

**RELATIONSHIP BETWEEN SOCIAL SUPPORT
DIMENSIONS AND EMPLOYEE ENGAGEMENT AT
WORKPLACE**

Thesis submitted to Goa University for the
award of the degree of

DOCTOR OF PHILOSOPHY

IN

MANAGEMENT

By

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DEDICATION

To my parents,

for their unconditional love, blessings and taking pride in my success; for teaching me to believe in myself and encouraging me to fly.

To my husband, Kapil,

for his patience and faith; for being my pivotal anchor and giving wings to my dreams.

To my lovely daughter, Kavya,

for whom I seek to be an inspiration, teach her to dream with passion and give her the confidence to chase her dreams.

DECLARATION

I, Sonya Kapil Angle, do hereby declare that this dissertation titled “Relationship between Social Support Dimensions and Employee Engagement at Workplace”, is a record of original research work done by me under the supervision of Dr. Nirmala Rajanala, Associate Professor, Department of Management Studies, Goa University.

I also declare that this dissertation or any part thereof has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Sonya Kapil Angle

Place: Goa University

Date:

CERTIFICATE

This is to certify that the Ph.D. thesis titled “Relationship between Social Support Dimensions and Employee Engagement at Workplace”, is an original work carried out by Sonya Kapil Angle, under my guidance, at the Department of Management Studies, Goa University.

I also declare that this dissertation or any part thereof has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

Dr. Nirmala Rajanala

Supervisor

Place: Goa University

Date:

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Relationship between Social Support Dimensions and Employee Engagement at Workplace

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Management Studies, Goa University.

ABSTRACT

This research focuses on the relationship between the dimensions of social support with employee engagement. The study develops and describes a new comprehensive model for understanding the relationships between dimensions of non-work social support, both the structural and functional and employee engagement. The study also considers the moderating impact of job demands on the relationship between social support and employee engagement. Literature review and an exploratory study led to the formulation of the hypothesized conceptual model. Measurement scales were developed for social support and job demands, while the existing scale (Utrecht Work Engagement Scale) was used to measure employee engagement. Data was collected from 203 employees from various organizations in the manufacturing and service sector located in Goa.

Analysis of data revealed that:

- (i) The four types of social support functions (emotional, informational, instrumental and social companionship), collectively have a positive relationship with employee engagement.

- (ii) Informational support and Emotional support functions were found to have significant relationship with employee engagement.
- (iii) There exists a strong relationship between social support structures and social support functions.
- (iv) No relationship between social structures with employee engagement was found.
- (v) Job demands do not moderate the relationship between social support functions and employee engagement.

The content of the thesis may be summarized as follows:

- a) Development of a conceptual model on the relationship between social support dimensions and employee engagement at workplace.
- b) Development and validation of scales to measure social support and job demands
- c) Test of hypothesised relationships using multiple regression analysis.

KEY WORDS

Employee Engagement, Social Integration, Social Network, Social Support Functions, Job Demands.

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CHAPTER 1

1.0 INTRODUCTION

“There are only three measurements that tell you nearly everything you need to know about your organization’s overall performance: *employee engagement, customer satisfaction and cash flow*. It goes without saying that no company large or small, can win over the long run without energised employees who believe in the mission and understand how to achieve it.” - Jack Welch

Do your employees feel excited to come to work every morning? The over enthusiastic sales person at the local supermarket who is always at your footstep greeting you and helping you with a carry basket and providing every assistance, the office assistant who has stayed long nights in office without any additional incentives for timely data entry during an ERP implementation exercise are few examples of the construct under discussion in this research; “employee engagement”. If your employees are willing to go the extra mile at the workplace and make a difference you are a ‘lucky Human Resource Manager’ with an engaged workforce.

The Human Resource function has undergone a rampant change from being merely a transactional to a transformational and strategic role. Organizations today are waking up to the fact that employees are the very essence of business excellence as they design, deliver, and support what the customers experience every day. Engaging and motivating employees to perform has gained more prominence with time. “Over the years, one of the toughest challenges confronting the CEOs, HR and the business leaders of many organizations, has been to ensure that when their employees check in

everyday, they not only do it physically but also mentally and emotionally. In short, they need to ensure that their employees are truly engaged. Employee engagement has emerged as a critical driver of business today. “Organizations are using their engaged employees as a tool of strategic competence. A highly engaged employee will consistently outperform and set new standards” (Bedarkar & Pandita, 2014).

“The importance of employee engagement in the current business scenario attains significance and it has been labelled as one of the “hottest topics in management” in recent times, Pati and Kumar (2010), since engaged employees are fully “psychologically present”, thus “giving it their all”. In fact the researcher believes that engagement is basically connecting at the head, heart and hand.

Employers now realize that by focusing on employee engagement, they can create a more efficient and productive workforce. Any initiatives of improvement which are taken by management cannot be fruitful without wilful involvement and engagement of employees. In an era of enhanced corporate transparency, greater workforce mobility, and severe skills shortages, retention of employees by enhancing employee engagement, has emerged as a critical issue for every organization.

High level of employee engagement occurs when employees are involved with, dedicated to, eager, and fervent about their work. An engaged employee understands what he or she must do to add value to the company, has a sense of pride, feels a connection to the company mission, and is willing to put those thoughts and feelings—discretionary effort—into action.

It is well established that employee engagement is of strategic importance and organizations must focus on enhancing the engagement levels of its employees and have interventions for the same. The HR representatives within the organizations must have a deep understanding of the construct of employee engagement and what drives it, in order to carve out effective strategies.

1.1 A Theoretical Background

Employee engagement is defined and operationalized in its own right as “positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (Schaufeli, et. al., 2002,).

Extensive literature review on employee engagement reveals that job and personal resources are the important antecedents of work engagement. Almost all research on engagement has explored various job and personal resources and found positive linkages with employee engagement. Literature has constantly shown that job resources such as social support from colleagues and supervisors, performance feedback, skill variety, autonomy, and learning opportunities are positively associated with work engagement (Bakker and Demerouti, 2008; Schaufeli and Salanova, 2007).

Schaufeli and Bakker (2004), found evidence for a positive relationship between three job resources (performance feedback, social support, and supervisory coaching) and work engagement (vigour, dedication, and absorption) amongst Dutch employees. A similar study by Hakanen, Bakker, & Schaufeli (2006), on 2000 Finnish teachers revealed that job control, information, supervisory support, innovative climate, and social climate were positively related to work engagement.

Personal resources are “positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to successfully control and have an impact on their environment” (Hobfoll, Johnson, Ennis, & Jackson, 2003). The relationships between personal resources and work engagement, has been convincingly proven by authors. Several personal resources including self-esteem, self-efficacy, locus of control, and the abilities to perceive and regulate emotions are positive predictors of work engagement. In a longitudinal study in a diary format by Xanthopoulou, et.al. (2009), three personal resources (self-efficacy, organizational-based self-esteem, and optimism) were instrumental in predicting work engagement.

The outcomes and consequences of employee engagement are directly related to positive indicators within an organization, more particularly with job performance, financial gains, higher retention rates, customer loyalty (Saks, 2006). Compared to those who do not feel engaged, those who are engaged feel more committed to the organization, are less often absent, and they do not intend to leave the organization. Also, engaged employees experience positive emotions, and enjoy very good mental and psychosomatic health (Schaufeli and Bakker 2004).

Engagement also leads to higher financial returns (Xanthopoulou et al., 2009). This suggests that engaged workers can indeed offer a competitive advantage to organizations. Those who are engaged also perform better. For instance, engaged employees deliver superior service quality, as perceived by their customers (Harter, Schmidt, and Hayes, 2002). It is also revealed that levels of engagement are positively related to business-unit performance (i.e., customer satisfaction and loyalty, profitability, productivity, turnover, and safety).

Bakker (2011), highlights and emphasizes four reasons why engaged workers perform better than non-engaged workers. Engaged employees: (1) often experience positive emotions, including happiness, joy, and enthusiasm; (2) experience better psychological and physical health; (3) create their own job and personal resources (e.g., support from others); and (4) transfer their engagement to others.

Hobfoll (2002), in his theory on Conservation of Resources posits that resource gain acquires its saliency in the context of resource loss. This implies that job resources become more salient and gain their motivational potential when employees are confronted with high job demands (Bakker and Demerouti, 2007). A study among highly skilled Dutch technicians by Xanthopoulou, et.al, (2007), who investigated the relationship of three personal resources (self-efficacy, organizational-based self-esteem, and optimism) in predicting work engagement. It was found that that engaged employees are highly self-efficacious and believe they can meet the demands they face in various contexts.

Extensive literature review reveals that most of the academic research on engagement is in the work and the organizational context and all factors and impacting employee engagement levels are also identified largely as job or personality traits and behaviors. This ignores a very important aspect of the non-work factors which are of immense importance as an employee is spending a good number of hours away from work. What happens in those moments mandates a study to get a holistic understanding and insight into what really is the source of engagement. It will help us seek answers to what creates engaged employees and what the role of non-work resources is, in creating engagement.

Most of the research on employee engagement is in the western context. There is limited research on this topic in the Indian organizational context and only a handful of studies are available for reference, as this construct has gained significance and popularity very recently in India, less than ten years ago. Studies highlighting antecedents of engagement are even fewer in number.

As it is famously said ‘no man is an island’, this is especially true in the Indian context where people are closely embedded and entrenched in their social circles/network which contribute to their physical, mental and emotional wellbeing. The Indian society is very unique and multifaceted characterized by high collectivism and social interdependence. Individuals are born into groups, families, castes, religious communities and are deeply entrenched within these groups and sub groups. Indians are closely embedded in social networks which contribute to their physical, mental and emotional wellbeing. Though joint family culture is on the decline due to changing societal structures as a result of various socio economics reasons, the familial bonds are still very strong. Though people may not live together, they draw all types of support from their respective networks including moral and practical support. The entire society is driven by emotions. May it be birth of a child, work life, marriage, education or even death, an individual can rely on his strong ties for support in every phase of his/her life. The support system provides resources like, facilitating admissions through some contacts, care during sickness, arranging marriage, child care support, work related financial and even support in case of death in the family. The line delineating personal and work space is very fine and people carry their home to work and work to their homes. This is also seen through various spill-over studies which deal with positive and negative spillovers from work to home domain and vice

versa. Individuals do not detach their personal emotions and feelings while going to work. This study focuses on this very characteristic of the Indian society, the relationship between the social support from non-work domain and its impact on employee engagement.

Literature too supports this aspect and we have numerous studies on job satisfaction, employee wellbeing, retention etc. enlisting the link and relationship between experiences at work and non-work domains enriching the individual. Numerous studies provide an insight into the theory of work-family enrichment that is the extent to which experiences in one role improve the quality of life in the other role. Work-family enrichment is bidirectional and occurs when work experiences improve the quality of family life, and family-to-work enrichment occurs when family experiences improve the quality of work life. “Home resources facilitate work performance by providing means (e.g., social support from one’s partner) or by enhancing individual abilities (e.g., opportunities for self-growth). Particularly, support from family or friends is positively related to the quality of job performance” (Orthner & Pittman, 1986).

Spillover refers to effects of work and family on one another that generate similarities between the two domains. The spillover theory states that these similarities are often discussed in terms of work and family affect (i.e. mood and satisfaction), values, skills and overt behaviours (Edwards and Rothbard, 2000). Positive experiences in the non-work domain will create positive state of mind and these are likely to spill over to the work domain enhancing the work motivation. These positive experiences come from the close relationships in our social network including partner, spouse, parents,

friends, family etc. They contribute to these experiences by providing just hanging around with them, relaxing in their company or also through resource provision like love and affection, some important job related information which helps to resolve some issues at work, financial support, child care, managing chores so the individual can distress and relax, doing some fun activities like taking a walk together, playing a sport or catching a movie.

In the Effort-Recovery theory, Meijman & Mulder (1998), also posit that off-job activities contribute to recovery to the extent that those activities enable employees to replenish personal resources. Individuals can indulge in leisure and recreational activities which allows them to de-stress, and recharge themselves and creates vigor and enthusiasm and energy required for the next day's work. Here too, the non-work domain and the resources provided by them would be crucial in aiding the recovery process.

1.2 PURPOSE OF THE STUDY

This research intends to contribute to the research in the area of employee engagement by proposing a new dimension of social support from the non-work domain as an antecedent of employee engagement and develop a comprehensive model of employee engagement. Specifically the purpose is to contribute to the existing body of knowledge on employee engagement by providing insights into the linkages of social support from non-work domain and employee engagement. It will reveal the relationship between of being socially integrated and having a close knit network and its impact on employee engagement. It also intends to measure the perceptions of an individual on the kinds of social support he/she may draw from

his/her network namely; emotional, instrumental, informational and social companionship and how each of these play a role in fostering engagement. Through the study the researcher also attempts to provide interesting leading points for practitioners to plan interventions to leverage the quality of the engagement for competitive advantage.

1.3 RESEARCH PROBLEM

Though the existing literature highlights and emphasizes the role of non-work resources and domains in enhancing and facilitating work outcomes, the literature on employee engagement largely focuses on two dimensions, namely job resources and personal resources as antecedents of employee engagement. So far the relationship between resources i.e. social support from the non-work domain and employee engagement has not been explored in detail. The few existing studies, have not covered in entirety, the dimensions of social support. An employee spends a healthy time away from workplace wherein he /she interacts with various people from his/her social network (family, friends etc.), has strong relationships with them and draws various resources from these networks. This research attempts to explore this very relationship between the three dimensions of social support, namely social integration, social network and social support functions with employee engagement.

RESEARCH QUESTIONS

1. What are the dimensions of social support?
2. What is the relationship of social support structures with employee engagement?

3. What is the relationship of perceptions of various social support functions from non-work domain with employee engagement?
4. What is the relationship of social support structures with the social support functions?
5. Do job demands have an impact on the relationship between social support and engagement?

RESEARCH OBJECTIVES

1. To study the various dimensions of social support.
2. To study the relationship between social support structures and employee engagement.
3. To study the relationship between perceived social support from non-work domain with employee engagement.
4. To study the relationship of social structures and social support functions.
5. To examine if job demands moderate the relationship between social support resources and employee engagement.

1.4 SCOPE OF THE RESEARCH

The aim of this study is to explore a new dimension of social support from non-work domain as an antecedent of employee engagement. Existing literature on employee engagement focuses on job resources and personal resources as antecedents to employee engagement. The study develops and describes a new comprehensive model for understanding the relationship between dimensions of social support, both structural comprising of social integration and social networks and the functional aspects (perceptions about types of social support functions), and employee

engagement. The study also considers the moderating effect of job demands on the relationship between social support and employee engagement.

The study purports that all non-work domain resources impacting employee engagement should be understood besides the work and personal resources. Hence the study puts forth a comprehensive framework to study the relationship of non-work social support with employee engagement. The study takes into consideration the three dimensions of social support, namely social integration, social network and perceptions of functions provided by the network, i.e. emotional, instrumental, informational and social companionship support, and explores their relationship with employee engagement within the manufacturing and service sector located in the state of Goa.

1.5 RESEARCH PLAN

This research began with an extensive review of existing literature on employee engagement, its importance, models, characteristics, antecedents, outcomes and various theories attached to the construct. The literature review was followed by an exploratory study to get an insight into the various factors and aspects of employee engagement and their perceptions and practices and outcomes, in the Indian context. In depth interviews of twelve Human Resource Managers both from the manufacturing and service sector, within as well as outside the state of Goa, were conducted. The elaborate literature review and exploratory study led to introduction of a new variable i.e. 'social support'. Elaborate literature review on this new dimension along with theories related to the same was studied in detail. Gaps in literature were identified. A conceptual model was defined and hypotheses for the study were proposed.

The third stage of research led to a study of the available appropriate scales to measure the constructs being studied, namely, Social Support (three dimensions i.e. Social Integration, Social Network, Social Support functions), Job Demands and Employee Engagement.

New scales were drawn up for the social support dimensions as the scales used in previous studies were not adequate and comprehensive to cover all the three aspects of social support. Items for the scale for job demands were adapted from three subscales of the existing instrument, “The Questionnaire on the Experience and Evaluation of Work –QEEW”, Marc van Veldhoven et. al. (2006). Employee engagement was measured using the existing scale widely used in various studies i.e. Utrecht Work Engagement Scale (UWES). The newly designed scales were tested for validity and reliability. A pilot survey was conducted.

The final questionnaires on social support, job demands and employee engagement were administered to the identified sample of employees from organizations from both, the manufacturing sector, as well as the service sector located in Goa.

This was followed by quantitative analysis and testing of hypotheses using the SPSS software and analysis of the findings.

1.6 ORGANISATION OF CHAPTERS OF THIS THESIS:

The thesis consists of six chapters. The following is the highlight of its contents

The first chapter consists of the introduction and provides a brief theoretical background and context for the study. It introduces us to the constructs being studied

and states the relevance and importance of this particular study. It provides an insight into the reasons for choice of the variables undertaken for the study. It also highlights the research problem, research objectives and scope of the study.

The second chapter deals with the literature review, of various existing studies in the area of employee engagement and social support. It initially covers studies in the western context on the construct of employee engagement. It also explores all factors, outcome, characteristics, models, theories and measurement of employee engagement. The studies in the Indian context have also been elaborated. The chapter also covers elaborate literature review of studies on social support, outlining various characteristics, measurement instruments, models and theories. It then provides linkages between the two constructs, i.e. social support and employee engagement. It concludes by identifying gaps in the existing literature which are critical to the formulation of hypotheses.

The third chapter explains the research methodology adopted in this study, research design and research tools used for capturing relevant data and for analyzing the same. It firstly presents a description of the exploratory study undertaken by the researcher and its findings which formed the basis of identification of the new variable. A conceptual model is proposed based on the literature review and various theories related to the constructs which provide support for the proposed hypotheses. This chapter also focuses on the research design, methodology adopted for data collection, sampling technique and measurement tools and data collection procedure.

Chapter four describes the scale development process adopted for development of the social support and job demands measurement scales including item generation, testing of content validity and reliability of the instruments leading to the development of the final instruments used for the quantitative study.

The fifth chapter presents the data analysis and output of the quantitative survey administered to employees from a cross section of organizations in Goa. Data which was analyzed using the SPSS software has been presented. Firstly the frequencies, sample characteristics and descriptives have been presented. One way ANOVA and independent t-tests have been carried out to understand the between group differences with respect to various demographic variables. This was followed by testing of the relationships between constructs to support the hypotheses proposed using technique of multiple regression analysis.

The sixth chapter presents the findings of this research and validates them with the help of existing literature. It also highlights the contribution of this research to the existing body of literature and theory of employee engagement through its interpretation of data analysis and elaborate discussion. The limitations of the study have been listed as well as some concrete managerial implications of the study are presented. Most importantly the chapter concludes with a clear direction for future research

CHAPTER 2

2.0 REVIEW OF LITERATURE

This chapter presents an in-depth review of literature related to the research being undertaken. It covers all the concepts under study, existing research about their definitions, relationships, content, measurements and other important facets. At the outset, employee engagement studies from around the world have been presented. Various facets, theories, models and characteristics have been described followed by a description of employee engagement studies in the Indian context. The next part of this chapter presents an extensive review on social support. The linkages between the two constructs have been derived and elucidated. This chapter also presents existing theories from the fields of Psychology and Sociology appropriate to this study. The chapter concludes by identifying gaps in literature which forms the basis of formulation of the hypotheses of the study.

The literature on employee engagement is very vast and has various facets and areas highlighted. This review systematically encapsulates it in various categories namely a) definition of the construct of engagement and its uniqueness. b) measurement of engagement c) state level engagement d) its antecedents and consequences f) model of engagement g) Spill over and crossover of engagement h) Saliency of Job Resources and Engagement h) gain spirals and engagement and i) crafting engagement.

2.1 EMPLOYEE ENGAGEMENT STUDIES AROUND THE WORLD

2.1.1 Defining Employee Engagement

Psychology has been criticized as primarily dedicated to addressing mental illness rather than mental “wellness.” This prevailing negative bias of psychology is illustrated by the fact that the number of publications on negative states exceeds that on positive states by a ratio of 14:1 (Myers, 2000). This research is an attempt to explore one such positive construct wellness; namely employee engagement.

The first scholar who conceptualized engagement at work was Kahn (1990), an ethnographic researcher, who described it as the “harnessing of organization members’ selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performances”. He carried out a qualitative study on summer camp counselors and organizational members of an architecture firm about their moments of engagement and disengagement at work. He found that three psychological conditions associated with engagement or disengagement at work: “meaningfulness, safety, and availability.”

“Engaged employees have high levels of energy, are enthusiastic about their work, and they are often fully immersed in their job so that time flies” report Macey and Schneider, (2008).

Employee engagement has also been described as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al, 2002). ‘Vigor’ is described as high levels of vitality and mental resilience while

working, the tenacity to invest effort in one's work, and perseverance during challenging times. 'Dedication' refers to being passionately involved in one's work, and experiencing a sense of meaning and worth, motivation and pride. Lastly 'Absorption' is characterized by being intensely focused and happily immersed in one's work, whereby the person loses track of time and has difficulties with detaching oneself from work.

Engagement has often been criticized for bearing similarity to other constructs like job satisfaction, work holism, organizational citizenship and burnout. A detailed study of the literature proves that engagement is theoretically different and unique and can be measured independently as against these related constructs.

Engagement and workaholism are empirically different concepts. "Theoretically also it is assumed that the underlying motivation for being absorbed in one's work differs; engaged workers are absorbed in their work because it is fun while workaholics feel driven to work, their absorption is a matter of compulsion, not of enjoyment. Engagement and workaholism can be measured separately and independently" (Taris T. Schaufeli W. and Shimazu A. 2009).

"Engagement as a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication, and absorption whereas burned-out employees are characterized by high levels of exhaustion and negative attitudes toward their work" (Maslach, Schaufeli and Leiter, 2001). "Low scores on exhaustion and cynicism cannot be taken as being representative of vigor and dedication, since employees who indicate that they are not fatigued are not necessarily full of energy" (Demerouti, Mostert and Bakker, 2010).

“Organizational commitment refers to a person’s attitude and attachment towards their organization whereas Engagement is not an attitude. It is the degree to which one is attentive and absorbed in work and Organizational Citizenship Behavior involves voluntary and informal behaviors that can help co-workers and the organization, while the focus of engagement is one’s formal role performance rather than extra-role and voluntary behavior” (Macey and Schneider, 2008).

Work engagement is different from job satisfaction too, in that “it combines high work pleasure (dedication) with high activation (vigor, absorption); job satisfaction is typically a more passive form of employee well-being. An employee is satisfied does not mean he is engaged, it means he is satiated” (Bakker 2011).

2.1.2 Antecedents & Consequences of Engagement

Various studies have revealed that engagement is a unique concept that is best predicted by job resources (e.g., autonomy, supervisory coaching, performance feedback) and personal resources (e.g., optimism, self-efficacy, self-esteem).

For instance, Bakker et. al. (2003), describes employee work engagement as the result of the job resources available in the organization. “Job resources refer to those physical, psychological, social, or organizational aspects of the job that are either/or: 1) functional in achieving work goals; 2) reduce job demands and the associated physiological and psychological costs; 3) stimulate personal growth and development. Job resources like social support from colleagues and supervisors, performance feedback, skill variety, and autonomy are linked to motivation because they empower employees, make their work meaningful, increase accountability and provide them with feedback about their work performance.”

“Personal resources on the other hand, are positive self-evaluations that are linked to resilience and refer to individuals’ sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, and Jackson, 2003). As such, personal resources (a) are functional in achieving goals, (b) protect from threats and the associated physiological and psychological costs, and (c) stimulate personal growth and development (e.g., optimism, resilience, self efficacy) It has been shown that positive self-evaluations related strongly to various aspects of work related well-being namely engagement” (Xanthopoulou, Bakker, Demerouti, and Schaufeli, 2009).

Previous cross-sectional studies by Xanthopoulou, Bakker, Demerouti, & Schaufeli, (2009), Bakker, Hakanen, Demerouti, and Xanthopoulou, (2007), have shown that several job resources like autonomy, social support, supervisory coaching, performance feedback, and opportunities for professional development related positively to work engagement.

Longitudinal survey among 201 telecom managers supported that job resources including social support, autonomy, opportunities to learn and to develop, and performance feedback leads to engagement (Schaufeli, Bakker and Rhenan, 2009). Salanova and Schaufeli (2008) investigated the mediating role of work engagement (i.e. vigour and dedication) among job resources (i.e. job control, feedback and variety) and proactive behaviour at work in two independent studies in technology employees in Spain and telecom managers in Netherlands. Both were about changes and innovations at work. They concluded that work engagement fully mediates the impact of job resources on proactive behaviour.

Richman, Civian, Shannon, Hill and Brennan (2008) explored the relationship of perceived flexibility, supportive work life policies, and use of formal flexible arrangements and occasional flexibility to employee engagement and expected retention. Perceived flexibility and supportive work-life policies were related to greater employee engagement and longer than expected retention.

Literature throws light on the various other antecedents of employee engagement though majority of studies on work engagement focuses on work-related outcomes. Some antecedents include job characteristics, perceived organizational support, supervisor support, rewards, procedural justice, distributive justice whereas consequences and outcomes include job satisfaction, commitment, intention to quit, organizational citizenship (Saks, 2006).

Tims, Bakker and Xanthopoulou (2011) threw light on how supervisors' leadership style influences followers' daily work engagement. They concluded that transformational leadership style enhances employees' work engagement through the mediation of optimism, on a day-to-day basis.

In a study by Salanova, Agut, and Peiró (2005), it was established that organizational resources and work engagement predicted service climate, which led to superior employee performance and enhanced customer loyalty. Engagement has also been linked to good health. Studies have reported that engaged workers enjoy good health and suffer less from health related issues like headaches, cardiovascular problems, and stomach aches reported Schaufeli and Bakker, (2004). Schaufeli and Bakker (2004) proved that engagement was negatively related to turnover intention and mediated the relationship between job resources and turnover intention.

Literature also stresses on the saliency role of job resources. It was found that job resources and personal resources particularly influence work engagement when confronted with high levels of stress and demands (Xanthopoulou, Bakker, Hakenen and Demerouti, 2007; Hakenen, Bakker, and Demerouti, 2005).

2.1.3 Characteristics of engagement

Trait and State Engagement

When the concept was emerging, engagement was considered as a relatively stable experience—a persistent and pervasive state rather than a momentary state (Schaufeli et al. 2002). The majority of previous (cross-sectional and longitudinal) studies treated work engagement as a relatively stable (trait-like) variable across time (Macey and Schneider, 2008). As such, these studies have solely focused on between-person differences in work engagement. Further studies then revealed that engagement levels may fluctuate on a daily or weekly basis too, i.e. there may be within person fluctuations too. Researchers used the diary studies design to explore and record daily work experiences of working employees in various sectors.

Most diary studies have linked work engagement to work-related outcomes, especially to job performance. For instance, Xanthopoulou et. al., (2009) provided evidence for the positive impact of daily work engagement on daily financial returns. He reported that daily fluctuations in job resources (autonomy, coaching, and team climate) are related to employees' levels of personal resources (self-efficacy, self-esteem, and optimism), work engagement, and financial returns. The study was conducted on employees working in three branches of a fast-food company. A questionnaire and a diary design study revealed that day-level job resources had an effect on work engagement, through day-level personal resources.

In a dairy study of flight attendants it was found that colleague support as a job resource was linked to employee engagement which led to better job performance (Xanthopoulou, Bakker, Heuven and Demerouti, 2008). This study shed light on the daily fluctuations in engagement levels as an outcome of fluctuations in the level of job resources.

Sonnentag et al. (2010) suggested that generally engaged employees may have off-days, since “not all days are created equally”. A study among Dutch teachers tested a model of weekly work engagement, by showing that week-levels of autonomy, exchange with the supervisor, and opportunities for development (but not social support) were positively related to weekly engagement, which, in turn, was positively related to weekly job performance. Moreover, momentary work engagement was positively related to job resources in the subsequent week (Bakker and Bal 2010).

Crossover of engagement

The process that occurs when the psychological well-being experienced by one person affects the level of well-being of another person is referred to as crossover (Westman, 2001). Previously most studies in literature have focused on unwell-being, or the crossover of stress and strain from one person to another especially partners, spouses or colleagues. Recently a few studies have examined the crossover of positive well-being, namely employee engagement. Studies have established that employee engagement crosses over from a leader to his team members as well as within partners and couples. Individuals who were inclined to adopt the point of view of others in everyday life were most likely to “catch” the vigor, dedication, and absorption of their partners.

Work engagement is not only important for one's own, but also for one's partner's performance. It was seen that women who took the perspective of their partner scored higher on engagement with increasing partner engagement. Moreover, the results showed that engagement crossover was strongest when both men and women were high (vs. low) in perspective taking. This is particularly likely when partners are high in empathy (Bakker and Demerouti, 2009).

A study on Royal Dutch constabulary officers, concluded that team-level burnout and work engagement are related to individual team members' burnout (i.e., exhaustion, cynicism, and reduced professional efficacy) and work engagement (vigor, dedication, and absorption) (Bakker, Emmerik and Euvema, 2006). A study by Bakker (2005) stated that intrinsic motivation, enjoyment and absorption (being totally immersed in the activity) transferred from music teachers to their students.

Spillover Crossover of Employee Engagement

'Spillover' refers to the transmission of experiences between domains (i.e., from work to home or vice versa), and 'crossover' refers to transmission within the same domain, between persons (Bakker et. al., 2013). The SCM model brings together, the two most important domains in the life of an employee, home and work. The SCM proposes that experiences built up at work spill over to the home domain, and consequently cross over to the partner. Indeed, since partners are likely to discuss their feelings and be attuned to each other, it is rather likely that their states cross over (Demerouti et. al., 2005).

SCM model initially focussed on spillover - crossover of negative emotions only. Later a diary study among Spanish dual-earner couples by Rodriguez-Mun˜oz, et. al. (2014) examined whether engagement at work has an impact on own and partners' well-being and found that employees' daily work engagement influenced partner's daily happiness through employees' daily happiness indicating that the positive effects of work engagement go beyond the work setting and beyond. Accordingly, employees' work experiences impact behaviours, thoughts and feelings in the home domain, which in turn, are transmitted to the partner.

A longitudinal study on Japanese couples revealed that experiences built up at work can have a positive or negative impact on one's partner's family satisfaction. The study highlights engagement has positive impact on employees' private life. This study shed a new light on the process through which employee work engagement influences one's partner at home (Bakker A.B., et. al., 2014). A study by Bakker A.B., Demerouti E., and Schaufeli W.B. (2005), found that home characteristics were associated with work engagement in both men and women. According to Greenhaus and Powell (2006), the experiences lived in one domain may improve the quality of life in the other domain.

Gain Spirals and Engagement

Gain spirals are defined as amplifying loops in which cyclic relationships among constructs build on each other positively over time (Lindsley, Brass and Thomas, 1995).

“For a gain spiral to exist, two conditions should be met: (1) normal and reversed causation (2) an increase in levels over time. Linked to Conservation of resources theory (COR) theory wherein people are seen as motivated to obtain, retain, foster and protect those things that they value i.e. resources. COR theory predicts that those who possess more resources are also more capable of resource gain. In other words, initial resource gain begets future gain, thus constituting so-called “gain spirals”. COR theory predicts that those with greater resources (e.g., more supportive colleagues) are less vulnerable to stress, whereas those with fewer resources (e.g., less supportive colleagues) are more vulnerable to stress” (Hobfoll, 1989).

To test the Gain Spirals theory, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) conducted a study to examine the role of personal resources (i.e. self-efficacy, self-esteem, and optimism) and job resources (i.e., job autonomy, supervisory coaching, performance feedback, and opportunities for professional development) in explaining work engagement. A two-wave longitudinal study was conducted on 163 employees with a 2-year time interval. Results confirmed that resources and work engagement and also job and personal resources were mutually related.

In another longitudinal study among 110 university students working in groups with ICT in a laboratory setting investigated the role of efficacy beliefs in the relationship between two potential task resources (i.e., time control and method control) and work engagement. It was revealed that personal resources (efficacy beliefs) mediate the relationship between task resources and work engagement. It was also found that engagement increases personal and task resources. The study showed that students with high levels of engagement felt more efficacious in performing the task, which in

turn, led to the perception of greater future task resources leading to positive spiral gains (Llorens, et. al., 2007).

2.1.4 Employee Engagement Models

JDR Model of Engagement based on the Conservation of Resources (COR) Theory

According to the Conservation of Resources theory, people seek to obtain, retain, and protect that which they value, e.g. material, social, personal, or energetic resources. The theory proposes that stress experienced by individuals can be understood in relation to potential or actual loss of resources. More specifically, Hobfoll and Shirom (2001) have argued that; “a) Individuals must bring in resources in order to prevent the loss of resources. b) Individuals with a greater pool of resources are less susceptible to resource loss. c) Those individuals who do not have access to strong resource pools are more likely to experience increased loss (loss spiral) and d) Strong resource pools lead to a greater likelihood that individuals will seek opportunities to risk resources for increased resource gains (gain spiral).”

Hobfoll (2002) has additionally argued that resource gain, in turn and in itself has only a modest effect, but instead acquires its saliency in the context of resource loss. This implies that job resources gain their motivational potential particularly when employees are confronted with high job demands.

The evidence regarding the antecedents and consequences of work engagement and the C.O.R. theory form the basis of the overall models of work engagement.

In the first model, the Job Demand Resource model of Engagement by Bakker and Demerouti (2008), two assumptions are drawn from the job demands-resources (JD-R) model of Bakker and Demerouti (2007). The first assumption is that “job resources such as social support from colleagues and supervisors, performance feedback, skill variety, and autonomy, start a motivational process that leads to work engagement, and consequently to higher performance. The second assumption is that job resources become more salient and gain their motivational potential when employees are confronted with high job demands (e.g. workload, emotional demands, and mental demands).” Further, Xanthopoulou et. al. (2007) expanded the JD-R model by showing that “job and personal resources are mutually related, and that personal resources can be independent predictors of work engagement. Thus, employees who score high on optimism, self-efficacy, resilience and self-esteem are well able to mobilize their job resources, and generally are more engaged in their work.”

The JD-R model of employee engagement is graphically depicted in (Figure 2.1). As can be seen, job resources and personal resources independently or combined predict work engagement. Further, job and personal resources particularly have a positive impact on engagement when job demands are high. Work engagement, in turn, has a positive impact on job performance. Finally, employees who are engaged and perform well are able to create their own resources, which then foster engagement again over time and create a positive gain spiral (Bakker and Demerouti, 2006).

The saliency aspect of job resources in the face of job demands which is purported in the COR theory is captured in a number of studies. Before enlisting the studies, it is important to define job demands to get an understanding of the saliency aspect.”

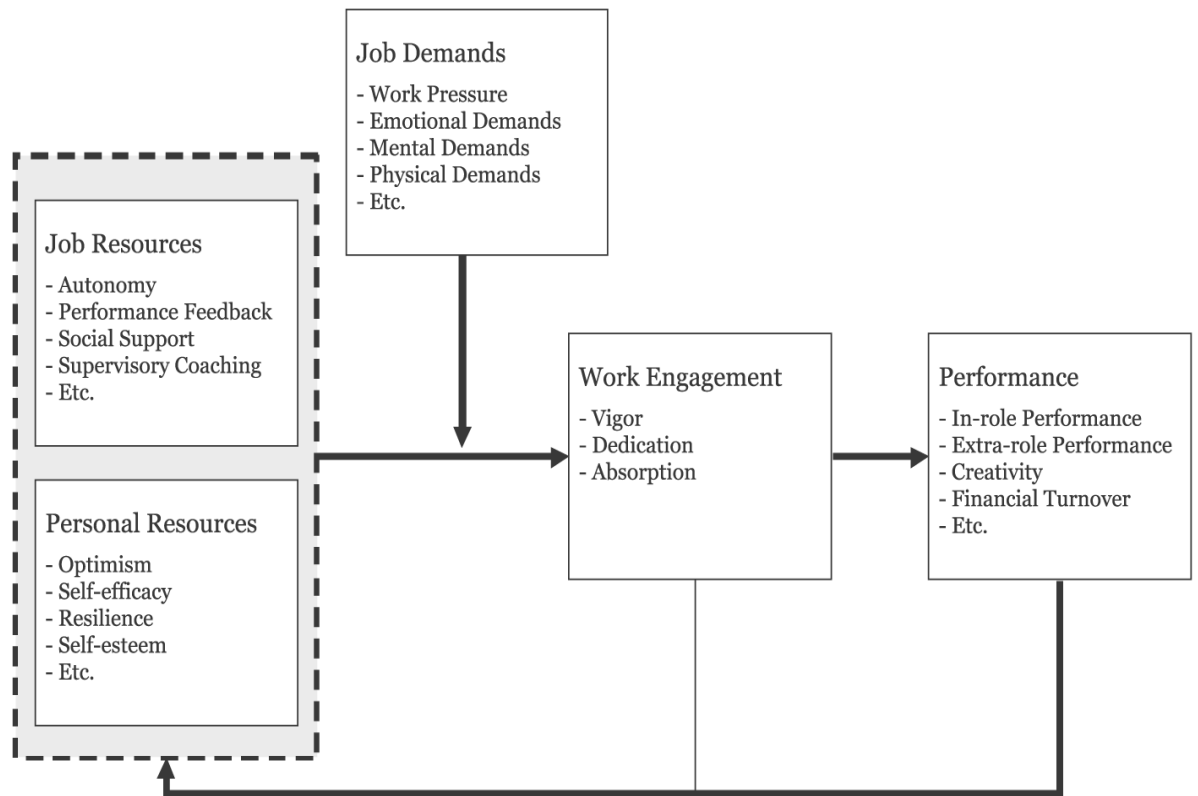
Job Demands refer to those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs. Although job demands are not necessarily negative, they may turn into job stressors when meeting those demands requires high effort and is therefore associated with high costs that elicit negative responses such as depression, anxiety, or burnout” (Bakker, Demerouti and Euwema, 2005). They may include the following types of demands; Quantitative demands (workload, time pressures, etc.); Emotional demands (concern emotionally charged interactions at work e.g., customer/colleague misbehaviour; Heuven et al., (2006); Mental demands (mental processes e.g., work requiring concentration, attention, or memory, Morgeson & Humphrey (2006); and physical demands.

A study by Hakanen, Bakker and Demerouti (2005) on 1919 Finnish dentists employed in the public sector focused on this saliency aspect of job resources in the face of job demands. Variability in professional skills mitigated the negative effect of qualitative workload on work engagement and, in addition, boosted work engagement when the qualitative workload was high. The main conclusion is that job resources are useful in coping with the high demands in dentistry and help dentists to stay engaged.

Bakker A.B., Hakanen J.J., Demerouti E., Xanthopoulou D. (2007), conducted a study of 805 Finnish teachers working in elementary, secondary, and vocational schools tested the impact of job resources as buffers in diminishing the negative relationship between pupil misbehaviour and work engagement. In addition, using conservation of resources theory, the authors hypothesized that job resources particularly influence work engagement when teachers are confronted with high levels of pupil misconduct.

The study revealed that supervisor support, innovativeness, appreciation, and organizational climate were important job resources that helped teachers cope with demanding interactions with students.

Figure 2.1



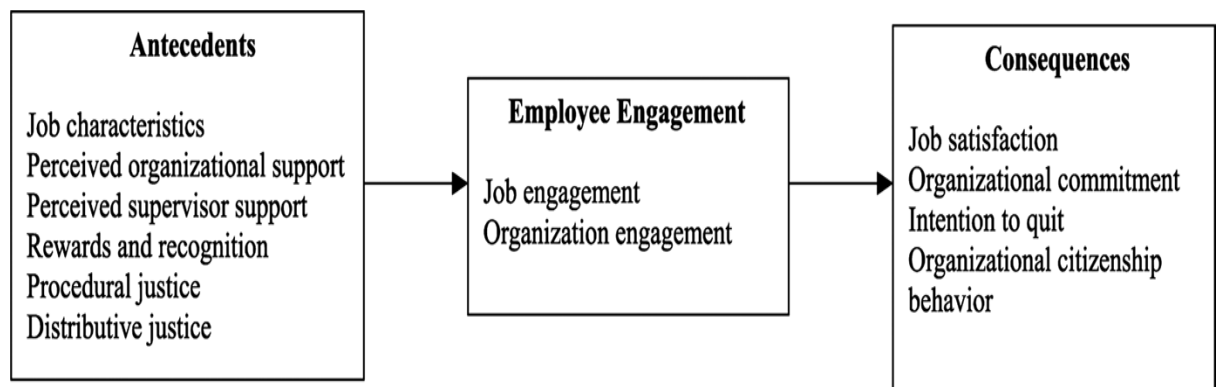
Source: Based on Bakker & Demerouti (2007)

The central tenet of the social exchange theory is that people make social decisions based on perceived costs and benefits (Cropanzano and Mitchell, 2005). The Social Exchange Theory provides a theoretical foundation to another model of engagement proposed by Saks (2006). He uses it to explain why employees choose to become more or less engaged in their work and organization. He states “when employees receive resources from their organization they feel obliged to repay the organization with greater levels of engagement.” He refers to Kahn’s (1990) definition of

Engagement whereby employees feel obliged to bring themselves more deeply into their role performances as repayment for the resources they receive from their organization. When the organization fails to provide these resources, individuals are more likely to withdraw and disengage themselves from their roles. Thus, the amount of cognitive, emotional, and physical resources that an individual is prepared to devote in the performance of one's work roles is contingent on the economic and socio emotional resources received from the organization.

This model described in (Figure 2.2) distinguishes between two types of employee engagement: job and organization engagement. "The reason purported is that work role and the individuals role as a member of an organization are the most significant roles. These are conveyed and described through the model explicitly. A number of potential antecedents have been referred to from Kahn (1990) and Maslach et al. (2001) model and work related consequences have been listed out. Employee engagement is the mediating variable for the relationship between the six work related conditions and various work related outcomes" (Saks, 2006).

Figure 2.2 Model of Employee Engagement



2.1.5 Measurement of Employee Engagement

The most popularly used instrument to measure engagement is the Utrecht Work Engagement Scale. Individuals are required to self-report their engagement on a 7 point likert scale. This instrument that has been validated in many countries across the world (Schaufeli and Bakker, 2003). It measure engagement on three dimensions and includes three subscales: vigour, dedication, and absorption. The UWES has been validated in several countries, including China, Finland, Greece, Japan, South Africa, Spain and the Netherlands.

“A Shortened version of the UWES Scale was developed to measure engagement. Data was collected in 10 different countries and results indicated that the original 17-item Utrecht Work Engagement Scale (UWES) can be shortened to 9 items (UWES-9). The factorial validity of the UWES-9 was demonstrated using confirmatory factor analyses, and the three scale scores have good internal consistency and test-retest reliability. The three engagement dimensions are moderately strong and positively related so that a total score can also be used as an overall indicator of work engagement” (Salanova, Bakker and Scaufeli, 2006).

The Utrecht Work Engagement Scale consists of three subscales namely; **Vigor** is assessed by six items. Those who score high on vigor usually have much high levels of vitality, energy and flexibility, the determination to put in extra efforts, and persevere in the face of challenges. They are full of enthusiasm about their work whereas those who score low on vigor have less energy, enthusiasm and endurance as far as their work is concerned.

Dedication is assessed by five items that refer to deriving a sense of significance from one's work, feeling enthusiastic and proud about one's job, and feeling inspired and challenged by it. Those who score high on dedication strongly identify with their work because it is experienced as meaningful, inspiring, and challenging. Those who score low do not identify with their work because they do not experience it to be meaningful, inspiring, or challenging; moreover, they feel neither enthusiastic nor proud about their work.

Absorption is measured by six items that refer to being totally and happily immersed in one's work and having difficulties detaching oneself from it so that time passes quickly and one forgets everything else that is around.

Those who score high on absorption feel that they usually are happily engrossed in their work, they feel immersed by their work and have difficulties detaching from it because it carries them away. As a consequence, everything else around is forgotten and time seems to fly. Those who score low on absorption do not feel engrossed or immersed in their work, neither do they have difficulties detaching from it, nor do they forget everything around them, including time (Schaufeli and Bakker, 2003).

2.2 Employee Engagement Studies in the Indian context

The researcher also focussed on studies conducted in the Indian context but only a sprinkling of studies was available, covering limited dimensions and relationships as compared to the literature available in the western context.

Srivastava and Bhatnagar (2008) explored the relationship of talent acquisition and employee engagement through a case study in Motorola India, They purport that due

diligence in talent acquisition is a critical problem organizations face today. They recommend a customized strategic approach to recruitment which will lead to higher levels of engagement and lower the attrition rate.

Abraham (2012) conducted a descriptive study to examine the effect of job Satisfaction on 30 employees of a private insurance company. Results indicated that job satisfaction and engagement are correlated. Various job related factors and organizational policies contributed to engagement.

Relationships between leader member exchange (LMX), innovative work behavior, and intention to quit were assessed by Agarwal et. al. (2012). They tested the mediating effect of employee engagement within the relationship. The study revealed that that the quality of exchanges between employees and their supervisors impacted engagement. Work engagement mediated the relationship between LMX and innovative work behavior and partially mediated the intention to quit.

Gupta and Kumar (2012) conducted a study on performance appraisals, one of most important human resource management practices as it yields critical decisions integral to various human resource actions and outcomes. The purpose of the paper was to explore the relationship between perceptions of performance appraisal fairness and employee engagement in the Indian business context. A significant positive association between distributive and informational justice dimensions were found to have a stronger impact on employee engagement conceptualized as antipode of burnout.

A study on 210 public sector banks in India on perceptions of distributive, procedural and interactional justice and their relationship to employee engagement was conducted by Ghosh, Rai and Sinha (2014). The study results showed that distributive, procedural and interactional justice are inter-related to one another. It also highlighted that distributive justice plays a more important role in creating engagement, followed by procedural and interactional justice.

The above literature helps us conclude that employee engagement makes a critical difference when it comes to innovation, organizational performance, competitiveness, customer loyalty and retention and thus ultimately business success. This builds a solid case to research this construct in a more in depth manner. So far, literature has stressed only on job factors and personal factors as antecedents of engagement. There is very limited discussion on non- work related factors which could play a vital role in creating engagement. This research looks at exploring that domain outside of the work environment, specifically social support resources could have a potential impact on employee engagement. Thus the next part of literature review explores social support and linkages between employee engagement and social support.

2.3 Social Support

2.3.1 Introduction and Definition

“People are part of social systems and we need to understand them within these systems. Each member in the system is linked to other members and, presumably, change in one will affect change in others. Over the past three decades, social support has become a major topic for social psychological investigation” (Sarason, Sarason, and Gurung, 1997). It is widely recognized that social relationships have powerful effects on physical and mental health (Heitzmann and Kaplan, 1988).

Social support is a very commonly used word in our day to day lives but this seemingly simple word has a very complex side to it. It's a multidimensional construct and many researchers including Heitzmann and Kaplan (1988), Barrera (1981) agree that there is little consensus on how to define and measure it. Many authors and researchers have attempted to define social support in a number of distinct ways. Cobb (1976) defined social support in terms of information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations." Barrera, Sandier, and Ramsay (1981), broadened the definition of "social support as including tangible forms of assistance such as the provision of goods and services as well as intangible forms such as guidance and expressions of esteem". According to Frey (1989), despite definitional diversity in the concept of social support, it is clear that social support is conceptualized as a component of social interaction with family, friends, neighbors, and others with whom an individual has personal contact.

The diverse nature of operational definitions of social support appearing in the literature are indicative of the issue of multiple interpretations of the meaning of social support. This in turn contributing to misinterpretations and erroneous generalizations. Tardy (1985) states that the solution is not to reach a consensus but to recognize and discuss the issues involved in defining the concept at the theoretical and operational levels. Cohen (1988) too, is of a similar opinion and states that rather than an all-encompassing definition, he proposes broad categories and classifications of the concepts be included under social support. Hence this literature review focuses on these broad categories of social support concepts that have been represented in the literature which have important implications to help guide and arrive at measurement decisions.

2.3.2 Measures of Social Support

Social Support Content

Social Support has been studied from two different perspectives by Cohen and Wills, (1985), in terms of the structure of a social network or in terms of the functions that a relationship or network serves. Structural measures describe the existence of and interconnections between social ties (number of friends, marital status, etc.) Functional measures assess whether interpersonal relationships serve particular functions (e.g. Provide affection, material aid, advise). Structural measures are usually used to measure objective characteristics of social networks while functional measures generally ask persons about their perceptions.

House and Kahn (1985) refer to three ways that social support has been defined and measured and suggest that each is a part of the overall domain of social support. They describe these three aspects in terms of: (1) the existence or quantity of social relationships, e.g. marriage or organizational membership; (2) the nature of the structures among a person's social relationships, e.g., size, density, usually referred to as an individual's social network; and (3) the functional content of the relationships, usually referred to as social support. Because these three aspects are closely interrelated (e.g., the structure of an individual's social relationships may determine how much or what type of social support he/she receives). They further recommend that in a research study at least two if not all three of these aspects be conceptualized and measured.

House (1987) goes on to state that these three aspects of social relationships, all often referred to as social support, must be more clearly distinguished and provides specific terms for each of the characteristics of social support; (1) their existence or quantity

(i.e., social integration), (2) their formal structure (i.e., social networks), and (3) their functional or behavioural content (i.e., the most precise meaning of "social support") and the causal relationships between the structure of social relationships (social integration and networks) and their functional content (social support) must be more clearly understood.

Despite the frequent use of the term social network, most studies do not measure any of the structural characteristics, other than perhaps size and frequency of contact, that are the hallmark of social network (e.g. density, reciprocity, stability etc.) state House, Umberson and Landis (1988). They further distinguish between the elements of social relationship structure: (a) social and (b) social network structure (c) Relational content refers to the functional nature or quality of social relationships, which may be distinguished in terms of source (e.g. spouse, friend, coworker, etc.). Social support is one of the important contents or qualities of such relationships.

Mueller (1980) discusses the need for measures that reflect the multidimensional nature of social support. He suggests that measures should include the dimensions of source (i.e., who is providing the support: a relative, friend, or professional), type (e.g., emotional, instrumental), and the intensity of the relationship (e.g., whether or not it is a confiding relationship). For each source of support the occurrence or availability should be assessed (House & Kahn, 1985).

This thesis has focussed on all the above three clearly differentiated aspects of social support. Lucid definitions and descriptions of each of these aspects as mentioned in literature are presented below.

Dimensions of Social Support

Social Integration

Social integration is explained through the ‘Attachment Theory’ by Bowlby (1969, through Berkman et. al. 2000), where he proposed that there is a universal human need to form close affection bonds. The theory contends that the attached figure, most often but not necessarily the mother, creates a secure base from which an infant or toddler can explore and venture forth. These intimate bonds, created in childhood, form a secure base for solid attachment in adulthood. It is an individual's need for secure attachment for its own sake, for the love and reliability it provides, and for its own “safe haven” (Berkman et. al. 2000).

House, Umberson, and Landis (1988) define social integrations as “a person's degree of social integration is a function only of the number of relationships s/he has with other people. It says nothing about the structure of those relationships or their functional content.” Heaney and Israel (through Glantz et. al. 2008), too concur with this definition and state that ‘social integration refers to the existence various social ties or relationships.’

Social integration is generally measured in terms of diversity of relationships one participates in. Relationships assessed in a typical social integration measure includes, spouse, close family members, friend, neighbours, and social or religious group members. The more types of relationships, the greater is the level of social integration (2001).

Social Network

“Refers to the structure which characterizes a set of relationships. Characteristics of specific relationships between the focal individual and other people in the network and in terms of characteristics of the network as a whole” (House, Umberson, and Landis, 1988).

These include **Frequency-** (number of face-to-face contacts and/or contacts by phone or mail), **Reciprocity** - Extent to which resources and support are both given and received in a relationship. **Duration** -is the length of time an individual knows another. **Density-** Extent to which network members know and interact with each other. **Geographic Dispersion-** Extent to which network members live in close proximity to the focal person (Heaney and Israel through Glantz et. al. 2008).

Social Support Functions

The following are the functional measures of social support. The terms and functional categories used here have been highlighted in various studies (e.g. Cohen and Wills, 1985, House, 1981, Thoits, 1995, Orth-Gomer and Unden, 1987).

Emotional support is related to the amount of “love and caring, sympathy and understanding and/or esteem or value available from others”. Self-esteem is enhanced by communicating to persons that they are valued for their own worth and experiences and are accepted despite any difficulties or personal faults.

Informational support is help in defining, understanding, and coping with problematic events. It is related to the provision of advice or information in the service of particular needs. It has also been called advice, appraisal support, and

cognitive guidance. **Instrumental support** is the provision of financial aid, material resources, and needed services. It may include aid in kind, money or labor. Instrumental aid may help reduce stress by direct resolution of instrumental problems or by providing the recipient with increased time for activities such as relaxation or entertainment. **Social companionship** is spending time with others in leisure and recreational activities. This may reduce stress by fulfilling a need for affiliation and contact with others, by helping to distract persons from worrying about problems, or by facilitating positive affective moods.

This research captures all the above three dimensions of social support, i.e. (Social Integration, Social Network structure and Social Support Functions.).

Perceived Social Support V/s Actual or Enacted Social Support

Perceived support is an individual's perception that adequate support would be available if it was required. Also known as 'support availability', it refers to the quantity or quality of support to which people have access to irrespective of whether they have actually or not received such support. The actual utilization of these support resources is referred to as enacted support (Tardy, 1985). The actual or enacted support measures focus more on an individual's report of support they have actually received. Measures of perceived social support ask respondents to make evaluations of the quality or availability of different types of support (Lakey and Cohen 2000). Measures of perceived social support typically have been found to have the strongest relationships with measures of reduced stress and psychological distress, as well as measures of improved well-being (Barrera, 1986).

2.2.3 Importance of Social Support

Numerous studies indicate that people with spouses, friends, and family members who provide psychological and material resources are in better health than those with fewer supportive social contacts (Mitchell, Billings, & Moos, 1982). There is a tremendous amount of research which links social support to good health and wellbeing, both physical and mental. Social support is a causal contributor to wellbeing (S. Cohen & Syme, 1985, House, 1981). Social support has also been concerned in the mediation and moderation of stressful life events, recovery from illness, and increased program adherence.

A] Social Support and Stress

An inverse relationship was found between frequency of social interactions with peers and faculty during the first 10 weeks of study and the incidence of stressful life events and the number of reported physical and psychological disturbances throughout the next six months, in a study carried out describing the effects of varying levels of social interaction on first year graduate students' reports of stressful events and on their health and emotional problems during the first six months of graduate study (Goplerud, 1980).

B] Social Support and Illness

The paper by Uchino (2006) provides evidence by linking social support to changes in cardiovascular, neuroendocrine, and immune function. Consistent with epidemiological evidence, social support appears to be related to more positive “biological profiles” across these disease-relevant systems. Recent research on immune-mediated inflammatory processes is also starting to provide data on more

integrative physiological mechanisms potentially linking social support to health. A review of the empirical literature examining the relationship between social support and chronic illness self-management was undertaken by (Gallant, 2003). Taken together, the studies provided evidence for a modest positive relationship between social support and chronic illness self-management, especially for diabetes.”

C] Social Support and Mortality.

A longitudinal study of social support and personal coping resources on mortality in older age concluded that persons who received a moderate level of emotional and those who received a high level of support had reduced mortality risks when compared with persons who received a low level of emotional support (Penninx, et al, 1997). In another study he revealed that the presence of a partner, having many close social relationships, feelings of mastery and a high self-esteem were found to have direct, favorable effects on psychological functioning. Social Integration too is related to mortality. Berkman and Syme (1979) in a study proved that individuals with higher social integration outlived their counterparts who had few social ties.

D] Social Support and Well being

Social support is said to have buffering effects on aspects of burnout related to the stresses of role conflict and workload. Himle, D.P. Jayaratne S. and Thyness P. (1991) studied the buffering effects of social support on burnout, four types of social support namely emotional, approval, instrumental, and informational that coworkers and supervisors offer to clinical social workers were examined. They found that informational and instrumental support provided by both coworkers and supervisors had buffering effects.

2.2.4 Process of Social Support

Cohen and Wills (1985) throw light on the process through which social support has a beneficial effect on well-being. They posit that this result can occur through two very different processes. They propose two models; Main effect model and the Buffering effects model. “One model proposes that support is related to well-being only (or primarily) for persons under stress. This is termed the buffering model because it posits that support "buffers" (protects) persons from the potentially pathogenic influence of stressful events. The alternative model proposes that social resources have a beneficial effect and promote well- being irrespective of whether persons are under stress.”

Main Effect

“This model describes a generalized beneficial effect of social support which could occur because large social networks provide persons with regular positive experiences and a set of stable, socially rewarded roles in the community. “This kind of support could be related to overall well- being because it provides positive affect, a sense of predictability and stability in one's life situation, and are cognition of self-worth. Integration in a social network may also help one to avoid negative experiences (e.g. economic or legal problems), that otherwise would increase the probability of psychological or physical disorder” (Cohen S. and Wills T.A., 1985).

Buffering effect

Stress arises when one evaluates a situation as intimidating or otherwise challenging and does not have a suitable coping strategy or response. “Characteristic effects of stress appraisal include negative affect, elevation of physiological response, and behavioral adaptations” (Baum, Singer & Baum 1981).

“First, support may intervene between the stressful event (or expectation of that event) and a stress reaction by attenuating or preventing a stress appraisal response” state Cohen and Wills (1985), which basically means that an individual may perceive that someone will/can provide them with necessary resources which helps to redefine the potential for harm posed by that condition and boosts one's perceived capability to handle the stresses and strains, and hence prevents that specific condition from being assessed as highly stressful.

“Second, adequate support may intervene between the experience of stress and the onset of the extreme outcome by reducing or eliminating the stress reaction or by directly influencing physiological processes. Support may ease the effect of stress assessment by providing a resolution to the actual issue, or by reducing the perceived importance of the stress” (Cohen and Wills, 1985).

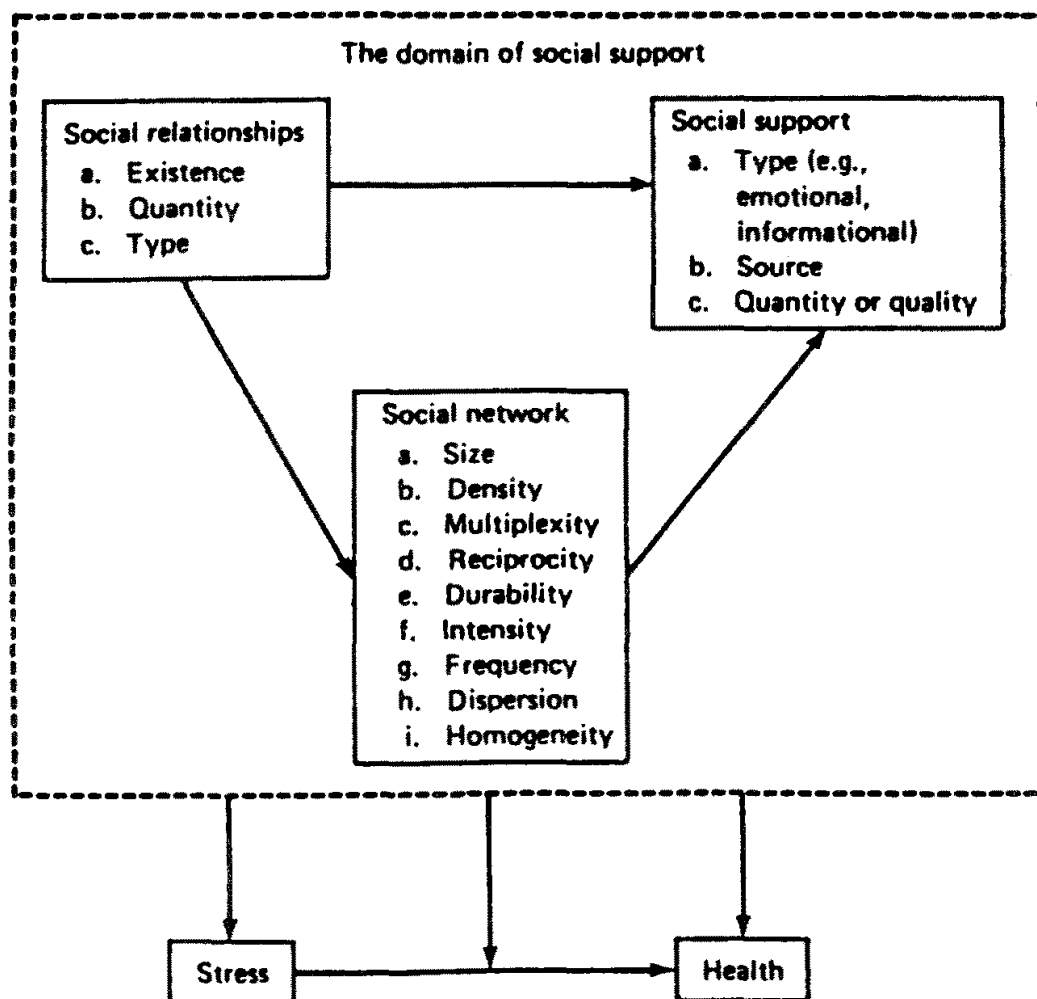
“Although the direct effects and the buffering effects of social support were initially investigated as either-or relationships, evidence suggests that social support and social networks have both types of effects, and that the predominance of one effect over the other depends on the target population, the situation being studied, and the ways in which the social relationship concept is measured” (Cohen and Wills, 1985; House, Umberson, and Landis, 1988). Our research focuses on the main effect of social support.

2.2.5 Model of Social Support

What is more relevant for the purpose of the study of social support is that the two concepts--social integration and social networks—are measures of social structures, while social support functions are most often measured in terms of perceived

psychological sentiments. But very few studies include measures of two, much less all, of these aspects of social relationships. The following model attempts to explain the relationships among these three aspects of social relationships and of their relationships to stress and health (Figure 2.3).

Figure 2.3- The model of the domain of social support



Source: House and Kahn, 1985.

“It suggests that the existence of social relationships is a necessary precondition or cause of network structure and that both of these may affect sentiments of social support. For simplicity's sake, the model uses one set of arrows to represent how each of the domains or aspects of social relationships can affect stress or health, but

recognizes that each of them may reduce stress, improve health, or buffer the relationship between stress and health (House and Kahn, 1985).

2.2.6 Measuring Social Support

In addition to the confusion and clarity in defining social support, the measurement of it has also been problematic. Numerous researchers have devised varied measures of social support, numerous scales and questionnaires, purport to measure this construct. Many of these instruments, however, have less than the optimal psychometric properties. They also differ substantially in length, focus, approach, and the nature of support that is evaluated (Heitzman and Kaplan, 1988). Some of the often used scales in various research settings are the Duke-UNC Functional Social Support Questionnaire – DUFSS, Broadhead, Gehlbach, DeGruy, and Kaplan (1988), the Medical Outcomes Study: Social Support Survey - MOS-SSS, Sherbourne & Stewart, (1991), the Multidimensional Scale of Perceived Social Support - MSPSS Zimet, Dahlem, Zimet, and Farley (1988), the Norbeck Social Support Questionnaire – NSSQ, Norbeck (1981), the Perceived Social Support Scale – PSSS, Procidano and Heller (1983) and Social Support Questionnaire – SSQ, Sarason et al, (1983) to name the most prominent ones. In order to guide selection of a measurement strategy for use in this, a detailed review of some of the often used scales was undertaken. The popular ones have been briefly described below;

The Norbeck Social Support Questionnaire (NSSQ) by Norbeck, Lindsey, & Carried (1981) is a self-administered measure that asks respondents to list 20 social network members and to then answer nine questions about each of them. Six of these questions are about the social support functions. The other questions are about the

frequency of contact with the network members, duration of the relationship, and the recent losses of social support. All functions of support are not covered.

The SSI consists of 18 items and was developed by Timmerman, Zuurveen and Emmelkamp (2000) and consists of 20 items covering three categories of support: emotional, tangible, and informational. The items were generated by polling a sample. It does not cover structural aspects of the social network.

The Inventory of Socially Supportive Behaviors (ISSB) was developed by Barrera, Sandler, and Ramsay (1981) consisting of 40 behaviourally oriented items. It has a 5 point rating scale to capture the frequency with which other people did the activities for/to or with the individual in the preceding month.

The Social Relationship Scale (SRS) by McFarlane et al, (1981) measures the extent of an individual's network of social relationships and its perceived helpfulness in cushioning the effects of life stresses on health. The scale requires the respondent to identify the people who supported him in each of six areas in which he had experienced life changes. The six areas of life change include: work-related events, changes in monetary and financial situation, events in the home and family, personal health events, personal and social events, and society.

The Social Support Questionnaire (SSQ) by Sarason, Levine, Basham, & Sarason (1983) quantifies the availability of, and satisfaction with, social support. It is a 27 item scale and covers two dimensions of social support; the perception that there are sufficient people available to help in times of need and the person's degree of

satisfaction with the support available. Each question requires a two part answer: respondents are asked to list people to whom they could turn and on whom they can rely in specified sets of circumstances, and to rate how satisfied they are with the available support.

Medical Outcomes Study or the (MOS) developed by Sherbourne and Stewart (1991) offers a brief, self- administered indicator of the availability of four categories of social support. It covers structural aspects (e.g., size of social network) and the functional aspects (e.g., perception of being supported). The scale measures various kinds of functional support including emotional support, instrumental or tangible support, informational, appraisal and companionship.

The Duke-University of North Carolina (UNC) Functional Social Support Questionnaire (DUFSS) developed by Broadhead, (1988) measures a person's satisfaction with the functional and affective aspects of social support is the briefest of the social support measures 8 items. It does not measure any structural characteristics.

Multidimensional Scale of Perceived Social support (MPSS) developed by Zimet, Dahlem, Zimet and Farley (1988), is a 12 item scale, that measures perceived social support from friends, family and significant others. It does not measure any structural characteristics of social support.

2.4 THEORIES LINKING NON WORK DOMAIN AND EMPLOYEE ENGAGEMENT

Role Accumulation Theory and Work family Enrichment

Research has found evidence that both work and home factors may affect employee well-being and health.

Life outside work has an impact on how one feels and behaves at work (Sonntag S. 2003). Many researchers too have sought to explain the numerous ways in which work and family roles are interdependent (Edwards & Rothbard, 2000). Seiber (1974) disputed the reasoning that multiplicity of roles produce role strain as a consequence of role conflict or role overload. Multiple roles—often referred to as role accumulation can produce positive outcomes for individuals (Voydanoff, 2001).

Work experiences and family experiences can have additive effects on well-being. Research suggests that individuals who participate in and are satisfied with work and family roles experience greater well-being than those who participate in only one of the roles or who are dissatisfied with one or more of their roles. Secondly, participation in both work and family roles can buffer individuals from distress in one of the roles. Thirdly experiences in one role can produce positive experiences and outcomes in the other role. This mechanism best captures the concept of work-family enrichment, which is defined as the extent to which experiences in one role improve the quality of life in the other role. Sieber (1974) has proposed that resources acquired in one role as a by-product of social relationships (e.g., recommendations to third parties, connections, inside tips) may be reinvested in other roles. Greenhaus and Powell (2006) elaborate five types of resources that can be generated in a role: skills

and perspectives, psychological and physical resources, social-capital resources, flexibility, and material resources.

The following table (table 2.1) lists out various studies of work family enrichment suggesting that employees perceive that these two domains of an individual's life, i.e. work and family roles do enrich one another.

Table 2.1 Studies measuring Work-Family Enrichment

TABLE 1
Studies Measuring Work-Family Enrichment with Self-Report Scales

Study	Name of Concept	Enrichment		Conflict		Correlation Between Enrichment and Conflict	
		Direction	Mean	Direction	Mean		
Cohen & Kirchmeyer (1995)	Resource enrichment	Nonwork to work	2.99	Nonwork to work	1.32	.06	
	Grzywacz (2000)	Positive spillover	Work to family	2.64	Work to family	2.63	Not reported
		Family to work	3.41	Family to work	2.08		
Grzywacz et al. (2002)	Positive spillover	Work to family	2.62	Work to family	2.62	Not reported	
		Family to work	3.42	Family to work	2.10		
Grzywacz & Bass (2003)	Facilitation	Work to family	2.61	Work to family	2.65	Not reported	
		Family to work	3.42	Family to work	2.12		
Grzywacz & Marks (2000a)	Positive spillover	Work to family	2.64	Work to family	2.63	Not reported	
		Family to work	3.42	Family to work	2.08		
Grzywacz & Marks (2000b)	Positive spillover	Work to family	2.61	Work to family	2.65	-.02	
		Family to work	3.42	Family to work	2.12		
Hammer et al. (2002)	Positive spillover	Wives	Work to family	3.72	Work to family	2.85	-.16*
			Family to work	3.94	Family to work	2.20	-.16*
	Husbands	Work to family	3.61	Work to family	3.03	-.02	
		Family to work	3.76	Family to work	2.12	-.07	
Hanson et al. (2003)	Positive spillover	Work to family	3.20				
		Family to work	3.67				
Hill (2005)	Facilitation	Work to family	2.56	Work to family	2.98	Not reported	
		Family to work	2.80	Family to work	2.01		
Kirchmeyer (1992a)	Resource enrichment	Parenting to work	3.24				
		Community to work	3.09				
		Recreation to work	3.10				
Kirchmeyer (1992b)	Positive spillover	Parenting to work	3.16	Parenting to work	1.78	-.15	
		Community to work	3.09	Community to work	1.61	-.19	
		Recreation to work	3.10	Recreation to work	1.48	.13	
Kirchmeyer (1993)	Positive spillover	Parenting to work	3.19	Parenting to work	1.98	-.20*	
		Community to work	3.34	Community to work	1.58	.18*	
		Recreation to work	3.05	Recreation to work	1.41	.35**	
Kirchmeyer (1995)	Positive spillover	Nonwork to work	3.21	Nonwork to work	1.61	.15*	
Ruderman et al. (2002)	Enhancement	Personal to professional	NA				
Stephens et al. (1997)	Positive spillover	Work to caregiver	3.59	Work to caregiver	2.90	.10	
		Caregiver to work	3.46	Caregiver to work	2.46	-.18	
Sumer & Knight (2001)	Positive spillover	Work to home	3.34	Work to home	2.79	.00	
Tiedje et al. (1990)	Role enhancement	Home to work	3.47	Home to work	1.85	-.10**	
Tompson & Werner (1997)	Conflict/facilitation	Work to family	3.71	Work to family	2.95	-.16*	
Wayne et al. (2004)	Facilitation	Work to family	2.88	Work to family	2.62	.00	
		Family to work	3.34	Family to work	2.08	.02	

Source: Greenhaus and Powell (2006)

There are several pathways through which the home situation may influence behaviour at work. The first is a direct or instrumental pathway meaning that home provides individuals with resources like esteem, social support, opportunities for self growth, and flexibility that may help them to perform better across other life domains (Greenhaus and Powell 2006).

Material resources gathered in one role, work or family, can also promote performance in the other role. Financial resources acquired within the family role (e.g., gifts, no interest loans, inheritance) can be used to start, promote, or upgrade a business venture; participate in activities that provide business contacts; or invest in career-enhancing education.

Moreover, individuals who experience flexibility in their family responsibility because their spouses spend extended time on child care activities make fewer adjustments to their work schedule for family reasons and perform more effectively on the job (Friedman and Greenhaus, 2000). In a similar manner, information provided by an employee's spouse may be usefully applied by the employee to his or her career (Friedman and Greenhaus, 2000).

Alternatively, an indirect, affective path is also possible, namely through positive affect (Rothbard, 2001). When people experience that their home situation positively influences their work, this favourable cognitive assessment will enhance positive emotions. Positive emotions, in their turn, will make them more likely to engage in their work.

Positive relationships have been observed between social support received from a family member and life and job satisfaction (Adams, King and King, 1996). Though social support from work related sources is more popularly studied in the work stress process, non-work support also has a role to play and prominently among non-work sources of social support is family members. Social support provided by members of work and family can have a positive influence on workers' health and wellbeing (Cohen and Wills, 1985).

Studies have shown that social resources can promote job performance or success; information acquired from a mentor can be used to make a significant contribution on a visible work assignment. Positive affect can expand one's level of energy, thereby increasing the likelihood of being highly engaged in another role. Rothbard (2001) provides partial support for her predictions, finding that positive affect at work triggers high attention in the family role (for men) and that positive affect within the family stimulates absorption with work (for women).

Thus, home resources facilitate work performance by providing means (e.g., social support from one's partner) or by enhancing individual abilities (e.g., opportunities for self-growth). Particularly, support from family or friends was positively related to the quality of job performance (Orthner and Pittman, 1986).

In a more recent study of 280 public secondary school teachers in Malaysia it was found that work-family enrichment partially mediated the relationships between job characteristics and job satisfaction, that an increase in job autonomy by teachers led to an increase in work-family enrichment (Fung et al 2014).

A study by Siu, Bakker et. al. (2013) revealed that “when employees receive more support from their supervisor, they are more satisfied with their job. This job satisfaction seems to spill over to the home domain: higher job satisfaction translates into positive experiences in the family domain, including feelings of security, confidence and accomplishment (i.e. work-to-family capital) and positive affect. Similarly, when employees receive more support from their family at home, they feel more satisfied and come to work in a positive mood.”

The Spillover Theory

The Spillover theory brings together, the two most important domains in the life of an employee, home and work. Spillover refers to effects of work and family on one another that generate similarities between the two domains. These similarities are often discussed in terms of work and family affect (i.e. mood and satisfaction), Values, skills and overt behaviours (Edwards and Rothbard, 2000).

Effort-Recovery Theory

In the Effort-Recovery theory, Meijman and Mulder (1998), proposed that off-job activities contribute to recovery to the extent that those activities enable employees to replenish personal resources. The process of recovery from work is commonly explained by this theory in combination with Conservation of Resources (COR) theory (Hobfoll, 1989). The general assumption of these theories is that employees have a certain supply of personal resources. Personal resources are personal traits and energies that are instrumental for achieving goals during the workday (Hobfoll,1998), including cognitive resources (e.g., directed attention), physical energy (e.g., positive-activated affect, health), and emotional energy (e.g., mental resilience). At the end of

the workday, those resources may be depleted (Meijman and Mulder, 1998). Recovery that occurs in the evening after normal working days or during weekends might be very important for maintaining well-being and performance.

Recovery after work is then necessary, and can be achieved in several ways. Leisure activities (social, low-effort, physical activities) can be seen as meaningful and fascinating activities that give employees the experience of being away from work (Kaplan, 1995). For example, while reading, watching TV one can feel being part of another world, forgetting about work, Exercising (e.g., outdoor running) and meeting with friends also provides the opportunity to stop intrusive thoughts and switch off one's attention from work-related matters (Cropley & and Millward, 2009). Leisure activities, then, are expected to enable employees to detach from work, contributing vigor in the morning.

We can probably conclude that recovery is possible when the individual has an active social network of family and friends which supports his recovery process. A spouse who is loving and caring and takes care of the home chores, playing with children which allows you to switch off from your work, or neighbors and friends with whom you may choose to hang out or even take up some joint form of exercise.

Studies linking the non -work domain resources employee engagement

Contrarily a three-year cross-lagged study of burnout, depression, commitment, and work engagement by Hakanen, Schaufeli and Ahola (2008) on Finnish dentists, tested the motivational and health impairment processes as proposed in the Job Demands-

Resources (JD-R) model. It was further revealed that home demands and home resources did not influence the motivational or health impairment process over time.

Montgomery, Peeters, Schaufeli and Ouden (2003) tested the theoretical model which posits that work and home demands lead to work strain and decreased feelings of engagement, while work and home resources lead to increased feelings of engagement and reduced burnout. They found that only mental home demands were positively related to cynicism (but not to exhaustion), whereas social support from family and friends (a home resource) was unrelated to burnout and work engagement. However, the sample of this study was rather small and data were collected only from 69 newspaper managers.

Bakker & Geurts (2004) has shown that positive work-related states (e.g. intrinsic motivation and work-related happiness) have a positive influence on private life, as employees come home cheerfully after a successful day at work. This means that if a husband comes home during a working day in a positive state, he is, for instance, more willing to take care of household responsibilities, giving his wife opportunities for recovery – a prerequisite for her work engagement during the next day (Sonnentag, 2003).

2.5 OPERATIONAL DEFINITIONS

The detailed literature review undertaken by us had helped us to derive operational definitions which are relevant and consistent with the objectives of our study. They have been elaborated below:

Employee Engagement -A positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.

Job demands - Quantitative demands- aspects such as workload and time pressures; Emotional demands- Emotional demands concern emotionally charged interactions at work (e.g., customer/colleague misbehaviour) and Mental demands- mental processes e.g., work requiring concentration, attention, or memory.

Social Support - The experience of being integrated in a stable network of relationships characterized by frequent communication and reciprocity, providing access to emotional, instrumental, informational and social companionship resources.

Social integration- refers to the existence and types of social ties or relationships

Social Network- Characteristics of specific relationships between the focal individual and other people in the network and in terms of characteristics of the network as a whole. This study has included five dimensions of social network, namely, Frequency - No of meetings and telephonic conversations with the network members; Reciprocity - Extent to which resources and support are both given and received in a relationship; Duration- of the relationship or the length of the relationship; Density- Extent to which network members know each other and interact with each other and Geographic Dispersion- Extent to which network members live in close proximity to the individual.

Social Support Functions -These assess whether interpersonal relationships serve particular functions. This study includes four types of social support functions, namely, Instrumental support- is the provision of financial aid, material resources, and

needed services; Informational support- is help in defining, understanding a situation, and providing counsel and guidance; Emotional support- is information that a person is loved, accepted and valued for their own worth and Social Companionship support - is spending time with others in leisure and recreational activities.

2.6 GAPS IN LITERATURE

- There exists elaborate literature on employee engagement in the European context, whereas employee engagement as a concept has not been explored much in the Indian context and is very much in the nascent stage.
- Most studies in literature have looked at work resources and personal resources as antecedents of employee engagement and the non- work domain relationships are less researched. Social support connect to engagement is largely unexplored.
- The model on employee engagement by Bakker and Demerouti (2008) highlights ‘social support at work’ as a job resource which leads to employee engagement, hence it is plausible and well worthy to explore that social support resource from non- work domains too will have a positive effect on engagement.
- There are studies on social support from non-work domains, ‘buffering’ effects of burnout from workplace. Burnout being the antithesis of engagement, it is plausible that a connection between social support and engagement exists. This needs to be explored.
- Family work enrichment studies are in abundance enlisting the importance of non-work domain activities and resources enriching the work domain, hence this encourages us to further explore the relationship between social support resources and employee engagement.

- Spill over studies suggest that positive emotions spill over from non-work to work domains. Employee engagement being a psychological state of wellbeing, it is plausible that it may spill over from non-work to work domain.
- Effort recovery theory states that off-job activities contribute to recovery to the extent that those activities enable employees to feeling vigorous and motivated at work, suggesting that non work interactions and activities have a role in fostering employee engagement.
- Theoretical papers are in abundance stating dimensions of social support but empirical studies on social support have not measured all the three aspects stated in the literature, namely, social integration, social network characteristics and social support functions. Studies have not been conducted to assimilate all characteristics and dimensions of support in a comprehensive form.
- The few studies measuring relationship between social support and engagement have not looked at a comprehensive model covering all aspects of social support.
- Job resources (appreciation, organizational climate, innovativeness) had a stronger relationship with work engagement when job demands are high. Yet, as far as we know, there is no empirical evidence that supports whether non work resources can also gain their salience to help people engage in their work when they face high job demands.
- The research in the area of employee engagement is more in the service sector. The manufacturing sector has not been explored in literature save for a study in the Indian Manufacturing industry which focused more on the interventions.

This research aims to bridge the above gaps in literature.

CHAPTER 3

3.0 Research Methodology

This chapter deals with the methodology adopted for the study including research design, population, sample size and sampling technique, data collection methods, instruments developed and validated, data collection procedure and plan for analysis. Firstly the exploratory study and its findings are presented. This is followed by the development of the model and formulation of the hypotheses. Finally the quantitative study has been described.

3.1 RESEARCH DESIGN

A research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process (Polit & Beck 2004). Research designs are developed to meet the unique requirements of a study. A cross sectional survey design was used to test the relationships in hypotheses proposed, however in-order to gain a deeper insight into various characteristics of the construct, employee engagement, an exploratory study was conducted through semi structured, in depth interviews with Human Resource managers of select organizations located in Goa. These interviews shed light on the various aspects of employee engagement and more specifically helped to identify factors impacting engagement. The study revealed a new variable of non-work social support in creating employee engagement.

3.2 EXPLORATORY STUDY

Research in any field begins with curiosity. “Exploration with its open character and emphasis on flexibility, pragmatism, and the particular, biographically specific interests of an investigator, is arguably a more inviting and indeed accurate way of representing social research than treating it as a narrowing, quasi rule bound and discipline based process that settles and confirms rather than unsettles and questions what one knows” (Stebbins R.A. 2001).

Employee engagement is a relatively new concept in Indian organizations. Literature on engagement in India is also relatively very limited with a sprinkling of studies which do no justice to the characteristics of this very important concept which is of strategic importance to organizations. Hence it mandated that an exploratory study be undertaken to gain a deeper understanding of what this construct of employee engagement entails and to explore the various factors, variables and characteristics therein, in order to provide context to the study.

Specifically the objectives of the exploratory study were:

- To understand at a macro level, what the construct of ‘employee engagement’ means to organizations, and their focus on work engagement.
- To identify characteristics of an engaged employee.
- To identify factors impacting employee engagement levels.
- To get an insight into organizational interventions to encourage work engagement among their employees.
- To gain an understanding of the outcomes of engagement

Sample Selection and Administration for the exploratory study

To gain an understanding about employee engagement characteristics and practices, it was imperative to draw respondents from a population of Human Resource practitioners at a senior level who would be able to contribute with their knowledge on this topic as well as their experience and contact with various levels of employees. It was also essential to identify organizations which are known for ‘forward looking’ Human resource practices. The study also mandated an informal conversation without a constraint of time and open sharing of opinions and facts. Hence twelve Human Resource managers were identified from ten organizations located in Goa and two outside of the State. The study being exploratory in nature, for the purpose of identifying characteristics and variables related to employee engagement, purposive sampling was used as recommended by Maxwell (1997), in which, “particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices”

Purposive sampling techniques are primarily used in qualitative studies and may be defined as selecting units (e.g. individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study’s questions (Teddlie C. and Yu F., 2007).

The researcher targeted organizations from the manufacturing, the service sector as well as the Government Sector. Face to face interviews were held with Human Resource heads of twelve organizations, located in Goa and telephonic interviews with two organizations outside Goa. The researcher used a broad schedule of questions (Annexure I) to get detailed information about various aspects of employee ‘engagement’ within the respective organizations. Semi structured, in-depth interviews were conducted. The schedule provided direction to the interview and

more specific questions were raised based on the respondent's answers, which helped to obtain a better picture of the construct under study.

Prior appointments were sought telephonically and through formal emails with the Human Resource heads. All the interviews were conducted at their respective organizations except for the two organizations based outside the state, wherein the interviews were conducted telephonically. The respondents narrated their opinions and experiences and the researcher played 'the listener', prodding at relevant junctures and making appropriate noting. All the HR managers consented to the audio recording of the interviews which made it convenient to transcribe the recordings later. This also ensured that the originality of the data would be preserved. Average time per interview was 50 minutes.

Table 3.1: Organizations covered in the exploratory study

Sector	No of Organizations
Retail	1
Pharmaceutical	1
IT Manufacturing	1
Manufacturing of Plastic & Packaging Materials	1
Hospitality	1
IT Software	1
Government sector	2
Telecom	1
Pharmaceutical	1
E-Commerce	1
Consultancy	1

Analysis of the exploratory study

All interviews were transcribed for a clear understanding and to identify relevant variables and constructs for the purpose of the study. An inventory of characteristics of engaged employees, factors leading to engagement and outcomes of engagement were drawn up. These were studied in relation to the existing literature and a newer variables were identified. Some of the broad themes (table 3.2) that emerged out of the interactions have been tabulated as below.

Table 3.2: Themes from the exploratory study

Characteristics of an engaged employee	Factors leading to engagement	Outcomes of engagement
Full of spirit of competition	Culture and values	High performance
Intrinsically motivated	Job role	Retention
Positive attitude and enthusiastic	Internal motivation	Less absenteeism
High self-worth	Personality and attitude	Loyalty
Highly responsible	Recognition and appreciation by superiors	Higher productivity
Customer oriented	Transparency in communication	Brand building
Work itself is reward	Equality	Initiative
Resourceful	Training and development	Enhanced learning and development
Keep the interest of the organization in mind	Support from superiors	Enhanced service quality
Dedicated	No fear of penalty	
Hungry for learning	Empowerment	
Knowledge of work	Client feedback	

Seek Solutions	Family support	
Happy, not cribbers	Work life balance	
Take up more tasks	Stress free mind (from family related matters)	
Flexible		
Open to change		
Brand Ambassadors		
Take initiative		

The various characteristics of engaged employees described by the respondents closely match with those provided in literature. Happy, flexible, taking initiative, dedicated, enthusiastic and positive, are some of the terms used to describe an engaged employee in literature.

Factors impacting engagement described by the H.R. heads confirmed the importance of organizational resources (Culture and values, job role, recognition from superiors, transparency, training and development, equality, no fear of penalty, support from supervisors, client feedback, empowerment) and personal resources (internal motivation, personality and attitude) as the main factors creating engagement in employees. Extant literature also focuses on organizational as well as personal factors in numerous studies as the main antecedents of employee engagement. Newer variables emerged in terms of social support from family and friends, work life balance, family health and level of support at home and stress free mind from family matters. The researcher then probed further with reference to these non-work domain factors and some specific instances were captured from their narratives which are listed below:

- a) A Human Resource Manager of a pharmaceutical company narrated that a highly engaged and high performing employee had lost his enthusiasm and motivation as his wife had been hospitalised and he had to manage the stress of illness as well as tend to the home front.
- b) A highly engaged and high performing employee of an IT organization, whose engagement levels had dipped after the delivery of her baby as she had no support at home to look after her child. The organization has accorded her a half day working policy a first time initiative as they did not want to lose a high performing employee, and she regained her enthusiasm at work as she was able to focus on her work as well as the baby.
- c) The HR manager of a retail supermarket spoke about a high performing female employee, who was having issues on the domestic front as her spouse is an alcoholic and but she has a very supportive neighbour to look after her daughter, post school hours. This ensures the employee highly focussed, motivated and engaged employee at work.
- d) A five star hotel H.R. head highlighted the role of social support from home being a driver of motivation at workplace. The hotel has been offering a few high performing and motivated female employees 'flexi hours' and 'half day working' as these employees were finding it difficult to perform at work as they did not have childcare support and hence could not focus on their work while worrying about the child.

These critical findings from the exploratory study revealed a new dimension (variable) of 'social support' from non-work domain such as friends and family as a factor impacting employee engagement and heightened the researchers curiosity to

explore this dimension thoroughly by studying the existing literature on social support.

3.3 PROPOSED MODEL

The findings of the exploratory study as well as a detailed analysis of literature on employee engagement and social support, enabled the researcher to arrive at and identify gaps existing in the literature and a conceptual model was firmed up.

Most researchers on social support follow an assumption that the most important aspect about social networks is the support functions they provide. Berkman et. al. (2000), argue that social support is not the only pathway by which social networks may influence physical and mental health status and states the need to have a comprehensive framework in which we must move ‘upstream’ to network structure.

Mueller (1980) also discusses the need for measures that reflect the multidimensional nature of social support. He suggests that measures should include the dimensions of source (i.e., who is providing the support: a relative, friend, or professional), type (e.g., emotional, instrumental), and the intensity of the relationship (e.g., whether or not it is a confiding relationship). For each source of support the occurrence or availability should be assessed (House & Kahn, 1985). Frequently measured types of support, commonly include (a) tangible or aid-related support, (b) informational support, (c) emotional support, and (d) social companionship (Orth-Gomer & Uden, 1987).

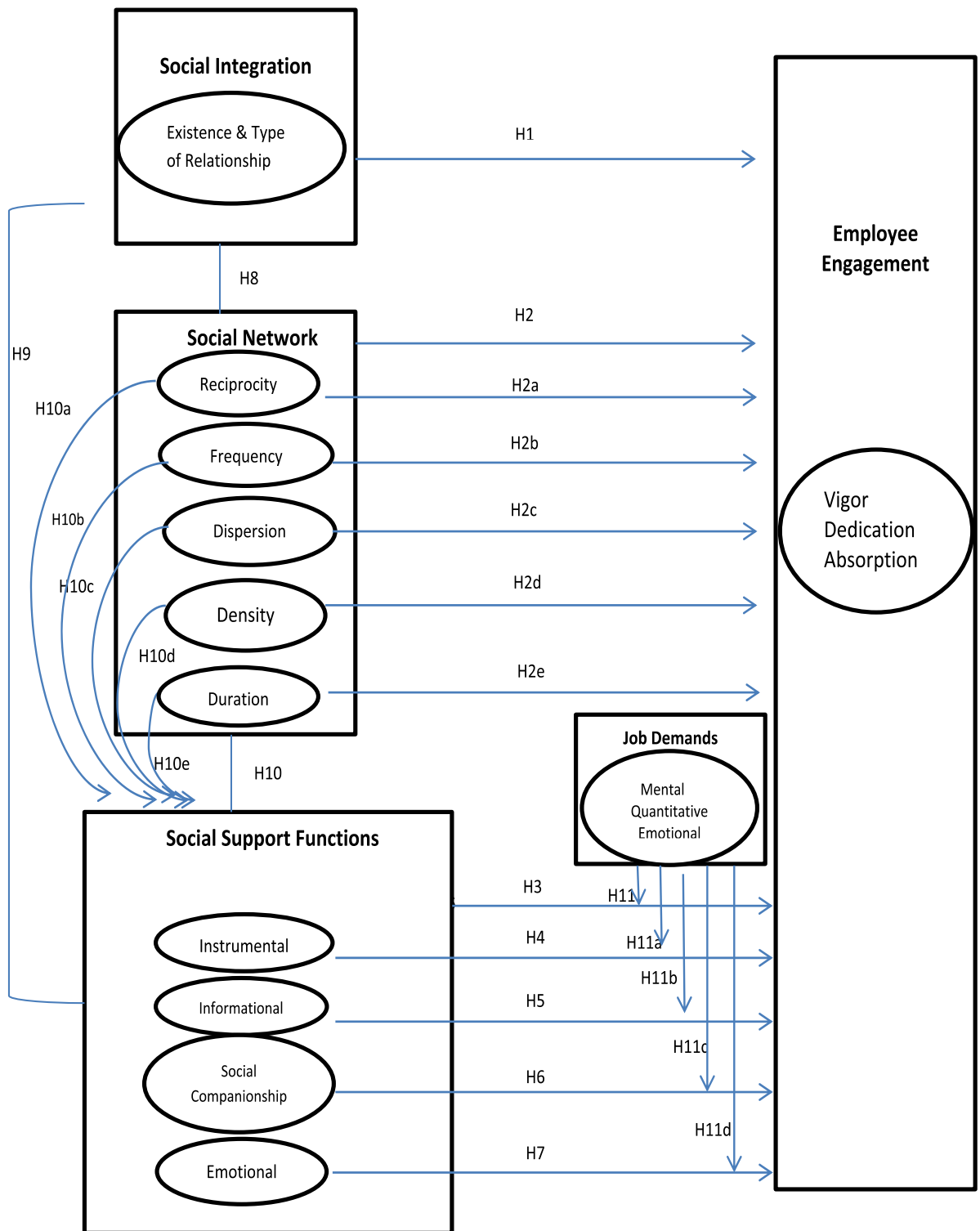
House (1987) also agree that existence of social relationships is a necessary precondition or cause of network structure and that both of these may affect

sentiments of social support. Kessler and McLeod (1985, through House, 1987) suggest that social integration and social support have somewhat independent effects on health, and may have those effects through quite different social psychological processes.

The following proposed conceptual model with hypothesised relationships (figure 3.1), focuses on the structural as well as functional aspects of social support. The model attempts to explain the relationships among these three dimensions of social support, namely social integration, social network and social support functions and employee engagement. It suggests that all three dimensions constitute the construct of social support and independently have a relationship with employee engagement. It elaborates that social integration, social network dimensions and type of social support function will independently lead to employee engagement and further social integration will lead to social network which in turn leads to social support functions. Finally it also highlights the possibility that social integration will lead to provision of social support functions. The model uses one set of arrows to represent the relationship of each of the three dimensions of social support and its impact on employee engagement. Finally it proposes that the social support functions become more salient and derive a higher motivational effect when individuals face high job demands i.e. job demands moderate the relationship between social support and employee engagement.

The gaps identified through a thorough literature review of employee engagement as well as social support, various theories from literature as well as the variable of social support identified in the exploratory study findings, form the basis of this model.

Figure 3.1: Conceptual model with hypothesized relationships



3.4 FORMULATION OF HYPOTHESES

Link between Social Integration and Employee Engagement

Social integration is explained through the 'Attachment Theory' by Bowlby (1969 through Berkman et. al. 2000) where he proposed that there is a universal human need to form close affection bonds. The theory contends that the attached figure, most often but not necessarily the mother, creates a secure base from which an infant or toddler can explore and venture forth. These intimate bonds, created in childhood, form a secure base for solid attachment in adulthood. "An individual's need for secure attachment is for its own sake, for the love and reliability it provides, and for its own "safe haven" (Berkman et. al. 2000).

Role accumulation theory states that multiple roles can produce positive outcomes for individuals (Sieber 1974). Work experiences and family experiences can have additive effects on well-being. Research suggests that individuals who participate in and are satisfied with work and family roles experience greater well-being than those who participate in only one of the roles or who are dissatisfied with one or more of their roles.

Closely linked to the role accumulation theory is the work-family enrichment theory by Greenhaus and Powell (2006), which further describes how experiences in one role improve the quality of life in the other role.

The spillover theory also describes the transmission of positive experiences between domains (i.e., from work to home or vice versa) (Demerouti E., Bakker A.B. and Schaufeli W.B. 2005). Hence we deduce that a generalized beneficial effect due to

social integration or the existence of a cohesive close set of relationships will occur which will result in an individual being motivated, enthusiastic, positive thus contributing to his/her vigor and wellbeing. The existence of these close relationships like spouse, parents, siblings and relatives will provide persons with regular positive experiences, a feeling of well-being and a sense of predictability and stability in one's life situation. These feelings will be translated as employee engagement at workplace.

Hypothesis 1

H₀ Social integration has no significant relationship with employee engagement.

H₁ Social integration has a significant relationship with employee engagement.

Social Network link with Employee Engagement

“The social network theory states that the social structure of the network itself is mainly responsible for determining individual behaviour and attitudes by determining the kind and amount of resources available to the individual which in turn determine access to opportunities and restraints on behaviour. The structural arrangement of social institutions shapes the resources available to the individual and hence that person's behavioural and emotional responses. Social networks define and reinforce meaningful social roles including parental, familial, occupational, and community roles, which in turn, provides a sense of value, belonging, and attachment” (Berkman et. al. 2000).

Structural characteristics mainly include reciprocity, frequency of meetings and interactions, geographic dispersion, duration of the relationship and density of the

network. Thus social networks of an individual which are close knit, in which relationships are highly reciprocal, individuals meet and communicate frequently, live within a close geographic distance will lead to well-being of an employee. An individual's network in which, the members within the network know and interact with each other will also create well-being as it would mean that the network is close knit and can lead to access to larger resources thus causing well-being in an individual. Interactions within these networks will lead to positive feelings, aid recovery, energize the individual, calm him and hence create well-being. This positive state of mind will spillover and translate into engagement at workplace. Hence the researcher proposes the following hypothesis.

Hypothesis 2

H₀ Social networks has no significant relationship with employee engagement.

H₁ Social networks has a significant relationship with employee engagement.

Hypothesis 2a

H₀ Reciprocity has no significant relationship with employee engagement.

H₁ Reciprocity has a significant relationship with employee engagement.

Hypothesis 2b

H₀ Frequency has no significant relationship with employee engagement.

H₁ Frequency has a significant relationship with employee engagement.

Hypothesis 2c

H₀ Geographic dispersion has no significant relationship with employee engagement.

H₁ Geographic dispersion has a significant relationship with employee engagement.

Hypothesis 2d

H₀ Density has no significant relationship with employee engagement.

H₁ Density has a significant relationship with employee engagement.

Hypothesis 2e

H₀ Duration has no significant relationship with employee engagement.

H₁ Duration has a significant relationship with employee engagement.

Link between Social Support Functions and Engagement

Firstly according to the Conservation of Resources theory, people seek to obtain, retain, and protect that which they value, e.g. material, social, personal, or energetic resources. In the Effort-Recovery theory, Meijman & Mulder (1998), proposed that off-job activities contribute to recovery to the extent that those activities enable employees to replenish his personal resources like energy levels, vigor and enthusiasm. The process of recovery from work is commonly explained by this theory in combination with Conservation of Resources (COR) theory Hobfoll (1989). The general assumption of these theories is that employees have a certain supply of personal resources. Recovery that occurs in the evening after normal working days might be very important for maintaining well-being and performance. Recovery can be achieved in several ways. Leisure activities like watching TV, exercising, taking a walk, catching a movie, shopping and meeting with friends also provides the opportunity to detach from work, contributing to vigor in the morning. Just being in the company of close relations and doing fun activities together will create positive feelings which will spillover as engagement.

Role accumulation theory states that multiple roles can produce positive outcomes for individuals (Voydanoff, 2001). Work experiences and family experiences can have additive effects on well-being. Research suggests that individuals who participate in and are satisfied with work and family roles experience greater well-being than those who participate in only one of the roles or who are dissatisfied with one or more of their roles.

Closely linked to the role accumulation theory is the work-family enrichment theory by Greenhaus and Powell (2006) which further describes how experiences in one role improve the quality of life in the other role. The theory suggests that are five types of resources that can be generated in a role: skills and perspectives, psychological and physical resources, social-capital resources, flexibility, and material resources. These resources may directly (instrumental path) help them to perform better across other life domains or through an affective path whereby a resource generated in Role A can promote positive affect within Role A, which, in turn, produces high performance and positive affect in Role B (Hanson et al., 2006).

There are several pathways through which the home situation may influence behaviour at work. The home provides individuals with resources like esteem, social support, opportunities for self- growth, and flexibility that may help them to perform better across other life domains (Greenhaus J. H. & Powell G. N, 2006). Material resources too, gathered in one role, work or family, can also promote performance in the other role. Supportive in laws to look after the child or cook food can be a huge relief and provide time for relaxation post work creating energy and enthusiasm, a spouse who helps in home chores will also help in post work recovery and the

communication, financial help from the social circle can boost confidence and enthusiasm. This will lead to mental relaxation, higher energy levels (vigor), time, confidence, enthusiasm and help the individual completely focus on his/her work, and hence create engagement.

Studies have shown that social resources can promote job performance or success; information acquired from a mentor can be used to make a significant contribution on a visible work assignment. Finally positive affect can expand one's level of energy, thereby increasing the likelihood of being highly engaged in another role (Rothbard 2001). Information provided (technical, motivational) by the social network would enable taking up projects and newer tasks with the experience, information, tips shared by a parent, mentor, and friends. This would help an individual build enthusiasm and creativity as well as vigor leading to engagement at work.

Emotional support extended by the social support network will have an overall calming effect on employees. It would help in reenergizing an individual mentally and is less likely to drain the energy that employees need at a hectic workplace. E.g. an individual who is exhausted after a day's work receives some love and soothing words, reaffirming love and support to an individual. It would also enhance feelings of happiness, personal worth, pride, confidence and hence create engagement.

The following hypotheses are proposed based on the above.

Hypothesis 3

H₀ Social support has no significant relationship with employee engagement.

H₁ Social support has a significant relationship with employee engagement.

Hypothesis 4

H₀ Instrumental support has no significant relationship with employee engagement.

H₁ Instrumental support has a significant relationship with employee engagement.

Hypothesis 5

H₀ Informational support has no significant relationship with employee engagement.

H₁ Informational support has a significant relationship with employee engagement.

Hypothesis 6

H₀ Social Companionship support has no significant relationship with employee engagement.

H₁ Social Companionship support has a significant relationship with employee engagement.

Hypothesis 7

H₀ Emotional support has no a significant relationship with employee engagement.

H₁ Emotional support has a significant relationship with employee engagement.

Social Support Structures link with Social support Functions

Berkman et. al. (2000) explains the influences network structure and function have on social and interpersonal behaviour. He states that networks influence behaviours through four primary pathways: (1) provision of social support; (2) social influence; (3) on social engagement and attachment; and (4) access to resources and material goods. Most obviously the structure of network ties influences health and well- being via the provision of many kinds of support. He acknowledges that there is variation in

the type, frequency, intensity, and extent of support provided. He further states that the structural arrangement of social institutions shapes the resources available to the individual and hence that person's behavioral and emotional responses.

Hypothesis 8

H₀ Social Integration has no significant relationship with social network

H₁ Social Integration has a significant relationship with social network

Hypothesis 9

H₀ Social integration has no significant relationship with social support

H₁ Social integration has a significant relationship with social support

Hypothesis 10

H₀ Social Network has no significant relationship with social support functions.

H₁ Social Network has a significant relationship with social support functions.

Hypothesis 10a

H₀ Reciprocity has no significant relationship with social support functions.

H₁ Reciprocity has a significant relationship with social support functions.

Hypothesis 10b

H₀ Frequency has no significant relationship with social support functions

H₁ Frequency has a significant relationship with social support functions.

Hypothesis 10c

H₀ Geographic dispersion has no significant relationship with social support functions.

H₁ Geographic dispersion has a significant relationship with social support functions.

Hypothesis 10d

H₀ Density has no significant relationship with social support functions.

H₁ Density has a significant relationship with social support functions

Hypothesis 10e

H₀ Duration has no significant relationship with social support functions.

H₁ Duration has a significant relationship with social support functions.

Job Demands as a Moderator between Social Support and Employee Engagement

As per the COR theory and one of the central assumptions in the JD-R model of work engagement the resources becomes more salient and derive a higher motivational effect when individuals face high job demands (Bakker & Demerouti, 2008).

Greenhaus and Powell (2006) proposed that, resources generated in Role A (e.g., family) were more likely to directly promote high quality life in Role B (e.g., work) when the resources were perceived to be relevant to Role B than when they were not relevant. Based on this proposition, we can infer that when people face a high job demand (a stressful work condition), they are more likely to seek help and support from family members. Thus family resources would be more salient when individuals are faced with demands.

The following research hypotheses are proposed.

Hypothesis 11

H₀ Social support functions have a significant relationship with employee engagement when job demands are high.

H₁ Social support functions have a significant relationship with employee engagement when job demands are high.

Hypothesis 11a

H₀ Emotional support has no significant relationship with employee engagement when job demands are high.

H₁ Emotional support has a significant relationship with employee engagement when job demands are high.

Hypothesis 11 b

H₀ Informational support has no significant relationship with employee engagement when job demands are high.

H₁ Informational support has a significant relationship with employee engagement when job demands are high.

Hypothesis 11c

H₀ Instrumental support has no significant relationship with employee engagement when job demands are high.

H₁ Instrumental support has a significant relationship with employee engagement when job demands are high.

Hypothesis 11d

H₀ Social Companionship has no significant relationship with employee engagement when job demands are high.

H₁ Social Companionship support has a significant relationship with employee engagement when job demands are high.

3.5 QUANTITATIVE STUDY

3.5.1 Population and Sampling

The target population are the employees from the manufacturing as well as service sector of organizations located in Goa. Data was obtained from the Economic survey of Government of Goa, 2012-13. (Tables 3.3., 3.4 & 3.5) regarding the categories of industries present in the state. Goa is one of the fastest growing states in the country. It is a multicultural, multidimensional state with a balanced representation of the industrial sectors, i.e. manufacturing as well as services. It has numerous multinational companies and is cosmopolitan in nature. The state's Gross State Domestic Product (GSDP) growth rate was at about 11.39 per cent between 2004-05 and 2015-16. The state's per capita Net State Domestic Product (NSDP) was US\$ 4,765.7, one of the highest in India, in 2015-16. Goa's economic growth is driven by the strong performance of industrial sectors such as mining, tourism and pharmaceuticals.

Goa is the second state in India to achieve a 100 per cent automatic telephone system with a solid network of telephone exchanges. As of June 2016, Goa had a total installed power generation capacity of 412.45 MW. Goa is also one of the few states in India to achieve 100 per cent rural electrification. Goa has a well-developed social, physical and industrial infrastructure and virtual connectivity. It has an international

airport that is in line with its importance as a globally-recognised leisure destination. It also has significant port infrastructure. The state has an established base for the pharmaceuticals industry and an emerging destination for knowledge-based industries such as biotechnology and IT. According to the Department of Industrial Policy & Promotion (DIPP), FDI inflows into the state of Goa, during April 2000 to March 2016, totalled to US\$ 841 million. (Source: www.ibef.org). Hence the researcher believes the population of Goa will be representative of the rest of the country.

The researcher targeted medium and large scale organizations within the two main sectors i.e. manufacturing and service sector. Organizations were chosen systematically based on the main clusters of industries existing within the state (as per GOG economic survey, 2012 and National Skill Development Corporation, Goa Skill Gap Assessment Report, 2012-17 & 2017-2022). The researcher surveyed employees from maximum categories of industries within the two sectors (Table 3.6).

Table 3.3- Summary of Industries of Goa

Services	Manufacturing	Agriculture & Allied	Mining								
<ul style="list-style-type: none"> • Tourism, the biggest contributor in terms of employment • 12% of foreign tourists in India are received by Goa • 104 km of coastline and 250 km of inland waterways support Logistics Sector presence • MPT is a significant contributor • Other Sectors include: <ul style="list-style-type: none"> • IT / ITES • BFSI • Retail • Healthcare 	<ul style="list-style-type: none"> • Ship Building, Steel, Pharmaceuticals & Food Processing are the major industries • Other smaller industries include manufacturing of tyres, Fertilizers, Chemicals, Wheat Products, Pesticides, Fish and Fruit Canning, Brewery Products, Handloom and Cottage, Footwear, etc. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Type</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>Small & Micro</td> <td align="center">7621</td> </tr> <tr> <td>Medium & Large</td> <td align="center">189</td> </tr> <tr> <td>Total</td> <td align="center">7810</td> </tr> </tbody> </table>	Type	Units	Small & Micro	7621	Medium & Large	189	Total	7810	<p align="center"><u>Agriculture</u></p> <ul style="list-style-type: none"> • Paddy, the major crop • Cashew-nut, Coconut, Pineapple, the major cash crops • Over the last 5 years, agricultural growth has been almost negligible <p align="center"><u>Fisheries</u></p> <ul style="list-style-type: none"> • Contributed to 1.23% to GSDP 2011-12 • Marshy lands, Creeks and Estuaries support this industry 	<ul style="list-style-type: none"> • Mining which used to contribute to 20% of state's revenue its peak, is at a standstill • There were around 17000-21000 trucks plying at its peak • Nearly 1,00,000 people employed in mining have gone unemployed in last few years • Of these, 45,000 people were locals and rest of them migrants who have gone back to their states
Type	Units										
Small & Micro	7621										
Medium & Large	189										
Total	7810										

Source: Economic Survey 2012-13, GOG

Table 3.4: The Industrial Clusters of North and South Districts of Goa- Manufacturing Sector

Chemical & Pharmaceuticals
Electricals and Electronic Hardware
Food & Beverages
Steel
Paper & Packaging
Ship Building
Rubber, Plastic Petroleum and Coal Products
Auto & Auto Components
Handicrafts

Table 3.5: The Industrial Clusters of North and South Districts of Goa- Service Sector

Hospitality
Retail
Healthcare
Information Technology/Enabled Services
Banking
Insurance
Automobile Sales
Real Estate
Logistics

(Source: National Skill Development Corporation, Goa Skill Gap Assessment Report, 2012-17 & 2017-2022)

Table 3.6: Type of Industries and Organizations covered in the Manufacturing and Service Sectors

Manufacturing Sector		Service Sector	
Type of Industry	Number of organizations	Type of Industry	Number of organizations
Pharmaceutical	2	IT	2
Electronics	2	Banking	2
Packaging	2	Logistics	1
Chemical	1	Hotel	2
White Goods	1	Insurance	1
Food Production	1	Healthcare	1
IT Hardware	1	Energy	1
Mining	1	Retail	1
Medical Equipment	1	Real Estate	1
Shipbuilding	1	Automobile Sales and Service	1
Total	13	Total	13

Sample Size

“A common goal of survey research is to collect data representative of a population. The researcher uses information gathered from the survey to generalize findings from a drawn sample back to a population, within the limits of random error. The question then is, how large of a sample is required to infer research findings back to a population?” (Bartlett, Kotrlik and Higgins, 2001)

To use multiple regression analysis, the ratio of observations to independent variables should not fall below five. If this minimum is not followed, there is a risk for over fitting, “making the results too specific to the sample, thus lacking generalizability”, quote, (Hair, Anderson, Tatham and Black, 1995). “A more conservative ratio, of ten observations for each independent variable was reported optimal by (Miller and Kunce, 1973).

Table 3.7: Sample size guideline for multiple regression analysis.

Table 2: Minimum Number of Regressors Allowed for Sampling Example		
	Maximum number of regressors if ratio is:	
	5 to 1	10 to 1
Sample size for:		
Continuous data: $\underline{n} = 111$	22	11
Categorical data: $\underline{n} = 313$	62	31

Source: (Bartlett, Kotrlik and Higgins, 2001)

If a researcher planned to use 14 variables in a multiple regression analysis and wished to use the optimal ratio of ten to one, the returned sample size must be increased from 111 to 140. (Table 3.7). This sample size of 140 would be calculated from taking the number of independent variables to be entered in the regression (fourteen) and multiplying them by the number of the ratio (ten). (Bartlett, Kotrlik and Higgins, 2001). The researcher used the above ratio as a basis for targeting a sample size of 200 respondents, as the proposed conceptual model was to test 10 dimensions of independent variables as well as 3 dimensions of the moderating variable.

3.5.2 Data Collection Tools

Out of the scales reviewed on social support (chapter 2), most were found to be lacking in comprehensiveness, as they covered various functional aspects of social support in detail, but largely ignored structural aspects of social support. Almost none of the scales measured the network characteristics. Also most of them were developed to be applied in the field of health and recovery. This mandated formulating a more comprehensive scale covering the structural as well as functional aspects to measure all the three dimensions of social support i.e. Social Integration, Social Network and Social Support, suitable to our study.

The Questionnaire on the Experience and Evaluation of Work (QEEW; VBBA in Dutch) by Marc van Veldhoven et al. (2006) is widely by professionals in the fields of Human Resource Management, business administration, occupational health, and work and organizational psychology. Subscales from this questionnaire measuring various types of job demands have been applied in a number of empirical studies in literature related to Job Demands and Employee Engagement. The QEEW2.0 was originally developed in Dutch and has been completely translated into English, French, and Italian. Items from three subscales of Questionnaire on the Experience and Evaluation of Work, measuring three types of job demands were adapted: ‘Mental Load’ (4 items), ‘Emotional Load’ (4 items) and ‘Pace and Amount of work’ (4 items). Some of these items were modified and reworded for a better understanding and in the context of the study.

The researcher wrote to the author of the scale, and he graciously shared the full scale as well as the latest updated manual for the purpose of the study being undertaken. These three subscales that have been adapted from this questionnaire with modifications.

Employee engagement was measured on the dimensions described by Schaufeli, et al (2002) as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”. The Utrecht Work Engagement Scale, a self-report instrument that has been validated in many countries across the world, was found to be suitable used as it captures these three dimensions of employee engagement. It is the most often used instrument to measure engagement in the varied studies in literature. It includes three subscales: vigour, dedication, and absorption. The scale has been adapted in entirety without any changes.

The researcher also included the demographic characteristics of the respondents in the final questionnaire including gender, age, education, designation, marital status, family type and annual salary, in order to facilitate intergroup analysis.

3.5.3 Data Collection Procedure

The next step was data collection by seeking appointments with various organizations, in both, the manufacturing as well as the service sector. Human Resource Heads of the target organizations were approached to identify and provide access to potential respondents willing to participate and support the study. The researcher requested the HR to identify employees with varying engagement levels as rated by them. Communication was carried out formally firstly via telephone and followed up by an official email. The objective of the study was communicated to them and confidentiality of the data was assured. The Human Resource heads were also assured that organization name would not be mentioned in the study. The researcher met the participants personally in groups (of 5 to 7 members) at their respective organizations. Participants comprised of both male and female employees belonging to different age groups, work designations and functions. At the outset, every respondent was thanked

for agreeing to support the study and then briefed about the objective of the study and provided detailed instructions with an example on how the questionnaire was to be filled in. They were put to ease by assuring them that this data would be confidential and not handed over to their organizations or Human Resource department. The researcher tried to ensure that maximum questionnaires were completed in the presence of the researcher so that the forms would not be left incomplete and doubts, if any were clarified immediately.

The questionnaire being lengthy, the employees required an average time of about 45 minutes to fill. Some employees requested for extra time to fill in the questionnaire and these were collected at a later committed date. The questionnaires were number coded to match the respondents.

230 questionnaires were administered out of which 215 were received. On checking, 12 questionnaires were found to have missing data and hence were not usable for the purpose of the study. Finally 203 questionnaires were used for the study. The high response rate of 93% maybe owed to personal supervision by the researcher while filling most of the questionnaires. The data was then fed into the SPSS software for analysis.

3.5.4 Data Analysis Techniques

The data obtained from the respondents was coded and entered in to the statistical package SPSS version 20. The final testing of the proposed hypotheses and the model under study, and to measure the relationships of the independent variables and moderating variables, on the dependent variable was done using Multiple regression analysis. One way ANOVA and independent sample t-test was done to establish relationships. Data handling procedure is explained in annexure (VII).

CHAPTER 4

4.0 SCALE DEVELOPMENT

4.1 CONCEPT CLARIFICATION

On study of extant literature and the exploratory study undertaken, five constructs with specific dimensions were identified. Clark and Watson (1995) state that a critical first step is to develop a precise and detailed conception of the target constructs and their theoretical context which was done. They recommend writing out a brief formal description of the constructs in crystallizing the conceptual model. They reiterate that thinking about theoretical issues prior to the process of scale construction increases the likelihood that the resulting scale will make a substantial contribution to the literature. It was imperative to have a clarity on the conceptual definitions of these constructs in the context of the study undertaken and have been described below.

Employee Engagement is described as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one’s work, and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Finally, absorption is characterized by being fully concentrated and happily engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from work”. Thus these three dimensions of ‘Vigor, Dedication and Absorption’ make up this construct.

Job demands have been operationalized in terms of;

- a) Quantitative demands- aspects such as workload and time pressures
- b) Emotional demands- Emotional demands concern emotionally charged interactions at work (e.g., customer/colleague misbehaviour)
- c) Mental demands- mental work processes requiring concentration, attention, or memory.

Social Support

Due to numerous definitions described in literature and lack of consensus on a common definition the researcher has operationalized social support as follows; “Social Support is the experience of being integrated in a stable network of relationships characterized by frequent communication and reciprocity, providing access to emotional, instrumental, informational and social companionship resources.” The dimensions and constructs of social support which are being included in the study are Social Integration, Social Network and Social Support Functions.

Social Integration

Social integration refers to the existence various social ties or relationships (Heaney and Israel through Glantz et. al. 2008). For the purpose of this study it includes the following dimension.

- a) Existence of social relationships and type of relationship of an individual has (e.g. partner, parents, siblings, friends and relatives etc.) (House, Umberson, and Landis, 1988).

Social Network

“Refers to the structure which characterizes a set of relationships. Characteristics of specific relationships between the focal individual and other people in the network and in terms of characteristics of the network as a whole” (House, Umberson, and Landis, 1988). This study has included the following social network characteristics.

- a) Frequency - No of meetings and telephonic conversations with the network members.
- b) Reciprocity - Extent to which resources and support are both given and received in a relationship.
- c) Duration- of the relationship or the length of the relationship.
- d) Density- Extent to which network members know each other and interact with each other.
- e) Geographic Dispersion- Extent to which network members live in close proximity to the individual (Heaney and Israel through Glantz et. al. 2008).

Social Support Functions

These assess whether interpersonal relationships serve particular functions. These functions have been categorized as follows (House, 1981, Cohen& Wills 1985); and used by the researcher for the purpose of this study.

- a) Instrumental Support- is the provision of financial aid, material resources, and needed services.
- b) Informational Support- is help in defining, understanding, and coping with problematic events. It has also been called advice, appraisal support.
- c) Emotional Support- is information that a person is loved, accepted and valued for their own worth.

- d) Social companionship Support - is spending time with others in leisure and recreational activities.

4.2 MEASUREMENT OF CONSTRUCTS

Social Support

Most of these scales reviewed in Chapter 2 on Social support were found to be lacking in comprehensiveness, as they covered more of the functional aspects of social support very well but very few looked at the structural aspects of social support. Almost none of the scales measure the network characteristics. Also most of them were more suitable to be applied in the field of health and recovery. This mandated formulating a more comprehensive scale covering the structural as well as functional aspects to measure all the three dimensions of social support i.e. Social Integration, Social Network and Social Support. Some items were adapted from the Norbeck Social Support Questionnaire (Norbeck, J., Lindsey, A., & Carrieri, V. 1981) and The Medical Outcome Study Social Support Survey (Sherbourne and Stewart 1991) scale. New items were generated on the basis of literature and the exploratory study as below.

Job Demands

The Questionnaire on the Experience and Evaluation of Work (QEEW; VBBA in Dutch) by Marc van Veldhoven et al. (2006) is widely by professionals in the fields of Human Resource Management, business administration, occupational health, and work and organizational psychology. Subscales from this questionnaire measuring various types of job demands have been applied in a number of empirical studies in literature related to Job Demands and Employee Engagement. The QEEW2.0 was

originally developed in Dutch and has been completely translated into English, French, and Italian. Items from three subscales of Questionnaire on the Experience and Evaluation of Work were adapted: ‘Mental Load’ (4 items), ‘Emotional Load’ (4 items) and ‘Pace and Amount of work’ (4 items). Some of these items were modified and reworded for a better understanding and in the context of the study.

Employee Engagement

Employee engagement was measured on the dimensions described by Schaufeli, et al (2002) as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”.

The Utrecht Work Engagement Scale, a self-report instrument that has been validated in many countries across the world, was found to be suitable used as it captures these three dimensions of employee engagement. It is the most often used instrument to measure engagement in the varied studies in literature. It includes three subscales: vigour, dedication, and absorption. The UWES is a self-report instrument and has been validated in many countries across the world. The scale was adapted in entirety without any changes.

4.3 ITEM GENERATION

The item generation process began with a thorough literature review on the constructs under study. Various scales were studied as detailed in (Chapter 2). It was revealed that Social support scales are lacking in inclusiveness and there was a lack of consensus on the measure of social support. The study being undertaken was focusing on three dimensions of social support, Social Integration, Social Network and Social

Support, for which an appropriate scale was not available in extant literature. Hence it was decided to construct a new scale which comprehensively covers structural as well as functional aspects of social support. After a detailed study of literature and analysis of the existing scales, some structural items were adapted from the Norbeck Social Support Questionnaire and functional items from the Medical Outcome Study Social Support Survey (MOSS) scale. Items to measure additional aspects of social support functions and network characteristics were drawn from literature.

Subscales from the Questionnaire on the Experience and Evaluation of Work (QEEW) measuring various types of job demands have been used with very slight modifications as suggested by experts. Three subscales measuring Mental Load' (4 items), 'Emotional Load' (4 items) and 'Pace and Amount of work' (4 items), renamed as Mental demands, Quantitative demands and Emotional demands have been adapted for this study with written permission from the author.

Employee engagement was measured on the dimensions described by Schaufeli, et al (2002) as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". The Utrecht Work Engagement Scale, a self-report instrument, was used in entirety.

The literature related to social support and employee engagement, the exploratory study as well as the experts opinions helped the researcher to generate the final pool of items.

Table 4.1 Item Pool Generation

Sr. No.	Items adapted from Norbeck Social Support Questionnaire (Norbeck, J., Lindsey, A., & Carrieri, V. 1981)	
	Original Item	Reworded for clarity
1	List out names of close people from your social circle or personal network (non-work area) e.g. spouse, family, neighbours, others.)	No Change
2	State your relationship with each of them.	No Change
Sr. No.	Items adapted from The Medical Outcome Study Social Support Survey (Sherbourne and Stewart 1991)	
1	You can count on this person to listen to you when you need to talk	No change
2	This person provides you information to understand and resolve a situation	This person provides you counsel/guidance to help you to resolve a situation
3	You can confide in this person and talk about yourself and your problems	No change
4	You can do some enjoyable things with this person	You can do some enjoyable things with like shopping, watching a movie etc. with this person.

5	This person helps you with your home chores (like cooking etc.) on a regular basis	This person helps you with your home chores (like cooking, dusting etc.) on a regular basis
6	This person helps you with your daily chores when you are confined in bed	No change
7	This person shows you love and affection	No change
8	This person gives you advise when in a crisis	No change
Sr. No.	Items of 3 subscales adapted from Questionnaire on the Experience and Evaluation of Work (QEEW; Marc van Veldhoven et al.-2006)	
1	‘Mental Load’, ‘Emotional Load’, and ‘Pace and Amount of work’.	Mental Demands, Emotional Demands and Quantitative Demands.
2	Does your work demand a lot from you emotionally?	No Change
3	Do you have to work extra hard in order to complete something?	No Change
4	Do you have contact with difficult clients in your work?	No Change
5	Does your work demand a lot of concentration?	No Change
6	Are you confronted with things that affect you personally in your work?	No Change
7	Does your work require a great deal of carefulness?	No Change
8	Do you find that you are behind in your work activities?	No Change

9	Does your work put you in emotionally upsetting situations?	No Change
10	Do you work under time pressure?	No Change
11	Do you have to be attentive to many things at the same time?	No Change
12	Would you prefer a calmer work pace?	No Change
13	Do you have to remember many things in your work?	No Change

4.4 INTER RATER RELIABILITY

The questionnaires were then passed through scale evaluation, which involve reliability and validity tests. The key indicators of quality of a measuring instrument are the reliability and validity of the measures (Kimberlin and Winterstein, 2008). Inter-rater agreement occurs when different raters assign the same values when rating the same phenomenon and Inter-rater reliability is used to assess the degree to which different raters or observers make consistent estimates of the same phenomenon (Kozolowski and Hattrup, as quoted in Fleenor, Fleenor and Grossnickle, 1996). Hence the researcher conducted an inter-rater agreement exercise, to examine the reliability of this scale.

Inter rater reliability is the degree of similarity between different examiners, without influencing one another (Wang 2009). Inter rater agreement represents the extent to which the different judges tend to assign exactly the same rating to each object (Tinsley and Weiss, 1975).

To ensure reliability in the classification of the items of the scale, six experts were given forms (annexure II and III) and asked to tick each of the items in the Social Support Scale and Job Demand Scale and categorize them into relevant dimensions by referring to the operational definitions of the following constructs provided to them as an annexure.

Social Support Scale which is categorized into Social Integration (Existence and type of Relationship), Social Network (Frequency of communication, Reciprocity, Duration, Geographic Dispersion and Density) and Support Functions (Emotional, Informational, Instrumental and Social Companionship).

Job Demand Scale is categorized into Mental, Quantitative and Emotional Demands. This method has been recommended by Rossiter (2002), in the “C-OAR-SE scale development procedure to make a final selection of constituents from ratings by a sample of raters and to rate content saturation of items for an eliciting attribute”.

The number of similar ratings were then scrutinized and the items which were less clear (lesser than 4) were refined for a better fit within a specific dimension. (Tables 4.2 &4.3)

Table 4.2: Inter rater agreement of Social Support Scale

Items	Item Rating
List out names of close people from your personal network/ social circle (non-work area, e.g. spouse, family, neighbours, others.)	SI-6 (Existence of Network)
State your relationship with them (state your relationship with each of the persons listed e.g. spouse, brother, sister etc.)	SI-4 (Relationship Type)
No of times you meet each of them in a month	SN-6 (Frequency of Communication)
How far do the people in your personal network live from you?	SN-6 (Geographic Dispersion)
Do the people in your personal network know one another?	SN- 4(Density)
Do the people in your personal network interact with each other?	SN- 4(Density)
How well does this person reciprocate the relationship (in terms of actions, feelings etc.)	SN-6 (Reciprocity)
How long have you known each other closely?	SN-6 (Duration)
No of times you chat via telephone, email etc. in a month	SN-6 (Frequency of Communication)
You can count on this person to listen to you when you need to talk	SFEmo-5
This person provides you counsel/guidance to help you to resolve a situation	SFInfo-6
You can confide in this person and talk about yourself and your problems	SFEmo-6

This person provides you guidance on professional queries	SFInfo-5
You can do some enjoyable things like shopping, watching a movie etc., with this person.	SFSoco-6
This person helps you with your home chores (like cooking, dusting etc.) on a regular basis	SFInst-6
This person picks and drops you to/from work	SFInst-5
You can hang out with this person just to unwind	SFSoco-5
This person helps you with your daily chores when you are confined in bed	SFInst-6
You can get together with this person for relaxation	SFSoco-5
This person shows you love and affection	SFEmo-6
This person gives you advise when in a crisis	SFInfo-6
You can rely on this person for financial assistance in case of a financial crisis.	SFInst-6
This person takes care of your child/children while you are at work.	SFInst-6

SI- Social Integration

SN- Social Network

SFEmo- Emotional Support Function

SFInst- Instrumental Support Function

SFInfo- Informational Support Function

SFSoco- Social Companionship Support Function

Table 4.3: Inter rater agreement of Job Demand Scale

Item	Item Rating
Does your work demand a lot from you emotionally?	EJD-6
Do you have to work extra hard in-order to complete something?	QJD-4
Do you have contact with difficult clients in your work?	EJD-4
Does your work demand a lot of concentration?	MJD-6
Are you confronted with things that affect you personally in your work?	EJD-5
Does your work require a great deal of carefulness?	MJD-6
Do you find that you are behind in your work activities?	QJD-6
Does your work put you in emotionally upsetting situations?	EJD-6
Do you work under time pressure?	QJD-6
Do you have to be attentive to many things at the same time?	MJD-4
Would you prefer a calmer work pace?	QJD-3
Do you have to remember many things in your work?	MJD-4

EJD- Emotional Job Demands

QJD- Quantitative Job Demands

MJD- Mental Job Demands

4.5 CONTENT VALIDITY

Content validity is defined as “the degree to which a sample of items, taken together, constitute an adequate operational definition of a construct” (Polit and Beck, 2006).

Rattray and Martyn, (2007), refer to content validity as, expert opinion on whether the

scale items represent the proposed domains or concepts, the questionnaire is intended to measure.

Since there is no statistical test to determine whether a measure adequately covers a content area or adequately represents a construct, content validity usually depends on the judgment of experts in the field (Kimberlin and Winterstein, 2008). Firstly the questionnaires were presented in the department’s weekly presentation forum to get feedback and ensure that the content was relevant to the constructs being measured.

Subsequently, six experts from the academic field as well as Human Resource practitioners from the industry judged the instrument. A sample format is provided in (Annexure II &III) The items of both the scales were judged for ‘Relevance’, ‘Clarity’ and ‘Simplicity’ using the below mentioned criteria. (Table 4.4).

Table 4.4: Criteria for Content Validity

Source: (Yaghmaie, 2003)

Relevance
1= Not Relevant
2= Item needs some revision
3= Relevant but needs minor revision
4=Very Relevant
Clarity
1= Not Clear
2= Item needs some revision
3= Clear but needs minor revision
4=Very Clear

Simplicity
1= Not Simple
2= Item needs some revision
3= Simple but needs minor revision
4=Very Simple

On completion of the expert ratings, the Content Validity Index (CVI), a measure which indicates the proportion of experts who endorsed an element as content valid, was determined. CVI allows for item level assessments in addition to scale level assessments and are more easily interpreted and understood than other methods of agreement (Polit and Beck, 2006).

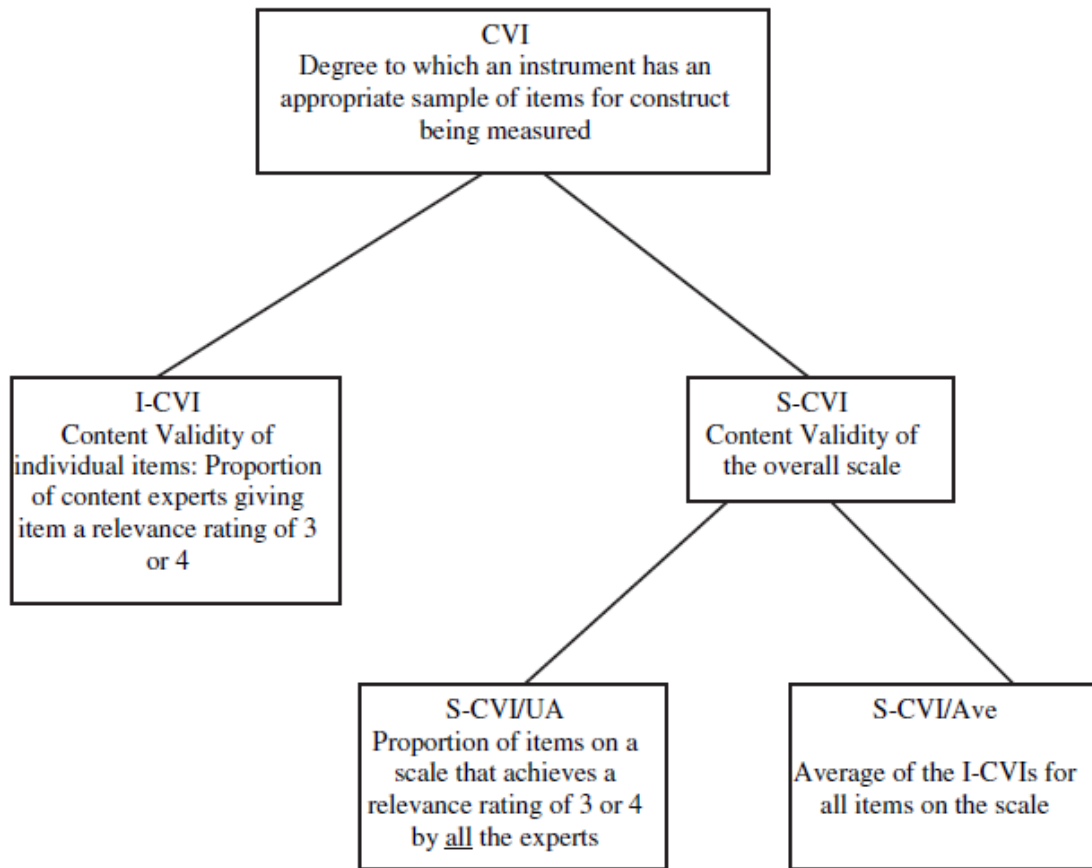
The I-CVI (item level CVI) was computed as the number of experts giving a rating of either 3 or 4 divided by the total number of experts. Polit and Beck (2006); Lynn, (1986) developed criteria for item acceptability that incorporated the standard error of the proportion. She recommended that with a panel of six or more judges, the acceptable standard of I-CVIs should be no lower than .78.

For the scale level the SCVI was computed using the Average expert proportion (SCVI/Avg) and the Universal Agreement (SCVI/UA). The best to conceptualize the S-CVI/Ave is as the average I-CVI value, i.e. the mean of the proportion of items that were rated either 3 or 4 across all the six experts. Davis (1992) and others have recommended a minimum S-CVI of .80.

Feedback from the experts was used to revise the questionnaire, resulting in rewording of a few items which lacked clarity and simplicity.

Figure 4.1: A diagrammatic representation for calculation of the CVI

Source: Polit & Beck (2006)



Details on I-CVI and S-CVI are provided below

Table 4.5 a: Social Support Scale- Relevance

Item Relevance	Rater	Rater	Rater	Rater	Rater	Rater	Number	CVI
Rating	1	2	3	4	5	6	Agreement	Index
List out names of close people from your social circle (non- work area, e.g. spouse, family, neighbours, others.)	4	4	4	4	4	3	6	1
State your relationship with them (Please state your relationship with each of the persons listed)	4	2	3	4	3	4	5	0.83
How far do the close people from your personal network live from you	4	4	4	4	4	4	6	1.00
No of times you meet each of them in a month	4	4	4	4	4	4	6	1.00
No of times you communicate with them via telephone, whatsapp, etc. in a month	4	3	4	4	4	3	6	1.00
How long have you known each other closely	3	4	3	4	4	4	5	1
How well does this person reciprocate the relationship (in terms of actions, feelings etc.)	4	4	4	4	4	4	6	1.00
You can count on this person to listen to you when you need to talk	4	4	3	4	4	4	6	1.00
This person shows you love and affection	4	4	4	4	4	4	6	1.00
You can confide in this person and talk about yourself and your problems	4	4	4	4	4	4	6	1.00
This person gives you advise when in a crisis	4	4	4	4	3	4	6	1.00

Relationship between Social Support Dimensions and Employee Engagement at Workplace

This person provides you guidance you with your professional queries	4	4	4	4	4	3	6	1.00
This person provides you counsel/ guidance to help you understand a situation	4	4	4	4	4	3	6	1.00
This person helps you with your home chores (like cooking, dusting etc.) on a regular basis	4	4	4	4	4	3	6	1.00
This person helps you with your daily chores when you are confined in bed	4	4	4	3	4	4	6	1.00
This person drops and picks you to/from work.	2	4	3	4	4	4	6	0.83
You can rely on this person for financial assistance in case of a financial crisis.	4	4	4	4	4	3	6	1.00
You can do some enjoyable things like shopping, watching a movie etc., with this person.	4	4	4	4	4	2	5	0.83
You can get together with this person with for relaxation	4	3	4	4	2	4	5	0.83
You can hang out with this person just to unwind.	4	4	3	4	4	4	6	1.00
Do the people in your personal network know one another?	4	4	4	4	4	4	6	1.00
Do the people in your personal network interact with each other?	4	4	4	4	4	4	6	1.00
This person takes care of your child/children while you are at work.	4	4	4	4	4	4	6	1.00
SCVI/Ave	0.97							

Figure 4.5 (b) Social Support Scale-Clarity

Item Clarity	Rater	Rater	Rater	Rater	Rater	Rater	Number	CVI
Rating	1	2	3	4	5	6	Agreement	Index
List out names of close people from your social circle (non- work area, e.g. spouse, family, neighbours, others.)	4	4	4	4	4	3	6	1
State your relationship with them (Please state your relationship with each of the persons listed)	3	4	4	4	4	4	6	1
How far do the close people from your personal network live from you	4	4	4	4	4	4	6	1
No of times you meet each of them in a month	4	4	4	4	4	4	6	1
No of times you chat with each of them via telephone, whatsapp etc. in a month	4	4	4	4	4	3	6	1
How long have you known each other closely	2	4	4	4	4	4	5	0.83
How well does this person reciprocate the relationship (in terms of actions, feelings etc.)	4	4	4	4	4	4	6	1
You can count on this person to listen to you when you need to talk	4	4	4	4	4	4	6	1
This person shows you love and affection	4	4	4	4	4	4	6	1
You can confide in this person and talk about yourself and your problems	4	4	4	4	4	4	6	1
This person gives you advise when in a crisis	4	4	4	4	4	4	6	1
This person provides you guidance on professional queries	4	4	4	4	4	3	6	1

Relationship between Social Support Dimensions and Employee Engagement at Workplace

This person provides you counsel/guidance to help you to understand a situation	4	4	4	4	4	3	6	1
This person helps you with your home chores (like cooking etc.) on a regular basis	4	4	4	4	4	3	6	1
This person helps you with your daily chores when you are confined in bed	4	4	4	3	4	4	6	1
This person drops/picks you to/from work	4	4	4	4	4	4	6	1
You can rely on this person for financial assistance in case of a financial crisis.	4	4	4	3	4	3	6	1
You can do some enjoyable things like shopping, watching a movie etc., with this person.	4	4	4	4	4	2	5	0.83
You can get together with this person for relaxation	4	4	4	4	4	4	6	1
You can hang out with this person just to unwind	4	4	4	4	4	4	6	1
Do the people in your personal network know one another?	4	4	4	4	4	4	6	1
Do the people in your personal network interact with each other?	4	4	4	4	4	4	6	1
This person takes care of your child/children while you are at work.	4	4	4	4	4	4	6	1

Figure 4.5 (c) Simplicity -Social Support Scale

Item Simplicity	Rater	Rater	Rater	Rater	Rater	Rater	Number	CVI
Rating	1	2	3	4	5	6	Agreement	Index
List out names of close people from your social circle (non- work area, e.g. spouse, family, neighbours, others.)	4	4	4	4	4	4	6	1
State your relationship with them (Please state your relationship with each of the persons listed)	3	4	4	4	4	4	6	1
How far do the close people from your personal network live from you	4	4	4	4	4	4	6	1
No of times you meet each of them in a month	4	4	4	4	4	4	6	1
No of times you chat via telephone, whatsapp, email etc. in a month.	4	4	4	4	4	4	6	1
How long have you known each other closely	2	4	4	4	4	4	5	0.83
How well does this person reciprocate the relationship (in terms of actions, feelings etc.)	4	4	4	4	4	4	6	1
You can count on this person to listen to you when you need to talk	4	4	4	4	4	4	6	1
This person shows you love and affection	4	4	4	4	4	4	6	1
You can confide in this person and talk about yourself and your problems	4	4	4	4	4	4	6	1
This person gives you advise when in a crisis	4	4	4	4	4	4	6	1
This person provides you guidance on professional issues	4	4	4	4	4	4	6	1

Relationship between Social Support Dimensions and Employee Engagement at Workplace

This person provides you counsel/guidance to help you to understand a situation	4	4	4	4	4	3	6	1
This person helps you with your home chores (like cooking etc.) on a regular basis	4	4	4	4	4	4	6	1
This person helps you with your daily chores when you are confined in bed	4	4	4	4	4	4	6	1
This person drops/picks you to/from work	4	4	4	4	4	4	6	1
You can rely on this person for financial assistance in case of an emergency situation.	4	4	4	3	4	4	6	1
You can do some enjoyable things like shopping, watching a movie etc., with this person.	4	4	4	4	4	4	6	1
You can get together with this person for relaxation	4	4	4	4	4	4	6	1
You can hang out with this person just to unwind	4	4	4	4	4	4	6	1
Do the people in your personal network know one another?	4	4	4	4	4	4	6	1
Do the people in your personal network interact with each other?	4	4	4	4	4	4	6	1
This person takes care of your child/children while you are at work.	4	4	4	4	4	4	6	1

Figure 4.6 (a): Job Demands Scale-Relevance

Item Relevance Rating	Rater	Rater	Rater	Rater	Rater	Rater	Number	CVI
	1	2	3	4	5	6	Agreement	Index
Does your work demand a lot from you emotionally?	4	4	4	4	4	4	6	1
Are you confronted with things that affect you personally in your work?	4	4	4	4	4	4	6	1
Do you have contact with difficult clients in your work?	4	3	4	4	2	4	6	0.83
Does your work put you in emotionally upsetting situations?	4	4	4	4	4	4	6	1
Do you work under time pressure?	4	4	1	4	4	4	5	0.83
Do you have to work extra hard in-order to complete something?	4	4	3	3	3	4	6	1
Do you find that you are lagging behind in your work activities?	4	4	3	4	4	4	6	1
Would you prefer a calmer work pace?	4	4	4	4	4	4	6	1
Does your work demand a lot of concentration?	4	4	4	4	4	4	6	1
Do you have to be attentive to many things at the same time?	4	4	1	4	4	4	5	1
Do you have to remember many things in your work?	4	4	1	4	4	4	5	0.83
Does your work require a great deal of carefulness?	4	4	4	4	4	4	6	1
SCVI/Ave	0.96							

Figure 4.6 (b) Job Demands Scale-Clarity

Item Clarity	Rating						Number Agreement	CVI Index
	Rater 1	Rater 2	Rater 3	Rater 4	Rater 5	Rater 6		
Does your work demand a lot from you emotionally?	4	4	4	4	4	4	6	1
Are you confronted with things that affect you personally in your work?	4	4	4	4	3	4	6	1
Do you have contact with difficult clients in your work?	4	3	4	4	2	4	5	0.83
Does your work put you in emotionally upsetting situations?	4	4	4	4	4	4	6	1
Do you work under time pressure?	4	4	4	4	4	4	6	1
Do you have to work extra hard in order to complete something?	4	4	4	3	3	4	6	1
Do you find that you are behind in your work activities?	4	2	4	4	3	2	4	0.67
Would you prefer a calmer work pace?	4	2	4	2	3	3	4	0.67
Does your work demand a lot of concentration?	4	4	4	4	4	4	6	1
Do you have to be attentive to many things at the same time?	4	4	4	3	4	4	6	1
Do you have to remember many things in your work?	4	4	4	4	4	4	6	1
Does your work require a great deal of carefulness?	4	4	4	4	3	4	6	1

Figure 4.6 (c): Job Demands Scale- Simplicity

Item Simplicity	Rater	Rater	Rater	Rater	Rater	Rater	Number	CVI
Rating	1	2	3	4	5	6	Agreement	Index
Does your work demand a lot from you emotionally?	4	4	4	4	4	4	6	1
Are you confronted with things that affect you personally in your work?	4	4	4	4	4	4	6	1
Do you have contact with difficult clients in your work?	4	3	4	4	4	4	6	1
Does your work put you in emotionally upsetting situations?	4	4	4	4	4	4	6	1
Do you work under time pressure?	4	4	4	4	4	4	6	1
Do you have to work extra hard in order to complete something?	4	4	4	3	3	4	6	1
Do you find that you are lagging behind in your work activities?	4	4	4	4	4	4	6	1
Would you prefer a calmer work pace?	4	4	4	4	4	4	6	1
Does your work demand a lot of concentration?	4	4	4	4	4	4	6	1
Do you have to be attentive to many things at the same time?	4	4	4	3	4	4	6	1
Do you have to remember many things in your work?	4	4	4	4	4	4	6	1
Does your work require a great deal of carefulness?	4	4	4	4	4	4	6	1

4.6 Face Validity

“Face validity has been defined as reflecting the extent to which a measure reflects what it is intended to measure” (Nunnally and Bernstein, 1994). It is used to check designed instrument whether apparently relates to the construct to be measured (Yaghmaie, 2003).

Face Validity was tested by initially presenting the questionnaires to experts (academicians) at the weekly PhD presentation forum at the Management department of Goa University as well as to 6 external industry experts from various organizations. It is reported that the instruments are appropriate to measure the constructs of social support and job demands.

4.7 PRE TESTING OF THE SCALE

30 questionnaires were distributed to a sample of respondents in three organizations from the Pharmaceutical, Electronics and IT sector. The purpose was to check for any difficulty in understanding, lack of clarity, difficulty levels of questions and time required to fill the questionnaire. The Human Resource functional heads of the organizations were contacted through telephone and then official communication was carried out vide email, seeking permission to nominate participants who would be willing to fill the questionnaires.

The researcher met the participants at their respective organizations. Participants comprised of both male and female employees belonging to different age groups, work designations and functions. They were assured about the anonymity and confidentiality of their responses. It was ensured that every questionnaire was filled

out in the presence of the researcher so that doubts could be clarified on the spot. There was no major difficulty reported in understanding and filling out the questionnaires.

4.8 RELIABILITY TESTING

The data obtained from the responses was entered in to SPSS software and to test the reliability of the various dimensions of the two instruments, internal consistency - cronbach's alpha was calculated. Results of the same are provided below. (Table 4.7) Coefficient alpha was used as a reliability estimate since it is a commonly applied estimate. The rule of thumb for reliability estimate is 0.7 or higher which suggests good reliability. The reliability of the scales was found to be adequate.

Table 4.7: Reliability of Scales

Reliability of Social Support, Job Demands and Employee Engagement Scales

Sn	Construct name	Alpha	Mean	Sd
1	Emotional_SS	0.76	3.97	0.90
2	Informational_SS	0.78	3.66	1.01
3	SocialCo_SS	0.83	3.51	1.15
4	Instrumental_SS	0.69	2.63	1.02
5	Emotional_JD	0.73	2.13	0.59
6	Quantity_JD	0.59	2.10	0.50
7	Mental_JD	0.73	3.07	0.61
8	Vigor_EG	0.77	4.37	0.99
9	Dedication_EG	0.83	4.74	1.10
10	Absorption_EG	0.73	4.37	0.96

Table 4.8: Refined Items

Original Item	Reworded for clarity as per suggestions from experts
1 This person drops/picks you to/from work	This person helps you when you have transportation problems or when you want to be accompanied somewhere.
2 Do you have to deal with difficult clients in your workplace?	Do you have to deal with difficult people (colleagues, clients etc.) at your workplace
3 Would you prefer a calmer pace of work?	Would you prefer a slower pace of work?

The final measurement instruments (Annexures IV, V, VI) are three scales to measure the three constructs for the constructs under study, namely a] Social Support b] Job Demands and c] Employee Engagement. The first two scales followed the procedure for scale development as discussed above which culminated in certain modifications being made in wording the items. These three scales were administered to the target sample.

The Social Support Scale consists of 23 items measured on a likert scale of 1-5, consisting of 2 questions adapted from the Norbeck Social Support Questionnaire, Norbeck, Lindsey and Carrieri (1981) and 8 items adapted from The Medical Outcome Study Social Support Survey, Sherbourne and Stewart, (1991). The dimensions it measures are a) **Social Integration includes Existence & Type of Relationship (2 items), b) **Social Network measured by** Reciprocity (1 item), Frequency of communication (2 items), Duration of relationship (1 item), Geographic**

dispersion (1 item) and Density (2 items) and c) **Social Support Functions which include** Emotional support (3 items), Informational support (3 items), Instrumental support (5 items) and social companionship (3 items).

Job Demands scale consists of 12 Items measuring three dimensions adapted from Questionnaire on the Experience and Evaluation of Work by Marc van Veldhoven et al. (2006) **on a 4 point likert scale as in the original scale. The dimensions are a)** Mental Load' renamed as 'Mental Demands' (4 items), 'Emotional Load', renamed as 'Emotional Demands' (4 items) and 'Pace and amount of work', renamed as 'Quantitative Demands' (4 items).

Employee Engagement scale consists of 17 Items measured on a 7 point likert scale. The Utrecht Work Engagement Scale by Schaufeli and Bakker (2003) has been adapted without any modifications. It consists of three dimensions including Vigor (6 items), Dedication (5 items) and Absorption (6 items).

The scales were administered to the sample in identified organizations and data was entered into the SPSS software. Data handling procedure has been listed in (annexure VII). The final testing of the proposed hypotheses and the model under study, and to measure the relationships of the independent variables and moderating variables, on the dependent variable was done using Multiple Regression analysis.

CHAPTER 5

5.0 DATA ANALYSIS

This chapter firstly presents the frequency tables, sample characteristics and descriptives. The statistical tests used in this research include the one way ANOVA and independent sample T-tests. An ANOVA makes multiple comparisons of treatment groups in single tests, by identifying whether there is any difference in mean values. Secondly, the independent sample t-test assesses the statistical significance between two sample means. Hypothesized relationships have been tested using multiple regression analysis. Moderation effects were tested using Hayes regression.

5.1 FREQUENCIES

Table 5.1 (a): Sector

Sector	Frequency	Percent
Manufacturing	102	50.2
Service	101	49.8

50% of the organizations surveyed are in the manufacturing sector, 49.8% are from the service sector, highlighting the fact that both sectors are well represented.

Table 5.1(b): Engagement level

Engagement level	Frequency	Percent
Low Engagement	25	12.3
Moderate	98	48.3
High Engagement	80	39.4

12.3% are in the low engagement category, 48.3 are moderately engaged and 39.4% display high engagement levels, as reported by the Human Resource department of their respective organizations.

Table 5.1(c): Gender

Gender	Frequency	Percent
Female	74	36.5
Male	129	63.5

63.5% of the respondents are male while female respondents achieved the low score of 36.5%.

Table 5.1(d): Marital Status

Marital Status	Frequency	Percent
Married	109	53.7
Single	94	46.3

Married respondents achieved the highest score of 53.7% while single respondents achieved the lowest score of 46.3%.

Table 5.1(e): Family Type

Family Type	Frequency	Percent
Nuclear	121	59.6
Joint	82	40.4

59.6% of the respondents are from a nuclear family setup while 40.4% are from a joint family setup.

Table 5.1(f): Number of Children

No of Children	Frequency	Percent
No Children	123	60.6
1 Child	50	24.6
2 Children	28	13.8
3 Children	2	1

60.6% respondents have no children, 24.6% have 1 child, 13.8% have 2 children and just 1 % have 3 children.

Table 5.1(g): Designation

Designation	Frequency	Percent
Associate	109	53.7
Executive	50	24.6
Managerial	44	21.7

With refer to designation, associates achieved the highest score of 53.7%, executive achieved the score of 24.6% while managerial cadre achieved the lowest score of 21.7%.

Table 5.1(h): Department

Department	Frequency	Percent
Production/Operations	80	39.4
Finance	21	10.3
Service Provision	49	24.1
Supply Chain Management	16	7.9
Marketing/Sales	37	18.2

On the analysis of the above table with refer to 39.4% of the respondents represent the Production/Operations department, 10.3% are from the Finance department, 24.1% from Service Provision while 18.2% are from Marketing/Sales department and 7.9% from the Supply Chain Management department.

Table 5.1(i): Experience Band

Experience Band	Frequency	Percent
0-5years	88	43.3
6-10years	58	28.6
11-15years	24	11.8
16-25years	20	9.9
above 25 years	13	6.4

With refer to Experience Band, experience levels range from 0-5yrs achieving the highest score of 43.3%, 28.6% are in the experience band of 6-10yrs, 11.8% are in the 11-15yrs band, 9.9% in the 16-25yrs while above 25yrs of experience are just 6.4%.

Table 5.1(j): Salary

Salary	Frequency	Percent
Below 1.5 lacs	19	9.4
1.5lacs < 3 lacs	53	26.1
3 lacs < 5 lacs	45	22.2
5lacs< 8 lacs	44	21.7
above 8 lacs	42	20.7

With refer to Salary, 26.10% are in the 1.5lacs < 3 lacs. salary band, 22.2% are in the 3lacs < 5 lacs band, 21.7% respondents belong to the 5lac < 8lac. category, 20.7% to the above 8 lacs band and 9.4%. are below 1.5lac.

Table 5.1(k): Education

Education	Frequency	Percent
HSSC	2	1
Diploma	22	10.8
Graduate	105	51.7
Post Graduate	73	36
Doctorate	1	0.5

With refer to Education, 51.7% of the respondents are graduates, 36% are post graduates 10.8% are diploma holders while a mere 1% are HSSC and 0.5% are Doctorate.

Table 5.1(l): Age Band

Age Band	Frequency	Percent
0- 20 years	3	1.5
21-30 years	103	50.7
31-40 years	67	33
41-50 years	24	11.8
above 50 years	6	3

With refer to age, 50.7% respondents are in the 21-30 years band, 33% are in the 31-40 years band, 11.8% are between 41-50 years while 3% are above 50 years and a mere 1.5 %are between 0-20 years.

Table 5.1(m): Type of Relationships

Type of Relationships	Frequency	Percent
Spouse	18	9%
Parent	28	14%
Siblings	32	16%
Relative	26	13%
Friend	95	47%
Child	4	2%
Total	203	100

All respondents affirmed an existence of a network with various relationships. (9%) stated spouse, parents (14%), siblings (16%), relatives (13%), friends (47%) and children (2%). This shows that respondent's network consists more of friends than parents, siblings, children and other relatives.

5.2 DESCRIPTIVE STATISTICS OF VARIABLES

Table 5.2 (a): **Social Network Descriptives**

	N	Minimum	Maximum	Mean	Std. Deviation
Reciprocity	203	1.00	5.00	4.40	0.73
Geographic dispersion	203	1.00	5.00	3.33	1.35
Duration	203	2.00	5.00	3.88	1.20
Frequency	203	1.00	5.00	2.46	0.96
Density	203	1.00	5.00	3.65	1.00
Social Network	203	1.70	5.00	3.54	0.56

Reciprocity has a mean value of 4.40 which may be interpreted as the respondents believe their relationships are based on mutual love and trust and are very well reciprocated.

Geographic dispersion has a mean value of 3.33 which means that respondents social network lives at a reasonable proximity (not too close, not too far) from them.

Duration has a mean value of 3.88 signifying that the average duration of the respondents relationships is between 5-10 years.

Frequency of communication mean is 2.46 indicating that respondents meet with their network members on an average between 1-5 times in a month and telephonic communication is between 11-30 times a month.

Density mean value of 3.65 signifies that the network members know and interact with each other moderately.

Table 5.2 (b): Social Support Functions Descriptives

	N	Minimum	Maximum	Mean	Std. Deviation
Emotional	203	1.33	5.00	4.00	0.93
Informational	203	1.00	5.00	3.68	1.01
Social Companionship	203	1.00	5.00	3.55	1.16
Instrumental	203	1.00	5.00	2.68	1.00
Social Support	203	1.08	5.00	3.48	0.84

Respondent's perceptions of availability of support ranged from a high mean value of 4.00 for emotional support to a lower mean of 2.68 while informational support and social companionship support means indicate moderate to high perceptions of these types of support functions from their network members. It may be interpreted as, the availability of these support functions range from 'some of the time' to 'most of the time.'

The respondent's perceptions of availability of emotional support from their network members is very high while that of instrumental support is average.

Table 5.2 (c): Job Demands Descriptives

	N	Minimum	Maximum	Mean	Std. Deviation
Emotional	203	1.00	4.00	2.09	0.56
Quantitative	203	1.00	3.75	2.16	0.50
Mental	203	1.50	4.00	3.15	0.60
Job Demand	203	1.33	3.92	2.47	0.43

Respondents perceptions for various job demands were not very high except for mental demands which has a mean of 3.15 which means they perceive that they ‘often’ face mental demands whereas the means of quantitative demands of 2.16 and emotional demands of 2.09 show that the respondents perceive their job is demanding ‘sometimes’ on these two dimensions.

Table 5.2 (d): Employee Engagement Descriptives

	N	Minimum	Maximum	Mean	Std. Deviation
Vigor	203	1.17	6.00	4.27	0.98
Dedication	203	1.00	6.00	4.66	1.10
Absorption	203	1.67	6.00	4.18	0.98
Employee Engagement	203	2.06	6.00	4.37	0.93

All dimensions of employee engagement, i.e. vigor, dedication and absorption had mean values in the similar range which signifies that they ‘often’ feel engaged.

Table 5.3: Correlation of Social Network Characteristics with Social Support Functions.

Correlations				
Pearson				
Correlation				
	Emotional	Informational	Social Co.	Instrumental
Reciprocity	.598**	.441**	.429**	.342**
Geographic dispersion	.161*	.085	.146*	.438**

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Duration	.219**	.089	-0.01	.213**
Frequency	.201**	.193**	.233**	.414**
Density	.081	.088	0.03	-0.02

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

Reciprocity has a correlation with all the types of social support functions i.e. Emotional, informational, social companionship and instrumental. Higher the reciprocity, higher is the perception of all kinds of social support functions. This is quite understandable, as when relationships are reciprocal, full of mutual trust and understanding, the bond is very strong and hence one may expect the perceptions of various kinds of support functions to be high.

Geographic Dispersion has a correlation with emotional, social companionship and instrumental social support functions. Closer the proximity, higher is the perception of emotional, instrumental and social companionship support. When network members live within close proximity, respondents are able to draw emotional support, do leisure activities with them like playing a sport, watching a movie etc. They are also able to draw instrumental support like help with daily chores, child care etc.

Duration has a correlation with emotional and instrumental social support functions. Longer the relationship, higher is the perception of emotional and instrumental support. Longer relationships may provide comfort of sharing emotions, and also rightfully drawing instrumental support like financial help, help around the house and child care support.

Frequency has a correlation with all the types of social support functions i.e. Emotional, informational, social companionship and instrumental. Higher the frequency of communication, higher is the perception of all kinds of support functions. Density does not have a correlation with the social support functions.

5.3 INDEPENDENT T-TEST OF EMPLOYEE ENGAGEMENT DIMENSIONS AND DEMOGRAPHIC VARIABLES

Table 5.4 (a): Sector

	Organization	Mean	Std. Dev	T value	Sig value
Vigor	Manufacturing	4.42	0.93	2.68	0.01
	Service	4.06	1.00		
Dedication	Manufacturing	4.87	1.04	3.35	0.00
	Service	4.36	1.13		
Absorption	Manufacturing	4.31	0.90	2.28	0.02
	Service	4.00	1.06		
Employee	Manufacturing	4.54	0.86	3.06	0.00
Engagement	Service	4.14	0.98		

Vigor: The manufacturing sector achieved the highest mean score of 4.42, while service achieved the lowest mean score of 4.06. The T value is 2.68 and Sig value is 0.01, hence it is significant at 1% level.

Dedication: The manufacturing achieved the highest mean score of 4.87, while service achieved the lowest mean score of 4.36. The T value is 3.35 and Sig value is 0.00, hence it is significant at 1% level.

Absorption: The manufacturing sector achieved the highest mean score of 4.31, while service achieved the lowest mean score of 4.00. The T value is 2.28 and Sig value is 0.02. Since the significance value is less than 0.05, it is significant at 5% level.

Employee Engagement: The manufacturing sector achieved the highest mean score of 4.54, while service achieved the lowest mean score of 4.14. The T value is 3.06 and Sig value is 0.00, hence it is significant at 1% level. Hence, null hypothesis is rejected and alternate hypothesis is accepted.

We can probably conclude that employees in the manufacturing sector are more engaged than the employees in the service sector.

Table 5.4 (b): Gender

	Gender	Mean	Std. Dev	T value	Sig value
Vigor	Female	4.16	1.01	-1.35	0.18
	Male	4.35	0.94		
Dedication	Female	4.66	1.09	0.00	1.00
	Male	4.66	1.11		
Absorption	Female	3.95	1.04	-2.90	0.00
	Male	4.35	0.90		
Employee Engagement	Female	4.26	0.97	-1.47	0.14
	Male	4.45	0.90		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions, significance difference is found only in the dimension absorption while no significant difference between the other dimensions was observed.

Absorption: The male respondents achieved the highest mean score of 4.35, while female respondents achieved the lowest mean score of 3.95. The T value is -2.90 and Sig value is 0.00, hence this parameter is significant at 1% level. This may be interpreted as male employees are more absorbed on their jobs as compared to female employees.

Table 5.4 (c): Marital Status

	Marital Status	Mean	Std. Dev	T value	Sig value
Vigor	Married	4.36	0.95	1.41	0.16
	Single	4.16	1.00		
Dedication	Married	4.80	1.06	2.08	0.04
	Single	4.48	1.13		
Absorption	Married	4.25	0.93	1.20	0.23
	Single	4.09	1.04		
Employee Engagement	Married	4.47	0.89	1.73	0.09
	Single	4.24	0.98		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions, significance difference is found only in the dimensions Dedication and for the overall construct of employee engagement while no significant difference between the other dimensions was noted.

Dedication: The married respondents achieved the highest mean score of 4.80, while single respondents achieved the lowest mean score of 4.48. The T value is 2.08 and Sig value is 0.04. Since the significance value is less than 0.05, it is significant at 5% level.

Employee Engagement: The married respondents achieved the highest mean score of 4.47, while single respondents achieved the lowest mean score of 4.24. The T value is 1.73 and Sig value is 0.09. Since the significance value is less than 0.10, it is significant at 10% level. This means that probably married employees are more engaged as compared to their single counterparts.

Table 5.4 (d): Family Type

	Family	Mean	Std. Dev	T value	Sig value
Vigor	Joint	4.19	1.07	-0.87	0.39
	Nuclear	4.31	0.92		
Dedication	Joint	4.44	1.08	-2.14	0.03
	Nuclear	4.78	1.10		
Absorption	Joint	4.13	1.05	-0.55	0.58
	Nuclear	4.21	0.94		
Employee Engagement	Joint	4.25	0.99	-1.33	0.18
	Nuclear	4.43	0.90		

T test is conducted and significance difference is found only in the dimension dedication, and no significant difference is noted between any of the other dimensions.

Dedication: The nuclear family achieved the highest mean score of 4.78, while joint family respondents achieved the lowest mean score of 4.44. The T value is -2.14 and Sig value is 0.03. Since the significance value is less than 0.05, it is significant at 5% level.

Employees from nuclear families are more dedicated at their workplace than employees who are from a joint family. This may be due to the fact that, in a nuclear family setup individuals have lesser responsibilities and limited tasks related to a smaller setup of family than in a joint family where there is a higher pressures of familial duties. Hence individuals from a nuclear setup can be more focused, passionate and strive more dedicatedly at work.

5.4 ONE WAY ANOVA OF EMPLOYEE ENGAGEMENT DIMENSIONS AND DEMOGRAPHIC VARIABLES

Table 5.5 (a): Based on Designation

	Designation	Mean	Std. Dev	F value	Sig value
Vigor	Associates	4.14	1.07	2.17	0.12
	Executive	4.30	0.92		
	Managerial	4.48	0.82		
Dedication	Associates	4.58	1.17	0.44	0.64
	Executive	4.72	1.05		
	Managerial	4.74	1.03		
Absorption	Associates	4.11	1.10	1.07	0.35
	Executive	4.15	0.94		
	Managerial	4.34	0.76		
Employee	Associates	4.28	1.05	1.21	0.30
	Executive	4.39	0.81		
Engagement	Executive	4.39	0.81		
	Managerial	4.52	0.79		

There is no significant difference found between designations based on employee engagement.

Table 5.5 (b): Based on Experience

	Experience	Mean	Std. Dev	F value	Sig value
Vigor	0-5years	4.04	1.00	2.04	0.09
	11-15years	4.46	0.97		
	16-25years	4.62	0.85		
	6-10years	4.36	1.06		
	above 25 years	4.30	0.68		
Dedication	0-5years	4.39	1.15	1.89	0.11
	11-15years	4.80	1.05		
	16-25years	4.78	0.97		
	6-10years	4.85	1.09		
	above 25 years	4.80	1.05		
Absorption	0-5years	4.04	1.14	1.51	0.20
	11-15years	4.53	0.91		
	16-25years	4.46	0.87		
	6-10years	4.13	0.91		
	above 25 years	4.20	0.67		
Employee	0-5years	4.16	1.04	1.80	0.13
Engagement	11-15years	4.60	0.90		
	16-25years	4.62	0.75		
	6-10years	4.45	0.93		
	above 25 years	4.43	0.69		

ANOVA test is conducted and there is significant difference found in the vigor dimension and not between any of the other dimensions.

Vigor: The 16-25 years experienced respondents achieved the highest mean score of 4.62, 11-15 years experienced respondents achieved the mean score of 4.46, 6-10 years experienced respondents achieved the mean score of 4.36, above 25 years experienced respondents achieved the mean score of 4.30, and finally 0-5 years experienced respondents achieved the lowest mean score of 4.05. The F value is 2.04 and Sig value is 0.09. Since the significance value is less than 0.10, it is significant at 10% level.

Vigor is seen as increasing with the increase in experience till 25 years of experience, post which it is seen diminishing. Individuals gain confidence, enthusiasm and passion for their job with increasing experience levels, hence vigor increases. After 25 years of work experience, individuals may be experiencing saturation levels in their jobs where they do not find newer challenges. Also physically their stamina and vigor levels may be diminishing due to age.

Table 5.5 (c): Based on Salary

	Salary	Mean	Std. Dev	F value	Sig value
Vigor	1.5 lacs < 3 lacs	4.30	1.03	4.23	0.00
	3 lacs < 5 lacs	4.46	1.10		
	5 lacs < 8 lacs	4.31	0.89		
	above 8 lacs	4.42	0.77		
	Below 1.5 lacs	3.55	0.94		
Dedication	1.5 lacs < 3 lacs	4.85	1.02	6.29	0.00
	3 lacs < 5 lacs	4.75	1.06		
	5 lacs < 8 lacs	4.72	1.11		
	above 8 lacs	4.84	0.95		
	Below 1.5 lacs	3.67	1.19		

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Absorption	1.5 lacs < 3 lacs	4.25	0.87	5.04	0.00
	3 lacs < 5 lacs	4.34	1.04		
	5 lacs < 8 lacs	4.14	0.78		
	above 8 lacs	4.41	0.85		
	Below 1.5 lacs	3.42	1.31		
Employee	1.5 lacs < 3 lacs	4.47	0.91	6.15	0.00
Engagement	3 lacs < 5 lacs	4.51	0.98		
	5 lacs < 8 lacs	4.39	0.82		
	above 8 lacs	4.56	0.73		
	Below 1.5 lacs	3.55	1.10		

ANOVA test is conducted and there is significant difference found in all the dimensions of employee engagement and overall employee engagement.

Vigor: The 3 lacs < 5 lacs salary respondents achieved the highest mean score of 4.46, 1.5lacs < 3 lacs salary respondents achieved the mean score of 4.30, 5lacs< 8 lacs salary respondents achieved the mean score of 4.31, above 8 lacs salary respondents achieved the mean score of 4.42, Below 1.5 lacs respondents achieved the lowest mean score of 3.55. The F value is 4.23 and Sig value is 0.00, hence it is significant at 1% level.

Dedication: The 1.5lacs < 3 lacs salary respondents achieved the highest mean score of 4.85, 3 lacs < 5 lacs salary respondents achieved the mean score of 4.75, 5lacs< 8 lacs salary respondents achieved the mean score of 4.72, above 8 lacs salary respondents achieved the mean score of 4.84, Below 1.5 lacs respondents achieved the lowest mean score of 3.67. The F value is 6.29 and Sig value is 0.00, hence it is significant at 1% level.

Absorption: The above 8 lacs salary respondents achieved the highest mean score of 4.41, 3 lacs < 5 lacs salary respondents achieved the mean score of 4.34, 1.5lacs < 3 lacs salary respondents achieved the mean score of 4.25, 5lacs< 8 lacs salary respondents achieved the mean score of 4.14, Below 1.5 lacs respondents achieved the lowest mean score of 3.42. The F value is 5.04 and Sig value is 0.00, hence it is significant at 1% level.

Employee Engagement: The above 8 lacs salary respondents achieved the highest mean score of 4.56, 3 lacs < 5 lacs salary respondents achieved the mean score of 4.51, 1.5lacs < 3 lacs salary respondents achieved the mean score of 4.47, 5lacs< 8 lacs salary respondents achieved the mean score of 4.39, Below 1.5 lacs respondents achieved the lowest mean score of 3.55. The F value is 6.15 and Sig value is 0.00, hence it is significant at 1% level.

Employee engagement is seen to increase with increasing salary levels, (except for the 5-8 lac. salary bracket) proving that probably that salary is indeed a motivator across hierarchical levels.

Table 5.5 (d): Based on Education

	Education	Mean	Std. Dev	F value	Sig value
Vigor	Diploma	4.21	1.12	0.77	0.47
	Graduate	4.36	0.98		
	Post Graduate	4.19	0.95		
Dedication	Diploma	4.64	1.20	0.21	0.81
	Graduate	4.71	1.16		
	Post Graduate	4.61	1.03		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Absorption	Diploma	4.34	1.01	1.25	0.29
	Graduate	4.26	0.97		
	Post Graduate	4.06	0.98		
Employee	Diploma	4.40	1.05	0.69	0.50
Engagement	Graduate	4.44	0.95		
	Post Graduate	4.28	0.90		

There is no significant difference found between levels of employee engagement with respect to education.

Table 5.5 (e): Based on Age

	Age	Mean	Std. Dev	F value	Sig value
Vigor	21-30 years	4.23	1.07	0.52	0.67
	31-40 years	4.21	0.98		
	41-50 years	4.45	0.80		
	above 50 years	4.32	0.53		
Dedication	21-30 years	4.60	1.15	0.39	0.76
	31-40 years	4.63	1.13		
	41-50 years	4.82	1.05		
	above 50 years	4.77	0.77		
Absorption	21-30 years	4.12	1.06	0.50	0.68
	31-40 years	4.16	1.04		
	41-50 years	4.35	0.76		
	above 50 years	4.28	0.63		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Employees	21-30 years	4.32	1.03	0.54	0.66
Engagement	31-40 years	4.33	0.95		
	41-50 years	4.54	0.73		
	above 50 years	4.46	0.56		

There is no significant difference found between levels of employee engagement with respect to age.

5.5 INDEPENDENT T-TEST OF SOCIAL SUPPORT FUNCTIONS AND DEMOGRAPHIC VARIABLES

Table 5.6 (a): Gender

	Gender	Mean	Std. Dev	T value	Sig value
Emotional	Female	4.12	0.93	1.54	0.13
	Male	3.91	0.93		
Informational	Female	3.85	0.95	2.10	0.04
	Male	3.56	1.03		
Social Companionship	Female	3.61	1.15	0.60	0.55
	Male	3.51	1.17		
Instrumental	Female	2.77	1.03	1.12	0.26
	Male	2.61	0.97		
Social Support Functions	Female	3.59	0.84	1.59	0.11
	Male	3.40	0.84		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions. Significance difference is found only in the dimension informational support function, while no significant difference between any of the other dimensions is seen.

Informational support: The female respondents achieved the highest mean score of 3.85, while male respondents achieved the lowest mean score of 3.56. The T value is 2.10 and Sig value is 0.04. Since the significance value is less than 0.05, this parameter is significant at 5% level.

Women were found to have higher levels of informational support as compared to men.

Table 5.6 (b): Marital Status

	Marital Status	Mean	Std. Dev	T value	Sig value
Emotional	Married	3.91	0.96	-1.46	0.15
	Single	4.10	0.89		
Informational	Married	3.53	1.02	-2.38	0.02
	Single	3.87	0.97		
Social	Married	3.41	1.25	-1.97	0.05
Companionship	Single	3.73	1.03		
Instrumental	Married	2.65	1.11	-0.44	0.66
	Single	2.71	0.83		
Social Support	Married	3.38	0.92	-1.93	0.06
Functions	Single	3.60	0.72		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions. Significance difference is found only in the dimension informational social support function, social companionship support and overall social support functions, while rest of them have no significant difference between any of the dimensions.

Informational social support: The single respondents achieved the highest mean score of 3.87, while married respondents achieved the lowest mean score of 3.53. The T value is -2.38 and Sig value is 0.02. Since the significance value is less than 0.05, this parameter is significant at 5% level.

Social Companionship Support: The single respondents achieved the highest mean score of 3.73, while married respondents achieved the lowest mean score of 3.41. The T value is -1.97 and Sig value is 0.05, hence this parameter is significant at 5% level.

Social Support Functions: The single respondents achieved the highest mean score of 3.60, while married respondents achieved the lowest mean score of 3.38. The T value is -1.93 and Sig value is 0.06. Since the significance value is less than 0.10, this parameter is significant at 10% level.

Respondents who are single reported higher of overall social support and particularly high levels of informational as well social companionship support. This may be attributed to the fact that single or unmarried individuals are not under pressures of managing a family along with their work. Hence they are probably able to cultivate various relationships and spend more time with their network members. This may provide them with various kinds of support, particularly, social companionship and informational support as compared to married individuals. Hence their perceptions of availability of social support is higher than married respondents

Table 5.6 (c): Family Type

	Family Type	Mean	Std. Dev	T value	Sig value
Emotional	Joint	3.97	0.95	-0.30	0.77
	Nuclear	4.01	0.92		
Informational	Joint	3.66	1.00	-0.19	0.85
	Nuclear	3.69	1.02		
Social Companionship	Joint	3.60	1.17	0.48	0.63
	Nuclear	3.52	1.16		
Instrumental	Joint	2.62	0.95	-0.66	0.51
	Nuclear	2.71	1.02		
Social Support Functions	Joint	3.46	0.80	-0.17	0.87
	Nuclear	3.48	0.86		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions there is no significant difference found between social support dimensions based on family type.

5.6 ONE WAY ANOVA OF SOCIAL SUPPORT FUNCTIONS AND DEMOGRAPHIC VARIABLES

Table 5.7(a): Based on Experience

	Experience	Mean	Std. Dev	F value	Sig value
Emotional	0-5 years	4.05	0.93	0.90	0.47
	11-15 years	3.63	0.99		
	16-25 years	3.98	0.87		
	6-10 years	4.04	0.91		
	above 25 years	4.04	0.98		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Informational	0-5 years	3.84	0.99	2.29	0.06
	11-15 years	3.19	1.15		
	16-25 years	3.44	0.95		
	6-10 years	3.78	0.97		
	above 25 years	3.56	1.00		
Social	0-5 years	3.73	1.08	1.76	0.14
Companionship	11-15 years	3.08	1.38		
	16-25 years	3.34	1.10		
	6-10 years	3.64	1.16		
	above 25 years	3.36	1.21		
Instrumental	0-5 years	2.77	0.87	0.96	0.43
	11-15 years	2.46	1.21		
	16-25 years	2.54	1.10		
	6-10 years	2.78	1.06		
	above 25 years	2.47	0.91		
Social Support	0-5 years	3.60	0.77	1.96	0.10
Functions	11-15 years	3.09	1.04		
	16-25 years	3.33	0.84		
	6-10 years	3.56	0.82		
	above 25 years	3.36	0.86		

On the analysis of the above table, ANOVA test is conducted to establish significant difference in various dimensions. Significance difference is found only in the dimension informational and overall social support functions and there was no significant difference between any of the other dimensions.

Informational Support: The respondents with 0-5 years experience achieved the highest mean score of 3.84, 6-10 years experienced respondents achieved the mean score of 3.78. 11-15 years' experience had a mean score of 3.19, 16-25 years of experience, a mean of 3.44 and above 25 years respondents achieved the mean score of 3.56 The F value is 2.29 and Sig value is 0.06. Since the significance value is less than 0.10, the parameter is significant at 10% level.

Social Support Functions: The respondents with 0-5 years experience achieved the highest mean score of 3.60, 6-10 years experienced respondents achieved the mean score of 3.56. 11-15 years' experience had a mean score of 3.09, 16-25 years of experience, a mean of 3.33 and above 25 years respondents achieved the mean score of 3.36 The F value is 1.96 and Sig value is 0.10, hence, this parameter is significant at 10% level.

Employees with lower levels of experience had perceptions of a higher level of informational support which diminished with increase in experience but increases when an individual has over 16 years of experience. This could be due to the reason that individuals actively need seek advice, solutions and other information in the initial years of their careers. (0-5 years). As the experience levels increase, (6-10 years) the individual has probably built knowledge and confidence required and the need for informational support decreases for some years as they may not draw any additional information from their network members. The need for informational support may be felt again at a higher level of experience (above 16years) as the individual may be at senior level in a decision making role, managerial role where informational support may have an important role with changes in trends and technologies.

Table 5.7(b): Based on Education

	Education	Mean	Std. Dev	F value	Sig value
Emotional	Diploma	3.96	1.00	0.63	0.53
	Graduate	3.92	0.95		
	Post Graduate	4.08	0.90		
Informational	Diploma	3.76	1.15	0.17	0.85
	Graduate	3.64	1.03		
	Post Graduate	3.71	0.97		
Social Companionship	Diploma	3.30	1.30	0.48	0.62
	Graduate	3.56	1.17		
	Post Graduate	3.59	1.13		
Instrumental	Diploma	2.79	1.04	1.08	0.34
	Graduate	2.57	0.95		
	Post Graduate	2.77	1.04		
Social Support Functions	Diploma	3.45	0.93	0.43	0.65
	Graduate	3.42	0.82		
	Post Graduate	3.54	0.85		

There is no significant difference found between any of the dimensions of social support based on education.

Table 5.7(c): Based on Age

	Age	Mean	Std. Dev	F value	Sig Value
Emotional	21-30 years	4.05	0.94	0.90	0.44
	31-40 years	3.98	0.86		
	41-50 years	3.78	1.10		
	above 50 years	4.16	0.62		
Informational	21-30 years	3.85	0.98	2.62	0.05
	31-40 years	3.61	0.96		
	41-50 years	3.34	1.15		
	above 50 years	3.48	0.85		
Social	21-30 years	3.70	1.09	1.98	0.12
Companionship	31-40 years	3.56	1.22		
	41-50 years	3.15	1.29		
	above 50 years	3.43	1.05		
Instrumental	21-30 years	2.72	0.90	1.11	0.35
	31-40 years	2.81	1.18		
	41-50 years	2.48	1.01		
	above 50 years	2.44	0.98		
Social Support Functions	21-30 years	3.58	0.77	1.97	0.12
	31-40 years	3.49	0.88		
	41-50 years	3.19	1.01		
	above 50 years	3.38	0.69		

On the analysis of the above table, ANOVA test is conducted to establish significant difference in various dimensions. Significance difference is found only in the dimension Informational and there was no significant difference between any of the other dimensions.

Informational Support: The 21-30years respondents achieved the highest mean score of 3.85, 31-40years respondents achieved the mean score of 3.61. 41-50 years respondents achieved the mean score of 3.34 while above 50years respondents achieved the mean score of 3.48. The above table brings out that the F value is 2.62 and Sig value is 0.05.and hence this parameter is significant at 5% level.

Individuals who are in the age group of 21 to 30 years would include fresher's at jobs or ones who are relatively new on the job requiring tips, information from various sources including family, friends and others. They perceive a higher availability of informational support from their network members who can help them with their domain knowledge, advice and tips in order to perform better at the job. As the age increases, so does experience level and competence and hence the need and perception of availability of informational support is lower. Perceptions of higher informational support are seen increasing again above the age of 50 as at this time individuals may be grappling and handling new trends, technologies and processes.

Table 5.7(d): Based on Designation

	Designation	Mean	Std. Dev	F value	Sig Value
Emotional	Associates	3.95	0.95	0.29	0.75
	Executive	4.06	0.96		
	Managerial	4.03	0.88		
Informational	Associates	3.76	0.99	2.14	0.12
	Executive	3.78	1.05		
	Managerial	3.44	0.99		
Social	Associates	3.56	1.11	1.59	0.21
Companionship	Executive	3.76	1.23		
	Managerial	3.35	1.18		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Instrumental	Associates	2.73	0.90	1.01	0.37
	Executive	2.76	1.01		
	Managerial	2.52	1.13		
Social Support	Associates	3.50	0.80	1.26	0.29
Functions	Executive	3.59	0.88		
	Managerial	3.34	0.88		

There is no significant difference found between any of the dimensions of social support based on designation.

5.7 INDEPENDENT T-TEST OF SOCIAL NETWORK DIMENSIONS AND DEMOGRAPHIC VARIABLES

Table 5.8(a): Based on Gender

	Gender	Mean	Std. Deviation	t	Sig. (2-tailed)
Reciprocity	Female	4.44	0.73	.673	.501
	Male	4.37	0.73		
Geographic dispersions	Female	3.32	1.45	-.092	.927
	Male	3.34	1.27		
Durations	Female	4.01	1.16	1.244	.215
	Male	3.79	1.22		
Frequency	Female	2.50	0.94	.547	.585
	Male	2.43	0.97		
Density	Female	3.77	1.03	1.468	.144
	Male	3.56	0.98		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Social Network	Female	3.61	0.56	1.377	.170
	Male	3.50	0.56		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions, there is no difference found in the dimensions with respect to gender.

Table 5.8(b): Based on Marital Status

	Marital Status	Mean	Std. Deviation	t	Sig. (2-tailed)
Reciprocity	Married	4.34	0.72	-1.458	.146
	Single	4.49	0.73		
Geographic dispersions	Married	3.33	1.37	-.013	.989
	Single	3.33	1.32		
Durations	Married	3.98	1.10	1.315	.190
	Single	3.76	1.31		
Frequency	Married	2.44	1.02	-.342	.733
	Single	2.48	0.89		
Density	Married	3.59	1.07	-.940	.348
	Single	3.72	0.91		
Social Network	Married	3.53	0.50	-.275	.784
	Single	3.56	0.62		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions, there is no difference found in the dimensions with respect to marital status.

Table 5.8(c): Based on Family Type

	Family	Mean	Std. Deviation	T	Sig. (2-tailed)
Reciprocity	Joint	4.44	0.71	.485	.628
	Nuclear	4.38	0.73		
Geographic dispersion	Joint	3.34	1.26	.073	.942
	Nuclear	3.32	1.39		
Duration	Joint	3.66	1.21	-2.010	.046
	Nuclear	4.01	1.18		
Frequency	Joint	2.59	0.97	1.459	.146
	Nuclear	2.38	0.95		
Density	Joint	3.62	1.12	-.308	.758
	Nuclear	3.67	0.94		
Social Network	Joint	3.53	0.58	-.304	.762
	Nuclear	3.55	0.55		

On the analysis of the above table, though T test is conducted to establish significant difference in various dimensions, difference is found only with respect to duration dimensions. T value is 2.01 and sig value is 0.046. .Since the significance value is less than 0.05, this parameter is significant at 5% level.

Duration: Nuclear family achieved a mean of 4.01 and Joint family, a mean score of 3.66. This may be interpreted as individuals living in nuclear families have longer term relations than those individuals in joint families.

5.8 ONE WAY ANOVA OF SOCIAL NETWORK DIMENSIONS AND DEMOGRAPHIC VARIABLES

Table 5.9: Based on Age

	Age	Mean	Std. Deviation	F	Sig.
Reciprocity	21-30 years	4.47	0.73	.587	.624
	31-40 years	4.32	0.76		
	41-50 years	4.33	0.76		
	above 50 years	4.37	0.50		
	Total	4.40	0.73		
Geographic dispersion	21-30 years	3.24	1.38	1.010	.389
	31-40 years	3.52	1.22		
	41-50 years	3.16	1.50		
	above 50 years	3.69	1.07		
	Total	3.33	1.34		
Duration	21-30 years	3.71	1.29	2.881	.037
	31-40 years	3.84	1.16		
	41-50 years	4.38	0.81		
	above 50 years	4.06	1.19		
	Total	3.88	1.20		
Frequency	21-30 years	2.53	0.87	2.113	.100
	31-40 years	2.59	1.04		
	41-50 years	2.13	1.05		
	above 50 years	2.27	0.96		
	Total	2.46	0.96		

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Density	21-30 years	3.66	0.93	.087	.967
	31-40 years	3.65	1.11		
	41-50 years	3.58	1.14		
	above 50 years	3.73	0.87		
	Total	3.65	1.00		
Social Network	21-30 years	3.52	0.62	.275	.843
	31-40 years	3.59	0.50		
	41-50 years	3.52	0.52		
	above 50 years	3.62	0.43		
	Total	3.54	0.56		

On the analysis of the above table, ANOVA test is conducted to establish significant difference in various dimensions. Significance difference is found only in the dimension duration and frequency and there was no significant difference between any of the other dimensions.

Duration: Respondents between 41-50 years achieved the highest mean of 4.38, respondents above 50 years achieved a mean of 4.06, between 31-40 years 3.84 and between 21-30 years 3.71. The above table brings out that the F value is 2.88 and Sig value is 0.037. Since the significance value is less than 0.05, this parameter is significant at 5% level. Hence, null hypothesis is rejected.

Frequency: Respondents between 31-40 years achieved the highest mean of 2.59, respondents between 21-30 years 2.53, above 50 years achieved a mean of 2.27, and between 41-50 years 2.13. The above table brings out that the F value is 2.11 and Sig value is 0.100. and hence, this parameter is significant at 10% level. Hence, null hypothesis is rejected.

This means may be interpreted as older respondents (above 40 years) have longer term relationships as compared to the younger respondents. In terms of frequency of communication, younger respondents (below 40 years) have a higher frequency of communication as compared to the older respondents. (above 40 years).

Table 5.10: Social Integration and Social Support Functions

	Relationship Type	Mean	Std. Deviation	F	Sig.
Emotional	Spouse[A]	4.56	0.64	5.63	0.00
	Parent[B]	4.53	0.67		
	Siblings[C]	4.16	0.85		
	Relative[D]	3.79	0.92		
	Friend[E]	3.74	0.96		
	Child[F]	3.91	1.16		
	Total				
Informational	Spouse[A]	4.28	0.71	4.38	0.00
	Parent[B]	4.06	0.79		
	Siblings[C]	3.75	1.03		
	Relative[D]	3.42	1.06		
	Friend[E]	3.56	0.99		
	Child[F]	2.37	1.49		
	Total				

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Social	Spouse[A]	4.53	0.66	3.91	0.00
	Parent[B]	3.60	1.05		
	Siblings[C]	3.64	1.15		
	Relative[D]	3.14	1.05		
	Friend[E]	3.41	1.22		
	Child[F]	4.32	0.64		
	Total				
Instrumental	Spouse[A]	4.10	0.85	25.96	0.00
	Parent[B]	3.51	0.73		
	Siblings[C]	2.86	0.81		
	Relative[D]	2.47	0.84		
	Friend[E]	2.18	0.75		
	Child[F]	2.38	1.04		
	Total				
Social Support Functions	Spouse[A]	4.37	0.48	9.50	0.00
	Parent[B]	3.92	0.66		
	Siblings[C]	3.60	0.81		
	Relative[D]	3.20	0.83		
	Friend[E]	3.22	0.80		
	Child[F]	3.24	0.83		
	Total				

On the analysis of the above table, ANOVA test is conducted to establish significant difference in various dimensions. There is a significant difference in all the dimensions of social support functions, emotional, instrumental, informational, social

companionship and overall social support functions. All are significant at 1% significant level.

Spouse, parents and siblings appear to be the key providers of all kinds of social support as compared to relatives, friends and children, except for social companionship where spouse, parents and children are the highest.

5.9 MULTIPLE REGRESSION ANALYSIS

Multiple regression analysis was used to test the hypotheses. The results are presented below.

Hypothesis 1

H₀ Social integration has no significant relationship with employee engagement.

H₁ Social integration has a significant relationship with employee engagement.

Table 5.11: Social Integration Relationship with Employee Engagement

ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.225	5.00	0.65	0.73	.598 ^b
	Residual	173.262	197.24	0.88		
	Total	176.487	202.24			

a. Dependent Variable: Employee Engagement

Coefficients^a

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	4.474	0.23		19.43	0.00
Relation=Parent	-.238	0.29	-0.09	-0.83	0.41
Relation=Siblings	-.247	0.28	-0.10	-0.87	0.38
Relation=Relative	-.112	0.30	-0.04	-0.38	0.71
Relation=Friend	-.057	0.25	-0.03	-0.23	0.82
Relation=Child	.521	0.51	0.08	1.02	0.31

Employee engagement enacted as dependent variable and social integration as the independent variable. Since social integration is categorical data, it is converted into dummy variable, keeping spouse as reference group with respect to other categories in the variable. There is no statistical relationship between social integration and employee engagement.

Hypothesis 2

H₀ Social networks has no significant relationship with employee engagement.

H₁ Social networks has a significant relationship with employee engagement.

Table 5.12: Social Network Relationship with Employee Engagement

Model Summary					
Model	R	R Square	F	Sig	
1	.001 ^a	.000	0.000	.989 ^b	

Coefficients^a					
Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	4.364	0.42		10.34	0.00
Social Network	.002	0.12	0.00	0.01	0.99

a. Dependent Variable: Employee Engagement

Employee engagement is the dependent variable, and social network as the independent variable. There is no statistical relationship between social integration and employee engagement. It may be interpreted that employee engagement is not dependent on mere existence of social networks.

Hypothesis 2a

H₀ Reciprocity has no significant relationship with employee engagement.

H₁ Reciprocity has a significant relationship with employee engagement.

Hypothesis 2b

H₀ Frequency has no significant relationship with employee engagement.

H₁ Frequency has a significant relationship with employee engagement.

Hypothesis 2c

H₀ Geographic dispersion has no significant relationship with employee engagement.

H₁ Geographic dispersion has a significant relationship with employee engagement.

Hypothesis 2d

H₀ Density has no significant relationship with employee engagement.

H₁ Density has a significant relationship with employee engagement.

Hypothesis 2e

H₀ Duration has no significant relationship with employee engagement.

H₁ Duration has a significant relationship with employee engagement.

Table 5.13: Social Network Characteristics with Employee Engagement

Model Summary

Model	R	R Square	F	Sig
1	.195 ^a	.038	1.55	0.175 ^b

a. Predictors: (Constant), Density, Duration, Geographic dispersion, Reciprocity, Frequency

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1 (Constant)	4.342	0.50			8.70	0.00
Reciprocity	-.130	0.09	-0.10		-1.38	0.17
Geographic dispersion	-.055	0.06	-0.08		-0.93	0.35
Duration	.005	0.06	0.01		0.09	0.93
Frequency	.078	0.09	0.08		0.91	0.37
Density	.157	0.07	0.17		2.38	0.02

a. Dependent Variable: Employee Engagement

Employee engagement enacted as dependent variable, and all dimensions of social network as independent variables. Density sig.= 0.02, hence density is significant at 5% level. There is evidence of significance relationship between only the density dimension of social network with employee engagement. This may be interpreted that when networks are dense where all network members know and interact with each other, perceptions of getting relevant support may be higher and hence have a relationship with employee engagement.

Hypothesis 3

H₀ Social support functions have no significant relationship with employee engagement.

H₁ Social support functions have a significant relationship with employee engagement.

Table 5.14: Social Support Functions Relationship with Employee Engagement.

Model Summary					
Model	R	R Square	F	Sig.	
1	.14 ^a	0.019	3.87	.052 ^b	

Coefficients^a					
Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	4.897	0.277		17.648	0.00
Social support function	0.152	0.078	0.136	1.954	0.05

a .Dependent Variable: Employee Engagement

Employee engagement enacted as dependent variable and social support functions as independent variables. Significant relationship is found between social support and employee engagement. sig= 0.05. Social support is significant at 5% level. This may be interpreted as emotional, informational, social companionship and instrumental support collectively have a relationship with employee engagement.

Hypothesis 4

H₀ Instrumental support has no significant relationship with employee engagement.

H₁ Instrumental support has a significant relationship with employee engagement.

Table 5.15: Instrumental Support Relationship with Employee Engagement

Model Summary

Model	R	R Square	F	Sig.
1	.028 ^a	0.001	0.152	.697 ^b

a. Predictors: (Constant), Instrumental

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	4.439	0.189			23.507	0.00
Instrumental	0.026	0.066	0.028		0.39	0.70

a. Dependent Variable: Employee Engagement

Employee engagement enacted as dependent variable, and instrumental support as independent variables. There is no significant relationship between instrumental support and employee engagement.

Hypothesis 5

H₀ Informational support has no significant relationship with employee engagement.

H₁ Informational support has a significant relationship with employee engagement.

Table 5.16: Informational Support Relationship with Employee Engagement.

Model Summary

Model	R	R Square	F	Sig.
1	.154 ^a	0.024	4.881	.028 ^b

a. Predictors: (Constant), Informational

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	4.89	0.25			19.90	0.00
Informational	0.14	0.06	0.15		2.21	0.03

a. Dependent Variable: Employee Engagement

This model, considered employee engagement as the dependent variable, and informational support as the independent variable. Sig=value is 0.03, which means informational support is significant at 5% level. There is a statistical relationship between informational support and social support.

Hypothesis 6

H₀ Social Companionship support has no significant relationship with employee engagement.

H₁ Social Companionship support has a significant relationship with employee engagement.

Table 5.17: Social Companionship Support Relationship with Employee Engagement.

Model Summary

Model	R	R Square	F	Sig.
1	.113 ^a	0.013	2.622	.107 ^b

a. Predictors: (Constant), Social Comp

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	4.693	0.21			22.336	0
Social Comp	0.091	0.056	0.113		1.80	0.107

a. Dependent Variable: Employee Engagement

There is no significant relationship between social companionship support and employee engagement.

Hypothesis 7

H_0 Emotional support has no a significant relationship with employee engagement.

H_1 Emotional support has a significant relationship with employee engagement.

Table 5.18: Emotional Support Relationship with Employee Engagement.

Model Summary

Model	R	R Square	F	Sig.
1	.155 ^a	0.024	4.941	.027 ^b

a. Predictors: (Constant), Emotional

Coefficients^a

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	4.99	0.29		17.42	0.00
Emotional	0.16	0.07	0.16	2.22	0.03

a. Dependent Variable: Employee Engagement

This model, considered employee engagement as the dependent variable, and emotional support as the independent variable. Sig=value is 0.27, which means emotional support is significant at 5% level. There is a statistical relationship between emotional support and social support.

Hypothesis 8

H₀ Social Integration has no significant relationship with social network

H₁ Social Integration has a significant relationship with social network

Table 5.19: Social Integration Relationship with Social Network.

Model Summary

Model	R	R Square	F	Sig
1	.551 ^a	.304	17.22	.000 ^b

a. Predictors: (Constant), Relation=Child, Relation=Relative, Relation=Parent, Relation=Siblings, Relation=Friend

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1 (Constant)	4.012	0.12			34.53	0.00
Relation=Parent	.036	0.15	0.02		0.25	0.80
Relation=Siblings	-.386	0.14	-0.25		-2.71	0.01
Relation=Relative	-.558	0.15	-0.33		-3.74	0.00
Relation=Friend	-.733	0.13	-0.65		-5.82	0.00
Relation=Child	.040	0.26	0.01		0.16	0.88

a. Dependent Variable: Social Network

Significant relationship is found between social integration and social network for all relationships except for parent and children. All types of relationships are significant at 5% except parents and children.

Strong networks are dependent on existence of various types of relationships like spouse (sig=0.00), siblings (sig=0.01), relatives (sig=0.00), and friends (sig=0.00) more than parents and children.

Hypothesis 9

H₀ Social integration has no significant relationship with social support

H₁ Social integration has a significant relationship with social support

Table 5.20: Social Integration Relationship with Social Support Functions

Model Summary

Model	R	R Square	F	Sig
1	.441 ^a	.194	9.51	.000 ^b

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1 (Constant)	4.369	0.19			23.26	0.00
Relation=Parent	-.446	0.23	-0.19		-1.90	0.06
Relation=Siblings	-.768	0.23	-0.34		-3.33	0.00
Relation=Relative	-1.164	0.24	-0.46		-4.84	0.00
Relation=Friend	-1.146	0.20	-0.68		-5.63	0.00
Relation=Children	-1.124	0.42	-0.19		-2.69	0.01

a. Dependent Variable: Social Support Functions

There is evidence of a significant relationship between social integration and social support functions. All types of relationships are significant at 5% expect parent (sig=0.06) variable which is significant at 10% significance levels. Hence the null hypothesis is rejected.

It could probably be interpreted that provision of various kinds of social support depends on firstly the existence of social relations, being integrated and having various types of relationships like spouse, parents, siblings, relatives, friends and children.

Hypothesis 10

H₀ Social Network has no significant relationship with social support functions.

H₁ Social Network has a significant relationship with social support functions.

Table 5.21: Social Network Relationship with Social Support Functions

Model Summary

Model	R	R Square	F	Sig
1	.454 ^a	.206	52.23	0.000 ^b

a. Predictors: (Constant), Social Network

Coefficients^a

Model		Unstandardized		Standardized		
		Coefficients		Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.060	0.34		3.13	0.00
	Social Network	.682	0.09	0.45	7.23	0.00

a. Dependent Variable: Social Support Functions

This model considered social support functions as dependent variable, and social network as independent variable. Social Network sig=0.00 and so it is significant at 1% level, There is a statistical relationship between social network and social support functions. It could probably be interpreted that existence of a close knit and strong network will lead to provision of various kinds of social support functions.

Hypothesis 10a

H₀ Reciprocity has no significant relationship with social support functions.

H₁ Reciprocity has a significant relationship with social support functions.

Hypothesis 10b

H₀ Frequency has no significant relationship with social support functions

H₁ Frequency has a significant relationship with social support functions.

Hypothesis 10c

H₀ Geographic dispersion has no significant relationship with social support functions.

H₁ Geographic dispersion has a significant relationship with social support functions.

Hypothesis 10d

H₀ Density has no significant relationship with social support functions.

H₁ Density has a significant relationship with social support functions

Hypothesis 10e

H₀ Duration has no significant relationship with social support functions.

H₁ Duration has a significant relationship with social support functions.

Table 5.22: Social Network Characteristics with Social Support Functions

Model Summary

Model	R	R Square	F	Sig
1	.601 ^a	.362	22.34	.000

a. Predictors: (Constant), Density, Durations, Geographic dispersions, Reciprocity, Frequency

Coefficients^a

Model	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1 (Constant)	.067	0.37			0.18	0.86
Reciprocity	.562	0.07	0.48		8.12	0.00
Geographic dispersion	.048	0.04	0.08		1.09	0.28
Duration	.054	0.04	0.08		1.28	0.20
Frequency	.175	0.06	0.20		2.76	0.01
Density	.039	0.05	0.05		0.80	0.42

a. Dependent Variable: Social Support Functions

There is evidence of a significant relationship between reciprocity, (sig= 0.00) and frequency (sig= 0.01) with social support functions. Both are significant at 1% level of significance.

This may be interpreted as that, if relations are reciprocal and interactions are frequent within a close knit network, perception of social support is high irrespective of duration of the relationship, density of the network or geographic dispersion.

Hypothesis 11

H₀ Social support functions have a significant relationship with employee engagement when job demands are high.

H₁ Social support functions have a significant relationship with employee engagement when job demands are high.

Table 5.23: Moderating Effect of Job Demands on Relationship between Social Support Functions and Employee Engagement.

Outcome: EE ← SS*JD

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.06	.00	.95	1.34	3.00	200	.26
Model							
		coeff	se	t	p	LLC	ULCI
constant		4.07	.71	5.70	.00	2.67	5.48
JD		.17	.29	.60	.55	-.39	.74
SS		.01	.21	.05	.96	-.39	.41
int_1		-.01	.08	-.13	.90	-.17	.15
Product terms key:							
int_1	SS	x	JD				
R-square increase due to interaction(s)							
	R2-chng	F	df1	df2	p		
int_1	.00	.02	1.00	202	.90		

The above table tested the moderating relationship of job demands between social support functions and employee engagement. Model could not establish the interaction effect. Hence we may conclude that job demands do not act as moderator between social support functions and employee engagement.

Hypothesis 11a

H₀ Emotional support has no significant relationship with employee engagement when job demands are high.

H₁ Emotional support has a significant relationship with employee engagement when job demands are high.

Table 5.24: Moderating Effect of Job Demands on Relationship between Emotional Support Function and Employee Engagement.

Outcome: EE ← Emotional_SS*JD

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.06	.00	.94	1.73	3.00	200	.16
Model							
		coeff	se	t	p	LLC	ULCI
constant		3.97	.73	5.45	.00	2.54	5.40
JD		.25	.30	.86	.39	-.33	.84
Em		.03	.18	.18	.86	-.33	.39
int_1		-.03	.07	-.39	.70	-.18	.12
Product terms key:							
int_1	Em	x	JD				
R-square increase due to interaction(s)							
	R2-chng	F	df1	df2	p		
int_1	.00	.15	1.00	202	.70		

The above table tested the moderating relationship of job demands between emotional support function and employee engagement. Model could not establish the interaction effect. Hence we may conclude that job demands do not act as moderator between emotional support function and employee engagement.

Hypothesis 11 b

H₀ Informational support has no significant relationship with employee engagement when job demands are high.

H₁ Informational support has a significant relationship with employee engagement when job demands are high.

Table 5.25: Moderating Effect of Job Demands on Relationship between Informational Support Function and Employee Engagement.

Outcome: EE ← Informational_SS*JD

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.09	.01	.94	2.85	3.00	200	.04**
Model							
		coeff	se	T	p	LLC	ULCI
constant		4.03	.64	6.27	.00	2.77	5.29
JD		.26	.26	1.03	.30	-.24	.77
Informational		.03	.17	.16	.88	-.31	.36
int_1		-.04	.07	-.53	.60	-.17	.10
Product terms key:							
int_1	Informational	x	JD				
R-square increase due to interaction(s)							
	R2-chng	F	df1	df2	p		
int_1	.00	.28	1.00	202	.60		

The above table tested the moderating relationship of job demands between informational support function and employee engagement. Model could not establish the interaction effect. Hence we may conclude that job demands do not act as moderator between informational support and employee engagement.

Hypothesis 11c

H₀ Instrumental support has no significant relationship with employee engagement when job demands are high.

H₁ Instrumental support has a significant relationship with employee engagement when job demands are high.

Table 5.26: Moderating Effect of Job Demands on Relationship between Instrumental Support Function and Employee Engagement.

Outcome: EE ← Instrumental_SS*JD

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.08	.01	.94	2.46	3.00	200	.06*
Model							
		coeff	se	T	p	LLC	ULCI
constant		3.99	.49	8.12	.00	3.03	4.96
JD		.12	.20	.62	.54	-.27	.51
Instrumental		.05	.18	.26	.80	-.30	.39
int_1		.00	.07	.06	.95	-.13	.14
Product terms key:							
int_1	Instrumental	x	JD				
R-square increase due to interaction(s)							
	R2-chng	F	df1	df2	p		
int_1	.00	.15	1.00	202	.95		

The above table tested the moderating relationship of job demands between instrumental support function and employee engagement. Model could not establish the interaction effect. Hence we may conclude that job demands do not act as moderator between instrumental support and employee engagement.

Hypothesis 11d

H₀ Social Companionship has no significant relationship with employee engagement when job demands are high.

H₁ Social Companionship support has a significant relationship with employee engagement when job demands are high.

Table 5.27: Moderating Effect of Job Demands on Relationship between Social Companionship Support Function and Employee Engagement.

Outcome: EE ← Social Co_{SS}*JD

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.09	.01	.94	2.85	3.00	200	.26
Model							
		coeff	se	t	p	LLC	ULCI
constant		4.33	.55	7.87	.00	3.25	5.41
JD		.06	.22	.25	.80	-.38	.50
Social Co.		-.06	.15	-.42	.67	-.36	.23
int_1		.02	.06	.38	.70	-.10	.14
Product terms key:							
int_1	Social Co.	x	JD				
R-square increase due to interaction(s)							
	R2-chng	F	df1	df2	p		
int_1	.00	.15	1.00	202	.70		

The above table tested the moderating relationship of job demands between social companionship support function and employee engagement. Model could not establish the interaction effect. Hence we may conclude that job demands do not act as moderator between social companionship support and employee engagement.

CHAPTER 6

6.0 DISCUSSION AND CONCLUSIONS

6.1 FINDINGS AND DISCUSSION

6.1.1 Frequencies and Sample Characteristics

The frequency tables in chapter 5 suggest that the study fairly covered representative employees from both, the manufacturing (50.2%) as well as the service sector (49.8%). There is a fair mix of genders, male (63.5%) and female (36.5%). They were in the age bracket of 20 to 50 years largely. Married accounted for (53.7%) while single respondents were (46.3%). Respondents belonging to nuclear families were (59.6%) whereas joint family were (40.4%). They were from various levels of hierarchy in the organizational structure, Associate or junior level (53.7%), Executive level (24.6%) and Managerial level (21.7%), with varying experience levels from freshers to 25years and above. Their educational backgrounds were varied with diploma holders amounting to (10.8%), graduates accounting for a larger percentage (51.7%) and postgraduates (36%). They belonged to different functional areas like Production and Operations (39.4%), wherein Production includes the Quality department. Finance department accounted for (10.3%), service provision (24.1%), including departments like Human Resource, Legal, Information Technology and Maintenance, Supply Chain Management (7.1%) including departments like Procurement, Logistics, Inventory, and Warehousing and Marketing and Sales (18.2%). Respondents also had differing levels of engagement levels as identified by their respective Human Resource Managers, low (12.3%), moderate (48.3%) and high (39.4%).

All respondents affirmed an existence of close relationships namely spouse, parents, siblings, relatives, friends and children. Respondent reporting spouse as a relationship were (9%), parents were(14%), siblings were (16%), child were (2%) but highest respondents reported friends (47%). In literature (Cohen S., Gottlieb B.H., Underwood L.G. 2001), reflect that more the number of relationships, higher the social integration.

6.1.2 Descriptives of Various Constructs

Reciprocity has a mean value of 4.40 which may be interpreted as the respondents believe their relationships are based on mutual love and trust and are very well reciprocated. Geographic dispersion has a mean value of 3.33 which means that respondents social network lives at a reasonable proximity (not too close, not too far) from them. Duration has a mean value of 3.88 signifying that the average duration of the respondents relationships is between 5-10 years. Frequency of communication mean is 2.46 indicating that respondents meet with their network members on an average between 1-5 times in a month and telephonic communication is between 11-30 times a month. Density mean value of 3.65 signifies that the network members know and interact with each other moderately.

Respondent's perceptions of availability of support ranged from a high mean value of 4.00 for emotional support to a lower mean of 2.68 while informational support and social companionship support means indicate moderate to high perceptions of these types of support functions from their network members. It may be interpreted as, the availability of these support functions range from 'some of the time' to 'most of the time.' The respondent's perceptions of availability of emotional support from their network members is very high while that of instrumental support is average.

Respondents' perceptions for various job demands were not very high except for mental demands which has a mean of 3.15 which means they perceive that they 'often' face mental demands whereas the means of quantitative demands of 2.16 and emotional demands of 2.09 show that the respondents perceive their job is demanding 'sometimes' on these two dimensions.

All dimensions of employee engagement, i.e. vigor, dedication and absorption had mean values in the similar range which signifies that they 'often' feel engaged. Reciprocity has a correlation with all the types of social support functions i.e. Emotional, informational, social companionship and instrumental. Higher the reciprocity, higher is the perception of all kinds of social support functions. This is quite understandable, as when relationships are reciprocal, full of mutual trust and understanding, the bond is very strong and hence one may expect the perceptions of various kinds of support functions to be high.

Geographic Dispersion has a correlation with emotional, social companionship and instrumental social support functions. Closer the proximity, higher is the perception of emotional, instrumental and social companionship support. When network members live within close proximity, respondents are able to draw emotional support, do leisure activities with them like playing a sport, watching a movie etc. They are also able to draw instrumental support like help with daily chores, child care etc.

Duration has a correlation with emotional and instrumental social support functions. Longer the relationship, higher is the perception of emotional and instrumental support. Longer relationships may provide comfort of sharing emotions, and also

rightfully drawing instrumental support like financial help, help around the house and child care support.

Frequency has a correlation with all the types of social support functions i.e. Emotional, informational, social companionship and instrumental. Higher the frequency of communication, higher is the perception of all kinds of support functions. Density does not have a correlation with the social support functions.

6.1.3 Independent Sample T-Test and One Way ANOVA

From the independent sample T-Test and one way ANOVA output tables in chapter 5, we can probably conclude that employees in the manufacturing sector are more engaged than the employees in the service sector. They display a higher level of vigor, dedication as well as absorption compared to employees in the service sector. One reason for this may be that the processes in the manufacturing industry are well defined and quite standardized and largely the challenges and issues are restricted and may be defined within certain boundaries. In the service sector, every day presents new interactions, issues and challenges as interactions with customers are very high and the processes also cannot be standardized. This finding cannot be compared with existing studies as there is very little literature regarding employee engagement in the manufacturing sector. Most employee engagement studies are in the service sector, hence this finding maybe considered as a new revelation.

Male employees show higher levels of ‘absorption’ on their jobs as compared to female employees. Previous studies found a weak /no relationship of gender and engagement (Schaufeli, Bakker and Salanova, 2006). One possible reason for this maybe that women largely have multiple responsibilities, related to home, children as

well as work. Hence it may be more challenging for them to delineate themselves completely from the home role and be immersed into their work. Whereas men are able to be more absorbed at their workplace as they do not have to worry much about the home front.

Married employees are more engaged as compared to their single counterparts. This is a new finding.

Employees from nuclear families display higher levels of dedication at their workplace than employees who are from a joint family. This may be due to the fact that, in a nuclear family setup individuals have lesser responsibilities and limited tasks related to a smaller setup of family than in a joint family where there is a higher pressures of familial duties. Hence individuals from a nuclear setup can be more focused, passionate and strive more dedicatedly at work.

Vigor is seen as increasing with the increase in experience. This may be due to the fact that individuals take some to time to settle in a job. Then the experience they gain gives them the confidence, enthusiasm and passion for their job.

Employee engagement increases with increasing salary levels. An explanation for this would be that money is indeed a motivator at most levels in the hierarchy. This increase is steady except between 5- 8 lacs band where it is lower. There are no studies in exiting literature to compare this finding.

There is no significant difference in engagement levels of respondents with respect to education levels, designation and age of the respondents.

Individuals living in nuclear families have longer term (duration) relations than those individuals in joint families. Older respondents (above 40 years) have longer term relationships as compared to the younger respondents. In terms of frequency of communication, younger respondents (below 40 years) have a higher frequency of communication as compared to the older respondents. (above 40 years).

Spouse, parents and siblings appear to be the key providers of all kinds of social support as compared to relatives, friends and children, except for social companionship where spouse, parents and children are the highest. Literature also state that types of support, such as emotional or instrumental, may vary by the relationship between the focal person and the person offering the support. It says that not all members of social networks are equally effective in offering social support.

Women report perceptions of higher levels of informational support as compared to men. This is probably a cultural aspect whereby Indian women proactively seek help or information more than men. Respondents who are single reported higher of overall social support and particularly high levels of informational as well social companionship support. This may be attributed to the fact that single or unmarried individuals are not under pressures of managing a family along with their work. Hence they are probably able to cultivate various relationships and spend more time with their network members. This may provide them with various kinds of support, particularly, social companionship and informational support as compared to married

individuals. Hence their perceptions of availability of social support is higher than married respondents.

Employees with lower levels of experience have perceptions of a higher level of informational support which diminishes with increase in experience but increases when an individual has over 16 years of experience. This could be due to the reason that individuals actively need and seek advice, solutions and other information in the initial years (0-5 years) of their careers and apply it to their jobs. As the experience levels increase, (6-10 years) the individual has probably built knowledge and confidence required and the need for informational support decreases for some years as they may not draw any additional information from their network members. The need for informational support may be felt again at a higher level of experience (above 16 years) as the individual may be at senior level in a decision making role, managerial role where informational support may have an important role. Also they may need information to be updated about the changing technologies and trends.

Individuals who are in the age group of 21 to 30 years perceive a high level of availability of informational support. This may be due to the reason that individuals in that age bracket largely lack work experience and may require tips, information from various sources including family, friends and others. They perceive a higher availability of informational support from their network members who can help them with their domain knowledge and advice in order to perform better at the job. As the age increases, so does experience level and competence and hence the need and perception of availability of informational support is lower. The perceptions for need of informational support goes up again at the age of (above 50 years). This may be

due to the fact that individuals face various challenges like adapting to change in technologies, newer management styles etc.

No significant differences were found between dimensions of social support based on education, designation and family type.

6.1.4 Findings Based on Multiple Regression Analysis

Based on the regression analysis presented in Chapter 5 the researcher has elucidated the findings as below:

Our study did not find a significant relationship between social integration and employee engagement. This could probably mean that employee engagement is not dependent on mere existence of social relationships. Existing studies in literature discuss a main effect of social integration with good health and well-being (Cohen and Wills, 1985). Kessler and McLeod, (1985, through House, 1987) also suggest that social integration and social support have somewhat independent effects on health, and may have those effects through quite different social psychological processes. This probably means that an individual having a network of various types of relationships like spouse, parents, siblings, relatives and friends may derive generalized health benefits and have a sense of stability and predictability but social integration alone is not enough to engage employees at their workplace.

The study did not find a significant relationship between social network characteristics like reciprocity, frequency of meetings, duration of relationship, geographic dispersion and employee engagement. Only density of the network was found to be significantly related to employee engagement. ($\text{sig} = 0.02$). A plausible interpretation may be that when networks are dense, where all network members

know and interact with each other, perceptions of access to various resources may be higher which may be directly applied to the work situation creating a positive effect leading to psychological well-being of an individual. Participation in formal and informal organizations can foster common interests and supportive positive interactions leading to well-being.

Existing literature on social network theory states that the social structure of the network itself determines individual behavior and attitudes by shaping the flow of resources which determine access to opportunities and constraints on behavior (Berkman L.F. et al 2000). Except for density of network, the findings do not support existing studies.

We tested the relationship between social support functions and employee engagement and it is found to be significant ($\text{sig}=0.05$). This may be interpreted to mean that the four types of social support functions, (emotional, informational, instrumental and social companionship), together have a positive relationship with employee engagement. This is in line with previous studies which found main effects of social support with well being (Beeble et.al., 2009; Bolger. and Eckenrode 1991). This may be interpreted as only when individuals perceive that they can draw various kinds of support from their network members, namely emotional, informational, instrumental and social companionship, they are likely to be engaged at workplace.

Informational ($\text{sig}= 0.03$) and emotional ($\text{sig}=0 .027$) support functions particularly have a significant relationship with employee engagement. Previous studies did not find a relationship of home resources with employee engagement (Montgomery, Peeters, Schaufeli and Ouden, 2003). But these studies have not examined support

types separately. Furthermore, most of these studies have operationalized non work support sources in terms of a combined reference to "family and friends.

The findings of this study confirm the relationship of non-work social support with employee engagement. A study by Wellman and Wortley (1990) on social support found that strong ties provide broader support than weaker active ties, significantly more emotional aid, minor services, and companionship. Respondents appear to get most of their social support-of all kinds- through their small number of strong ties. The strength of a relationship has the strongest association of all variables with emotional support. Cohen, Gottlieb and Underwood (2004) state that, "having a wide range of network ties also provides multiple sources of information and thereby increases the probability of having access to an appropriate information source. This information could influence well-being". "The provision of social support, particularly informational support, can attempt to influence the thoughts and behaviours of the receiver", state Heaney and Israel (2008). Our findings also seem to suggest the dominant role of emotional and informational support.

Perceptions of informational support shows significant relationship with employee engagement, as informational support may directly aid individuals with their work related issues, challenges and may foster creativity, initiative at workplace. It will build positivity, enthusiasm and confidence to tackle work related matters and thus influence feelings of engagement.

Also when individuals may confide their work related issues among their non work relationships, emotional support in the form of positive words of encouragement and love may build up confidence, enthusiasm and may encourage them to persevere at work despite of the challenges faced.

This contribution is well supported by various theories like the Role Accumulation theory, Sieber (1974), Work-Family Enrichment Theory, Greenhaus and Powell, (2006), the Conservation of Resources Theory, Hobfoll, (1989) and the Spillover Theory, Rothbard and Edwards, (2000). This contribution significantly supports the role accumulation theory by Seiber S. (1974) which states that multiplicity of roles may lead to well-being. The theory further states the benefits of role accumulation and puts forth four types of rewards derived from role accumulation: role privileges, overall status security, resources for status enhancement and role performance and enrichment of the personality and ego gratification. The Work-Family Enrichment Theory adds provides more backing to our finding and reveals that experiences in one role improve the quality of life in the other role. It elaborates on several pathways through which the home situation may influence behavior at work, by providing individuals with resources like esteem, social support, opportunities for self- growth, and flexibility that may help them to perform better across other life. The Conservation of Resources (COR) theory which states that people are seen as motivated to obtain, retain, foster and protect those things that they value i.e. resources, is also strengthened through our findings. Finally the Spillover theory, which describes that work and family affect (mood and satisfaction), values (the importance ascribed to work and family pursuits), skills, and overt behaviors may spillover to the work domain. Our findings add robustness to these theories.

The study did not find a significant relationship between instrumental support and employee and social companionship support and employee engagement. This may mean that perceptions of tangible aid like support in daily chores, financial help and childcare may probably lead to relaxation, lesser fatigue and reduction of stress but does not have a direct bearing on employee engagement at workplace. Similarly

relaxing with family and friends, doing fun activities may have a calming effect and relax the individual but it does not lead to employee engagement at workplace. In fact the effort recovery theory discusses the importance of leisure activities post work replenishing lost resources and creating vigor and enthusiasm at work the next day, but our study did not support this theory.

Significant relationship is found between social integration and social network. This means that strong networks are dependent on existence of various types of relationships (Sig=0.000), like spouse, relatives, siblings and friends. Characteristics of the network like reciprocity, density, geographic dispersion, duration and frequency of interactions are determined by existence of various types of relationships (Berkman et. al. 2000). There is no significant relationship between parents and children with network characteristics, which is quite surprising, but may be attributed to the reason that we Indians take these relations for granted. We have high expectations from these relationships, irrespective of the time we spend with them, proximity or how we reciprocate their feelings, especially with parents.

There is evidence of a significant relationship between social integration and social support functions. All types of relationships are significant a (sig= 0.00), contributing to provision of social support. It could probably be interpreted that provision of various kinds of social support depends on firstly the existence of social relations from which an individual may draw various types of social support from his strong networks. Our findings seem to support the model of domain of social support, House and Kahn (1985) which explains the relationships among these three aspects of social relationships.

The Conservation of Resources (COR) theory (Hobfoll, 1989), which states that people are seen as motivated to obtain, retain, foster and protect those things that they value i.e. resources, is also strengthened through our findings. This contribution significantly supports the role accumulation theory by Seiber (1974) which states that multiplicity of roles may lead to well-being. The theory further states the benefits of role accumulation and puts forth four types of rewards derived from role accumulation: role privileges, overall status security, resources for status enhancement and role performance and enrichment of the personality and ego gratification. In line with this theory our findings reveal that individuals, who participate in various roles of being a spouse, parent, child, sibling, friend, etc. in the non-work domain, are able to draw resources and experiences from these varied roles which may be used at their workplace. Our findings add robustness to this theory.

Literature also states that “The combination of kith and kin supplies both stable support from ascribed ties with immediate kin and adaptive support from achieved ties with friends, neighbors, co-workers, and other organizational ties. The combination of abundance and tie strength means that strong ties with friends, neighbors, and siblings make up about half of all supportive relationships. Because friends make up a large portion of these networks, their supportiveness is crucial. However, the aid that friends exchange depends on the strength of their relationships” (Wellman and Wortley, 1990). Our findings are in line with the literature.

The study reports evidence of a significant relationship between social network and social support functions. (Sig=0.001). It could probably be interpreted that existence of a close knit and strong network will lead to provision of various kinds of social

support. In a community study by Wellman and Wortley (1990), found that “most respondents realize that the quality of their relationships considerably affects the support that they will get through them. While the respondents get all five dimensions of support from somewhere in their networks, they usually get different types of support from different network members. Different types of relationships, often provide companionship, emotional aid, services, and financial aid.” Our findings are in line with existing literature. Here too the role accumulation theory is supported.

Among the network characteristics, frequency of interactions ($\text{sig}=0.01$) and reciprocity ($\text{sig}= 0.00$) has significant relationship with social support. This may be interpreted as that, if relations are reciprocal and interactions are frequent within a close knit network, perception of social support which can be drawn from a network is high irrespective of duration of the relationship, density of the network or geographic dispersion. Vishwanath (2008), states that communication is central to social networks, both in initiating and in maintaining social them. This is what our findings also seem to suggest. Today with the blurring geographic boundaries, a person need not be located within close proximity to provide support. Individuals can access their networks over phones, whatsapp messaging, video calling, skype and other communication applications and forge close and reciprocal bonds. The presence of online support groups has multiplied, extending the proffering of social support without geographical proximity. Findings also suggest that duration is not an important criteria for strength of relationships as an individual may connect instantly with people having certain common characteristics. Literature is divided on this aspect. According to Homans (1961), “more contact between network members, the more supportive the relationship: frequent contact encourages the provision of support

by fostering shared values, increasing mutual awareness of needs and resources, mitigating feelings of loneliness, encouraging reciprocal rounds of support, and facilitating the delivery of aid”. In a community study by Wellman and Wortley, (1990), it was revealed that there is no association between the frequency of face-to-face contact and the strength of a relationship and also telephone contact is not significantly related to any dimension of support when other tie characteristics are taken into account.

No significant relationship was found between job demands as a moderator between social support and employee engagement and subsequently between individual types of support and employee engagement. Literature on employee engagement describes various studies highlighting the saliency of resources with employee engagement, when job demands are high. As per the Conservation of Resources theory, resources achieve saliency in the face of job demands. ‘It was found that job resources and personal resources particularly influence work engagement when confronted with high levels of stress and demands’, (Xanthopoulou, Bakker, Hakenen and Demerouti 2007, Hakenen, Bakker, and Demerouti 2005). Our findings are contrary to the literature. Another plausible explanation may be that our study covered a number of organizations and hence not all organizations and jobs and individuals may be experiencing high job demands throughout. Our descriptive analysis of job demands also revealed that respondents’ average perception is that they face quantitative and emotional job demands ‘sometimes’ and mental demands ‘often’. This may be investigated through further studies by looking specifically at high stress job settings. We may speculate that probably social support may be significant as moderator between job demands and engagement. Literature discusses the moderating effect of social support when faced with stressors (Himle, et. al.,1991).

All in all the results exemplify the crucial role of social support structures and functions in fostering employee engagement.

6.2 THEORETICAL CONTRIBUTION

This study highlights the importance of social support from non-work domain as an important factor to enhance employee engagement levels. It reveals that being socially integrated and having various types of relationships leads to strong network of relationships which in turn provide access to various types of social support and thus lead to employee engagement at workplace. Emotional support and informational support particularly have a significant relationship with employee engagement. So far largely literature on employee engagement has focused mainly on job resources and personal resources as antecedents of employee engagement at work. This research discloses a new dimension suggesting that the source of employee engagement may actually be the 'non-work domain'. The significant contributions of this study have been elucidated below;

- 1) The study mandated development of a new measurement scale of social support which includes both the structural aspects i.e. social integration and social network as well as the functional aspects i.e. four types of support including emotional, informational, instrumental and social companionship. This scale is very comprehensive and captures five dimensions of the social network characteristics (frequency, reciprocity, duration, geographic dispersion and density). These are generally not measured in the existing scales of social support. At the most size of network, reciprocity and frequency of contacts are the three dimensions which are covered in a few scales. The scale was tested for validity and reliability. This comprehensive scale may be used in future studies to capture the structural and functional aspects of social support.

- 2) The study also has led to development of a job demands scale covering dimensions of mental demands, quantitative demands and emotional demands, with items adapted from Questionnaire on the Experience and Evaluation of Work (QEEW) by Marc van Veldhoven (2006). This scale has been validated and tested for reliability in the Indian context. This scale may be used to measure the three kinds of job demands in future studies.
- 3) Literature on employee engagement has highlighted only the impact of job and personal resources in enhancing employee engagement (Xanthopoulou, Bakker, Demerouti, and Schaufeli, 2009), (Bakker & Demerouti, 2008; Schaufeli & Salanova, 2007). The existing Job Demand Resources model of Engagement by Bakker and Demerouti (2008), too elaborates on these two dimensions of job and personal resources as antecedents of employee engagement. This research presents a new dimension of ‘social support from the non-work domain’ as an antecedent of employee engagement, thus presenting a comprehensive model of employee engagement. (Figure 6.1). This contribution is well supported by the Work-Family Enrichment Theory, Greenhaus and Powell (2006), the Conservation of Resources Theory Hobfoll (1989) and the Spillover Theory. The first states how experiences and resources in one role enrich the quality of life and performance in the other role. It elaborates several pathways through which the home situation may influence behaviour at work, by providing individuals with resources that may help them to perform better across other life domains. The Conservation of Resources (COR) theory which states that people are seen as motivated to obtain, retain, foster and protect those things that they value i.e. resources, is also strengthened through our findings. Finally the Spillover theory, which describes that work and family affect (mood and satisfaction), values (the importance

ascribed to work and family pursuits), skills, and overt behaviours may spillover to the work domain. This theory adds robustness to our findings.

- 4) This study focuses on both the structural as well functional aspects of social support. It provides insights into types of relationships, the network characteristics and their relationship with the types of social support functions. Previous studies have often seen social support as unidimensional and have not reflected on the investigative chain backward to study what leads to provision of social support, i.e. social support structures. Umberson, and Landis (1988) also stresses on the importance of studying the structural aspects to understand why certain ties are supportive. Berkman et. al. (2000) says it's important to go upstream and understand the structures before going downstream to the functions delivered by social support. This research findings report a significant relationship between the structural aspects (social integration with social network and social support). These findings have been presented in a conceptual model of a cascading causal process beginning with social integration, i.e. existence of relationships being a prerequisite for a strong network which leads to provision of social support and in-turn to employee engagement. This contribution significantly supports the role accumulation theory by Seiber S. (1974) which states that multiplicity of roles may lead to well-being. The theory further states the benefits of role accumulation and puts forth four types of rewards derived from role accumulation: role privileges, overall status security, resources for status enhancement and role performance and enrichment of the personality and ego gratification. In line with this theory our findings reveal that individuals, who participate in various roles of being a spouse, parent, child, sibling, friend, etc. in the non-work domain, are able to draw resources and experiences from these

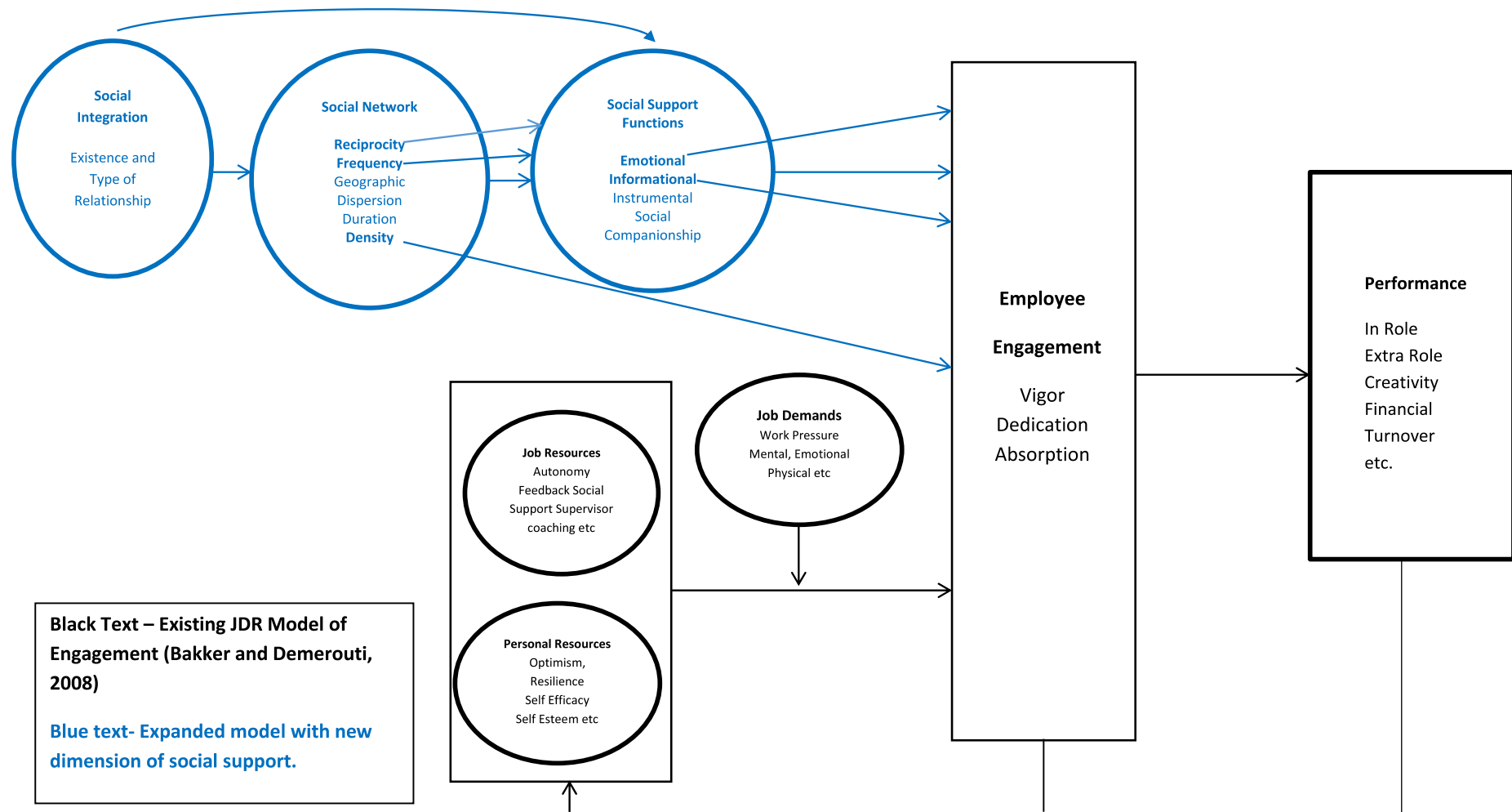
varied roles which have a positive influence at their workplace, in the form of engagement. Our findings add robustness to this theory.

- 5) Our study revealed that social support from non-work domain, namely, emotional, informational, instrumental and social companionship, collectively and more specifically emotional and informational support individually has a significant relationship with employee engagement. Previous studies on employee engagement have not found a relationship between home resources and employee engagement (Montgomery A.J. et. al., 2003). These studies have not comprehensively studied the social support dimensions and have only considered support from 'family and friends' as a variable. Most studies on social support have reported a buffering effect of social support, Cohen S., Wills T.A, (1985), whereas our study found a main effect for social support with employee engagement. This finding is in line with the work family enrichment theory, in which Greenhaus and Powell (2006) describe how experiences in one role improve the quality of life in the other role. The theory suggests that there are five types of resources that can be generated in a role: skills and perspectives, psychological and physical resources, social-capital resources, flexibility, and material resources. These resources can be transferred directly or through an affective path within another role thus enhancing performance in that role.

The Spillover theory is also supported through this finding as it states that work and family affect (mood and satisfaction), values (the importance ascribed to work and family pursuits), skills, and overt behaviours may spillover across domains. Our findings add robustness to these two theories.

Relationship between Social Support Dimensions and Employee Engagement at Workplace

Figure 6.1: Final Model



6.3 MANAGERIAL IMPLICATIONS

If you treat employee engagement as an annual survey that demonstrates you're not as bad as your competitors, then you've missed the point," If organizations wish to motivate and engage their workforce, a one-size fits all approach will not work. Employee engagement has proved to be a strategic tool for business success. Organizations must constantly reinvent themselves and implement strategic interventions which will strengthen and enhance employee engagement.

The researcher hopes that the findings of this study will contribute in helping practitioners to devise specific interventions that are intended to strengthen new or existing social resources.

This study highlights the importance of social support from non-work domain as an important factor to enhance employee engagement levels. It reveals that being socially integrated and having a close network of various types of relationships, provide access to various kinds of social support. Emotional and informational support particularly have a significant relationship with employee engagement.

So far largely organizations have been focusing only on enhancing job resources to enhance employee engagement. This research unfolds a larger picture whereby suggesting that the source of employee engagement may actually be the 'non-work domain'.

This new understanding that social support from non-work domain has a significant relationship with employee engagement at workplace will have a bearing on the entire HR planning and strategies related to hiring, talent management and retention at large.

- 1 a) The study found that social integration and social networks are important so that individuals may draw social support from them thus leading to employee engagement. This may have an impact Human Resource planning and strategies related to hiring, talent management and retention at large. Organizations may hire people by carefully considering their social backgrounds. Potential candidates with various types of close relationships as against candidates who lack relationships and are isolates may be given preference. Social media may be utilized for a more effective screening and background checks.
 - b) Organizations can focus on strengthening the social integration and network of their existing employees firstly by effectively identifying employees who may be lacking in social support by developing specific programs that are targeted at specific employees.
 - c) Creating opportunities through the organization, in-order to enhance social integration and the network of employees, providing them with more time to cultivate new and enrich existing relationships and strengthen their networks.

- 2 The study revealed that informational and emotional support have a significant relationship with employee engagement. Hence practitioners may encourage the participation of individuals in various social groups (outside the work place), by encouraging memberships to social groups, associations, online groups, etc. This type of program may be particularly effective for individuals whose existing network relationships are limited. These opportunities will help them to be integrated and develop newer relationships, thus being able to draw various types of support functions from the newer relationships.

- 3 Enhancing social skills of employees i.e. skill training on maintaining network ties, personality development etc. to engage employees and help them seek new ties and support.
- 4 The employees from the service sector reported lower engagement levels. Service sector includes the industries like hospitality, banking, hotels etc. wherein the interface between employees and customers is very high, hence having highly engaged employees in the service sector is extremely important. Interventions and initiatives may be planned to enhance their engagement levels.
- 5 It has been found that there is a difference in engagement levels with respect to salary levels. Compensation may be used as a strategic tool to enhance engagement levels
- 6 Women reported higher levels of informational support and single employees have reported higher perceptions of availability of social support. Support enhancing activities and interventions may be planned keeping this in mind.

6.4 LIMITATIONS

Some limitations of this study have been captured.

1. The first limitation is that data regarding various dimensions of social support, job demands and engagement has been captured using a cross sectional design and does not allow conclusions about changes in the long term. Since social support and employee engagement levels may change over a period of time, a longitudinal or a diary research design may be used in the future.

2. This study has not accounted for other contextual organizational factors such as culture, type of management etc.

The researcher believes that the above limitations have not diluted the purpose of the research and that the study has provided important insights in the domain of social support and its impact on employee engagement.

6.5 DIRECTION FOR FUTURE RESEARCH

1. The social network characteristics identified in the study, except for density, did not have any significant relationship with employee engagement. Future studies could probe this further.
2. Studies may also explore more network characteristics like homogeneity. Homogeneity measures may include educational levels, employment status, occupational status, gender and marital status.
3. Future studies may explore characteristics and resources possessed by network members themselves than on the characteristics of relationships. Characteristics such as socio economic status, empathy, and experience are resources and the holders of these resources may serve as effective sources of support.
4. The role antecedents such as personal characteristics of an individual in sourcing various kinds of social support from his network may be explored to provide a holistic picture of whether it characteristics of a network or the individual which leads to enhanced social support provision. The study may reflect on the significance of the role played by a particular personality of an individual in generating social relationships and hence more support.
5. This research did not find a moderating effect of job demands between social support and employee engagement. Future studies may focus on specific

organizations and job roles having high mental, quantitative and emotional job demands e.g. nursing profession for quantitative and emotional demands, IT professionals for mental demands to test the moderating effect of job demands in a high stress setting.

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ANNEXURE I

Exploratory Study- Schedule of Questions

- What does employee engagement mean to your organization?
- Are you measuring the engagement levels within the organization? (tools, frequency, internally/externally)
- Are results shared individually with employees?
- What are the characteristics of an engaged employee?
- Factors impacting engagement- organizational, individual, others?
- Outcomes of Engagement- retention, productivity, others?
- How do you deal with a] high engagement levels and b] low engagement levels?
- Initiatives and interventions related to employee engagement within the organization
- Measurement of success of interventions.
- Do you believe having employee engagement interventions has impacted organizational performance?
- Do employee engagement interventions have a link to performance of employees?
- Future plans from the employee engagement perspective.

ANNEXURE III

Interrater Agreement and Content Validity Format- Job Demand Scale

Please tick only the most appropriate choice after referring to the meaning of each term stated in the Annexure provided

Please Rate the Relevance, Simplicity and Clarity dimensions on a scale of 1-4 as described in the Annexure provided

Items	Job Demands			Relevance	Clarity	Simplicity
Item	Mental Demands	Emotional Demands	Quantitative Demands	Relevance	Clarity	Simplicity
Does your work demand a lot from you emotionally?						
Do you have to work extra hard inorder to complete something?						
Do you have contact with difficult clients in your work?						
Does your work demand a lot of concentration?						
Are you confronted with things that affect you personally in your work ?						
Does your work require a great deal of carefulness?						
Do you find that you are behind in your work activities?						
Does your work put you in emotionally upsetting situations?						
Do you work under time pressure?						
Do you have to be attentive to many things at the same time?						
Would you prefer a calmer work pace?						
Do you have to remember many things in your work?						

ANNEXURE IV

Final Scale- Social Support

Name (Optional)		Age	
Designation		Gender	
Department		Married/ Single	
Experience		Joint Family/ Nuclear Family	
Salary	Below 1.5 lacs 1.5 lac < 3 lacs 3 lacs < 5 lacs 5lacs < 8 lacs above 8 lacs	Family Income (please tick 1 option)	Below 1.5 lacs 1.5 lac < 3 lacs 3 lacs < 5 lacs 5lacs < 8 lacs above 8 lacs
Education	HSSC Diploma Graduate Post Graduate Doctorate	No. of Children	
		Age of Children	

Instructions to fill in the questionnaire

- 1 Read the items carefully and fill in the respective spaces in the table.
- 2 The following items are about your the social support network, its members, charateristics of the relationships and your perception of the type of support the members provide.
- 3 You are required to first list out your close social support network and then answer all following questions keeping each individual person from the the network you listed in mind.
- 4 For Q 1, You are not required to put down names, only the initials will suffice.
Example: T.N. (initial of name)- Brother(relationship)
- 5 You may put down more than 10 sources if required by adding extra columns
- 6 Please feel free to explore as many sources as possible
Example- spouse, family, relatives, neighbours, counsellors, recreational club members etc
- 7 All following questions will have to be filled in the appropriate spaces below each individual member identified
Thank You for your support

19	This person gives you advise when in a crisis	1 None of the time 2 A little of the time 3 Some of the time 4 Most of the time 5 All of the time											
20	This person takes care of your child/children while you are at work.	1 None of the time 2 A little of the time 3 Some of the time 4 Most of the time 5 All of the time											
21	You can rely on this person for financial assistance in case of an emergency situation	1 None of the time 2 A little of the time 3 Some of the time 4 Most of the time 5 All of the time											

Please tick the most appropriate choice for the following ;

22 Do the people in your above stated personal network know one another?

Not at all	1	
Not too well	2	
Average	3	
Well	4	
Very well	5	

23 Do the people in your above stated personal network interact with each other?

They do not know each other	1	
Rarely	2	
Occasionally	3	
Quite actively	4	
Very actively	5	

ANNEXURE V

Final Scale- Job Demands

The following items are about the various job demands faced at workplace.

If you feel that these statements apply to you, please tick the appropriate choice in the table.

Sr No.	Refined Item	Never	Sometimes	Often	Always
1	Does your work demand a lot from you emotionally?				
2	Do you have to work extra hard in order to complete something?				
3	Do you have contact with difficult people (colleagues, clients etc)in your workplace?				
4	Does your work demand a lot of concentration?				
5	Are you confronted with things that affect you personally in your work ?				
6	Does your work require a great deal of carefulness?				
7	Do you find that you are lagging behind in your work activities?				
8	Does your work put you in emotionally upsetting situations?				
9	Do you work under time pressure?				
10	Do you have to be attentive to many things at the same time?				
11	Would you prefer a slower pace of work?				
12	Do you have to remember many things in your work?				

ANNEXURE VI

Final Scale- Employee Engagement

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job.

If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you felt it by crossing the number from (1-6) that best describes how frequently you felt that way.

Sr. No	Employee Work Engagement Items	Never 0	Almost Never 1	Rarely 2	Sometimes 3	Often 4	Very Often 5	Always 6
		Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Everyday
1	At my work, I feel bursting with energy.							
2	I find the work that I do, full of meaning and purpose.							
3	Time flies when I am working							
4	At my job, I feel strong and vigorous							
5	I am enthusiastic about my job							
6	When I am working, I forget everything else around me.							
7	My job inspires me							
8	When I get up in the morning, I feel like going to work.							
9	I feel happy when I am working intensely.							
10	I am proud of the work that I do							
11	I am immersed in my work							
12	I can continue working for very long periods at a time.							
13	To me, my job is challenging.							
14	I get carried away when I am working.							
15	At my job, I am very resilient, mentally.							
16	It is difficult to detach myself from my job.							
17	At my work, I always persevere, even when things do not go well							

ANNEXURE VII

Data Preparation

This data set contains various parts like demographics, organizational variables, social support items, job demand items and employee engagement items. Social support and related items are dealt with various relations which extended upto 10 levels. So basically data is captured in wide format especially for relationship related variables but other variables are captured in normal format. In order to do data analysis, wide format is converted into long format, by stacking each set of relationship variables one below other. Table 1, is the outcome of the Department variables in the original data set. Table 2, is long format data set frequency of department and it also eliminated missing values, table 1 showed original department respondents are 203, long format is 1042, so in order to pursue data analysis in original data set, weight mechanism is applied, weight is the mathematical corrective mechanism especially to manage under or over sampling in compare with expected sample collection. After weight is computed, weighted data is applied for all the analysis than original or long format data. Table 4, weighted data is matched with frequency of department which is obtained from original data which is showed in table 1.

Data Preparation for weighted data social support

Table 1: Actual data frequency based on department 1 through department 5

Actual data		
	Frequency	Percent
Dep1	80	39.4
Dep2	21	10.3
Dep3	49	24.1
Dep4	16	7.9
Dep5	37	18.2
Total	203	100

Table 2: Stacked data based on Relation and missing values are eliminated, count of departments.

	Frequency	Percent
Dep1	104	10
Dep2	184	17.7
Dep3	358	34.4
Dep4	100	9.6
Dep5	296	28.4
Total	1042	100

Table 3: Weight (wt.) computation for department wise.

Dept=1	wt=0.769.
Dept=2	wt=0.108.
Dept=3	wt=0.138.
Dept=4	wt=0.158.
Dept=5	wt=0.129.

Table 4: Obtained count by department based on weighted variable

	Frequency	Percent
Dep1	80	39.4
Dep2	20	9.8
Dep3	49	24.3
Dep4	16	7.8
Dep5	38	18.8
Total	203	100

ANNEXURE VIII

List of Publications

Angle S.K., (2013). Employee Engagement, A Study of Select Organizations in Goa, Anushandhan, ISSN 2320-5903, Volume III, Pages 34-44.

Angle S.K., Nirmala R. (2014). The Many Facets of Employee Engagement, Anushandhan, ISSN 2320-5903, Volume IV, Pages.43-56.

Angle S.K., (2015). 'Engaging Employees for Organizational Effectiveness, Conference proceedings- Two Day International Conference, ISBN 978-93-5212-047-5, published by Bharati Vidyapeeth's Institute of Management Studies and Research, Mumbai.