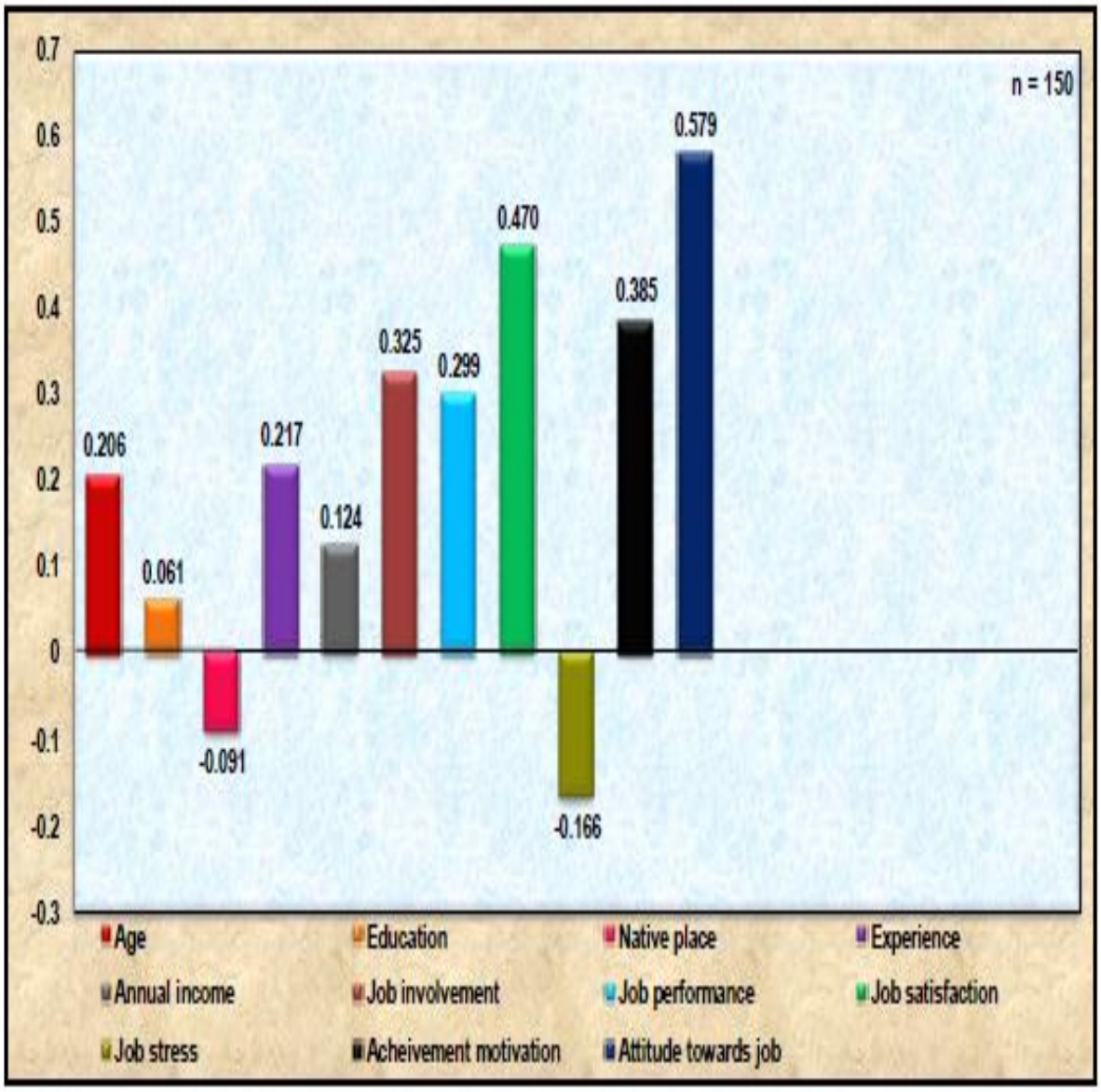


Fig. 28: Relationship between selected characteristics of the scientists and their attitude towards organizational climate

satisfaction, achievement motivation and their attitude towards job, while job stress perceived by the scientists exhibited negative and significant relationship. Whereas, variables namely education, native place and annual income of the scientists failed to exhibit any significant relationship with their attitude towards organizational climate.

Table 30: Relationship between selected characteristics of the scientists and their attitude towards organizational climate

n = 150

Sr. No.	Independent variables	Correlation-Coefficient ('r' value)
I.	**Personal-economic variables**	
1.	Age	0.206*
2.	Education	0.061
3.	Native place	-0.091
4.	Experience	0.217**
5.	Annual income	0.124
II.	**Job related variables**	
1.	Job involvement	0.325**
2.	Job performance	0.299**
3.	Job satisfaction	0.470**
4.	Job stress	-0.166*
III.	**Psychological variables**	
1.	Achievement motivation	0.385**
2.	Attitude towards job	0.579**

*Significant at 0.05 level of probability

**Significant at 0.01 level of probability

5.5.1 Personal-economic variables and attitude towards organizational climate

5.5.1.1 Age and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_1) that there is no relationship between the age of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.206*) value was found to be positive and significant at 0.05 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between age of the scientists of and their attitude towards organizational climate indicated that attitude of the scientist towards organizational climate was observed better among old aged scientists than young aged scientists. This might be because of that the old aged scientists were more aware about the organizations' policies, working pattern and culture of the organization as compared to young aged scientists and old aged scientist were having more job experience within the organization as compared to young aged scientists.

Thus, it can be concluded that age of the scientists plays a significant role in relation to their attitude towards organizational climate. Sandic (2006) also reported similar finding.

5.5.1.2 Education and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_2) that there is no relationship between the education of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.061) value was found to be non-significant. Hence, the null hypothesis was accepted.

It can be concluded that the education of the scientists had positive but non-significant relationship with their attitude towards organizational climate. It indicates that the Post-graduates and Ph.D. degree holder scientists were similar in their attitude towards organizational climate. It might be due to that the feeling or attitude of a scientist is not only based on the formal education but also several other factors related to organization. Thus, it can be inferred that education had no any influence on the scientists' attitude towards organizational climate.

In other word, it can be said that education level of the scientists did not play any significant role in motivating them to show their attitude towards organizational climate.

This finding is supported by the findings of Nagananda (2005) and Kiran (2007).

5.5.1.3 Native place and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_3) that there is no relationship between the native place of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= -0.091) value was found to be non-significant. Hence, the null hypothesis was accepted.

The negative and non-significant relationship between native place of the scientists and their attitude towards organizational climate indicated that the scientists with rural native and urban native were alike in their attitude towards organizational climate. It meant that, native place of the

scientists had negligible influence on their attitude towards organizational climate.

In other word, it can be said that native place of the scientists did not play any role in inspiring them to express their attitude towards organizational climate.

5.5.1.4 Experience and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_4) that there is no relationship between the experience of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.217**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between experience of the scientists of and their attitude towards organizational climate indicated that attitude of the scientist towards organizational climate was observed better among more experienced scientists than less experienced scientists. This might be due to that upper cadre scientists like Associate Professors and Professors were more familiar with the organization and they were more conscious about the organizations' strategies and work culture of the organization as compared to Assistant Professors due to their length of experience resulted in greater in their attitude towards organizational climate.

Thus, it can be concluded that experience of the scientists plays a significant role in relation to convey their attitude towards organizational climate. This finding gets support from the study conducted by Tondare *et al.* (2005) and Sandic (2006).

5.5.1.5 Annual income and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_5) that there is no relationship between the annual income of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.124) value was found to be non-significant. Hence, the null hypothesis was accepted.

The non-significant relationship between annual income of the scientists and their attitude towards organizational climate indicated that the scientists with higher and lower annual income were similar in their attitude towards organizational climate. It might be due to that the feeling of a scientist is not only based on his economic status but also several other factors related to organization like; organizational design, culture, teamwork, leadership style of the administrators etc. Thus, it can be inferred that annual income had negligible influence on the scientists' attitude towards organizational climate.

In other word, it can be said that economic status the scientists did not play any significant role in inspiring them to express their any kind of attitude towards organizational climate. Similar finding was obtained by Kiran (2007).

5.5.2 Job related variables and attitude towards organizational climate

5.5.2.1 Job involvement and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_6) that there is no relationship between the job involvement of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.325**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between job involvement of the scientists and their attitude towards organizational climate indicated that the scientists with higher job involvement were greater in their attitude towards organizational climate than the scientists with lower involvement in their job. This might be due to that the scientists with higher job involvement were more physically and psychologically involved in their respected job, which increases their emotionally attachment to the organization and its welfare.

Thus, it can be inferred that job involvement of the scientists plays a significant role in inspiring them to express their positive attitude towards organizational climate.

This finding gets support from the study conducted by Nagananda (2005), Sandic (2006) and Kiran (2007).

5.5.2.2 Job performance and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_7) that there is no relationship between the job performance of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.299**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between job performance of the scientists of and their attitude towards organizational climate indicated that the higher job performed scientists were greater in their attitude towards organizational climate than the scientists with lower job performance. The possible reason behind this might be due to that the university authority appreciate them for their performance and provides adequate remuneration. This may be the reason behind their favourable attitude towards their organizational climate.

Thus, it can be inferred that job performance of the scientists plays a significant role in stimulating them to convey their attitude towards organizational climate. The finding has got the support of Nagananda (2005) and Kiran (2007)

5.5.2.3 Job satisfaction and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_8) that there is no relationship between the job satisfaction of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.470**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

It can be concluded that job satisfaction of the scientists had positive and significant relationship with their attitude towards organizational climate. If the scientist derived higher level of satisfaction from their job, greater was the feeling about their organizational climate. Higher level of different aspects related to job satisfaction such as salary, work opportunity, promotion opportunity, facilities to work etc. would have induced scientists to

increase their attitude towards organization and its climate or environment. This may be the reason behind their favourable attitude towards their organizational climate.

Thus, it can be inferred that job satisfaction of the scientists plays a significant role in motivating them to express their attitude towards organizational climate. Similar results were obtained by Nagananda (2005), Tondare *et al.* (2005), Sandic (2006) and Kiran (2007).

5.5.2.4 Job stress and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_9) that there is no relationship between the job stress of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= -0.166*) value was found to be negative and significant at 0.05 level of probability. Hence, the null hypothesis was rejected.

It can be said that job stress of the scientists had negative but significant relationship with their attitude towards organizational climate. It indicated that if the scientist derived higher level of stress in their job, lesser was the sentiment about their organizational climate. Higher level of different aspects related to job stress such as heavy workload, disturbance in social life, not able in time management, dispute with their colleagues and superiors, low infrastructure facilities to work etc. would have induced scientists to subdue their attitude towards organizational climate.

Thus, it can be inferred that job stress of the scientists had significant influence on their attitude towards organizational climate.

This finding gets support from the findings of Nagananda (2005), Sandic (2006) and Kiran (2007).

5.5.3 Psychological variables and attitude towards organizational climate

5.5.3.1 Achievement motivation and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_{10}) that there is no relationship between the achievement motivation of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.385**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

It can be said that achievement motivation level of the scientists had positive and highly significant relationship with their attitude towards organizational climate. In other words, if the scientist shows higher level of achievement motivation within the organization, greater was the feeling about their organizational climate. The probable reason behind this might be due to that for the lower cadre scientists there is a great hope for further promotions, increments and advancement their career would have induced scientists to increase their favourable attitude towards organization and its climate or environment.

Thus, it can be inferred that achievement motivation level of the scientists had significant influence on their attitude towards organizational climate. Similar finding was obtained by Kiran (2007).

5.5.3.2 Attitude towards job and attitude towards organizational climate

The data in Table 30 were used to test the null hypothesis (Ho_{11}) that there is no relationship between the attitude towards job of the scientists of Anand Agricultural University and their attitude towards organizational climate.

The calculated correlation coefficient (r= 0.579**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

It can be said that scientists' attitude towards job had positive and highly significant relationship with their attitude towards organizational climate. It implies that those who had more favourable or positive attitude towards their job felt more about organizational climate and its welfare. Their higher level of positivism towards job would have helped them to reduce their negative feelings in the interest of university.

Hence, it can be inferred that attitude of the scientists towards their job had a vital role to play in relation to their attitude towards organizational climate. The present finding is in conformity with the findings of Kiran (2007).

5.6 The functional relationship between independent variables and attitude towards organizational climate

In the previous sub section, the relationship between independent variables and attitude towards organizational climate was ascertained by computing correlation coefficient (r). The correlation coefficient value gives only the strength and direction of relationship between two

characters or variables, but it does not reflect on predictive ability of the independent variables to influence the dependent variable. Hence, in order to assess the amount of contribution or influence or predictive ability of each independent variable to the dependent variable, the multiple regression analysis using the step wise method was carried out with the help of computer.

The stepwise regression, as stated by Efroymson (1962) that is one such method, which has been widely adopted in multiple regression analysis. It has got the added advantage that at each stage of analysis, every variable is subjected to an examination for its predictive value.

The multiple correlations (R) represent the correlation between the dependent variable and a set of independent variables fitted in multiple regression equation. The partial regression coefficient ($by_{1.}j$) represents the change in dependent variable (Y) with a unit change in independent variable (X_i) keeping other variables constant, and it was tested for its significance by student 't' test.

The various independent variables had their own unit of measurement, which did not permit a comparison of the partial regression coefficients ($by_{1.}j$). To facilitate comparison, the partial regression coefficients ($by_{1.}j$) were converted into standardized partial regression coefficients ($by_{1.}j$) values (ignoring ±) to find out their relative importance in predicting the dependent variable. The content of Table 31 reveals that the independent variables were introduced stepwise in succession, depending upon the contribution of each of them in explaining their variation on the dependent variable.

Table 31: Stepwise regression analysis of attitude of the scientists of Anand Agricultural University towards organizational climate

n = 150

Sr. No.	Independent variables	Partial Regression Coefficient (b_i)	Standard error of (b_i)	't' value	Significance	Coefficient of Determination (R^2)	Standard Partial Regression Coefficient (SPRC)	Rank
1.	Attitude towards job (X_{11})	0.763**	0.121	6.288	0.000	0.425 (42.50)	0.440	I
2.	Job satisfaction (X_8)	0.273**	0.080	3.386	0.001		0.239	II
3.	Job involvement (X_6)	0.230**	0.085	3.723	0.007		0.177	III
	CONSTANT	- 0.335						

**Significant at 0.01 level of probability

(Figures parentheses indicate percentage)

As a result of stepwise regression analysis, the following regression model was obtained:

$Y = a + b_{11}X_{11} + b_8X_8 + b_6X_6$.

$Y = -0.335 + 0.763^{**} X_{11} + 0.273^{**} X_8 + 0.230^{**} X_6$

($R^2 = 42.50$ %)

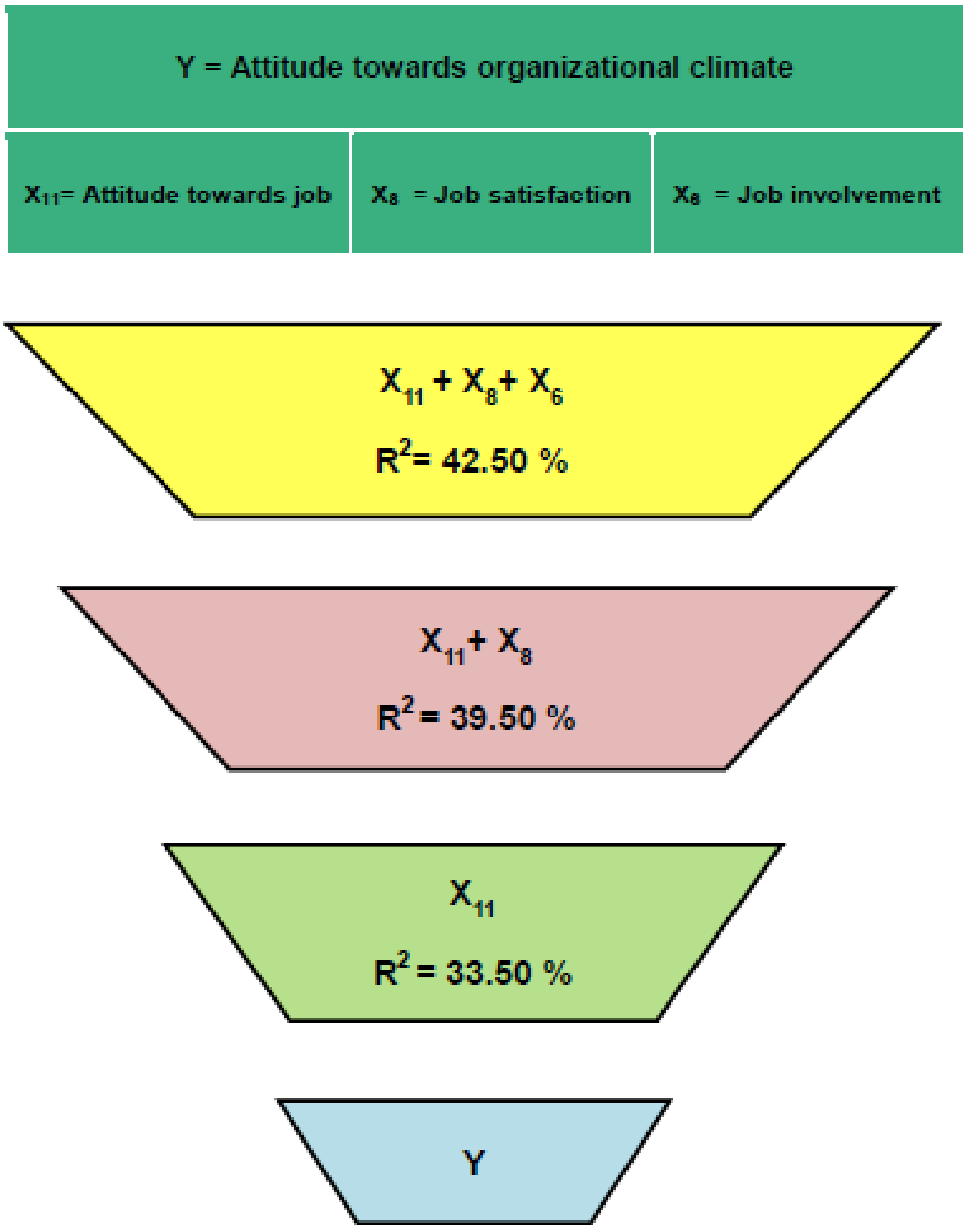


Fig. 29: Functional relationship between independent variables and the attitude towards organizational climate

It can be observed from the Table, that out of 11 independent variables, 3 variables were acquainting significant influence on the attitude towards organizational climate. All the three variables together were contributing 42.50 per cent variation indicated by R^2 value for the attitude towards organizational climate.

It can be inferred that 33.50 per cent of the variation in attitude towards organizational climate was explained by attitude towards job. However, Attitude towards job + Job satisfaction accounted 39.50 per cent of the variation. On the other hand, Attitude towards job + Job satisfaction + Job involvement together had contributed 42.50 per cent of the variation respectively in the attitude towards organizational climate.

The R^2 values at each stage of step up regression were significant at 0.01 level of probability. The partial 'b' values of these three variables were converted in to standard partial 'b' values, which were 0.440 for Attitude towards job, 0.239 for Job satisfaction and 0.177 for Job involvement, respectively.

The 't' value or partial 'b' in case of all the independent variables was found to be highly significant at 0.01 level of probability. According highest to lowest standard partial 'b' the rank order was given to the variables. Hence, the null hypothesis (Ho_{11}, Ho_8 and Ho_6) for these variables, i.e. Attitude towards job, Job satisfaction, and Job involvement was rejected and for the remaining variables, it was accepted.

The findings are suggestive to the fact that these traits may be taken in to consideration for increasing the positive attitude towards organizational climate among the scientists. There was a negligible increase in R^2 by adding more variables. So, the remaining variables were excluded from the model.

5.7 RELATIONSHIP BETWEEN SELECTED CHARACTERISTICS OF THE SCIENTISTS AND THEIR PERCEPTION ABOUT ORGANIZATIONAL COMMITMENT

The perception of the scientists about organizational commitment is not independent itself, but is rather a complex process which is governed by personal-economic, job related and psychological attributes. It was, in this context felt necessary to study the relationship between profile of the scientists of Anand Agricultural University and their perception about organizational commitment. The relationship was determined and tested with the help of Karl Pearson's Co-efficients of Correlation, the zero order correlations are presented in Table 32 and graphically depicted in Fig. 30 which is discussed under following subheads:

It could be seen from Table 32, that among eleven selected independent variables of the AAU scientists for the study, six variables had exhibited positive and significant relationship, while two variables had exhibited negative and significant correlation with their perception about organizational commitment.

The independent variables that had positive and significant relationship were experience, job involvement, job performance, job satisfaction, achievement motivation and their attitude towards job, while native place and job stress perceived by the scientists exhibited negative and significant relationship. Whereas, variables namely age, education and annual income of the scientists failed to exhibit any significant relationship with their perception about organizational commitment.

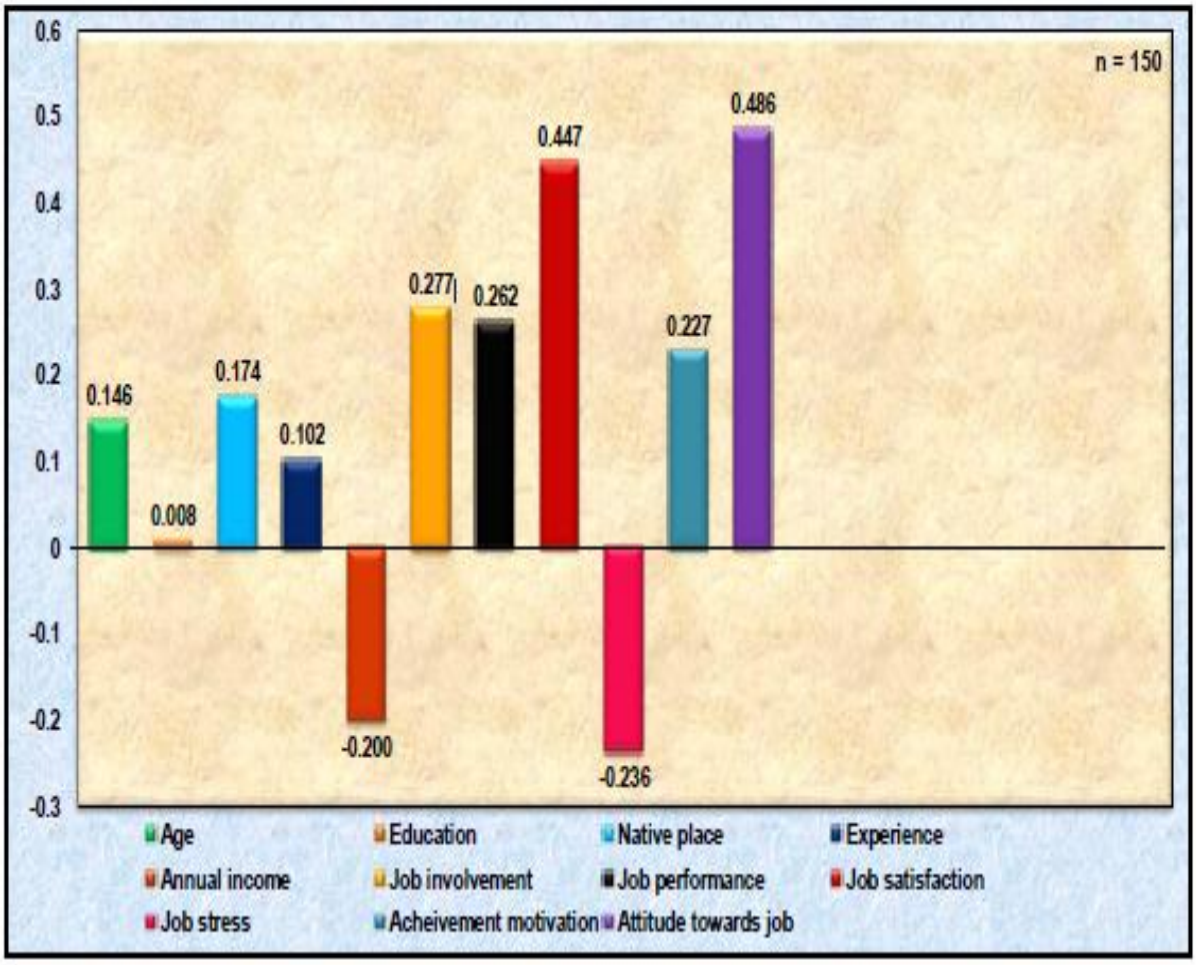


Fig. 30: **Relationship between selected characteristics of the scientists and their perception about organizational commitment**

Table 32: Relationship between selected characteristics of the scientists and their perception about organizational commitment n = 150

Sr. No.	Independent variables	Correlation-Coefficient ('r' value)
I.	**Personal-economic variables**	
1.	Age	0.146
2.	Education	0.008
3.	Native place	-0.200*
4.	Experience	0.174*
5.	Annual income	0.102
II.	**Job related variables**	
1.	Job involvement	0.277**
2.	Job performance	0.262**
3.	Job satisfaction	0.447**
4.	Job stress	-0.236**
III.	**Psychological variables**	
1.	Achievement motivation	0.227**
2.	Attitude towards job	0.486**

*Significant at 0.05 level of probability

**Significant at 0.01 level of probability

5.7.1 Personal-economic variables and perception about organizational commitment

5.7.1.1 Age and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{12}) that there is no relationship between the age of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.146) value was found to be non-significant. Hence, the null hypothesis was accepted.

The non-significant relationship between age of the scientists and their perception about organizational commitment indicated that the young and old aged scientists were similar in their perception about organizational commitment. It might be due to that the feeling or emotion of a scientist is not only based on the age but also several other factors related to organization. Thus, it can be inferred that age had no any influence on the scientists' perception about organizational commitment.

In other word, it can be said that age of the scientists did not play any significant role in motivating them to show their perception about organizational commitment. Kiran (2007) was obtained similar result.

5.7.1.2 Education and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{13}) that there is no relationship between the education of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.008) value was found to be non-significant. Hence, the null hypothesis was accepted.

It can be concluded that the education level of the scientists had positive but non-significant relationship with their perception about organizational commitment. It indicates that the Post-graduates and Ph.D. degree holder scientists were alike in their perception about organizational commitment. It might be due to inability of the organization to provide considerable rewards to their education level. It may also be due to that the sentiment of a scientist is not only based on the formal education but also

several other factors related to organization. Thus, it can be inferred that education had no any influence on the scientists' perception about organizational commitment.

In other word, it can be said that education level of the scientists did not play any significant role in encouraging them to express their perception about organizational commitment.

The present finding is not in conformity with the finding of Michaels (2004) and Kiran (2007).

5.7.1.3 Native place and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{14}) that there is no relationship between the native place of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= -0.200*) value was found to be negative and significant at 0.05 level of probability. Hence, the null hypothesis was rejected.

The negative and significant relationship between native place of the scientists and their perception about organizational commitment indicated that scientists' perception about organizational commitment was observed better among rural background scientists than urban background scientists. This might be because of that the rural background scientists were having high level of affective and normative commitment and low level of continuance commitment as compared to urban background scientists.

Thus, it can be concluded that native place of the scientists plays a negative but significant role in relation to their perception about organizational commitment.

5.7.1.4 Experience and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{15}) that there is no relationship between the experience of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.174*) value was found to be positive and significant at 0.05 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between experience of the scientists and their perception about organizational commitment indicated that perception of the scientists about organizational commitment was observed better among more experienced scientists as compared to less experienced scientists. This might be due to that upper cadre scientists like Associate Professors and Professors were more familiar with the organization and they were more conscious about the organizations' policies and working pattern of the organization as compared to Assistant Professors due to their length of experience resulted in greater in their perception about organizational commitment.

Thus, it can be said that experience length of the scientists plays a significant role in relation to their perception about organizational commitment.

Similar results were also obtained by Michaels (2004) and Kiran (2007).

5.7.1.5 Annual income and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{16}) that there is no relationship between the annual income of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.102) value was found to be non-significant. Hence, the null hypothesis was accepted.

The non-significant relationship between annual income of the scientists and their perception about organizational commitment indicated that the scientists with higher and lower annual income were similar in their perception about organizational commitment. It might be due to that the sentiment of a scientist is not only based on his economic status but also several other factors related to organization like; organizational design, working pattern etc.

Thus, it can be said that economic status the scientists did not play any significant role in encouraging them to convey their any kind of perception about organizational commitment. The present finding is not in line with the finding of Michaels (2004) and Kiran (2007).

5.7.2 Job related variables and perception about organizational commitment

5.7.2.1 Job involvement and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{17}) that there is no relationship between the job involvement of the scientists of

Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.277**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between job involvement of the scientists and their perception about organizational commitment indicated that the scientists with higher job involvement were greater in their perception about organizational commitment as compared to scientists with low job involvement. The probable reason behind this might be that scientists of the Anand Agricultural University were more psychologically and physically involved in their job which increases the favourable perception about organizational commitment. This may also be due to that job activity of the scientists demands more job efforts with day to day development which calls for greater involvement in their respective job *viz.* teaching, research and extension education.

In other word, it can be said that job involvement the scientists plays a significant role in encouraging them to express their perception about organizational commitment.

This finding gets support from the findings of Michaels (2004) and Kiran (2007).

5.7.2.2 Job performance and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{18}) that there is no relationship between the job performance of the scientists of

Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.262**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

It can be concluded that job performance of the scientists of Anand Agricultural University had positive and significant relationship with their perception about organizational commitment. It indicates that the scientists with higher job performance were greater in their perception about organizational commitment than scientists with low job performance. The possible reason behind this might be that within the organization more freedom given to the scientists to take independent decision and perform at their best level which increases their job performance for the organizations' welfare.

It can be inferred that the job performance of the scientists had positive and significant influence on their perception about organizational commitment.

Similar findings were obtained by Michaels (2004) and Kiran (2007).

5.7.2.3 Job satisfaction and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{19}) that there is no relationship between the job satisfaction of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.447**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between job satisfaction of the scientists of Anand Agricultural University and their perception about organizational commitment indicated that if the scientist derived higher level of satisfaction from their job, greater was the feeling about their organizational commitment. Higher level of different aspects related to job satisfaction such as salary, work-opportunity, promotion opportunity, facilities to work etc. would have induced scientists to increase their favourable perception about organization commitment. This might be a reason for their higher level of job satisfaction. It can be concluded that job satisfaction of the scientists had positive and significant effect on their favourable perception about organizational commitment.

The finding gets support from the findings of Michaels (2004) and Kiran (2007).

5.7.2.4 Job stress and attitude towards organizational climate

The data in Table 32 were used to test the null hypothesis (Ho_{20}) that there is no relationship between the job stress of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= -0.236**) value was found to be negative andhighly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The negative but significant relationship between job stress of the scientists of Anand Agricultural University and their perception about

organizational commitment indicated that if the scientist derived higher level of stress in their job, lesser was the feeling about their organizational commitment. Higher level of different aspects related to job stress such as heavy workload, disturbance in social life, not able in time management, dispute with their colleagues and superiors, low infrastructure facilities to work etc. would have induced scientists to subdue their favourable perception about organizational commitment.

Thus, it can be said that job stress of the scientists had negative but significant influence on their favourable perception about organizational commitment.

This finding is in conformity with the findings of Michaels (2004) and Kiran (2007).

5.7.3 Psychological variables and perception about organizational commitment

5.7.3.1 Achievement motivation and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{21}) that there is no relationship between the achievement motivation of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.227**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

It can be concluded that achievement motivation level of the scientists of Anand Agricultural University had positive and significant

relationship with their perception about organizational commitment. It indicates that within the organization perception of the scientists about organizational commitment was observed better among scientists with higher level of achievement motivation as compared to scientists with low level of achievement motivation. The lower cadre scientists has great hope for further promotions, increments and their career advancement might be a reason for their favourable perception about organizational commitment.

Thus, it can be inferred that achievement motivation level of the scientists had positive and significant effect on their favourable perception about organizational commitment.

5.7.3.2 Attitude towards job and perception about organizational commitment

The data in Table 32 were used to test the null hypothesis (Ho_{22}) that there is no relationship between the attitude towards job of the scientists of Anand Agricultural University and their perception about organizational commitment.

The calculated correlation coefficient (r= 0.486**) value was found to be positive and highly significant at 0.01 level of probability. Hence, the null hypothesis was rejected.

The positive and significant relationship between attitude towards the scientists and their perception about organizational commitment indicated that those scientists who had highly positive attitude towards their job had most favourable perception about organizational commitment. Their higher level of positivism towards job would have helped them to reduce their negative commitment in the interest of organization.

Hence it can be concluded that attitude of the scientists towards their job had a vital role to play in relation to their perception about organizational commitment. Similar results were obtained by Michaels (2004) and Kiran (2007).

5.8 The functional relationship between independent variables and perception about organizational commitment

In the previous sub section, the relationship between independent variables and perception about organizational commitment was ascertained by computing correlation coefficient (r). The correlation coefficient value gives only the strength and direction of relationship between two characters or variables, but it does not reflect on predictive ability of the independent variables to influence the dependent variable. Hence, in order to assess the amount of contribution or influence or predictive ability of each independent variable to the dependent variable, the multiple regression analysis using the step wise method was carried out with the help of computer.

The stepwise regression, as stated by Efroymson (1962) that is one such method, which has been widely adopted in multiple regression analysis. It has got the added advantage that at each stage of analysis, every variable is subjected to an examination for its predictive value.

The multiple correlations (R) represent the correlation between the dependent variable and a set of independent variables fitted in multiple regression equation. The partial regression coefficient ($by_1.j$) represents the change in dependent variable (Y) with a unit change in independent variable (X_i) keeping other variables constant, and it was tested for its significance by student 't' test.

The various independent variables had their own unit of measurement, which did not permit a comparison of the partial regression coefficients ($by_{1.}j$). To facilitate comparison, the partial regression coefficients ($by_{1.}j$) were converted into standardized partial regression coefficients ($by_{1.}j$) values (ignoring ±) to find out their relative importance in predicting the dependent variable. The content of Table 33 reveals that the independent variables were introduced stepwise in succession, depending upon the contribution of each of them in explaining their variation on the dependent variable.

It can be observed from the Table, that out of 11 independent variables, 3 variables were having significant influence on the perception about organizational commitment. All the three variables together were contributing 32.50 per cent variation indicated by R^2 value for the perception about organizational commitment.

It can be inferred that 23.60 per cent of the variation in perception about organizational commitment was explained by attitude towards job. However, Attitude towards job + Job satisfaction accounted 30.60 per cent of the variation. On the other hand, Attitude towards job + Job satisfaction + Job involvement together had contributed 32.50 per cent of the variation in the perception about organizational commitment.

The R^2 values at each stage of step up regression were significant at 0.01 level of probability. The partial 'b' values of these three variables were converted in to standard partial 'b' values, which were 0.342 for Attitude towards job, 0.266 for Job satisfaction and 0.143 for Job involvement.

Table 33: Stepwise regression analysis of perception of the scientists of Anand Agricultural University about organizational commitment n = 150

Sr. No.	Independent variables	Partial Regression Coefficient (b_i)	Standard error of (b_i)	't' value	Significance	Coefficient of Determination (R^2)	Standard Partial Regression Coefficient (SPRC)	Rank
1.	Attitude towards job (X_{22})	0.642**	0.142	4.512	0.000	0.325 (32.50)	0.342	I
2.	Job satisfaction (X_{19})	0.329**	0.094	3.488	0.001		0.266	II
3.	Job involvement (X_{17})	0.201**	0.099	2.021	0.045		0.143	III
	CONSTANT	33.74						

**Significant at 0.01 level of probability (Figures parentheses indicate percentage)

As a result of stepwise regression analysis, the following regression model was obtained:

$Y = a + b_{22}X_{22} + b_{19}X_{19} + b_{17}X_{17}$.

$Y = 33.74 + 0.642^{**} X_{22} + 0.329^{**} X_{19} + 0.201^{**} X_{17}$

($R^2 = 32.50$ %)

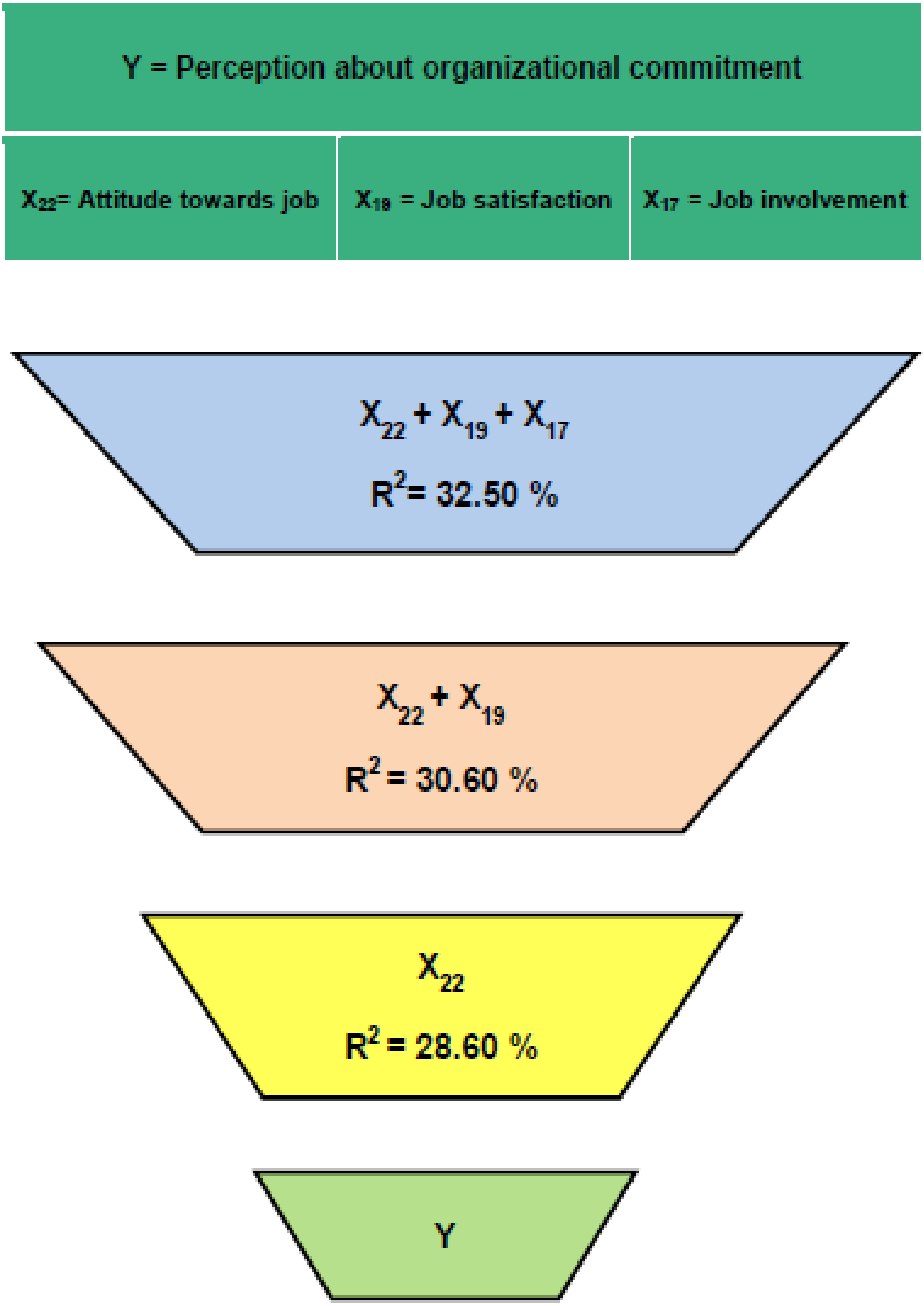


Fig. 31: Functional relationship between independent variables and the perception about organizational commitment

The 't' value or partial 'b' was significant in case of all the independent variables. According highest to lowest standard partial 'b' the rank order was given to the variables. Hence, the null hypothesis (Ho_{22}, Ho_{19} and Ho_{17}) for these variables, i.e. Attitude towards job, Job satisfaction, and Job involvement was rejected and for the remaining variables, it was accepted.

The findings are suggestive to the fact that these traits may be taken in to consideration for increasing the favourable perception about organizational commitment among the scientists. There was a negligible increase in R^2 by adding more variables. So, the remaining variables were excluded from the model.

5.9 PROBLEMS OF ORGANIZATIONAL CLIMATE EXPERIENCED BY THE SCIENTISTS

In the present study, problems experienced by the scientists of Anand Agricultural University in their organizational climate were also studied. Mean score and rank order for each problem were calculated. The data in this regard are depicted in Table 34.

At critical look at the data presented in Table 34 bring into focus that out of eighteen problems experienced by the scientists engaged in teaching, research and extension education activity in their organizational climate, "lack of willingness towards work (2.06 Mean score)" was the first major problem. This was followed by "lack of accountability among staff members (2.05 Mean score)", "indifferent attitude of administrators (2.03 Mean score)","absence of periodical checks and objective assessment of work (2.01 Mean score)", "suffering from heavy workload other than

mandatory work (1.97 Mean score)"were assigned second, third, fourth and fifth rank, respectively by the scientists. It is worth mentioning here that "lack of conveyance facility for field and institutional visits (1.95 Mean score)" and "lack of provision for international training programmes (1.95 Mean score)" were jointly accorded sixth rank and "lack of laboratory facilities (1.94 Mean score)" was accorded seventh rank.

Table 34: Problems experienced by the scientists in organizational climate n=150

Sr. No.	Problems experienced by scientists	Mean score	Rank
1.	Lack of willingness towards work	2.06	I
2.	Non-availability of well-equipped classrooms	1.87	VIII
3.	Lack of laboratory facilities	1.94	VII
4.	Indifferent attitude of administrators	2.03	III
5.	Lack of proper communication among staff members	1.79	XII
6.	Lack of accountability among staff members	2.05	II
7.	Absence of cordial atmosphere in department	1.82	XI
8.	Lack of conveyance facility for field and institutional visits	1.95	VI
9.	Absence of mutual trust and respect for each other	1.75	XIII
10.	Lack of teamwork among staff members	1.86	IX
11.	Absence of periodical checks and objective assessment of work	2.01	IV
12.	Inordinate delay in proper settlement of service matters	1.87	VIII
13.	Lack of coordination among staff members	1.87	VIII
14.	Dominance of casteism, nepotism etc. while extending special privileges	1.85	X
15.	Lack of rewards/incentives for work	1.69	XIV
16.	Lack of leadership quality among superiors	1.59	XV
17.	Lack of provision for international training programmes	1.95	VI
18.	Suffering from heavy workload other than mandatory work	1.97	V

While, "non-availability of well-equipped classrooms (1.87 Mean score)", "inordinate delay in proper settlement of service matters" and "lack of coordination among staff members (1.87 Mean score)" were jointly assigned eighth rank.

Among other not-so-important problems of organizational climate as mentioned by the scientists of Anand Agricultural University were; "lack of teamwork among staff members (1.86 Mean score)", "dominance of casteism, nepotism etc. while extending special privileges (1.85 Mean score)", "absence of cordial atmosphere in department (1.82 Mean score)", "lack of proper communication among staff members (1.79 Mean score)", "absence of mutual trust and respect for each other (1.75 Mean score)", "lack of rewards/incentives for work (1.69 Mean score)" and "lack of leadership quality among superiors (1.59 Mean score)" were assigned ninth, tenth, eleventh, twelfth, thirteenth, fourteenth and fifteenth rank, respectively.

In general, the discussion leads to conclude that the major problems of organizational climate experienced by the scientists of Anand Agricultural University in sequential order were: lack of willingness towards work (Rank I), lack of accountability among staff members(Rank II), indifferent attitude of administrators (Rank III), absence of periodical check and objective assessment of work (Rank IV), suffering from heavy workload other than mandatory work (Rank V), lack of provision for international training programme (Rank VI), lack of conveyance facility for field and institutional visits (Rank VI), lack of laboratory facilities (Rank VII), non-availability of well-equipped classrooms (Rank VIII), inordinate delay in proper settlement of

service matters (Rank VIII) and lack of teamwork among staff members (Rank VIII).

These findings go to corroborate the observations of Nagananda (2005), Kiran (2007) and Lad *et al.* (2013).

5.9 SUGGESTIONS FROM THE SCIENTISTS TO IMPROVE THE ORGANIZATIONAL CLIMATE

An attempt was also made to know the suggestions of the scientists of Anand Agricultural University to improve the organizational climate. The scientists' suggestions were elicited through a simple open-ended question. The data in this respect are presented in Table 35.

It is explicated from the data presented in Table 35 that most of the scientists of Anand Agricultural University suggested for increase the willingness of the employees towards their work by motivating them (60.67 per cent), university’s employee should not be engaged in non-mandatory work (59.33 per cent), accountability should be fixed for all employees (57.33 per cent), need to regular follow up and checks of assessment of work (54.67 per cent), attitude of administrators should be concerned or sympathetic (51.33 per cent), permission for international training programmes should be given to the employees (48.67 per cent) and placement of the employee should be based on their interest in teaching, research and extension education activity (45.33 per cent), must be a provisions of rewards or incentives for work (39.33 per cent), honest communication system should be develop at all levels to build trust among superiors and subordinates (37.33 per cent) and personality development programmes should be provided to the employee (30.00 per cent).

Table 35: Suggestions from the scientists to improve the organizational climate n=150

Sr. No.	Suggestions	Frequency	Per cent	Rank
1.	Increase the willingness of the employees towards their work by motivating them	91	60.67	I
2.	Accountability should be fixed for all employees	86	57.33	III
3.	Adequate laboratory facility should be available in every department	36	24.00	XII
4.	Attitude of administrators should be concerned or sympathetic	77	51.33	V
5.	Honest communication system should be developed at all levels to build trust among superiors and subordinates	56	37.33	IX
6.	Need to regular follow up and checks of assessment of work	82	54.67	IV
7.	Strategies for teamwork should be established among staff members	44	29.33	X
8.	Adequate conveyance facility for field and institutional visits should be provided	32	21.33	XIII
9.	Provisions of rewards or incentives for work	59	39.33	VIII
10.	Cordial atmosphere should be developed within the university	41	27.33	XII
11.	University's employee should not be engaged in non-mandatory work	89	59.33	II
12.	Proper settlement of service matters should be within time	39	26.00	XI
13.	Need to increase the coordination among staff members	41	27.33	XI
14.	Need to improve the proper performance appraisal of the employee	23	15.33	XVI
15.	Need to boost up leadership quality among superiors	29	19.33	XIV
16.	Permission for international training programmes should be given to the employees	73	48.67	VI
17.	Placement of the employee should be based on their interest in teaching, research and extension education activity	68	45.33	VII
18.	Paper work for genuine permission from higher authority should be reduced	18	12.00	XVII
19.	Personality development programmes should be provided to the employee	45	30.00	IX
20	Feedback about superiors should also be taken from subordinates	29	19.33	XV

In addition to this, the scientists also felt that strategies for teamwork should be established among staff members (29.33 per cent), cordial atmosphere should be developed within the university (27.33 per cent), need to increase the coordination among staff members (27.33 per cent), proper settlement of service matters should be within time (26.00 per cent), adequate laboratory facility should be available in every department (24.00 per cent),adequate conveyance facility for field and institutional visits should be provided (21.33 per cent), need to boost up leadership quality among superiors (19.33 per cent), feedback about superiors should also be taken from subordinates (19.33 per cent), need to improve the proper performance appraisal of the employee (15.33 per cent)and paper work for genuine permission from higher authority should be reduced (12.00 per cent).

From the above discussion, it can be concluded that the major suggestions made by the scientists of Anand Agricultural University engaged in teaching, research and extension education activities to improve the organizational climate in sequential order were: the willingness of the employees towards their work should be increased (60.67 per cent), employees of the university should not be engaged in non-mandatory work (59.33 per cent), accountability for all employees should be fixed (57.33 per cent), regular follow up and check of assessment of work should be done (54.67 per cent), attitude of the administrators or superiors should be concerned or sympathetic (51.33 per cent), permission should be given to the employees for international training programmes (48.67 per cent), employees' placement should be based on their area of interest (45.33 per cent),

provisions of rewards or incentives should be made for their work (39.33 per cent), communication system should be honest at all the levels to develop trust among staff members (37.33 per cent), personality development programmes to the employee should be provided (30.00 per cent), strategies for teamwork among staff members should be established (29.33 per cent), cordial atmosphere should be developed within the university (27.33 per cent), coordination among staff member should be increased (27.33 per cent), proper settlement of service matters should be within time (26.00 per cent), adequate laboratory facility should be available in every department (24.00 per cent), conveyance facility for field and institutional visits should be provided adequately (21.33 per cent), need to boost up leadership quality among superiors (19.33 per cent), feedback about superiors should also be taken from the subordinates (19.33 per cent), proper performance appraisal of the employee should be improved (15.33 per cent)and paper work for genuine permission from higher authority should be reduced (12.00 per cent).

VI. SUMMARY AND CONCLUSIONS

This chapter in a nutshell gives description of the present study in respect of summary, conclusions, implications and suggestions for future study have also been given.

6.1 SUMMARY

The nature of organizational climate differs from one university to the other. Organizational climate serves as a measure of individual perceptions or feelings about an organization. Organizational climate includes management or leadership styles, participation in decision making, provision of challenging jobs to employees, reduction of boredom and frustration, provision of benefits and personnel policies, provision of good working conditions and creation of suitable career ladder for academics.

The scientist working in agricultural universities performs three fold functions namely teaching, research and extension education activities. The contribution of the scientific community is not always steady since there will be several ups and downs due to multi dimensional personal, socio psychological and organizational factors. In other words, the academic contribution of the farm scientists in the field of teaching, research and extension education is greatly determined by their surroundings, promotional opportunities, procedures followed for recognizing good work, freedom enjoyed, superior-subordinate relationship, loyalty to the institution, its security, respect in the society and so on so forth.

The capacity to influence organizational climate is perhaps the most powerful leverage point in the management system because

organizational climate properties could have profound effect on performance and satisfaction of employees. On the other hand, low levels of discipline, confidence and responsibility are created in organization under the circumstances of the contemporary world, which influence employees' commitment within the organization.

Any organization small or big needs constant studies and evaluation with a view to ascertain the measures necessary to improve areas of deficiency, So as to faster rate of growth and development towards achieving goals. With all these views in mind, the present research study entitled **"Perception of Scientists of Anand Agricultural University towards Organizational Climate"** was thought essential to be undertaken.

6.2 OBJECTIVES OF THE STUDY

1. To study the profile of the scientists.
2. To develop the scale to measure attitude of scientists towards organizational climate.
3. To study the organizational climate as perceived by scientists.
4. To study the organizational commitment as perceived by scientists.
5. To study the relationship between profile of scientists and their attitude towards organizational climate.
6. To study the relationship between profile of scientists and their perceived organizational commitment.
7. To study the problems experienced by the scientists in organizational climate.

8. To seek suggestions from the scientists to improve the organizational climate.

6.3 REVIEW OF LITERATURE

A brief account of literature reviewed has been presented in profile of the scientists, perception about organizational climate, different components of the organizational climate, attitude of the scientists towards organizational climate, relationship between profile of the scientists and their attitude towards organizational climate, perception about organizational commitment, different components of the organizational commitment, relationship between profile of the scientists and their perception about organizational commitment, problems experienced by the scientists in organizational climate and suggestions to improve the organizational climate. Based on review of literature and suggestions of experts, variables to be studied were selected.

6.4 THEORETICAL ORIENTATION

On the basis of review of literature having direct or indirect bearing on the problem, a theoretical orientation was developed for the study. Various concepts to be used in study were operationalized. Based on assumptions, tentative paradigm was laid down. The null hypotheses were also formulated with the help from theoretical orientation.

6.5 METHODOLOGY

The present investigation was conducted in the Anand Agricultural University, Anand of Gujarat state. A list of all the scientists doing teaching, research and extension education activities under the Anand Agricultural University of Gujarat state was obtained from the office of the

Registrar, Anand Agricultural University, Anand. Thereafter, the scientists from each of the activities were selected randomly in such a manner that there would be proportional to total size of the scientists in respective activities. In all, 150 scientists comprising 90 Assistant Professors, 42 Associate Professors and 18 Professors were selected to serve as the respondents for the study. The data were collected through structural interview schedule. The "*Ex-Post-Facto"* research design was employed for conducting the proposed study.

The dependent variables undertaken in this study were (i) perception about organizational climate (ii) perception about organizational commitment. The independent variables chosen for the study were: age, education, native place, experience, annual income, job involvement, job performance, job satisfaction, job stress, achievement motivation and attitude towards job.

In order to measure the attitude of the scientists towards organizational climate, a scale was developed for the purpose was used. The other dependent and independent variables were measured with the help of suitable scales and structured schedules adopted by various researchers. An interview schedule was developed keeping in view the objectives of the study. The collected data of this study were collected by arranging personal interview with 150 scientists of Anand Agricultural University of Gujarat state. The data so collected were classified, tabulated and analyzed in order to make the findings meaningful. The statistical measures such as frequency, percentage, mean score, rank order, coefficient of correlation, stepwise

multiple regression and standard partial regression coefficient analysis were used.

6.6 DERIVATION OF HYPOTHESES TESTED

Ho_1 There is no relationship between age of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_2 There is no relationship between education of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_3 There is no relationship between native place of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_4 There is no relationship between experience of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_5 There is no relationship between annual income of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_6 There is no relationship between job involvement of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_7 There is no relationship between job performance of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_8 There is no relationship between job satisfaction of the

scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_9 There is no relationship between job stress of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{10} There is no relationship between achievement motivation of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{11} There is no relationship between attitude towards job of the scientists of Anand Agricultural University and their attitude towards organizational climate.

Ho_{12} There is no relationship between age of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{13} There is no relationship between education of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{14} There is no relationship between native place of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{15} There is no relationship between experience of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{16} There is no relationship between annual income of the scientists of Anand Agricultural University and their perception

about organizational commitment.

Ho_{17} There is no relationship between job involvement of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{18} There is no relationship between job performance of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{19} There is no relationship between job satisfaction of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{20} There is no relationship between job stress of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{21} There is no relationship between achievement motivation of the scientists of Anand Agricultural University and their perception about organizational commitment.

Ho_{22} There is no relationship between attitude towards job of the scientists of Anand Agricultural University and their perception about organizational commitment.

6.7 MAJOR FINDINGS AND CONCLUSIONS

6.7.1 Profile of the scientists

6.7.1.1 Personal-economic characteristics

More than half (58.67 per cent) of the overall scientists engaged in teaching, research and extension education activity were found in middle to

old age group, while slightly more than two-fifth (41.33 per cent) were belonged to young age group.

Slightly less than three-fourth (74.00 per cent) of the overall scientists had education up to doctoral level, while 26.00 per cent of them were post graduates.

Slightly more than half (52.67 per cent) of the overall scientists had rural native, followed by 47.33 per cent of them were belonged to urban native.

A large proportion (51.33 per cent) of the overall scientists were having more than 10 years of total service experience as a teacher, researcher and extension educationist.

A vast majority (93.33 per cent) of the overall scientists had annual income more than ₹ 5.01 lakhs, followed by 6.67 per cent of them had annual income up to ₹ 5.00 lakhs.

6.7.1.2 Job related characteristics

A great majority (87.34 per cent) of the overall scientists had medium to high level of job involvement, followed by 12.66 per cent of overall scientist were with very high level of job involvement category and none of them were found in very low to low level category of job involvement.

An overwhelming number (97.33 per cent) of the overall scientists had high to very high level of job performance, followed by 2.67 per cent of overall scientist were with medium level of job performance.

More than half (58.66 per cent) of the overall scientists engaged in teaching, research and extension education activity had medium to high

level of job satisfaction, followed by 24.67 per cent and 16.67 per cent of them had very high and low level of job satisfaction, respectively.

A vast majority (92.00 per cent) of the overall scientists were belonged to low to medium level of job stress, followed by 8.00 per cent of overall scientist were with high level of job stress in their respective job.

6.7.1.3 Psychological characteristics

A great majority (85.34 per cent) of the overall scientists had medium to high level of achievement motivation, followed by 13.33 per cent of them were with very high level of achievement motivation, while remaining 1.33 per cent of the scientists were belonged to low level category of achievement motivation.

A great majority (84.66 per cent) of the overall scientists had positive to highly positive attitude towards their job, while 14.67 per cent and 0.67 per cent fell in the category of neutral and negative attitude towards their job, respectively.

6.7.2 Perception of the scientists about organizational climate

Slightly more than half (50.67 per cent) of the overall scientists had most favourable perception about organizational design, followed by 40.67 per cent of them with favourable perception. While, remaining 5.33 per cent of the scientists were having neutral perception and only 3.33 per cent of them had unfavorable perception about organizational design.

A great majority (83.33 per cent) of the overall scientists had high to very high level of trust on their staff and university authority, followed by 10.00 per cent of them with medium level of trust within the organization.

An overwhelming number (90.00 per cent) of the overall scientists were having good to very good perception about their superiors' leadership skill, followed by 7.33 per cent and 2.67 per cent of them has perceived their superiors' leadership skill as an average and poor level, respectively.

A vast majority (83.34 per cent) of the overall scientists of Anand Agricultural University engaged in teaching, research and extension education had good to very good level of overall communication.

A great majority (89.33 per cent) of overall scientist engaged in teaching, research and extension education activity had favourable to most favourable perception about their organizational culture, followed by 8.67 per cent and 2.00 per cent of them with neutral and unfavourable perception, respectively.

A vast majority (85.33 per cent) of the overall scientists engaged in teaching, research and extension education activity perceived that teamwork within the organization was good to very good level, followed by 12.67 per cent of overall scientist were with average perception about teamwork.

A great majority (85.34 per cent) of the overall scientists had high to very high level of motivation from their superiors, followed by 11.33 per cent and 3.33 per cent of overall scientists were belonged to medium and low level category of motivation, respectively.

A great majority (88.67 per cent) of overall scientist had favourable to most favourable overall perception about their organizational

climate, followed by 8.00 per cent and 3.33 per cent of them were having neutral and unfavourable perception, respectively.

6.7.3 Attitude of the scientists towards organizational climate

Slightly more than four-fifth (82.67 per cent) of the overall scientists engaged in teaching, research and extension education activity in the university had positive to highly positive attitude towards their organizational climate, while 14.00 per cent and 3.33 per cent of them were having neutral and negative attitude towards organizational climate, respectively.

6.7.4 Perception of the scientists about organizational commitment

A vast majority (91.33 per cent) of the overall scientists engaged in teaching, research and extension education activity had high to very high level of affective commitment, followed by 6.00 per cent and 2.67 per cent of overall scientist were belonged to medium and low level category of affective commitment, respectively.

A great majority (86.00 per cent) of the overall scientists had medium to high level of continuance commitment, followed by 14.00 per cent of overall scientist were with low level of continuance commitment.

Nearly three-fourth (72.67 per cent) of the overall scientists engaged in teaching, research and extension education work had high to very high level of normative commitment, followed by 26.00 per cent of overall scientist were with medium level of normative commitment.

An overwhelming number (94.67 per cent) of the overall scientists engaged in teaching, research and extension education activity had

medium to high to level of overall organizational commitment, while remaining 5.33 per cent of them were having very high level of overall organizational commitment.

6.7.5 Relationship between selected characteristics of the scientists and their attitude towards organizational climate

6.7.5.1 Relationship between personal-economic variables and their attitude towards organizational climate

The variables namely age and experience of the scientists had positive and significant relationship with their attitude towards organizational climate. Whereas, three variables namely education, native place and annual income did not exhibit any significant relationship with their attitude towards organizational climate.

6.7.5.2 Relationship between job related variables and their attitude towards organizational climate

Scientists' job involvement, job performance and job satisfaction had positive and significant relationship with their attitude towards organizational climate, while job stress of the scientists had exhibited negative but significant relationship with their attitude towards organizational climate.

6.7.5.3 Relationship between psychological characteristics and their attitude towards organizational climate

Scientists' achievement motivation and attitude towards job had positive and significant relationship with their attitude towards organizational climate.

6.7.6 Relationship between selected characteristics of the scientists and their perception about organizational commitment

6.7.6.1 Relationship between personal-economic variables and their perception about organizational commitment

There was positive and significant relationship between experience of the scientists and their perception about organizational commitment, while native place of the scientists had exhibited negative but significant relationship with their perception about organizational commitment. Whereas, three variables namely age, education and annual income did not exhibit any significant relationship with their perception about organizational commitment.

6.7.6.2 Relationship between job related variables and their perception about organizational commitment

Scientists' job involvement, job performance and job satisfaction had positive and significant relationship with their perception about organizational commitment. While, job stress of the scientists had exhibited negative but significant relationship with their perception about organizational commitment.

6.7.6.3 Relationship between psychological characteristics and their perception about organizational commitment

Scientists' achievement motivation and attitude towards job had positive and significant relationship with their perception about organizational commitment.

6.7.7 Problems of organizational climate experienced by the scientists

The major problems of organizational climate experienced by the scientists engaged in teaching, research and extension education activity of Anand Agricultural University in sequential order were: lack of willingness towards work (Rank I), lack of accountability among staff members(Rank II), indifferent attitude of administrators (Rank III), absence of periodical check and objective assessment of work (Rank IV), suffering from heavy workload other than mandatory work (Rank V), lack of provision for international training programme (Rank VI), lack of conveyance facility for field and institutional visits (Rank VI), lack of laboratory facilities (Rank VII), non-availability of well-equipped classrooms (Rank VIII), inordinate delay in proper settlement of service matters (Rank VIII) and lack of teamwork among staff members (Rank VIII).

6.7.8 Suggestions from the scientists to improve the organizational climate

The major suggestions offered by the scientists engaged in teaching, research and extension education activity of Anand Agricultural University to improve the organizational climate in sequential order were: the willingness of the employees towards their work should be increased (60.67 per cent), employees of the university should not be engaged in non-mandatory work (59.33 per cent), accountability for all employees should be fixed (57.33 per cent), regular follow up and check of assessment of work should be done (54.67 per cent), attitude of the administrators or superiors should be concerned or sympathetic (51.33 per cent), permission should be

given to the employees for international training programme (48.67 per cent), employees' placement should be based on their area of interest (45.33 per cent), provisions of rewards or incentives should be made for their work (39.33 per cent) and communication system should be honest at all the levels to develop trust among staff members (37.33 per cent).

In addition to this, the scientists also felt that the personality development programme to the employee should be provided (30.00 per cent), strategies for teamwork among staff members should be established (29.33 per cent), cordial atmosphere should be developed within the university (27.33 per cent), coordination among staff member should be increased (27.33 per cent), proper settlement of service matters should be within time (26.00 per cent), adequate laboratory facility should be available in every department (24.00 per cent), conveyance facility for field and institutional visits should be provided adequately (21.33 per cent), need to boost up leadership quality among superiors (19.33 per cent), feedback about superiors should also be taken from the subordinates (19.33 per cent), paper work for genuine permission from higher authority should be reduced (12.00 per cent)and proper performance appraisal of the employee should be improved (15.33 per cent).

6.8 EMPIRICAL MODEL OF THE STUDY

The tentative conceptual model was laid down in the beginning of this dissertation while arriving at the conceptual frame of the study Fig. 1. Now, the final form has been depicted through the empirical model in Fig. 32. The model shows those characteristics of the scientists which had significant

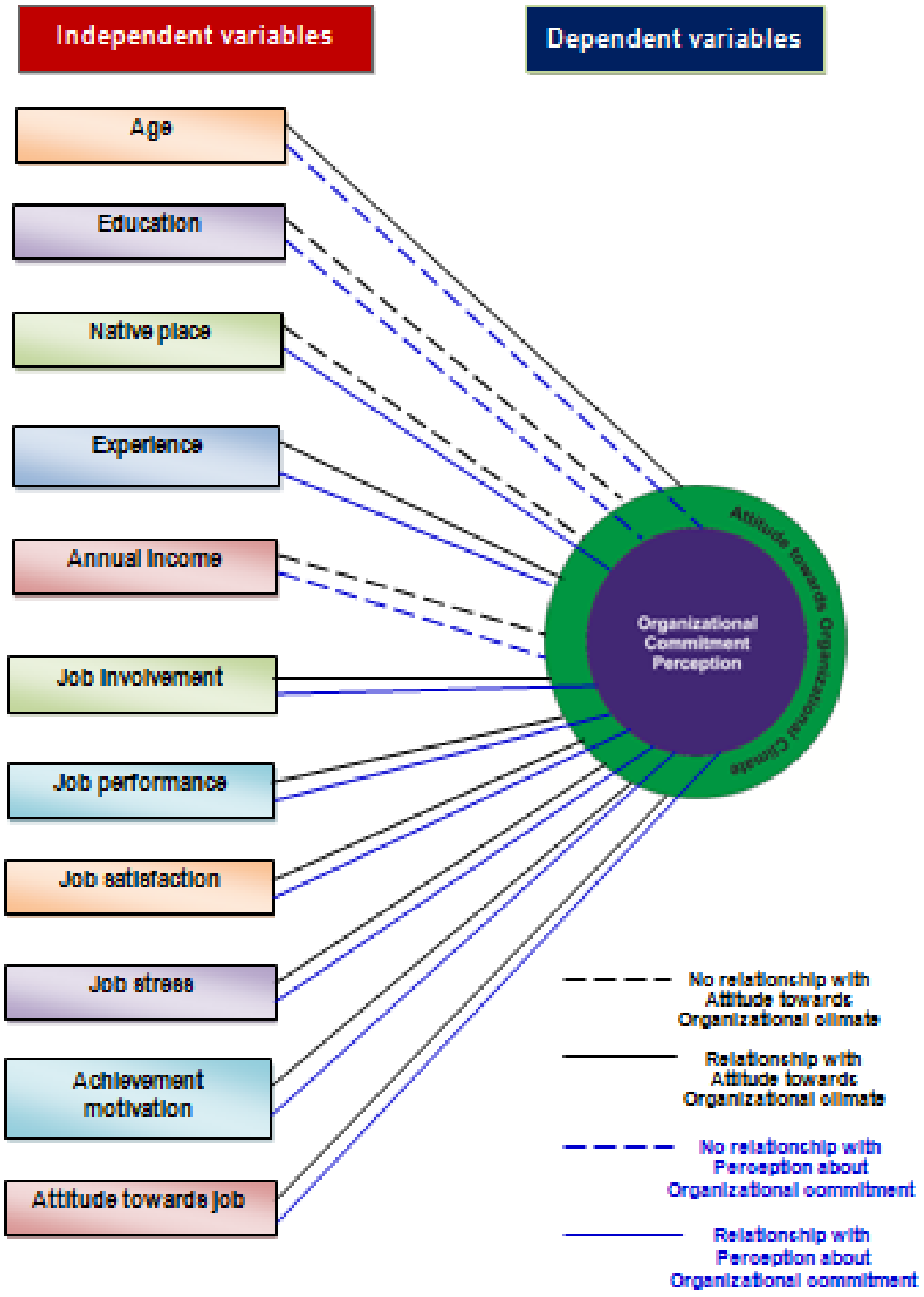


Fig. 32: Empirical model showing cause and effect of relationship between independent and dependent variables

relationship with the dependent variable i.e. attitude towards organizational climate and perception about organizational commitment.

6.9 MAJOR IMPLICATIONS

The present study has highlighted direction on the new areas in which research work is needed to be carried out. On the basis of findings of present investigation a few implications are given below:

1. The study facilitated in knowing personal-economic characteristics, organizational or job related characteristics, and psychological characteristics of the scientists of Anand Agricultural University and it would act as a guideline to the administrations or higher authority to plan, implementing programmes related to human resource development within the organization.
2. The findings of the study clearly imply that perception of the scientists about the organizational climate of Anand Agricultural University, Gujarat was moderately favourable. Hence, there is scope for tuning this performance to perform better by further improving the organizational climate through better human resource development measures. This can be done by recognizing good work, through promotions and rewards/incentives. This requires to be increase their willingness towards work by providing them adequate facilities.
3. The findings clearly depicted that majority of scientists were in medium to high level of organizational commitment category. Hence, there is a scope to improve the level of organizational

commitment among the scientists by increasing their responsibilities within the organization and to involve them completely to achieve the organizational goals.

4. Majority of the scientists were belonged to medium to high level of job related characteristics, such as job involvement, job performance, job satisfaction and medium level of job stress. There is scope to improve these characteristics from high to very high level category and reduce the level of job stress of the scientists through counseling and by introducing appropriate educative programmes, adequate training facilities in their respective fields, etc.

5. Lack of willingness towards work, lack of accountability among staff members, absence of periodical checks and objective assessment of work, suffering from heavy workload other than mandatory work, lack of conveyance facility for field and institutional visits, lack of laboratory facilities, lack of provision for international training programmes, non-availability of well equipped classrooms, lack of teamwork among staff members and absence of cordial atmosphere were some of the major problems experienced by the scientists in the organization. Appropriate actions should be taken to eliminate these problems.

6. Some of the suggestions made by the scientists of Anand Agricultural University are needed to be seriously considered by the higher authority/administration and the policy makers like

increase the willingness of the employee towards work through motivation, accountability of each employee should be fixed for reducing the job stress, employee of the university should not be engaged in non-mandatory work for better quality of productive work and permission for international training programmes for their personality development.

6.10 SUGGESTIONS FOR FUTURE RESEARCH

An attempt has been made to suggest a few areas of the future studies, which are given below:

1. The present study was conducted to only in Anand Agricultural University of Gujarat state. It is true that findings of the single study are not adequate to make any generalizations. Therefore, this study opens possibilities to carry out similar studies in other state agricultural universities or any other organizations of India.
2. The present investigation was carried out under certain limitations of time and resources available with researcher, covering only scientists of Anand Agricultural University of Gujarat state. However, such study can be carried out among other faculties of other state agricultural universities or any other organizations of India.
3. This study was limited to only perception of the scientists towards organizational climate. Hence, impact studies of organizational climate on the employee performance in welfare of the organization can also be undertaken on the basis of results of this study.

4. Some more personal, social, situational, communicational, economical and psychological variables can be correlated with attitude of the scientists towards organizational climate and perception of the scientists about organizational commitment.

5. The present study was concentrated only on scientists of Anand Agricultural University of Gujarat state. Future investigation may be carried out for non-teaching personnel of the State Agricultural Universities.

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APPENDIX - I

EXTENSION EDUCATION INSTITUTE
ANAND AGRICULTURAL UNIVERSITY
ANAND – 388 110

Date: 19 / 08 / 2015

To,

Dear sir / Madam,

As we know, that management of human resources involves several important and complex issues in the form of multidimensional reactions. Today the impacts of modern behavioural sciences have new insights and approaches to the management of human resources. These new insights have highlighted the concept of motivating people in the organization as an important strategy. Researchers in organizational behavior have long been interested in understanding employees' perception of the work environment and how these perceptions influence individual's work- related attitude and behaviour.

The scientists working in the agricultural universities perform three fold functions, *viz.*, teaching, research and extension education activities. They are responsible for managing UG/PG teaching as well as research and extension education programmes.

Along with the several factors, an attitude plays a very crucial role in making favourable feelings towards organizational climate. Realizing the above fact, one of my Ph. D. students, **Mr. Mohmmad Yunus** has undertaken a research study on **"Development of a scale to measure attitude of scientists of Anand Agricultural University towards organizational climate"** as a part of his major research.

Considering your vast academic and extension experience in the social research, you are requested to act as one of the judges to opine to select statements, which would be included in the construction of scale. I shall be thankful if you could kindly spare your valuable time to go through the enclosed statements and give your responses whether you feel that each of the listed statements can be included in a scale to measure attitude of the scientists towards organizational climate or not. Please give your response by making tick mark (√) against each of the statements in any one of the five points continuum, ranging from strongly agree (SA) to strongly disagree (SDA).

Kindly arrange to return duly filled list of statements to student or me at your earliest convenient day preferably within a week.

With regards,

Yours sincerely,

(C. P. DESAI)

Extension Educationist
Extension Education Institute
Anand Agricultural University
Anand-388110
Gujarat, India

Encl: List of attitudinal statements (PTO)

Please tick mark (√) your response for each statement in appropriate column stating your view considering relevance of the statements to measure “Attitude of the Scientists of Anand Agricultural University towards Organizational Climate"

SA = I strongly agree and believe that this statement should be part of the scale

A = I agree and believe that this statement should be a part of the scale

UD = I cannot decide whether this statement should be part of the scale or not

DA = I feel that this statement should be a part of the scale

SDA =I strongly feel that this statement should not be a part of the scale

No.	Statements	SA	A	UD	DA	SDA
1.	I think management style in my university supports the academic atmosphere (+)					
2.	I think impression created by management in my university supports the research activity (+)					
3.	I believe that existing climate in my university supports extension movement (+)					
4.	I feel that leadership style of my organization is encouraging (+)					
5.	I believe that vertical communication between senior and junior employees is discouraging (-)					
6.	I consider that horizontal communication within the employees is cheering (+)					
7.	I think that efficiency of employee in my organization is considerable factor in delegating the power (+)					
8.	I believe that my university maintains the high standard of working climate (+)					
9.	I am unsatisfied with the working conditions of my university (-)					
10.	I am unhappy with the style of planning adopted in my university (-)					
11.	I am pleased with the staffing pattern adopted in my university (+)					
12.	I am unsatisfied with the work culture of my university (-)					

13.	I feel that authority of my university creates motivating environment for all (+)					
14.	I think that my university provides necessary resources to execute duties (+)					
15.	I think working climate of my university is impractical (-)					
16.	I believe that level of discipline in my university is well maintained (+)					
17.	I believe that climate provided to develop carrier in my university is discouraging (-)					
18.	I think that the working atmosphere of my university is pleasant (+)					
19.	I believe that trustworthiness between superiors and subordinates in my university is reliable (+)					
20.	I believe that level of commitment amongst the employees of my university is superior (+)					
21.	I think that authority is failed in creating conducive working climate in my university (-)					
22.	I think that critical decisions are taken in my university by participatory approach (+)					
23.	I think creative ideas of employees are valued by decision makers of university (+)					
24.	I believe that infrastructural facility made available at my university is discouraging (-)					
25.	I feel lucky getting favourable climate of my university (+)					
26.	I think that climate created in my university is encouraging to perform duties (+)					
27.	I think organizational environment of my university is adaptive (+)					
28.	I feel that organizational setting of my university is stressful (-)					
29.	I believe that organizational culture of my university is productive (+)					

APPENDIX - II

INTERVIEW SCHEDULE

PERCEPTION OF SCIENTISTS OF ANAND AGRICULTURAL UNIVERSITY TOWARDS ORGANIZATIONAL CLIMATE

Part - I

Information on Personal-economic independent variables

1. Name : _____

2. Gender : **Male / Female**

3. Place of work : _____

4. Division/Department : _____

5. Age (in completed years) : _____

6. Education : **M.Sc. (Ag.) /PhD (Ag.) /Others**

7. Designation : _____

8. Total experience (in years): _____

9. Annual Income : _____ ₹

10. Native Place : **Rural/Urban**

Part - II

Information on job related and Psychological independent variables

1. Job involvement:

Please indicate your degree of agreement or disagreement to the following statements based on your experience:

(**SA**- Strongly agree, **A**- Agree, **UD**- Undecided, **DA**- Disagree, **SDA**- Strongly disagree)

No.	Statements	SA	A	UD	DA	SDA
1.	I shall stay overtime to finish a job even if I am not paid for it. (+)					
2.	One can measure a person well by how good a job he/she does. (+)					

3.	Major satisfaction in my life comes from my job. (+)					
4.	I usually go for work a little early to get the things ready. (+)					
5.	Sometimes I keep myself awake at night thinking about next day planning. (+)					
6.	I am a perfectionist about my work. (+)					
7.	I feel depressed when I fail at something connected with my work. (-)					
8.	I have other activities more important than my work. (+)					
9.	I would keep working even if I do not get money. (+)					
10.	Quite often, I feel like staying at home instead of going for work. (-)					
11.	I am very much involved in my work. (+)					
12.	I avoid taking extra duties and responsibilities in my work. (-)					
13.	Most things in life are more important than work. (-)					
14.	Sometimes I would like to kick myself for the mistakes I make in my work. (+)					

2. Job Performance:

The following statements are relating to your job performance please indicate your response in the appropriate column:

(**SA**- Strongly agree, **A**- Agree, **UD**- Undecided, **DA**- Disagree, **SDA**- Strongly disagree)

No.	**Statements**	**SA**	**A**	**UD**	**DA**	**SDA**
1.	Study the situation and identify the problems. (+)					
2.	Involve in planning of departmental assignments and execution. (+)					
3.	Involve in teaching, research and extension activities. (+)					
4.	Communicate technical information and knowledge. (+)					
5.	Utilize the university properties judiciously. (+)					

6.	Assess the performance of work after completion. (+)					
7.	Do not report the problems faced during work to my superiors. (-)					
8.	Maintain all the prescribed records and registers neatly and up-to-date. (+)					
9.	Not successful in getting support from my superiors. (-)					
10.	Attend official meetings regularly. (+)					
11.	Conduct research in my own field of specialization. (+)					
12.	Prepare research proposals. (+)					
13.	Loyal to job and university. (+)					
14.	Capable in meeting the difficulties. (+)					

3. Job Satisfaction:

Please indicate your degree of satisfaction or dissatisfaction with regard to the following statements relating to your job:

(**VMS**- Very much satisfied**, MS**- Much satisfied, **S**- Satisfied, **LS**- Less satisfied, **NS**- Not satisfied)

No.	Statements	VMS	MS	S	LS	NS
	How much satisfied are you?					
1.	Flexibility given by superior to do job well. (+)					
2.	Your present position when you compare it to a similar other position. (+)					
3.	Towards the programme, you are carrying out and to the goals, which you set for yourself in the present position. (+)					
4.	People of your area give proper recognition to your work. (+)					
5.	Amount of time, you devote to your job. (+)					
6.	Promotional opportunities in your job. (+)					
7.	Work, you do as an employee. (+)					

8.	You are being recognized as a professional worker in your field. (+)					
9.	Present job when you consider the expectation you had when you took up this job. (+)					

4. Job Stress:

The following statements related to job stress. Based on the level of stress you are experiencing in your job, please indicate your response in the appropriate column:

(**NSS**- Not a source of stress, **RSS**- Rarely a source of stress, **STSS**- Sometime a source of stress, **ASS**- Always a source of stress)

No.	Statements	NSS	RSS	STSS	ASS
1.	I work on my unnecessary job activities. (-)				
2.	My job activities are unclear to me. (-)				
3.	To keep up with my job I always have to take work home with me. (+)				
4.	I have to work hard to complete my work on time. (+)				
5.	My job is boring. (-)				
6.	My work area is too crowded. (-)				
7.	I do not have the authority to do my job well. (-)				
8.	My job is too difficult. (-)				
9.	My job has become to routine. (+)				
10.	There is not enough time to do my job. (-)				
11.	Work conditions on my job are below satisfactory. (-)				
12.	I receive conflicting requests from two or more people. (-)				
13.	I am not sure of what is expected of me. (-)				
14.	I am responsible for too many jobs. (+)				
15.	My job is too easy. (+)				
16.	I am responsible for helping others to solve their problem. (+)				

17.	I do not have time to take an occasional break from the job. (-)				
18.	My working conditions are not as good as working condition of others. (-)				

5. Achievement Motivation:

Please tick mark any of the five alternatives provided against each statement to indicate your degree of agreement or disagreement:

(**SA**- Strongly agree, **A**- Agree, **UD**- Undecided, **DA**- Disagree, **SDA**- Strongly disagree)

No.	Statements	SA	A	UD	DA	SDA
1.	One should work hard until one is satisfied with the results. (+)					
2.	One should set difficult goals for himself and try to reach them. (+)					
3.	Your efforts are directed towards a goal. (+)					
4.	One should have determination and driving ambition to achieve desired things in life. (+)					
5.	Work should come first even if one cannot get rest. (+)					
6.	While working in a group, one should try to excel others for similar tasks. (+)					
7.	The way things are happening nowadays discourages one to work hard. (+)					
8.	It is better to be content with whatever one has than to be always struggling for more. (-)					
9.	There is no need to put more efforts as everything has been determined by destiny. (-)					

6. Attitude towards Job:

Following are some of the statements, which are related to your work/job. Check your response at appropriate place on the scale given against each statement:

(**SA**-Strongly agree, **A**-Agree, **UD**-Undecided, **DA**-Disagree, **SDA**-Strongly disagree)

No.	Statements	SA	A	UD	DA	SDA
1.	I feel that the real enjoyment in my work since it is very interesting. (+)					

2.	I think that other jobs are more interesting than the work I am doing. (-)					
3.	I think that this work gives me opportunities to express myself. (+)					
4.	I feel that most of the time, I have to force myself to go on with the work. (-)					
5.	I feel that the work I am doing is best and I would not change my job for another. (+)					
6.	I believe that I definitely dislike my work. (-)					
7.	I feel that my work is interesting enough to keep me from getting bored. (+)					
8.	I think that the work does not require any creative ability at all. (-)					

Part - III

Information on Dependent Variables

1. Organizational (AAU) Climate:

The statements given below are to get an insight into the organizational climate or environment of your Organization/University. The statements have to be answered by checking one of the alternatives provided under each item.

(**AT**- Always true, **UT**- Usually true, **ST**- Sometimes true, **RT**- Rarely true, **NT**- Never true)

No.	Statements	AT	UT	ST	RT	NT
I.	**Organization's Design**					
1.	The organization's goals are clear to me. (+)					
2.	Clear reporting structures have been established in the organization. (+)					
3.	Employees have a shared understanding of what the organization is supposed to do. (+)					
4.	Roles and responsibilities within the employees group are understood. (+)					
5.	The organization's objectives are clear to me. (+)					
6.	Employees have right skill sets to perform their job functions. (+)					

II.	**Trust**					
7.	I trust my immediate superior. (+)					
8.	I believe what my immediate superior says. (+)					
9.	Authority delivers what they promise. (+)					
10.	Attitude of the authority is transparent. (+)					
11.	My immediate superior trusts me. (+)					
III.	**Leadership**					
12.	My immediate superior values the contribution I make. (+)					
13.	My immediate officer does a good job at "employee management", dealing with their employees who work for him/her. (+)					
14.	The working style of my immediate superior is generally participative. (+)					
15.	My immediate superior demonstrates strong leadership skills. (+)					
16.	The working style of my immediate superior is generally autocratic. (-)					
17.	My immediate superior tackles employee (internal or external) relationships well. (+)					
18.	My immediate superior is knowledgeable in his/her area of specialization. (+)					
19.	My immediate superior respects me as an employee. (+)					
20.	I clearly understand what my superior expects of me. (+)					
21.	My immediate officer's actions are consistent with the organization values. (+)					
IV.	**Communication**					
22.	I receive the information I need to perform my job well. (+)					
23.	My immediate superior listens carefully to his/her employees. (+)					
24.	Our face-to-face meetings are productive. (+)					
25.	Changes are well communicated by me to those most directly affected. (+)					
26.	When I need help, I can ask others in my work group for suggestions or ideas. (+)					

27.	My immediate superior clarifies misunderstandings, if needed. (+)					
28.	My immediate superior conducts staff meetings in an effective manner. (+)					
29.	The organization's plans (strategy) have been clearly communicated to me. (+)					
30.	I am informed of changes before they actually happen. (+)					
31.	My immediate superior does a good job of sharing information. (+)					
V.	**Culture / Work culture**					
32.	My organization has a good working environment. (+)					
33.	I feel valued as an employee. (+)					
34.	Morale is high across the organization. (+)					
35.	Employees have a good balance between work and personal life. (+)					
VI.	**Teamwork**					
36..	The people I work with are pleasant. (+)					
37.	I feel like a part of my team. (+)					
38.	In my department, we work together as a team. (+)					
39.	My immediate superior participates in team activities. (+)					
40.	Employees of my team are appropriately involved when we have to make a decision. (+)					
41.	I feel my input is valued by my peers. (+)					
42.	I feel supported by other employees even in the face of challenging situations. (+)					
43.	Employees of my work group vary widely in their skills and abilities. (-)					
VII.	**Motivation**					
44.	I am energetic about my work. (+)					
45.	The organization challenges me to strive for ambitious goals. (+)					
46.	I receive a great deal of encouragement and recognition. (+)					

47.	I am always enthusiastic towards my work. (+)					
48.	I have been appropriately rewarded for my performance. (+)					

2. Attitude towards Organizational Climate:

Following are some of the statements, which are related to organizational climate. Check your response at appropriate place on the scale given against each statement:

(**SA**- Strongly agree, **A**- Agree, **UD**- Undecided, **DA**- Disagree, **SDA**- Strongly disagree)

No.	Statements	SA	A	UD	DA	SDA
1.	I think impression created by management in my university supports the research activity. (+)					
2.	I believe that vertical communication between senior and junior employees is discouraging. (-)					
3.	I consider that horizontal communication within the employees is cheering. (+)					
4.	I think that efficiency of employee in my organization is considerable factor in delegating the power. (+)					
5.	I am unsatisfied with the working conditions of my university. (-)					
6.	I think working climate of my university is impractical. (-)					
7.	I believe that level of discipline in my university is well maintained. (+)					
8.	I believe that climate provided to develop career in my university is discouraging. (-)					
9.	I think that authority is failed in creating conducive working climate in my university. (-)					
10.	I think that critical decisions are taken in my university by participatory approach. (+)					
11.	I believe that infrastructural facility made available at my university is discouraging. (-)					
12.	I think organizational environment of my university is adaptive. (+)					

3. Organizational Commitment:

Listed below are some statements that represent possible feelings that you might have about the university. With respect to your own feelings, please indicate

the degree of your agreement or disagreement with each statement by putting tick mark in appropriate column:

(**SA**- Strongly agree, **A**- Agree, **UD**- Undecided, **DA**- Disagree, **SDA**- Strongly disagree)

No.	Statements	SA	A	UD	DA	SDA
I.	**Affective commitment**					
1.	I would be very happy to spend the rest of my career in this organization. (+)					
2.	I enjoy discussing about my organization with people outside. (+)					
3.	I really feel as if the organization's problems are my own. (+)					
4.	I do feel like 'part of family' of this organization. (+)					
5.	I do feel 'emotionally attached' to this organization. (+)					
6.	This organization has a 'sentimental value' to me. (+)					
7.	I do feel a strong sense of belonging to this organization. (+)					
II.	**Continuance commitment**					
8.	My life would be disrupted if I decided I wanted to leave this organization now. (-)					
9.	It would not be too costly for me to leave my job at this organization in the near future. (-)					
10.	Right now, staying with my job at this organization is a matter of necessity as much as desire. (+)					
11.	I am afraid of what might happen if I quit my job without having another one lined up. (-)					
12.	I feel that I have a few options to consider leaving this organization. (-)					
13.	One of the few serious consequences of leaving this organization would be scarcity of available alternatives. (-)					
14.	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice (another organization may not match the overall benefit I have here). (+)					

III.	**Normative commitment**					
15.	Things are better when people stayed with one organization for most of their career. (+)					
16.	I was taught to believe in the value of remaining loyal to one organization. (+)					
17.	I do believe that a person must always be loyal to his/her organization. (+)					
18.	I think that people these days move from one organization to another too often. (+)					
19.	I believe that loyalty is important and therefore I feel a sense of moral obligation to remain. (+)					
20.	If I got another offer for a better job elsewhere, I would not feel it was right to leave the organization. (-)					
21.	Things were better in the days when people stayed with one organization for most of their career life. (+)					

Part - IV

(A) Problems of organizational (AAU) climate encountered by scientists:

Please mark the problems, which are being experienced by you in the university.

(**MI**- Most important, **I**- Important, **NI**- Not important)

No.	Problems experienced by scientists	MI	I	NI
1.	Lack of willingness towards work			
2.	Non-availability of well-equipped classrooms			
3.	Lack of laboratory facilities			
4.	Indifferent attitude of administrators			
5.	Lack of proper communication among staff members			
6.	Lack of accountability among staff members			
7.	Absence of cordial atmosphere in department			
8.	Lack of conveyance facility for field and institutional visits			
9.	Absence of mutual trust and respect for each other			
10.	Lack of teamwork among staff members			
11.	Absence of periodical checks and objective assessment of work			

12.	Inordinate delay in proper settlement of service matters			
13.	Lack of coordination among staff members			
14.	Dominance of casteism, nepotism etc. while extending special privileges			
15.	Lack of rewards/incentives for work			
16.	Lack of leadership quality among superiors			
17.	Lack of provision for international training programme			
18.	Suffering from heavy workload other than mandatory work			

(B) Suggestions from the scientists to improve the organizational climate:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

APPENDIX - III

Relationship between selected characteristics of the scientists and their attitude towards organizational climate

No.	Independent variables	Correlation-Coefficient ('r' value)	Range of obtained score
I.	**Personal-economic variables**		
1.	Age	0.206*	23 to 62 years
2.	Education	0.061	17 to 20 score
3.	Native place	-0.091	1 to 2 score
4.	Experience	0.217**	2 to 39 years
5.	Annual income	0.124	₹ 5 lakhs to ₹ 20 lakhs
II.	**Job related variables**		
1.	Job involvement	0.325**	39 to 65 score
2.	Job performance	0.299**	44 to 69 score
3.	Job satisfaction	0.470**	21 to 45 score
4.	Job stress	-0.166**	28 to 55 score
III.	**Psychological variables**		
1.	Achievement motivation	0.325**	21 to 43 score
2.	Attitude towards job	0.579**	17 to 40 score

APPENDIX - IV

Relationship between selected characteristics of the scientists and their perception about organizational commitment

No.	Independent variables	Correlation-Coefficient ('r' value)	Range of obtained score
I.	**Personal-economic variables**		
1.	Age	0.146	23 to 62 years
2.	Education	0.008	17 to 20 score
3.	Native place	-0.200*	1 to 2 score
4.	Experience	0.174*	2 to 39 years
5.	Annual income	0.102	₹ 5 lakhs to ₹ 20 lakhs
II.	**Job related variables**		
1.	Job involvement	0.277**	39 to 65 score
2.	Job performance	0.262**	44 to 69 score
3.	Job satisfaction	0.447**	21 to 45 score
4.	Job stress	-0.236**	28 to 55 score
III.	**Psychological variables**		
1.	Achievement motivation	0.227**	21 to 43 score
2.	Attitude towards job	0.486**	17 to 40 score

Appendix V: Correlation matrix													
	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}
X_1	1.00												
X_2	0.423**	1.00											
X_3	0.995**	0.402**	1.00										
X_4	0.811**	0.389**	0.855**	1.00									
X_5	-0.284**	-0.138	-0.223**	-0.184*	1.00								
X_6	-0.206*	0.129	0.229**	0.205*	-0.166*	1.00							
X_7	0.174*	0.063	0.185*	0.128	-0.004	0.299**	1.00						
X_8	0.191*	0.249**	0.196*	0.150	-0.157	0.239**	0.389**	1.00					
X_9	-0.203*	-0.213**	-0.247**	-0.172*	-0.062	-0.097	-0.034	-0.222**	1.00				
X_{10}	0.112	0.063	0.153	0.118	0.060	0.286**	0.249**	0.367**	-0.014	1.00			
X_{11}	0.131	0.106	0.166*	0.084	-0.131	0.206*	0.324**	0.429**	-0.196*	0.384**	1.00		
X_{12}	0.206*	0.061	0.217**	0.124	-0.091	0.325**	0.299**	0.470**	-0.166*	0.385**	0.579**	1.00	
X_{13}	0.146	0.008	0.174*	0.102	-0.200*	0.277**	0.262**	0.447**	-0.236**	0.227**	0.486**	0.555**	1.00
**. Correlation is significant at the 0.01 level (2-tailed) *. Correlation is significant at the 0.05 level (2-tailed)													

X_1 Age
X_2 Education
X_3 Native place
X_4 Experience
X_5 Annual income
X_6 Job involvement
X_7 Job performance
X_8 Job satisfaction
X_9 Job stress
X_{10} Achievement motivation
X_{11} Attitude towards job
X_{12} Attitude towards organizational climate
X_{13} Perception about organizational commitment