# Understanding Employee Wellbeing in Organizations: Role of Mindfulness Intervention, Job Environment Variables and Behavioral Outcomes

## **THESIS**

Submitted in partial fulfillment of the requirements for the degree of

## **DOCTOR OF PHILOSOPHY**

by

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BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI 2023



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## **CERTIFICATE**

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| Organizations: Role of Mindfulness Int    | tervention, Job Environment Variables and |
| Behavioral Outcomes" submitted by M       | s. Shilpi Kalwani, ID No. 2018PHXF0429P   |
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A Heartfelt Ode to

My Parents

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Mrs. Rashmi Kalwani

**ACKNOWLEDGEMENTS** 

I would like to express a heartfelt gratitude to my PhD Supervisor Prof. Jayashree Mahesh,

Associate Professor, Department of Management, BITS Pilani, for her constant support and

guidance throughout the process. I would also like to thank my Co-Supervisor Prof. Anil K.

Bhat, Professor, Department of Management, BITS Pilani, for his unwavering support and

patience throughout the process.

I would further like to appreciate and thank the members of my Doctoral Advisory

Committee (DAC), Prof. Jyoti Tikoria and Dr. Faraz Naim, for their time and effort to provide

valuable feedback and suggestion on my work. I am thankful to the entire administration at the

BITS Pilani- Pilani Campus. My sincere thanks to all the faculty members, research scholars

and the administrative staff at the Department of Management, BITS Pilani for their

encouragement and support throughout the Ph.D. programme.

Lastly, I owe this accomplishment to my parents Mr. Suresh Kalwani and Mrs. Rashmi

Kalwani for their unconditional love and support, which gave me the confidence to embrace

all the odds. Thank you for always guiding me towards the right path. I would also like to thank

and acknowledge my brother Mr. Tushar Kalwani for being a constant source of motivation

and encouragement throughout the process. I am grateful to my family for their compassion

and empathy during challenging times. None of it would have been possible without the

blessings of the almighty. Thank you Universe for the faith and blessings. Grateful for

everything ☆

Ms. Shilpi Kalwani

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## **ABSTRACT**

There has been a massive shift in the working environment and patterns in recent times especially post the COVID-19 pandemic. The COVID-19 pandemic has not only impacted and necessitated change in work practices, but also lead to stress and mental health issues in employees (Baral & Bhargava, 2011). Organizations not only have to deal with unprecedented changes and emotional complexities at the workplaces, but also bear the cost of organizational health and wellbeing of employees. To deal with the significant issue of degrading organizational health and Wellbeing, positive interventions are required. One such intervention is the Mindfulness intervention. In the last decade, Mindfulness has received a great deal of attention (Chandra, 2012). The majority of research has focused on clinical studies to evaluate the efficacy of Mindfulness-based interventions (Conversano et.al, 2020). Review from literature suggests that there is a lack of convenient and effective Mindfulness interventions that could be used in present day workplaces to enhance the health and Wellbeing of employees (Reb and Atkins, 2015; Lomas et al., 2017).

The literature review was conducted to understand the various variables and theories related to Mindfulness and Wellbeing. In addition to this, to understand the key job environmental variables better, in this domain a literature review was conducted for the period of 2016-2019. On the basis of the literature review, the crucial factors affecting employee Wellbeing in a workplace are Ostracism, Belongingness, Counterproductive Work Behavior, Organizational Citizenship Behavior and Mindfulness. A proposed conceptual model was framed on the basis of the identified variables and theoretical constructs. Based on this model, this research has three major objectives:

 To investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study.

- To statistically validate and administer a Mindfulness intervention for individual Wellbeing.
- To investigate the relationship between Wellbeing and Mindfulness

The first objective focusses on the effectiveness of the intervention. It is a self-training intervention designed for a period of 4 weeks. 504 respondents from the public and private organizations from the power sector of India participated in the study. Out of 504 respondents, 273 respondents were from the public sector, and 231 respondents were from the private sector respectively. Path analysis, paired t-test analysis, hierarchical regression were used for the statistical analysis. It has been found that the Mindfulness intervention was successful in reducing the negative traits of behavioral outcomes and enhancing the positive traits of behavioral outcomes. The final results conclude that there is an 11.25 % and 12.24% increase in the Mindfulness and Wellbeing score post the Mindfulness training intervention respectively.

After investigating the relationship between job environment variables and behavioral outcomes, the research findings suggest that there is a significant backward relationship between Counterproductive Work Behavior and Ostracism. The research also suggests a linear relationship between Mindfulness and Wellbeing. The study confirms the significant mediating impact of Mindfulness and Wellbeing in the equation.

Additionally, this study also tries to contrast the effectiveness of this intervention in the public and private organizations in power sector. It has been found that the effectiveness of the sector is more in public sector than the private sector. This could be because of the longer tenure of people in public sector organization and their awareness to such interventions. This study has a broad research scope in future. The intervention could be further validated in varied sectors and type of organizations to provide generalisability and empirical support. Other environmental variables could also be undertaken for study. Based on the study and its findings,

it can be established that this Mindfulness intervention can be adopted by practitioners and managers in organizations dealing with issues concerning employee Wellbeing.

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# **ABBREVIATIONS**

| OM  | Ostracism                                |
|---|--|
| WB  | Wellbeing                                |
| MDFS  | Mindfulness                              |
| BG  | Belongingness                            |
| NTB   | Need to Belong                           |
| SEM   | Structural Equation Modelling            |
| CWB   | Counterproductive Work Behavior          |
| OCB   | Organizational Citizenship Behavior      |
| EFA   | Exploratory Factor Analysis              |
| *All the key variables considered for the study have be | en used in the title case throughout the |
|   |  |

thesis report.

## **Chapter 1: Introduction**

#### 1.1 Introduction

There has been a rise in scholarly interest towards mindfulness in recent years. A considerable amount of literature in this area focuses on interrelationship between mindfulness and psychological and physical well-being (Brown et al., 2007; Glomb et al., 2011). Based on these research findings, one might assume that mindfulness must be a beneficial tool within workplace settings. Unfortunately, mindfulness has received relatively little consideration in organizational scholarship. There is presence of literature that suggests that mindfulness promotes key work outcomes (Dane, 2011; Glomb et al., 2011), but empirical studies providing an evidence to this possibility is limited (Hülsheger et al., 2013; Reb et al., 2012). The present Organizational literature on mindfulness mostly adopts a collective, rather than individual level of analysis (e.g. Rerup, 2009; Vogus and Welbourne, 2003; Weick et al., 1999; Vogus and Sutcliffe, 2012). Hence, there emerges a need to uncover various facets of Mindfulness at the workplaces.

In the recent years, organizations have been impacted by rapid and turbulent changes that have necessitated organizations to 'unlearn and relearn' (Lund et.al, 2020; Kalliath et.al, 2018). These changes have resulted in tension for both organizations and employees and if not managed well could lead to dysfunctional organizational and individual outcomes. In addition to this, the corona pandemic has not only disrupted organizations and necessitated changes in work practices but also resulted in stress and mental health issues in employees (Baral and Bhargava, 2011). These dynamic changes and trends in new age organizations can affect employee-wellbeing negatively in the long run (Singh, 2013). Due to the increasing challenges concerning employee health and Wellbeing, there has been a growing interest in the subject for

the past few years. This study makes an attempt to identify significant job environment variables and behavioral outcomes affecting employee Wellbeing in workplaces.

## 1.2 Need and Motivation for the Study

Organizations in order to adapt, sustain, and be resilient to the external environment, requires employees who can be a source of competitive advantage. Organizations must prioritize the health and Wellbeing of their employees to create a positive and productive work environment. Recent studies have revealed that one of the negative consequences of COVID-19 was the impact on mental health (Marshall et.al, 2020; Boden et.al, 2021). If organizations have to become 'employers of choice', they must make significant investment to improve the health and Wellbeing of their employees, else it could lead to negative outcomes at the workplace.

With an increasing interest in the subject of Wellbeing, there is also a need to identify methods, tools, techniques, and interventions to enhance Wellbeing of employees. One such intervention is the Mindfulness Based Stress Reduction (MBSR) that aims to foster productivity and reduce stress. While significant research has been done in clinical setting on health and Wellbeing of professionals, limited research has been done on this topic in the organizational setting (Reb and Atkins, 2015). There are very few convenient and effective Mindfulness interventions that could be applied to workplaces in the Indian context (Lomas et al., 2017). Therefore, this research attempts to design and test a self-training Mindfulness intervention to reduce negative workplace behaviors and enhance positive workplace behaviors.

## 1.3 Background of the Study

Baumeister et al. (2002) explain the concept of social exclusion and urgent need to associate as the theory of Cognitive Deconstruction and Self-Regulation Impairment. The theory suggests that any form of exclusion may lead to temporary cognitive deconstruction which may

further lead to negative behavioral outcomes at the workplace. This theory studies Ostracism or social exclusion as a crucial job environment variable and negative behavioral traits as the outcome. This study is built on the theory of Cognitive Deconstruction and Self-Regulation Impairment by introducing an intervention or assumed mediating role of Mindfulness in the equation. The purpose of introducing the Mindfulness intervention is to reduce the impact of negative job environment variables and behavioral outcomes at the workplace. The intervention also tries to increase the impact of positive job environmental variables and behavioral outcomes at the workplace.

## 1.4 Contextual Background

This is an experimental research conducted in one public and one private organization in the Indian power sector. There have been substantial changes in the structure, reforms, privatization in the power sector leading to regulatory and financial pressures, thereby, impacting the productivity and Wellbeing of its employees. As a result of these continuous changes, power sector is an apt choice for studying the impact of job environmental variables, behavioral outcomes, and Mindfulness on employee Wellbeing. The second reason is that due to the Corona Pandemic being at its peak during the study, thereby, leading to excessive stress, made it an ideal setting to test the Mindfulness based intervention in this sector.

## 1.5 Scope of the Study

This study focusses on understanding job environment factors, behavioral outcomes, and Mindfulness impacting employee Wellbeing at the workplace. In order to make the study more relevant, based on an extensive literature review, specific job environmental factors viz. workplace Ostracism (negative factor) and workplace Belongingness (positive factor) have been identified. The study has tried to identify the impact of these job environmental factors

on the behavioral outcomes of Counterproductive Work Behavior and Organizational Citizenship Behavior at the workplace. There is a dearth of self-training Mindfulness interventions producing work specific outcomes for non-clinical population in India (Segal et.al. 2002; Vøllestad et.al. 2011; Virgili, 2015; Lomas et.al. 2017; Janssen et.al. 2018; Johnson et.al. 2020). Hence, there is a need to develop and statistically test a Mindfulness intervention that is effective, easy to incorporate, and cost and time efficient.

## 1.6 Research Questions

The following research questions have been addressed in the study:

- What impact does the job environmental factor 'workplace Ostracism' have on the Mindfulness and Wellbeing of an individual?
- What impact does the job environmental factor 'workplace Belongingness' have on the Mindfulness and Wellbeing of an individual?
- What impact does the Mindfulness intervention and Wellbeing have on the behavioral outcome of 'Counterproductive Work Behavior' of an individual?
- What impact does the Mindfulness intervention and Wellbeing have on the behavioral outcome of 'Organizational Citizenship Behavior' of an individual?

## 1.7 Objectives of the Study

The objective of this research is to investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study. The results of this study help us identify crucial job environmental factors and behavioral outcomes that are together put in the form of a proposed conceptual model. The conceptual model also proposes Mindfulness as a positive intervention promoting Wellbeing at workplaces. This research helps to analyse the effectiveness of the adapted intervention. The research objectives provide a base

to the study and provide a direction to the research process. The study proposes two major research objectives.

- To investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study.
- To statistically validate and administer a Mindfulness intervention for individual Wellbeing.
- To investigate the relationship between Wellbeing and Mindfulness

## 1.8 Contributions of the Study

The study was conducted amongst 504 respondents, out of which 273 respondents were from the public sector and 231 respondents were from the private sector. Though the relationship between Mindfulness and Wellbeing looks direct and simple, when studied under the light of job environmental factors such as Ostracism, Belongingness, and work outcomes such as Counterproductive Work Behavior and Organizational Citizenship Behavior, shows varied trends and patterns. The key findings from the analysis states that the backward relationship between Counterproductive Work Behavior and Ostracism is statistically significant. There is a possibility of Counterproductive Work Behavior leading to Ostracism. This could lead to further research establishing Counterproductive Work Behavior as an antecedent to Ostracism. The insights also indicate at the possibility of Mindfulness enhancing the Wellbeing of an individual. The findings suggest that the relationship is statistically significant. There is presence of a strong mediating effect of Mindfulness and Wellbeing in the proposed conceptual framework. A significant contribution for practitioners is the development of a statistically tested and validated Mindfulness Based Stress Reduction (MBSR) intervention that can be adapted to suit to the requirements of various corporate settings.

From an organizational perspective, the study hints at the importance of helping employees develop greater mindfulness. The results indicate that workplace mindfulness is not only positively related to the parameters of job performance, but also predictive of individual wellbeing at the workplace. In the past decade, researchers have emphasized on the importance of meditation-based programs to help employees focus attention on the present (Hölzel et al., 2011, Hülsheger et al., 2013). This study differs in its approach to study individual-level antecedents at the workplace such as ostracism and belongingness, which are often depicted as relatively stable and enduring attributes. Consequently, this research examines not only whether or to what degree Mindfulness can be developed through training, but also whether such training benefits employees after a time-period of four weeks.

## 1.9 Organisation of the Thesis

The thesis is divided into seven chapters. The step by step explanation of each chapter is given below:

## Chapter 1: Introduction

This chapter provides an introduction to the thesis. This chapter explains the rationale behind selection of the variables and context. It also highlights the nature of the gap and the significance, aim and objective of the study. There is also a glimpse of the research methodology that has been adopted in the study. This chapter lists down the research questions that form the basis of the study and outlines the structure of the thesis.

## Chapter 2: Literature Review

In this chapter, a systematic review of the substantial literature concerning the variables is conducted. This review helps us trace down some critical studies concerning each variables and the chronology of the supporting theories. This systematic review helps us to narrow down the foundational work that has already been done, on the basis of which the intervention can

be developed and tested. The review also sets the record straight for the studies pertaining to the interrelationship amongst the variables.

Chapter 3: Development of Propositional Framework and Research Hypothesis

Based on the systematic review conducted in Chapter 2, the theoretical framework and hypothesis is developed and presented in this chapter.

Chapter 4: Research Methodology

This chapter is a link between the theoretical framework developed in the previous chapter and the empirical results to be presented in Chapter 5. The chapter starts with a detailed explanation on the pilot study. On the basis of the results obtained from the pilot study, it then explains the adoption of the revised instruments for the final data collection process. The chapter also explains and justifies the choice of the population, the sample size, the method of data collection and analysis for the final study.

Chapter 5: Data Analysis

This chapter has three main themes: descriptive analysis, data preparation and screening, and data analysis. For descriptive analysis, data preparation and screening, SPSS (Statistical Package for Social Sciences) was used. Structural equation modelling (SmartPLS) has been used for data analysis to generate results.

Chapter 6: Research Findings

This chapter discusses the applicability of the obtained results. This chapter discusses the results in contrast to the research aim, purpose and objectives set at the beginning of the research. This chapter reports the insights gained from the study which can be helpful for academicians and practitioners in application of Mindfulness interventions.

## Chapter 7: Implications and Future Scope of Research

This chapter concludes and summarizes the entire research process. The theoretical and practical implications of the study along with implications and future directions of research are discussed in this chapter. The suggestive measures that could be adopted for better application of Mindfulness interventions are also mentioned in this chapter.

## **Chapter 2: Literature Review**

#### 2.1 Introduction

This chapter presents a review of the job environmental factors, behavioral outcomes and assumed mediators of Wellbeing and Mindfulness. This chapter provides a detailed review of literature on the job environmental variables viz. Ostracism and Belongingness, behavioral outcome variables viz: Counterproductive Work Behavior and Organizational Citizenship Behavior and mediating variables viz. Wellbeing, and Mindfulness. It also highlights the prevailing theories concerning the interrelationship amongst these variables. The systematic literature review presented in this chapter serves as a base for development of the proposed conceptual framework in Chapter 3 and the empirical analysis conducted in Chapter 4 and 5.

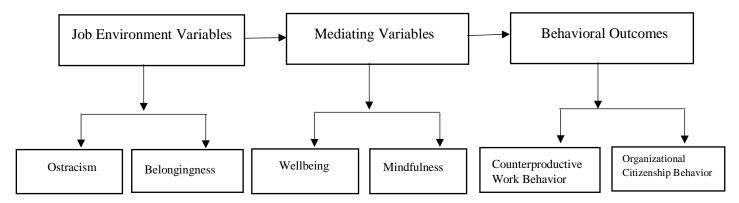


Figure 2. 1 Literature Review

In the past few decades, there has been a growing interest towards employee Wellbeing (Westman and Etzion, 1995; Schaufeli et al. (2006); Westman et al., 2009). Though measures such as training and counselling programmes have been adopted by organizations to deal with employee Wellbeing, there has been a dearth of interventions that adopt multiple elements and techniques in order to result in positive outcomes. There are also limited mechanisms or programmes suited for Indian workplaces which possess a challenge to the organizations (Kossek et al., 2001; Lund et.al, 2020).

To understand the challenges faced by Indian organizations, a systematic study of 15 top management journals for the period of 2016-2019 was conducted. Literature review was done to identify fundamental concepts, theoretical variables and key variables significant to the study. In order to identify specific job environment variables and behavioral outcomes, the period of 2016 - 2019 was considered for the study.

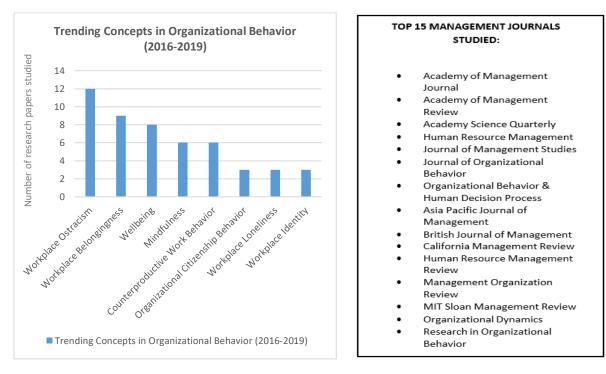


Figure 2.2: Trending Concepts in Organizational Behavior

As per the results of the systematic study of 50 relevant research papers, the top six relevant variables have been considered for further examination namely, workplace Ostracism, workplace Belongingness, Wellbeing, Mindfulness, Counterproductive Work Behavior, and Organizational Citizenship Behavior. The next section examines the job environmental variables taken for the study.

#### 2.2 Job Environmental Variables

Organizations are dealing with varied stressors and challenges at the workplace post the pandemic. The study conducts a systematic literature review to understand important job

environmental factors in the constantly evolving workplaces. Based on the preliminary literature review, this study makes a choice to review and understand Ostracism and Belongingness as significant job environmental factors. The evolution, conceptualization of Ostracism and its impact on workplaces is explained in the following section.

#### 2.2.1 Ostracism

Ostracism is defined as exclusion of individuals or groups by a particular individual or groups (Williams, 2007). Ostracism then came to be defined as a process of social exclusion (Gruter and Masters, 1986). The substantial concept of Ostracism has started gaining attention in the past decade. The domains of social psychology and management have published literary works that deals with the concept in depth. The reason for the sudden rise in the number of studies concerning Ostracism is the rise of socially intolerable behaviors. Ostracism may lead to a strong need of social acceptance. This Need to Belong hampers the ability to differentiate between the good and the bad to such an extent, that an individual is attracted towards any group that welcomes them. Ostracism may lead to violent and anti-social behaviors (Baumeister and Leary, 1995). The rise of Counterproductive Work Behavior at the workplace is one such instance (Bushman and Anderson, 2001). The next section describes the history of Ostracism in detail.

## 2.2.1.1 History of Ostracism

The early traces of Ostracism are as old as 500 B.C. It was named as *Ostrakismos* during this time. As per the tradition Athenians used to cast their votes on clay ostraca to decide whether a member of the community should be exiled for 10 years. The exclusion may take place in groups ranging from religious, political, social, military, educational, and workplace groups (Gruter and Masters, 1986). Ostracism is not just observed in humans but in animals as well. Species (wolf, buffalo, bee, elephant and others) socially exclude certain members from the

group. This may be due to the anti-social and trouble making behavior demonstrated by the member. Sometimes there is no strong rationale behind the exclusion and it might just be an expression of preference by majority of other group members.

A notable research on Ostracism has been done by Schachter's (1951). This research discusses the concept of difference of opinion in group discussions. He stressed on the principle of conformity stating that an individual is reluctant to voice his difference of opinion in a group setting. This is due to the peer pressure of compliance and fear of social exclusion. A few theories and models were established subsequent to this research. Some of them explained how Ostracism threatens the fundamental needs of an individual. Ostracism threatens the Need to Belong as it separates an individual from the group. It affects the self-esteem of an individual as ostracized individuals perceive themselves as unworthy of affection. It threatens an individual's sense of control as Ostracism remains unaffected by the individual's response to the event. The reaction to this loss of control is usually hostile and the individual is more likely to get temperamental and display anger issues (Twenge, 2005; Twenge and Baumeister, 2005; Twenge et al., 2001). Ostracism disregards the meaningful existence of an individual as the social need of recognition, affection and coexistence is overlooked. In some extreme cases, overlooking the fundamental social needs can lead towards loss of life (Case and Williams, 2004).

A major contribution to the Ostracism literature was made by the development of 'Need to Belong Theory' by Baumeister and Leary in 1995. This theory established and validated Ostracism and Belongingness as pivotal social concepts. Post the establishment of this theory, there is a plethora of work concerning Ostracism in developmental and social psychology as well as management science. The substantial theories are discussed in detail in the following section.

## 2.2.1.2 Theories of Ostracism

Ostracism can be explained with the help of three significant theories. These theories are explained in the following section.

**Table 2.1 Theories of Ostracism** 

| S.No. | Theory  | Author/<br>Year          | Explanation  |
|-------|---|--------------------------|--|
| 1     | The Temporal<br>Examination<br>Theory                       | Williams<br>(1997)       | There are three stages in the Temporal Examination Theory:  (a) Reflexive Stage: The response to any form of exclusion  (b) Reflective Stage: Trying to understand the reason and source of such exclusion  (c) Resignation Stage: Feeling helpless and withdrawing from the situation |
| 2     | The Social<br>Monitoring<br>System and<br>Sociometer Theory | Leary et al., (1995)     | Threatening the self-esteem of an individual would motivate an individual to improve their social skills.  |
| 3     | Cognitive Deconstruction and Self- Regulation Impairment    | Baumeister et al. (2002) | Any form of exclusion may trigger temporary cognitive deconstruction leading to depression and suicide.  |

## 2.2.1.3 Workplace Ostracism

A very important aspect of Ostracism studies is the workplace Ostracism. When an individual feels ostracized, they experience stress, which in turn negatively affects their physical and mental functioning. At workplaces, Ostracism can lead towards Counterproductive Work Behavior and affect the overall job performance (Schachter, 1951; Jackson and Saltzstein, 1958; Snoek, 1962; Hitlan et.al, 2006). Workplace Ostracism can also be studied from a conserving resource point of view. The Conservation of Resources (COR) Theory stresses on the importance of resources for promoting Wellbeing at workplaces (Hobfall, 1989). According

to the theory, people try to protect and sustain their resources because of the value attached to them. Both personal as well as job resources are equally important for employee performance at work. Personal resources may include individualistic resources or characteristics such as self-worth, self-esteem and Wellbeing quotient. Job resources may include resources concerning workplace environment such as superior-subordinate relationship, co-worker's support, flexibility at work and many others (Wright and Hobfoll, 2004). Personal resources help an individual gain perceived control over his environment (Hobfoll et.al, 2003). Job resources are those aspects of job environment that promote motivation, job involvement and job engagement (Hakanen et.al, 2008; Karatepe and Olugbade, 2009). The four types of workplace Ostracism has been explained below (Leung, 2011):

- Linguistic Ostracism refers to "any situation in which two or more people converse in a language that others around them cannot understand".
- Social rejection has been defined as "when one person seeks to form and maintain at least
  a temporary alliance or relationship with someone else and that other person says no (at
  least implicitly)".
- Organizational shunning, "the systematic exclusion of a person who was once an included member of the group".
- Social exclusion can be defined as "one person is put into a condition of being alone or is denied social contact".

## 2.2.2 Workplace Belongingness

"Belonging is a fundamental requirement for security, reproductive success, and mental health" (Williams, 2007). There are two basic characteristics of sense of Belongingness namely; an individual feels respected, included, valued and important as a part of community or group;

and an individual feels aligned with the goals, ideologies, and philosophies of the community or group (Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier, 1992).

"Belongingness has been defined as a deeply personal and contextually mediated experience that evolves in response to the degree to which an individual feels (a) secure, accepted, included, valued and respected by a defined group; (b) connected with or integral to the group; and (c) that their professional and/or personal values are in harmony with those of the group" (Mohamed, 2013).

## 2.2.2.1 History of Belongingness

Belongingness is rooted in the ancient civilization. It is an important tool that has helped humans survive and reproduce over the years. Baumeister and Leary (1995) were the first to conceptualize Belongingness. An important theory that defines varied aspects of Belongingness is the Need to Belong Theory. The Need to Belong Theory is explained in the following section.

#### 2.2.2.2 Need to Belong Theory (NTB)

The most prominent theory that explains all the aspects of Belongingness is the 'Need to Belong Theory' by Baumeister and Leary (1995). The 'Need to Belong Theory' defines Belongingness as the presence of three significant traits: senses of identity, security, and orderliness. The theory highlights fourteen conditions that define the Need to Belong Theory. The 'Need to Belong Theory' is a result of more than decades of study around related variables to finally arrive at Belongingness. Belongingness was studied in the form of loneliness (Weiss, 1974; Kohut, 1984), attachment (Bowlby, 1988; Ainsworth, 1989), and perceived social support (Newcomb, 1990) until its conceptualization in 1995.

#### 2.3 Behavioral Outcomes

Post the pandemic, organizations are dealing with the complexity of human emotions at the workplaces. At such a crucial time, it is important to understand the impact that varied job environmental factors can have at the workplace. The study makes a choice to review and understand Counterproductive Work Behavior and Organizational Citizenship Behavior as substantial behavioral outcomes at the workplaces. The evolution, conceptualization of Counterproductive Work Behavior and its impact on workplaces is explained in the following section.

## 2.3.1 Counterproductive Work Behavior

Counterproductive Work Behaviors are intentional acts that harm the organization or organizational reputation. Such acts may include theft, withdrawal, absenteeism, aggression, sabotage, harm to the physical property, leak of confidential information and many others (Spector and Fox, 2005). The key characteristic that helps identify Counterproductive Work Behavior is that the action is purposeful and not accidental. The employee make a conscious choice to demonstrate such behavior to harm the organization. The inability of an employee to perform the duties efficiently due to incapability or poor learning skills is not Counterproductive Work Behavior. The intent or purpose towards the act separates Counterproductive Work Behavior from poor performance at the organization (Kelloway et.al, 2010). There are two different intent states for the Counterproductive Work Behavior. Review of literature on Counterproductive Work Behavior suggests that most of Counterproductive Work Behavior is associated with aggression, negative emotions and intentional harm. There is also a type of Counterproductive Work Behavior that involves unintentional harm. The explanation of two major motive states, or types of Counterproductive Work Behavior are as follows. When an employee purposely gets aggressive with the co-workers in order to cause

disruption in the day to day functioning of an organization, it is the Counterproductive Work Behavior with intentional harm. When an employee steals from the organization with an intent that organization is wealthy and would not miss the stolen object, it is the Counterproductive Work Behavior with unintentional harm. In this case, the behavior was intentional but the harm was accidental. The theft was motivated with the desire for the object and not with the desire to cause harm. The results in both the cases are harmful to the organization and hence both the types are classified under Counterproductive Work Behavior (Penney and Spector, 2005).

## 2.3.1.1 History of Counterproductive Work Behavior

Counterproductive Work Behavior is not a new concept. Before the 1980's, there was considerable amount of research in the area of employee absenteeism, sloppy performance, theft, turnover and aggressive behavior (Cressey, 1953; Gouldner, 1954; Robin, 1969; Horning, 1970; Taylor and Walton, 1971; Mars, 1973). Due to the lack of a defined concept or theory to study these verbal and non-verbal malicious behaviors at the workplace, Counterproductive Work Behavior could not be much explored. In the 1990's, these behavioral outcomes were conceptualized under the umbrella of dysfunctional behavior and then workplace deviance to finally arrive at the concept of Counterproductive Work Behavior.

There are varied ways to define the concept of Counterproductive Work Behavior. In the 1990's there was a variety of research literature published around dysfunctional behavior at work. Behavioral outcomes such as absenteeism (John, 1994); workplace violence (Rogers and Kelloway, 1997); lateness (Blau, 1995) and others were studied cautiously to understand the reasons behind these impulsive behavioral outcomes. Robinson and Bennett (1995) collectively defined these outcomes under the concept of workplace deviance. These behaviors were further studied and classified into two major dimensions.

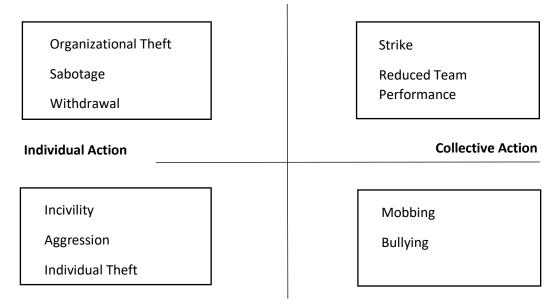
The first dimension classifies these behaviors on the basis of severity. A behavioral outcomes like employee wasting working hours by using social media would be an act of minor deviance. A behavioral outcome like an employee being aggressive and verbally abusing his co-worker would be an act of major deviance (Hollinger and Clark, 1982). The second dimension classifies behavioral outcomes on the level of impact on the recipients. If the behavior is harmful to an individual's Wellbeing, then it is classified as interpersonal deviance. If the behavior is harmful to the overall organizational Wellbeing, then it is classified as organizational deviance (Hollinger, 1986). Bennett and Robinson (2000) established that interpersonal and organizational deviance are highly correlated. Delving deep into these two classifications, can result into four more sub-classifications namely Production Deviance, Property Deviance, Political Deviance and Personal Aggression. The in-depth explanation of the dimensions and classifications is present in the following section.

In early 2000's, researchers like Spector and Fox realized the severity of the issues relating to organizational performance and productivity. They classified and conceptualized specific deviant behaviors at workplaces into Counterproductive Work Behaviors. Since then, the understanding of the antecedents and outcomes concerning these Counterproductive Work Behaviors at work have been widely studied and documented. The dimensions of Counterproductive Work Behavior are explained in detail in the following section.

## 2.3.1.2 Dimensions of Counterproductive Work Behavior

Kelloway et.al, 2010 defined Counterproductive Work Behavior as a form of protest. He went ahead and developed a framework for demonstrating various dimensions of Counterproductive Work Behavior. The framework is displayed with an explanation of the dimensions.

## **CWB: Organizational Target**



**CWB: Individual Target** 

Figure 2.3 Framework of Counterproductive Work Behavior as Protest

Individual action, organizational target

Counterproductive Work Behaviors that are enacted by an individual, but targeted towards an organization come under this classification. The Production Deviance and the Property Deviance mentioned earlier is, enacted by an individual, targeted towards the organization, and hence is a part of this classification. A probable reason for an individual to take such action against the organization may be to restore the organizational justice. The Counterproductive or Work Behavior adopted by an individual could be a result of the perceived inequity in the organization. The act of Counterproductive Work Behavior might be a protest from the individual against the perceived inequity in the organization in order to restore organizational equity (Robinson and Bennett, 1995).

## Collective action, organizational target

Counterproductive Work Behavior may also be enacted on a group level. Groups may be formal or informal groups formed within the organization. Formal groups may include labour unions and work teams, whereas informal groups may include a coming together of colleagues and friends within the organization. Not all acts targeted under this classification can be categorized as Counterproductive Work Behavior. Sometimes the strikes taken up by labour unions are formal way of protesting through collective bargaining and contract negotiations to benefit the workforce. Such acts are essential to ensure a perceived sense of equity and justice in the organization and hence cannot be termed as counterproductive. When such strikes or protests are escalated to a point where the act starts negatively affecting the productivity and profits of the organization, then it is termed as Counterproductive Work Behavior. Such acts of Counterproductive Work Behavior may not always be demonstrated by formal groups but also by informal groups as a silent protest in the organization. A group of friends or colleagues may come together to enact theft, sabotage, aggression and other unproductive behaviors at the workplace to cause harm to the organization.

#### Individual action, individual target

There has been an increase in the number of studies concerning workplace aggression, workplace violence and incivility (Barling et.al, 2009). Some of the anticipated reasons might be to fight against perceived injustice; to portray a certain image in the organization; or may be some history of physical or mental health related issues (Schat and Kelloway, 2005). To enact such aggression and violence requires a certain amount of detachment from the opponent as well as the environment (Staub, 2005). To develop a certain level of insensitivity and detachment towards colleagues and organization may serve as a crucial intent towards Counterproductive Work Behavior.

A collective formal or informal group might come together to target an individual. Some commonly predicted reasons are: the inability of an individual to gel with the group; an individual being the source of some kind of organizational inequity; an individual being an over performer at the workplace; gender, cultural and racial disparities; and many others. Mobbing, bullying, sexual harassment are some forms of such collective action against an individual. Such groups may also be formed due to power and authority dynamics between the superior and subordinate. Such hostile equations at work give way to unjust acts and work politics (Miner-Rubino and Cortina, 2007).

## 2.3.1.3 Structure of Counterproductive Work Behavior

In order to understand the structure of Counterproductive Work Behaviors, a review of literature to understand the covariance between various forms of such behavior was conducted (Sackett and Wanek, 1996). There were two classifications concerning the structure of Counterproductive Work Behavior. The first classification makes use of instruments such as psychological tests to understand the structure of Counterproductive Work Behavior (Sackett and Decker, 1979; Sackett and Harris, 1984; Sackett, Burris and Callahan, 1989). The limitation of this psychological test is that there are variety of Counterproductive Work Behaviors demonstrated by employees such as violation of safety rules, absenteeism and drug and alcohol use on the job. This test was initially limited to predicting the motive of employee theft. Later, it was developed to cover other important aspects of absenteeism, drug and alcohol use on the job and others. The second classification attempts at the categorisation of Counterproductive Work Behaviors. Hollinger and Clark (1982, 1983a, 1983b) conducted the seminal work and developed a broad list of Counterproductive Work Behaviors. They categorised these behaviors into 'property deviance' and production deviance'. Property deviance involves misuse of employer assets. Theft, property damage, and misuse of discount

privileges are some prominent examples of property deviance. Production deviance involves violating norms concerning the means for job accomplishment. Absence, tardiness, long breaks, and behaviors that detract from production when on the job such as drug and alcohol use, intentional slow or sloppy work are some examples of production deviance.

## 2.3.2 Organizational Citizenship Behavior

Behavior at work cannot be specifically quantified like other measures of job performance, but is a crucial factor for determining long-term organizational sustainability (Graham, 1991). In the 1980's, organizational sciences saw a lot of revolutionary reforms. The changing infrastructure and the working mechanism at the workplaces, gave way to a lot of out of box ideas and concepts (Smith, Organ and Near, 1983). The increasing global competition forced the organizations to adopt organizational innovation and flexibility towards rapidly evolving workplaces (Schnake, 1991). This was the time when Organizational Citizenship Behavior (OCB) came into existence. In the earliest available literary seminal work, Organizational Citizenship Behavior was defined by two criteria: the behavior beyond the routine job requirements; and the fruitfulness of the act towards the organization (Bateman and Organ, 1983). The early studies on Organizational Citizenship Behavior were linked to Altruism (Miceli 1986; Podsakoff and Huber, 1986). In the 1980's, there were variations in the variables considered as a part of Organizational Citizenship Behavior. During this time, most empirical studies have established various combinations of factors under the light of Organizational Citizenship Behavior (Organ and Konofsky, 1989; Puffer, 1987). These diverse conceptualizations of the concept are explained in detail in the following section.

## 2.3.2.1 Conceptualization

Katz and Kahn (1966) were the first one to notice the employee extra-role behavior at the workplace. The term 'Organizational Citizenship Behavior' was coined by Bateman and Organ

(1983). Organizational Citizenship Behavior can be defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1983; 1988). Podsakoff et.al, (2000) and Cinar et.al, (2000) stated that the definition given by Organ (1988) was an amalgamation of concept of individual's 'willingness to cooperate' given by Barnard (1938) and one's 'innovative and spontaneous behaviors' given by Katz (1964). Organizational Citizenship Behavior is understood as any work-related behavior that is discretionary and goes beyond one's routine job responsibilities to support the organizational environment (Zeinabadi and Salehi, 2011).

In the process of identifying behaviors that contribute towards organizational efficacy, some traditional measures of organizational performance were overlooked. There are two classic approaches towards Organizational Citizenship Behavior (Graham, 1991). The first approach segregates the idea of Organizational Citizenship Behavior from traditional measures of job performance as two different entities. The earliest researches on Organizational Citizenship Behavior defined it as a separate concept from in-role routine job performance and to be included "as both extra-role and organizationally functional" (Bateman and Organ, 1983). These classifications put academicians and practitioners in a difficult position as to what is to be categorized as in-role and extra-role? To clear this confusion, Graham proposed the second approach. The second approach draws its roots from philosophy, history and political science. Graham proposed that Organizational Citizenship Behavior is "a global concept that includes all positive organizationally relevant behaviors of individual organization members". Thus this classification includes the element of in-role behaviors, extra-role behaviors and also some justified political behaviors (Van Dyne et.al, 1994).

## 2.3.2.2 Determinants of Organizational Citizenship Behavior

Organizational Citizenship Behavior is an interdisciplinary subject and has been studied in political science, history, social psychology, management and humanities and social sciences. The varied dimensions of the concept has been the reason for its study in various domains. Researches in social psychology have defined mood states as the major determinant of Organizational Citizenship Behavior (Berkowitz, 1970). A mood of positive affect motivates an individual towards altruism and prosocial behavior. On the other hand, a mood of negative affect stemming up from frustration and negativity is most likely to demonstrate Counterproductive Work Behavior. The positive and negative mood affects are also the result of some antecedents present on and off workplace. These antecedents may include workplace environment as a major antecedent. Workplace environment is a broad concept and may include physical environment (such as lighting, infrastructure, hygiene, available working space) and non-physical environment (leadership style, support from co-workers, flexible workplace policies, and meaningfulness of work, appreciation and remuneration) (Thompson, 1967). It is not solely the workplace environmental factors that can trigger a negative affect but the individual factors also come into play. The personality of an individual i.e. personality type A or B, the neurotic traits, history of any mental illness or personality disorder, are some of the individualistic factors that can affect the intensity and cause positive or negative affect amongst individuals (Smith et.al, 1983). To understand the variable of Organizational Citizenship Behavior better, Graham (1991) went ahead to study political theories and philosophy. He further identified a set of traits and behavior that led towards 'active citizenship syndrome'. The following section explains the syndrome in detail.

## 2.3.2.3 Active Citizenship Syndrome

Graham (1991) proposed three interrelated categories of civic responsibilities that forms the crux of active citizenship syndrome. The first is obedience. Obedience means having respect

for the elderly, processes, structures and ways in which a system function (Cary, 1977). It promotes abiding by the law and being a responsible citizen or employee at the workplace. The second category is loyalty. The category promotes common good and welfare of everyone who is a part of the community. It advocates taking up extra responsibilities proactively to protect the members of the community and ensure the common good for all (Lane, 1965). The third category is participation. Participation advocates being informed about the challenges faced by the group or community, sharing knowledge and information with other citizens, and contribute towards the process of self-governance within the boundaries of law (Rossiter, 1950). The adoption of theories from political science, philosophy and history towards citizenship duties and responsibilities form the base for Organizational Citizenship Behavior at workplace. Since the development of Organizational Citizenship Behavior in 1983, 30 different forms of the behavior have been identified and studied. The behavioral outcomes are triggered by a particular or a group of job environmental factors.

From the examination of literature, it has been found out that workplaces have observed changes in their perception towards health and Wellbeing of individuals (Keyes, 2002; Chambers et.al, 2018). Health and Wellbeing have not only been a concern on an individual level, but at a group and organizational level. Organizations are focussing on a holistic approach to Wellbeing by recognizing a need to foster a culture of health and developing a clear strategy to promote health and Wellbeing of their employees. More often, terms such as health, wellness and wellbeing are used interchangeably. To understand the varied dimensions of Wellbeing, it is important to first understand the difference between health, mental health, wellness and Wellbeing. The following section explains the concepts in detail.

## 2.4 Evolution of Health, Wellness and Wellbeing

Most of the times, the terms mental health, wellness and Wellbeing are used interchangeably. To understand various aspect of Wellbeing, it is important to first differentiate between health, wellness and Wellbeing. The following sub-section explains the concepts in detail.

### 2.4.1 Mental Health

World Health Organization (2014) defines mental health as not just a state of absence of disease, but a state of overall physical, mental, emotional and social well-being (Galderisi and Heinz, 2015). The earliest traces of research work on mental health were found in 1950's. After World War II, substantial work on mental health began to be published. Seminal work on mental health was published by Jahoda in 1958. The first empirical study on positive mental health was conducted by R. Grinker in 1962. In the workplace, poor mental health of employees cannot only lead to physical illnesses, but also impact businesses through increased absenteeism, lower productivity, and adverse employee morale, thereby, leading to accidents and increased costs (Rajgopal, 2010).

### 2.4.2 Wellness

National Wellness Institute defines wellness as the process of moving towards a more aware and successful existence (National Wellness Institute, 2015; Baicker et.al, 2010). The first holistic view of wellness was proposed by Dr. Halbert Dunn. He explained that the gamut of wellness embodies body, mind and spirit. He further explained that the life cycle of individual wellness revolves around balancing purpose of living and self-fulfilment (Dunn, 1961; Kunte 2016). As per the Future Workplace 2021 HR Sentiment Survey, it was found that 68% of senior HR leaders consider employee Wellbeing and mental health as top priority (Forbes, 2022). It has been found post the pandemic, employers need to shift their focus from

organizational issues to individual human life experiences and support employees in their personal and work life.

### 2.4.3 Wellbeing

The theories around happiness, good life, and Wellbeing were first discovered in Ancient Greece (Wright and Doherty, 1998; Wright and Huang, 2012). These theories are considered as the basis of Wellbeing. Rath and Harter (2010) define well-being as a perception of experiencing life. Various conceptualizations of hedonism, eudaimonia, and stoicism have also emerged from Wellbeing (Haybron, 2008). Well-being can be classified into two school of thoughts: the hedonic view and the eudaimonic view.

Hedonic view describes pleasant feelings and evaluations as important parameters to Wellbeing. Eudaimonic view considers engaging in behaviors that are self-actualizing, meaningful, and growth producing (Fisher, 2014).

Eudaimonic Wellbeing focuses on a good life instead of a pleasant one. Eudaimonic philosophy is based on the human needs of competence, autonomy, relatedness, and self-acceptance. Growth and self-actualization are the most important virtues of the eudaimonic philosophy (Sheldon and Elliot, 1999). The eudaimonic tradition has its roots in Greek philosophy (Waterman, 2008). To understand varied aspects of health, wellness and Wellbeing, it is important to differentiate their source and components. The next section explains the basic differentiation between health, wellness and Wellbeing.

## 2.4.4 Definition of Health, Wellness and Wellbeing

Table 2.3 explains the definition, source and components of health, wellness and Wellbeing in detail. A clear differentiation between health, wellness and Wellbeing is provided below.

Table 2.2 Definition of Health, Wellness and Wellbeing

| S.No | Concept   | Definition   | Source                                    | Components   |
|------|-----------|--|---|--|
| 1    | Health    | A harmonious state of physical, mental, and social balance.        | World Health<br>Organization<br>(2004)    | Financial,<br>Emotional, &<br>Occupational<br>Health |
| 2    | Wellness  | Wellness is making informed choices towards a healthier lifestyle. | National<br>Wellness<br>Institutes (2015) | Physical Health                                      |
| 3    | Wellbeing | The perception of experiencing our lives.                          | Rath and Harter (2010)                    | Physical, Mental,<br>Social, and Spiritual<br>Health |

To balance the behavioral outcomes and promote organizational health, it is important to introduce a positive intervention. There are varied available interventions. Interventions like cognitive therapy, internet based virtual interventions, and psychosomatic treatment interventions are being used prevalently (Walach et.al, 2007). These interventions have been widely accepted due to the limited dosing and ease of access. These interventions were primarily used to cater clinical populations, but the successful efficiency rates brought them to the non-clinical population as well (Shonin et.al, 2014). One such intervention Mindfulness is preferred as an intervention due to its efficiency and accuracy in clinical as well as non-clinical trials. The physical, psychological and neurological impact of Mindfulness on the clinical as well as non-clinical population is substantial. Mindfulness along with the detailed explanation on the Mindfulness interventions is provided in the following section.

#### 2.5 Mindfulness

Mindfulness is focussing one's entire attention to the present moment without any judgements. It can be viewed as a desired state of mind or an external stimuli of meditation to achieve a desired state of being. In the 5th millennium B.C.E., Mindfulness emerged as a significant practice (Baer, 2006). Since then Mindfulness established itself as a prominent practice in the Indian subcontinents.

Mindfulness has gained a lot of attention among clinical practitioners in the last few decades (Cousins, 1996). It was after the introduction of Mindfulness Based Stress Reduction Programmes by Jon Kabat-Zinn in 1982, Mindfulness was established as a positive intervention in treatment of chronic illnesses. The effectiveness of the mindfulness programmes have initiated research to replicate the results of clinical trials in the non-clinical trials as well.

## 2.5.1 Conceptualization of Mindfulness

The concept of Mindfulness dates back to 5<sup>th</sup> millennium Buddhist scriptures. The conceptualization of the term historically is explained below.

**Table 2.3 Conceptualization of Mindfulness** 

| S.No | Substantial Literature                                | Description  |
|------|---|--|
| 1    | Satipatthana Sutta (5 <sup>th</sup> millennium B.C.E) | Mention of spiritual aspects of Mindfulness in the Buddhist text                   |
| 2    | Thich Nhat Hanh (1988)                                | Vietnamese Zen master's perspective on Mindfulness                                 |
| 3    | Jon Kabat-Zinn (1991)                                 | Introduction of Mindfulness for clinical population to deal with chronic illnesses |

#### 2.5.2 Mindfulness Based Interventions

There has been manifold increase in the number of Mindfulness based studies in the last two decades. These studies also discuss psychological and neurobiological mechanisms of Mindfulness interventions and highlight potential risks of Mindfulness interventions. While there is a lot of academic interest and availability of multiple Mindfulness-based interventions, there is limited awareness and availability of self-training interventions in the Indian context. This chapter further highlights the available Mindfulness interventions, reviews them and then justifies the adoption of the Mindfulness intervention used in the study. The review of the types of available interventions is as follows:

## 2.5.2.1 Types of Mindfulness Based Interventions

In the late 19th century, Mindfulness interventions used nonrandomized pre-test, post-test designs. In the early 2000s, there was a shift in the mechanism adopted for Mindfulness interventions. There was a substantial increase in randomized control trials that compare Mindfulness interventions to treatment as usual (TAU), wait-list control, or active comparison interventions. The varied types of available interventions are explained below:

Mindfulness Based Stress Reduction Programmes (MBSR)

Mindfulness-based stress reduction programme is a 8 week long intervention developed by Jon Kabat-Zinn. The programme consists of weekly 2.5 hours classes with a certified Mindfulness trainer. The programme also includes daily audio-guided home practice material for approximately 45 minutes per day (Kabat-Zinn 1990). The MBSR programmes were initially developed for the clinical population. MBSR programmes were used as a means to treat and heal chronic physical illnesses. These programmes also propagate discussions and practices guided towards applying mindful awareness to daily life experiences. In the past three decades, there has been a change in the way these programmes are perceived. With the same basic

structure and varied modifications, these programmes are now used to treat non-clinical populations and problems.

### Mindfulness Intervention Retreats

The usual perception towards a Mindfulness-based intervention is with the timeline of 8 weeks, but there are varied evidence-based forms of Mindfulness intervention available to scholars and practitioners. Mindfulness meditation residential retreat programmes ranging from 3 days to 3 months are a transformational way to deliver well-controlled doses of Mindfulness intervention (Rosenberg et al. 2015). Considering the time constraint, a lot of brief Mindfulness meditation interventions have also come into picture. The programmes range from 2–3-week programs to lab-based 3–4-day Mindfulness interventions (Zeidan et al. 2011; Mrazek et al. 2013). Research studies have found that these brief Mindfulness based interventions are effective and valid in varied experimental settings (Broderick, 2005; Papies et al., 2015, Schofield et al., 2015; Westbrook et al., 2013).

## Internet and Smartphone Application Mindfulness Interventions

The past decade has seen an explosion of virtual, internet and smartphone based Mindfulness programmes. The most popular smartphone app- the 'Headspace Mindfulness Smartphone App', has over two million active users worldwide. In the absence of a certified trainer and the time and cost investment required for a traditional Mindfulness programme, people are switching to virtual online programmes. Though these programmes are lucrative in terms of ease of access and low costs, the question concerning efficiency of these programmes cannot be overlooked. There is a dearth of studies that empirically validate these interventions due to their recent introduction.

#### Control Interventions

Control interventions are the latest addition to the list. Randomized Control Trials with a control and a comparison group have been the most popular form of experimental studies in the last decade (Davidson and Kaszniak, 2015). There are varied forms of active group-based interventions ranging from relaxation interventions to targeted health education programmes that have been effectively implemented (Morone et al., 2016). There are also a lot of non-validated Mindfulness interventions being practiced. These are type of Mindfulness meditation trainings in which participants are frequently instructed to take a deep breath and sit in a state of Mindfulness meditation. These trainings do not provide any detailed explanation on how to foster mindful awareness (Zeidan et al. 2015, p. 15).

#### 2.5.3 Effects of Mindfulness Interventions

Studies suggest that Mindfulness interventions have shown a large variety of outcomes depending on the type and dosage of the intervention. Though Mindfulness interventions have dramatically increased in the last decade, most interventions have methodological limitations. The small sample size, lack of high-quality pre-treatment/post-treatment, and follow-up measures are some of the major limitations of the existing studies. These methodological limitations make it extremely difficult to draw strong conclusions about the validity and reliability of the interventions. Despite the above mentioned limitations, some Mindfulness interventions have been successful in demonstrating positive outcomes. Such outcomes or benefits are declared in the following sub-section. The next sub-section discusses the impact on physical health in detail.

## 2.5.3.1 Impact on Physical Health

The origin of Mindfulness based stress reduction programmes was to treat patients suffering from chronic physical pain. Studies have highlighted that Mindfulness interventions can foster

greater interoceptive awareness, improves stress management and coping skills, all of which can promote physical health and reduces health risks (Creswell and Lindsay 2014).

## Chronic pain

Mindfulness interventions have proven to be most successful in treatment of chronic pain. Stress is the most common reason and powerful trigger amongst chronic pain patients (Schwartz et al. 1994). Early non-randomized studies showed that Mindfulness interventions are effective in reducing pain symptoms and dependence on pain killers and pain-relief medication among chronic pain patients. Researchers like Morone and colleagues (2016) established that Mindfulness interventions were successful in treatment of adults suffering from chronic lower-back pain compared to an active healthy aging program.

## *Immunity*

The immune system plays a crucial role in protecting the body from a variety of pathogens and infectious agents. Chronic stress causes damage to the immune system's functional response. Some of the major damage includes its capacities to mount antibody responses and to produce lymphocyte proliferative, and natural killer cell responses (Segerstrom and Miller, 2004).

## 2.5.3.2 Impact on Mental Health

There has been a rising interest among medical practitioners and clinical scientists towards applicability of Mindfulness interventions towards treatment of mental illnesses. Clinicians also state that Mindfulness interventions can help individuals regulate the maladaptive thoughts, emotional responses, and automatic behaviors that trigger mental health problems.

## Depression relapse

The treatment of depression is a complicated process as there are times when improvement suddenly falls into relapse. The most substantial benefits of Mindfulness interventions in the literature has been the reduction of depression relapse. Literature suggests that the 8-week

Mindfulness based stress reduction technique is a cost-effective treatment that significantly reduces the risk of depression relapse (Ma and Teasdale, 2004; Teasdale et al. 2000).

Depression and Anxiety Symptoms

Mindfulness interventions help foster an open and accepting awareness of one's thoughts and feelings, including the thought patterns and body experiences that occur when one feels anxious or depressed. Depression and anxiety trigger experiential avoidance, self-judgment, and rumination. Mindfulness intervention helps an individual focus their attention on these negative emotions in order to heal them (Roemer and Orsillo 2009).

### 2.5.4 Limitations of Mindfulness Interventions

Though Mindfulness interventions have been very successful in maximising positive behavioral outcomes, there are certain limitations associated with the interventions. One of the important limitations is concerned with the expression of unpleasant emotions. Sometimes during the Mindfulness intervention training, participants report varied unpleasant reactions and emotions such as agitation, anxiety, discomfort, or confusion (Lustyk et al., 2009; Shapiro 1992). Apart from the short-term depleting effects, the cognitive demands of adopting a new reflective awareness might disrupt one's responses to cognitive tasks. Research studies suggest that brief Mindfulness interventions can reduce evaluative cognitive biases such as the correspondence bias and sunk cost bias and can also increase false memory recall (Hafenbrack et al., 2014; Wilson et al. 2015; Hopthrow et al., 2016).

Mindfulness plays a substantial role in enhancing individual wellbeing, but it is also important to understand the job environmental variables affecting the Mindfulness quotient. The substantial job environmental factors and the behavioral outcomes affecting Mindfulness have been developed in the form of a proposed conceptual framework explained in the next chapter.

# Chapter 3: Development of Propositional Framework and Research Hypothesis

### 3.1 Introduction

The aim of this chapter is to propose a conceptual framework for the study, based on relevant theoretical foundation, research gaps identified and the objectives of the study. The proposed conceptual framework explains the job environmental factors that influence behavioral outcomes at work. The forthcoming sections discuss the adaptation of the conceptual framework, identification of independent variables, dependent variables and the job environment factors that impact the behavioral outcomes. The development of the proposed conceptual framework, the underlying theory and the hypotheses development are presented towards the end of this chapter. The flow of the chapter is explained in the form of a flow chart in the next figure (Fig. 3.1).

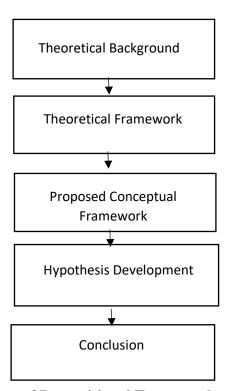


Figure 3.1 Development of Propositional Framework and Research Hypothesis

## 3.2 Theoretical Background

Systematic literature review can be considered as an initial procedure to arrive at the variables and the knowledge gap (Xiao and Watson, 2019). In order to put the conceptual framework through a process of empirical testing, the model needs to be developed on a strong theoretical base. Organizational behavior as a domain has contributed towards development of substantial theories that define the relationship between individual behavior and workplace outcomes. Several theories from behavioral perspective have been studied to develop the conceptual framework. Since the conceptual framework tries to investigate the impact of job environment variables on the behavioral outcome, the approach is very similar to the behavioral science theory of management. The behavioral approach focusses on group relationships and group behavior as important factors towards organizational effectiveness (Latham, 2007). Behavioral science theory aims at predicting future employee behaviors.

#### 3.3 Theoretical Framework

The proposed conceptual framework has been built on two strong theoretical pillars. Though all the theories of management have contributed significantly to the growth and development of organizations, but behavioral science theory is the closest to explaining the rationale behind choice of the job environmental factor. This research aims at identifying the impact of the job environmental variables on the behavioral outcomes with the mediating effect of Mindfulness and Wellbeing. This research tries to explore the job environmental factors and the human factors that impact employee behavior at the workplace. Williams (2007) proposes three major theories concerning Ostracism and investigation of behavioral outcomes at the workplace.

1. The Temporal Examination Theory by Williams (1997): There are three stages in the Temporal Examination Theory: (a) Reflexive Stage: The response to any form of exclusion;

- (b) Reflective Stage: Trying to understand the reason and source of such exclusion; (c) Resignation Stage: Feeling helpless and withdrawing from the situation.
- 2. The Social Monitoring System and Sociometer Theory by Leary et al., (1995):
  Threatening the self-esteem of an individual would motivate an individual to improve their social skills.
- 3. Cognitive Deconstruction and Self-Regulation Impairment by Baumeister et al. (2002): The theory suggests that any form of social exclusion or Ostracism may lead to temporary cognitive deconstruction which may further lead to negative behavioral outcomes at the workplace. This theory studies Ostracism or social exclusion as antecedents and negative behavioral traits as the outcome. This research is built on the theory of Cognitive Deconstruction and Self-Regulation Impairment by introducing an intervention or assumed mediating role of Mindfulness in the equation.

Based on systematic literature review, this research has made a choice of introducing job environment variables such as Ostracism, Belongingness, and behavioral outcomes such as Counterproductive Work Behavior and Organizational Citizenship Behavior, and anticipated mediators of Mindfulness and Wellbeing in the equation. This research is an extension of the Theory of Cognitive Deconstruction and Self-Regulation Impairment aimed at addressing the identified research problem at the workplaces.

The study tries to understand the impact of job environmental factor Ostracism on the behavioral outcomes at the workplace. The purpose of the proposed conceptual framework is very similar to the intent of the theory. Due to several changes internally and externally, organizations have been facing the challenge of emotional complexity at the workplaces (Chandra, 2012). There is an urgent need to understand human emotions at the workplaces as they are dynamic in nature and introduce positive interventions for improving organizational

health (Conversano et.al, 2020). To balance the behavioral outcomes and promote individual health, it is important to introduce a positive intervention (Vanbeest and Williams 2006; Warburton, Williams, and Cairns, 2006; Williams and Sommer, 1997; Gruter and Masters, 1986). Interventions like cognitive therapy, internet based virtual interventions, psychosomatic treatment interventions are commonly being used for treatment amongst clinical and non-clinical population (Walach et.al, 2007). These interventions have been widely accepted due to the limited dosing and ease of access (Shonin et.al, 2014). Mindfulness is preferred as an intervention due to its efficiency and accuracy in clinical as well as non-clinical trials (Glomb et.al, 2011; Kersemaekers et.al, 2018).

A relevant question put forth by Williams (2007) in his research on Ostracism was "Can Ostracism be coped with successfully, without making individuals become aggressive or overly susceptible to social influence?" This research tries to address this challenge and attempts at proposing and validating a conceptual framework that tries to understand the impact of job environmental variables namely, Ostracism and Belongingness, on the behavioral outcomes namely, Counterproductive Work Behavior and Organizational Citizenship Behavior, with the mediating impact of Mindfulness and Wellbeing. The conceptual framework is based on the Theory of Cognitive Deconstruction and Self-Regulation Impairment proposed by Baumeister et al. (2002). The proposed conceptual framework tries to study the impact of the job environmental factors of Ostracism and Belongingness, and empirically validate the assumed relationships amongst the variables. The proposed conceptual framework is demonstrated in the following section.

## 3.4 Proposed Conceptual Framework

Research studies have established a relationship between job environmental factors like Ostracism and work related outcomes such as performance and profits. The study tries to investigate the impact of job environment factors like Ostracism and Belongingness on the behavioral outcomes of Counterproductive Work Behavior and Organizational Citizenship Behavior. The proposed conceptual model also tries to investigate the impact of Mindfulness and Wellbeing on the equation. The study proposes introduction of a Mindfulness intervention to understand the interrelationships between the variables. The conceptual framework of the study is displayed in the following section.

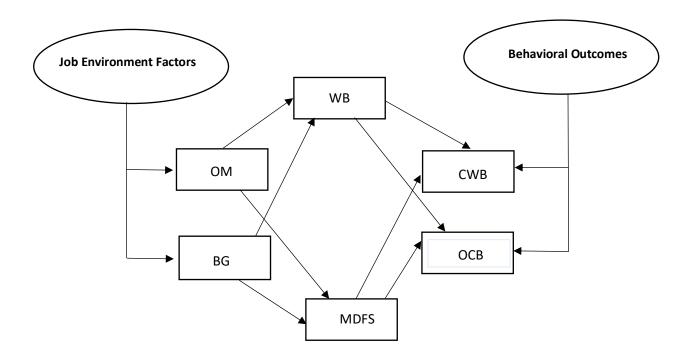


Figure 3.2 Proposed Conceptual framework

In Figure 3.4, OM = Ostracism is a job environmental variable with negative connotation; BG = Belongingness is a job environmental variable with positive connotation; CWB = Counterproductive Work Behavior is a behavioral outcome with negative connotation; OCB = Organization Citizenship Behavior is a behavioral outcome with positive connotation; MDFS = Mindfulness is an assumed mediator in the equation; WB = Wellbeing is an is an assumed mediator in the equation.

To develop a conceptual framework, requires, clarity and responsibility. This makes the proposed conceptual framework more realistic in backdrop of constantly evolving organizations. The multidimensionality of the model is what makes it unique in its approach.

# 3.5 Hypothesis Development

This is the most crucial step in the research process. The hypothesis development has to be done keeping in mind the research objectives and the research questions. This section lists down the basis for the formulation of the listed hypothesis. These hypothesis are statistically tested and the results are explained in Chapter 6 and Chapter 7.

## 3.5.1 Hypothesized Relationship between Job Environment Variables and Mindfulness

Many researchers have attempted to understand the relationship between Ostracism and Mindfulness at the workplace (Ramsey and Jones, 2015; Scott and Duffy, 2015; Jones et.al, 2019). Ostracism is a multidisciplinary concept and has been acknowledged by research works in social science, psychology and health sciences. This study attempts at adopting and developing a self-training intervention to understand the pre and post effect of introducing the intervention.

This hypothesis was formulated keeping the longitudinal design of the study in mind. There is a pre and post study conducted to understand the effectiveness of the Mindfulness intervention. This hypothesis helps us understand whether the intervention is able to make considerable difference in the Ostracism levels in an organization.

Hol (Null): There is no significant decrease in the Ostracism post the Mindfulness intervention

Hal (Alternate): There is a significant decrease in the Ostracism post the Mindfulness intervention

The second hypothesis discusses the relationship between 'Need to Belong' and 'Mindfulness'. Studies suggest that there is a positive relationship between Belongingness and Mindfulness (DeWall et.al, 2011; Collins et.al, 2016; Roush et.al, 2018). The earlier research studies theoretically investigate the relationship between Belongingness and Mindfulness, but

do not discuss the pre and post effect of introducing a Mindfulness intervention. Hence, this study investigates and facilitates formulation of hypothesis, to understand the pre and post impact of introduction of a Mindfulness intervention.

In this study, Belongingness is captured by the Need to Belong scale. Hence, the hypothesis here is formulated on the basis of Need to Belong score. The Need to Belong is inversely related to the Belongingness quotient. As and when the Need to Belong value decreases, the Belongingness quotient improves. Belongingness is a positive behavioral trait whereas Need to Belong is a negative behavioral trait. The intervention is supposed to cause a significant decrease in the Need to Belong quotient. Hence, the hypothesis tries to test if there is a significant difference in pre and post intervention values of the Need to Belong quotient.

Ho2 (Null): There is no significant decrease in the Need to Belong post the Mindfulness intervention

Ha2 (Alternate): There is a significant decrease in the Need to Belong post the Mindfulness intervention

## 3.5.2 Hypothesized Relationship between Behavioral Outcomes and Mindfulness

Review suggests that Counterproductive Work Behavior is supposed to have a negative impact on the Mindfulness of an individual (Yang et.al, 2016; Hafenbrack, 2017; Lyddy et.al, 2021). Though there is an inverse relationship between Counterproductive Work Behavior and Mindfulness, this study attempts to investigate the pre and post impact of introduction of a Mindfulness intervention to the equation. The formulated hypothesis tries to test if there is a significant difference in the Counterproductive Work Behavior quotient pre and post the introduction of Mindfulness intervention.

Ho3 (Null): There is no significant decrease in the Counterproductive Work Behavior post the Mindfulness intervention

Ha3 (Alternate): There is a significant decrease in the Counterproductive Work Behavior post the Mindfulness intervention

Organizational Citizenship Behavior has a linear relationship with Mindfulness (Glomb et.al, 2011; Reb and Narayanan, 2015; Mulligan, 2018). This theoretical understanding of this linear relationship is empirically tested in this research with the help of a Mindfulness intervention. The formulated hypothesis tries to test if there is a significant difference between Organizational Citizenship Behavioral trait pre and post the introduction of Mindfulness intervention. Organizational Citizenship Behavior is a positive trait and hence the study assumes an increase in the trait post the introduction of the intervention.

Ho4 (Null): There is no significant increase in the Organizational Citizenship Behavior post the Mindfulness intervention

Ha4 (Alternate): There is a significant increase in the Organizational Citizenship Behavior post the Mindfulness intervention

## 3.5.3 Other Hypothesized Relationships

Studies suggest that there is an ever going debate on the relationship between Mindfulness and Wellbeing. Some studies suggest that Wellbeing induces Mindfulness (Bajaj and Pande, 2016; Jnaneswar and Sulphey, 2021), whereas others suggest Mindfulness induces Wellbeing (Baer et.al, 2012; Gu et.al, 2015; Lomas et.al, 2017). To understand and investigate this relationship better, this study tries to introduce a Mindfulness intervention in the equation. The formulated hypothesis tries to investigate if there is a significant change in the Wellbeing quotient pre and post the introduction of the Mindfulness intervention. The study assumes Wellbeing to act as

a mediator and hence the hypothesis tries to test if there is an increase in the positive state of Wellbeing.

Ho5 (Null): There is no significant increase in Wellbeing post the Mindfulness intervention

Ha5 (Alternate): There is a significant increase in Wellbeing post the Mindfulness intervention

The next hypothesis discusses the impact of Mindfulness interventions on the Mindfulness quotient of an individual. There is a positive and direct relationship between Mindfulness quotient and the Mindfulness intervention (Baer' 2003; Creswell, 2017; Jamieson and Tuckey; 2017). The hypothesis formulated here tries to study if the intervention brings considerable difference in the Mindfulness quotient pre and post the intervention. Mindfulness is a positive trait and the study assumes Mindfulness to play a mediating role in the equation. Hence, the hypothesis tries to test if there is a substantial increase in the Mindfulness quotient. Hob (Null): There is no significant increase in Mindfulness post the Mindfulness intervention Hab (Alternate): There is a significant increase in Mindfulness post the Mindfulness intervention

The following hypothesis discusses the implementation of Mindfulness intervention at the public and the private sector. The study makes a choice of one public sector organization and one private sector organization to contrast the difference in the obtained results. The underlying assumption is that due to the stability and prestige associated with public sector jobs, employees are reluctant to quit the job despite of being challenges with negative emotions at work.

Ho7 (Null): There is no significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

Ha7 (Alternate): There is a significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

## 3.6 Conclusion

The systematic literature review presented in Chapter 2 explain the choice of variables and the justification for research in this subject. This chapter takes a step ahead and discusses the fundamental theory for development of the proposed conceptual framework, explains the context of the framework and develops specific hypothesis to be tested in this study. Based on the hypothesis developed, the Mindfulness intervention has been administered and analysis is done on the sample data pre and post introduction of the Mindfulness intervention. The next chapter discusses in detail the research methodology adopted for the measurement scales, research design, and sample used for the study.

# **Chapter 4: Research Methodology**

## 4.1 Introduction

It provides an overview of the research methods and design used for the study. It also provides a detailed explanation for the statistical tool and techniques used for data analysis. The chapter starts with the fundamentals of research methodology, choice of methods and justification for choosing these methods. It details the process of data collection, timelines for the study, and the measurement scales used for the study. The chapter presents an overall summary of the four weeks Mindfulness training conducted in India. The flowchart depicting visual summary of the chapter is presented below.

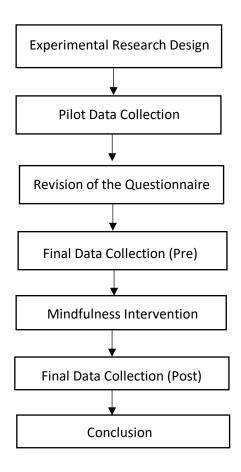


Figure 4.1 Flowchart Summarizing Research Methodology

## 4.3 Experimental Research Design

There are three types of research design: experimental, descriptive and explorative. In the context of the stated objectives of the research, experimental research was considered as an apt choice for the study. Experimental research design is more suitable to measure the effects of an intervention. One of the experimental research design is comparison of outcome before and after a planned intervention. Pre-test, post-test experimental design are the preferred method to compare and measure the degree of change occurring as a result of intervention. It has been established that such interventional studies are often prospective and can be specifically tailored to evaluate the direct impact of an intervention (Lester & Murrell, 2022). This particular type of pre-test-post-test interventional design is categorized as interrupted time series design (Miller et.al, 2020). In interrupted time series design, data are collected at multiple time points both before and after an intervention, and analyses explore whether the intervention was associated with the outcome beyond any pre-existing secular trend. This research evaluates the mediating impact of Mindfulness and Wellbeing on the equation between job environmental factors and behavioral outcomes at work. The first step was to review the existing literature. Then a proposed conceptual framework was developed based on the gathered insights. The research design aided in identifying the interrelationships between the variables involved in the study.

For this study, longitudinal data was collected from the respondents. In this study, data is collected from the respondents prior to introduction of the Mindfulness training programme, and then 4 weeks post the introduction of the programme. The period of four weeks helped gather observations that could confirm presence of a particular behavioral pattern. The study helps keep a track of changes over time and hence is very effective in detection of an emergency casualty. Though there are a lot of advantages associated with adoption of longitudinal data,

there are some disadvantages too (Remeny et al., 1998). Sometimes it is difficult to follow up respondents and keep a consistent check over the same. During a time lag required for the study, a respondent might get exposed to resources that might create a bias in the perception of an individual (Caruana et al., 2015).

### 4.4 Measurement Scales

The research used nominal as well as ordinal scales for measurement. The Likert scale was used for questions that captured respondent's perception towards job environment variables and behavioral outcomes. Standardized 5-point Likert scales were used for the study. Questions with both negative and positive connotations were used to check the consistency of responses. Six variables were used for the study namely Ostracism, Belongingness, Mindfulness, Wellbeing, Counterproductive Work Behavior and Organizational Citizenship Behavior. In this study, there are five independent variables namely Ostracism, Belongingness, Counterproductive Work Behavior, Organizational Citizenship Behavior and Wellbeing. The dependent variable in this study is Mindfulness.

## 4.5 Justification for Likert Scale

Likert scale is a summated rating scale where a respondent's score is an average of individual response to multiple questions on the questionnaire (Warmbrod, 2014). There are varied types of Likert scale from 5 point Likert scale to 11 point Likert scale. Scale below 5 point Likert scale are not preferred due to the lower accuracy and validity associate with the scales (John, 2010). Standardized five point Likert scales were used for this study. Every statement in the Likert scale gives a range of options from total agreement to neutral and then to total disagreement. These range of options makes it easier for respondents to mark their responses. It is also easy for researcher to administer the Likert scale and keep the score. The popular belief amongst the researchers suggests that, the accuracy of response while capturing attributes

of a behavioral variable is better with five, seven, nine or eleven points rather than two, three or four points scale (Preston and Colman, 2000; Metler, 2009; Revilla et al., 2016). Hence, five point Likert scales were preferred for the current study.

## 4.6 Validity, Reliability and Operationalisation of the Instruments

Convergent and discriminant validity were used as significant tools to ensure the accuracy of the measurements. Convergent validity is estimated with the help of factor loading, average variance extracted AVE, and composite reliability. The minimum criteria for factor loading is that the value < 0.5, the AVE > 0.5, and composite reliability is > 0.6. The instruments were tested with the mentioned parameters and the instruments were found to have good convergent validity. The second measure used for validity was the discriminant validity. For discriminant validity to be significant, the average variance extracted (AVE) > squared correlation. This study shows significant level of discriminant validity.

To assess the internal reliability, Cronbach's alpha ( $\alpha$ ) is used as a statistical parameter. As a rule of thumb,  $\leq 0.90$  is treated as excellent reliability, 0.70-0.90 is treated as highly reliable, 0.50-0.70 show moderate reliability, and  $\leq 0.50$  represented low reliability (Hinton et al., 2004). In this study, the variables demonstrated reliability between 0.70-0.90 units. In this study, the samples demonstrate high levels of validity and internal reliability.

Operationalization is directed towards empirical measurement of the indicators. Concepts from existing theory were studies to arrive at valid instruments for research. These scales have been adapted from available valid and reliable instruments in English language. Mindfulness has been measured by the 15 item Mindful Attention Awareness Scale (MAAS) by Brown, K.W. & Ryan, R.M. (2003). The choice of MAAS scale has been made due to the content validity of the scale (Osman et.al, 2015; Phang et.al, 2016). The MAAS scale here serves as a reliable tool for capturing the required behavioral traits (MacKillop et.al, 2007; Dam et.al, 2010; Sauer et.al, 2013; Bao et.al, 2015; Osman et.al, 2016). Though, the scale has been

criticized for its variable validity by a group of scholars and practitioners (Black, 2012; Ruiz, 2016), the study acknowledges the fact and makes the choice on the maintained reliability and internal consistency (Cronbach's  $\alpha = .89$ ) of the scale (Black, 2012). These items were then adapted to fit the objectives of the research. A standardized five-point Likert scale with a score of 1= 'strongly disagree' and a score of 5= 'strongly agree' was adopted for the questionnaire. Table 4.1 displays the details on the instruments used for the study.

**Table 4.1: Measurement Instruments** 

| Variable                               | Name of Instrument                              | No. of items | Researchers/Year             |  |
|--|---|--------------|------------------------------|--|
| Ostracism                              | Ostracism Scale                                 | 10 items     | Ferris, 2008                 |  |
| Belongingness                          | Need to Belong Scale                            | 10 items     | Leary et.al, 2013            |  |
| Mindfulness                            | Mindfulness Attention<br>Awareness Scale (MAAS) | 15 items     | Brown et.al, 2003            |  |
| Wellbeing                              | Job-related Affective<br>Wellbeing Scale (JAWS) | 20 items     | Katwyk et.al, 2000           |  |
| Counterproductive<br>Work Behavior     | Workplace Deviance Scale                        | 19 items     | Bennett and<br>Robinson 2000 |  |
| Organizational<br>Citizenship Behavior | Organizational Citizenship<br>Behavior Scale    | 16 items     | Lee and Allen, 2002          |  |

Six demographic questions: age, gender, marital status, educational qualification and professional designation, and year of joining were also included in the questionnaire. The questionnaire had three parts:

Part 1 of the instrument included a greeting note for participants. It provided information
and instructions related to the questionnaire. It included 6 demographic open-ended
questions namely age, gender, marital status, educational qualification, professional
designation and year of joining.

- Part 2 was composed of 83 questions. These questions were standardized to 5 point Likert scale questions. It included valid instruments to capture Ostracism, Belongingness, Mindfulness, Wellbeing, Counterproductive Work Behavior and Organizational Citizenship Behavior score.
- Part 3 included a thank you note for participating in the study. It also included the contact details of the researcher, to be reached out in case of any doubts or clarification. This part also clarified on the expectation from the responses and the timeline within which the results will be shared with the participants.

## 4.7 Design of the Research Plan

Structured questions were considered for the study in order to get accurate responses. These questions were carefully drafted after finding the suitable instruments for capturing each variable. The five steps of questionnaire developments adopted for this research are discussed here (Blair et.al, 2014):

- **1. Designing and planning:** It involves gathering information about the availability of resources and the timeline for the research. The sample size, the research objective, and the data collection technique has to be specified and aligned before moving towards the next step (Bajpai, 2011).
- **2. Adopting and framing the questionnaire:** Adopting and framing a questionnaire is primarily based on the target audience. On the basis of the level of education and exposure associated with the target audience, the language, words and layout of the questionnaire are decided. After finalizing on the questionnaire type and format, it is important to pre-test the questionnaire.
- **3. Pilot study:** Pre-testing or the pilot study gives us an idea whether the prepared questionnaire helps us attain the desired response and defined research objective. It also helps us understand

if the measurement instruments are able to capture the required information from the respondents. The pilot study also helps analyse if the instruments are valid and reliable measure of the defined variables.

- **4. Final study:** The results obtained from the pre-testing study helped modify the questionnaire. The pilot study provides insights on the adjustments that need to be made in order to generate meaningful responses. Revision of the questionnaire is done based on the results of the pilot study. The validity and reliability of the instruments, sample size, data collection process, length and format of the questionnaire are all checked before drafting the final questionnaire.
- **5. Data collection:** The prepared final questionnaire is now circulated to the target audience. This stage demands precision. Care has to be taken that ethical protocols are followed while the data collection process. The timeliness of the process is another important parameter. In case the process exceeds the timeline, there is an increase in the total cost, time and effort investment involved. Data collection planning begins much before than the actual process. The flow and design of the data collection process has to be decided in the planning stage.
- 5. Analysis and reporting of results: The raw data responses collected from the questionnaire are first coded to prepare it for the analysis. This is done so that the data is ready as per the format of the statistical tool used for analysis. The missing values and incomplete responses are cleaned from the data set. The results generated from the analysis are then decoded to generate meaningful insights. These generate insights are then reported in a systematic manner in the final report. In the subsequent sections, a brief explanation is given on the preliminary study. In the subsequent sections, first the pilot study is explained in detail, then, based on the outcome of the pilot study, the changes made and procedure for final data collection is explained.

## 4.8 Preliminary Study

A preliminary study was conducted amongst few experts in this field and higher degree University students who have prior work experience. Experts suggested that a clear understanding between the 'Need to Belong scale' and the Belongingness quotient be established. The Need to Belong is a negative trait and a decrease in the 'Need to Belong' increases the Belongingness quotient. Experts also suggested to put a brief introductory paragraph in the beginning of the questionnaire, to give clarity on the instruction and the way responses are to be filled. In terms of the comments and feedback received during the pre-pilot run, there was a question from Counterproductive Work Behavior scale that asked if the employees/students were involved in discussing the confidential information concerning the organization/institution outside the workplace/University. Multiple respondents came up for clarification regarding that particular question as it was not worded appropriately. After the pre-pilot run, this particular question from the Counterproductive Work Behavior scale was reworded and approved by the experts.

## 4.9 Pilot Data Collection

Pilot study is an essential step prior to the final study. The purpose of the pilot study is to check the effectiveness of the adapted research instruments. Pilot study aims at identifying the loopholes in the designed research process, so that modifications can be made before the final questionnaire. The main aim of conducting a pilot study is to ensure that the final questionnaire attains maximum valid responses from the participants. Pilot study is responsible for maintaining the validity and reliability of the collected responses. Validity ensures the rationalization of the process of measuring the variables. Whereas reliability ensures that the consistency of the research instruments is kept intact.

## 4.9.1 Sample for Pilot Study

The pilot study was conducted at a reputed government hospital and 117 responses were collected from the study. The pilot study was conducted from 18<sup>th</sup> October, 2020 to 15<sup>th</sup> November, 2020. Out of 121 responses received, 117 responses were accepted and the remaining four were rejected due to incomplete information. The response rate of 96.69% was attained for the pilot study. The pilot study was analyzed with two major objectives. To check if the items in the questionnaire constitute for appropriate validity to attain desired responses and to check if the instruments had the required consistency to attain desired reliability. SPSS Version 16.0, a software by IBM was used for pilot study analysis.

## **4.9.2 Pilot Data Analysis**

The pilot data analysis had two major purposes. The first was to check if each item of the questionnaire was able to appropriately represent their respective variable. The second was to check the effective of the adapted Mindfulness training programme. For the stated objectives, an exploratory factor analysis (EFA) was conducted to check the factor loading and Cronbach alpha values. SPSS 16 software by IBM was used for the analysis.

Statistical Package for the Social Sciences (SPSS) is a software by IBM which is most commonly used in researches concerning management science. SPSS was used to analyse the quantitative set of data obtained from the pilot study. SPSS 16 was used due to the ease of availability and accessibility. Initially, it was used to code the data responses, screen missing data responses and clean the data. An exploratory factor analysis (EFA) was done to arrive at the results.

## 4.9.3 Data Cleaning and Tabulation

For the statistical analysis to be performed on the data set, it is extremely important to clean the data set by identifying the missing data or outliers and testing the assumptions of multivariate analysis. In the current study, SPSS was used as a statistical tool for the same.

## Missing data

Missing data is a threat to the data analysis procedure. Missing data means the data value which is not stored for a particular variable (Kang, 2013). The incomplete responses received by the respondents may lead to missing data. It is acceptable if the missing data is less than 10% of the entire data (Kline 1998; Byrne, 2001). In this case the percentage of missing data is less than 5%. Hence, the missing values could be ignored with a minor treatment (Olinsky et al., 2003; Kline, 2011).

### Outliers

Outliers are defined as scores that are different from the rest (Kline, 2011). Outliers can be categorized into two types: univariate and multivariate. The former occurs when an extreme value is observed on one variable, whereas the latter is an unusual combination of values or more than one variables (Tabachnick and Fidell, 2013; Schauer, 2014). In this study, no cases had extreme values.

## 4.9.4 Factor Analysis

Factor analysis is a statistical technique where large data sets are grouped and reduced to factors. It is used to analyse the correlation between multiple variables by their underlying factors. It helps to institute a structure that reduces large data sets to manageable classifications or factors (Field, 2009). Factor analysis helps in summarisation and data reduction. The choice of the technique is based on the research approach. An exploratory factor analysis aims at exploring the interrelationship among the variables and does not have an a priori fixed number of factors. The basic assumption behind exploratory factor analysis is that the researcher has a

general expectation about the findings but has not yet settled for a specific hypothesis. The instruments are new to the non-clinical population of blue collar employees of India, hence exploratory factor analysis was preferred. This study used exploratory factor analysis (EFA) for reduction of data and to investigate the interrelationship between variables.

## 4.9.5 Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis is majorly adopted in management and humanities and social sciences researches. This is due to the fact that the nature of domain allows investigation of behavioral variables which usually lead to large data sets. The exploratory factor analysis is an easy way to group items by placing highly related items together in one group (Hair et al., 2010). The two steps in performing an exploratory factor analysis are: extraction and rotation. Extraction helps identify the factors that underlie a number of variables. The principal component analysis (PCA) is the most preferred method of extraction. This is due to the fact that Principal Component Analysis (PCA) produces reliable results with minimum errors (Luck and Rubin, 1987). The second step is rotation. Rotation demonstrates the pattern of factor loadings in a systematic way. The implementation of the rotation technique makes the result easy to interpret. There are two approaches to the process of rotation: orthogonal and oblique. There is one significant difference between the two approaches. An orthogonal rotation is responsible for generating unrelated factors, whereas an oblique rotation generates correlated factors (Tabachnick and Fidell, 2013). Due to the generation of unrelated factors in an orthogonal technique, the results are less complicated and easy to report. It also minimises the number of factors as they are not related. In this study, a principal component analysis and an orthogonal technique with varimax rotation are used to perform a factor analysis using SPSS 16.

### 4.9.6 Revision of the Questionnaire

Based on the insights from the pilot study, certain revisions were made to the questionnaire. All the questions were made mandatory. Respondents could not proceed to the next question until they have answered the current one. This was done to maintain a flow in the questionnaire. The questionnaire also made use of two reverse questions to check the consistency of the received responses. The graphical representations in the form of logos and images were avoided to keep the length of the questionnaire short. Due to the choice of structured and scaled/rating questions, the alignment of the questionnaire was consistent. This consistency with alignment and font made it look neat and saved a lot of space. The Likert scale rating instruments were preferred due to the ease of the respondents to display their agreement or disagreement with a given statement. The questions were separated based on the topic and put together in a logical order. Funnel approach was used for the study. The questionnaire started with general demographic questions moving towards the specific or core questions.

The reliability of the questionnaire was checked by the internal consistency of each item on the questionnaire. Internal consistency was measured using Cronbach's alpha ( $\alpha$ ) method. The method is usually selected to measure the consistency of the questions. A Cronbach's alpha value  $\leq 0.90$  is indicative of an outstanding reliability value, 0.70-0.90 shows high reliability value, 0.50–0.70 shows moderate reliability value, and a value  $\leq 0.50$  indicates low reliability (Hinton et al., 2004). Cronbach's alpha coefficients of 0.7 is the bare minimum to show sufficient internal consistency. In this study, all the items during the principal component analysis in SPSS 16 did not show a value equal or greater than 0.7. Eight such items in the questionnaire were identified. These questions were analyzed to see the presence of a similar question in the questionnaire. Seven of them were eliminated. The last one was retained as there was no question similarly capturing particular attribute. It was reworded and reframed to achieve a bare minimum internal consistency value. The questionnaire used for pilot study

is attached in Appendix I (A) and the revised questionnaire used for the final study is also attached in Appendix I (B).

#### 4.9.7 Ethical Conduct

Ethical conduct can be defined as the way in which a process is conducted and the results are achieved keeping the ethical protocols in mind (Collis and Hussey, 2014). Ethical conduct involves consent of the participants and provides them with confidentiality of information. An ethical conduct was adopted by the researcher throughout the process. Written permission was obtained from the selected organisations before the data collection process. The participants were given complete information about the objective and relevance of the study. The participants could back out from the study at any given moment. The participants was voluntary. The names of the participants were kept confidential. The participants were ensured that the data collected will only be used for academic purposes. Before the beginning of the questionnaire, a section explained the objective of the study and ensured confidentiality of the collected information. The name of the respondents were not recorded in the questionnaire to maintain anonymity and avoid any kind of bias. The participants were provided with the researcher's contact information in case of any clarification required regarding the study.

## 4.10 Final Study

The study had three major objectives. To investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study; to statistically validate and administer a Mindfulness intervention in order to establish its effectiveness; and to investigate the relationship between Wellbeing and Mindfulness. In the context of these objectives, a proposed conceptual framework was developed to understand the factors that affect the effectives of Mindfulness training programmes at the workplace. To be specific, the study focuses on the role of Mindfulness on the equation between Ostracism, Belongingness,

Wellbeing, Counterproductive Work Behavior and Organizational Citizenship Behavior. A longitudinal study was adopted where the responses were collected from the same set of respondents before and after the training programme.

### 4.10.1 Final Data Collection

The process of data collection was targeted as obtaining meaningful information from the respondents using a well-designed questionnaire. In this study, the researcher first made a choice of the sector and organizations to be included in the process of data collection. This process was based on logical reasoning and strong justification to fulfil the research objective. A brief overview of the data collection process is presented here, while the detailed steps are mentioned in the forthcoming sections (section 4.10.2 - 4.10.6). The justification for the choice of the sector is given in Section 4.10.5. The organizations were reached out with a blueprint of the plan to allow access to their human resource. The human resource manager started collecting the name of the employees who volunteered for the training programme. After gaining a particular convenient number of respondents willing to take part in the process, a date was finalized for the training programme. This date was finalized in consultation with human resource and learning and development manager of the organization. The process for the next four weeks of self-administered training was explained to the respondents. The medium of training was virtual keeping the COVID-19 protocols the organization in mind. Follow up mail and reminders were sent on the employee email id for the next four weeks. This process was followed for each respondent.

A post training session was conducted to understand the changes experienced by the employees with the training programme. Two renowned companies from the power sector participated in the study. The duration of data collection process was from February 2021 to December 2021. Ethical protocols were followed and consent from each employee and the organization was taken before beginning the process. The employees could back out from the

training programme at any time due to any perceived inconvenience. The instrument/questionnaire was circulated four times during the study. Instrument 1 was circulated at the pre training session at the Government power sector organization. Instrument 2 at the post training session at the Government power sector organization. Instrument 3 at the pre training session at the private power sector organization. Instrument 4 at the post training session at the private sector organization. All the four instruments were similar in structure and included same items.

For the final data collection, a similar approach as the pilot study was adopted. One public sector and one private sector organization were selected for the study. A set of 273 responses from the public sector organization and 231 responses from the private sector organization were received. There were three objectives of the study: to investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study; to statistically validate and administer a Mindfulness intervention in order to establish its effectiveness; and to investigate the relationship between Wellbeing and Mindfulness. Structural Equation Modelling software (SmartPLS) was used to understand the interrelationships between the variables and paired t-test analysis was conducted to explore the effectiveness of the Mindfulness training programme. The statistical techniques and the results are explained in detail in Chapter 5.

## 4.10.2 Sampling Procedure

The main aim of the data collection process if to observe or identify patterns in the data collected from the respondents. To generalize the findings, the researcher always intends that the findings or insights are representative of the entire population. Hence, a sample is selected. A sample is a small group of respondents who represent the characteristics of the entire population. To provide a definition, sample is a "subset of those entities from which evidence

is gathered" (Easterby -Smith et al., 2012). The following section provides further details on the sample design.

## 4.10.3 Sample Design

An appropriate sampling design aids the research process by reducing the bias and eliminating sampling errors. Hence it is extremely important to understand the objective as well as purpose of the research to arrive at an appropriate sample design. In this study, for both the companies that were chosen, all the employees were apprised of the study and their willingness to participate in the study was solicited. Based on the objective of the study, voluntary/self-chosen sample were chosen for the study. The samples were selected on the basis of their willingness to be a part of the four weeks training programme. There are majorly two types of sampling designs: probability sampling and non-probability sampling. Probability sampling is mostly adopted for quantitative research. It involves simple random sampling, systematic sampling, stratified sampling, cluster sampling, stage sampling and double sampling. In order to represent the entire population, probability sample include random subjects from a niche population (Gray, 2017). Whereas when the sample is chosen from an unknown population, it is termed as non-probability sampling. Non-probability sampling includes the convenience sampling, snowball sampling and purposive sampling. This study adopts non- probability sampling. Here, convenience sampling is conducted to ensure easily accessibility of data from public and private sector organization of India. In this study, the objective was to validate the efficiency of the mindfulness training programme. The training programme is a self-administered training programme for a period of four weeks. The researcher intervenes in the process with regular follow ups and reminders. But to complete a training programme of four weeks would requires a lot of interest and trust on the process. Hence convenience samples were preferred. Another strong reason was the availability of time. The self-training process required an individual to devote a certain amount of time every day to the process for next four weeks. This is a big

commitment and hence required respondents who are enthusiastic about the process. The samples were selected on the basis of their willingness to be a part of the four weeks training programme.

## 4.10.4 Sample Size

Sample size forms a very important part of the data collection process (Blair et.al, 2014). The consideration of cost and time available with researcher is an important criteria for determination of the sample size. However, while conducting a quantitative analysis a large sample size is preferred. This is due to the fact that selecting the largest possible sample would be a better representative of the population.

Gorsuch (1983) suggests a thumb rule regarding sample size determination which states that there should be minimum five respondents per variable. In addition of this, while developing the conceptual framework, Structural Equation Modelling was decided as an appropriate statistical technique. Harris and Schaubroeck (1990) suggests there should be a minimum sample size of 200 respondents to ensure smooth analysis using SEM. Hair et.al, 2010 confirms the same by stating that the minimum sample size for usage of SEM should be 250 respondents or more. The minimum sample parameter of 250 respondents for SEM was also confirmed by Kline (2005) and Gerbing and Anderson (1993). Some researchers went ahead and classified the sample sizes as follows: 100 respondents as poor, 200 respondents as reasonable, 300 respondents as good, 500 respondents as very good and more than 1000 respondents as an excellent choice (Comrey and Lee 1992; Mvududu and Sink, 2013). The sample size suggested from the literature review was put to test and a pre-pilot analysis was conducted at the University to determine the sample size. The pre-pilot analysis confirmed the availability of minimum 250 respondents or more to generate meaningful insights using the Structural Equation Modelling. The total sample size for the study was attained at 504 respondents.

#### 4.10.5 Justification of the Choice of Sector

The study is carried out in the power sector of India. A public sector (government undertaking) and a private sector organization were selected for the study. The justification for the choice of a public sector and a private sector organization is explained in this section.

Public Sector: The choice of the public sector for the study is based on significant reasons. Government jobs are a symbol of prestige and security in society. There could be a possibility that despite facing issues of Ostracism and Counterproductive Work Behavior in the job environment, the employees would not quit due to the stability associated with the job (Perry & Porter, 1982; Karl et.al, 1998). It is also possible that the organization might be dissatisfied with the behavioral traits of an employee. Despite such issues, Government organizations might be reluctant to lay off people from the organization due to their employment policies (Goel & Rekhi, 2013; Ghosh et.al, 2014; Shukla, 2014). A recent example of this is the takeover of Air India by the Tata group from private sector (Bhattacharya & Khan, 2022). Air India formerly being a Government owned airline, was always reluctant to lay off the difficult employees. Even after the acquisition, since Tata group is known for placing employees first, they are not able to lay off difficult employees due to the policy of the company (Sabharwal & Mantri, 2022). In addition to this sometimes due to the affirmative action mandate potentially mismatched candidates gain entry into the organizations. Due to the legal regulations associated with the Government organizations and their focus on affirmative action, such organizations make them an ideal choice for this study. Another significant factor in the equation is the infrastructure involved. Government organizations have better infrastructure for training programmes and policies supporting organizational Wellbeing. Due to the scale of the organizations, there is already an existing set of learning and development policies (Wright, 2001). This makes the organizations more open and supportive of conducting such interventions. Government jobs are also

known to have provisions representing various communities, hence there is a diversified workforce involved (Scoppa, 2009). The diversification makes the environment suitable for validating a Mindfulness intervention. Hence the choice of conducting a part of the study at public sector was made.

Private Sector: The choice of the private sector for the study is based on significant reasons. Private sector organizations in the power sector are going through rapid expansion. Due to this, there are a lot of policy changes in these organizations. These policy changes make the private sector organizations in the power sector more vulnerable to emotional and behavioral complexities at the workplace. There could be a possibility that despite facing issues of Ostracism and Counterproductive Work Behavior in the job environment, the employees would not quit due to the remuneration or perks associated with the job. In addition to this, the selected private sector organization has gone through an acquisition in the recent past. Due to this, the organization is still trying to set up a learning and development infrastructure for the specific unit. This makes the organization suitable for study of varied complex job environmental variable and behavioral outcomes at the workplace. The study also acknowledges the need of a positive Mindfulness intervention at a recently acquired organization selected for the study. Hence, the choice of a public and private sector organization is justified and suitable for the study.

# **4.10.6** Final Sample for the Study

This research was carried out in two esteemed organizations in the power sector of India. The data collection was conducted by distributing a total of 507 questionnaires. The questionnaire was first distributed in the public sector organization and then in the private sector organization. The questionnaire was distributed to 275 employees in the public sector organization and 232 employees in private sector organization of India. Professionals from the middle management

were invited for the psycho-educational training session on Mindfulness. Post which an instruction manual was provided for the 4 weeks self-training module. The collected data was checked for the missing, redundant and incomplete responses. Later two responses were omitted due to missing data from the public sector responses, and 273 responses were considered for the analysis. One response was omitted due to incomplete information from the private sector responses, and 231 responses were considered for the analysis. Out of 507 distributed questionnaires, 504 responses were considered for statistical analysis. The filtered responses were accepted for further analysis.

**Table 4.2 Summary of Respondents** 

| Demographic<br>Profiling | Public Sector (Pre and Post)                              | Private Sector (Pre and Post)               |  |  |
|--------------------------|---|---|--|--|
| No. of<br>Respondents    | 273 respondents   | 231 respondents                             |  |  |
| Gender                   | 187 Participants – Male                                   | 154 Participants – Male                     |  |  |
|                          | 86 Participants- Female                                   | 77 Participants- Female                     |  |  |
| Age                      | 189 Participants (Below 30                                | 174 Participants (Below 30 years)           |  |  |
|                          | years)  | 37 Participants (31-35 years)               |  |  |
|                          | 51 Participants (31- 40 years)                            | 20 Participants (Above 35 years)            |  |  |
|                          | 33 Participants (Above 40 years)                          |   |  |  |
| Marital Status           | 154 Participants (Unmarried)                              | 137 Participants (Married)                  |  |  |
|                          | 117 Participants (Married)                                | 94 Participants (Unmarried)                 |  |  |
|                          | 2 Participants<br>(Separated/Widowed/Divorced<br>/Others) | None<br>(Separated/Widowed/Divorced/Others) |  |  |
| Educational              | 134 Participants (MBA)                                    | 123 Participants (MBA)                      |  |  |
| Qualification            | 112 Participants (B.TECH)                                 | 108 Participants (B.TECH/B.E.)              |  |  |
|                          | 23 Participants (M.TECH)                                  |   |  |  |
|                          | 4 Participants ( PhD)                                     |   |  |  |

| Professional<br>Designation | 153 Participants (Senior Managers)  111 Participants (Middle Management)  9 Participants (Top Management) | 122 Participants (Senior Managers) 104 Participants (Middle Management) 5 Participants (Top Management) |
|-----------------------------|---|---|
| Year of Joining             | 189 Participants (During or after 2019)  84 Participants (Joined before 2019)                             | 166 Participants (During or after 2019) 65 Participants (Joined before 2019)                            |

The responses collected pre and post the training programme were statistically analyzed to investigate interrelationships in the proposed conceptual model.

# **4.11 Overview of Statistical Techniques**

Quantitative research mostly adopts structured interviews as well as observations (Saunders et al., 2016). Statistical tools such as SPSS 16, SmartPLS 3.3 were selected for the data analysis. Data analysis methods such as hierarchical regression, structured equation modelling and paired t-test were adopted to empirically validate the findings. The justification of the choice of techniques is given in Chapter 5. The empirical analysis was done pre and post the introduction of the intervention on a sample size of 504 respondents. The process was separately conducted for a public as well as private sector organization.

# **4.12 Mindfulness Training Intervention**

The sequence of the Mindfulness intervention is explained through the following steps:

This study adopted a Mindfulness training interventions with varied facets of emotional regulation and behavioral outcomes. The details of the adopted Mindfulness training intervention are explained as follows. The Mindfulness training intervention is a self-training intervention.

- A 2.5 hour long psycho education session on neurological and physical benefits of Mindfulness is conducted by the researcher. The session explains about the practical applicability of the intervention to the participants.
- The participants are asked to maintain a good book. A good book is a diary in which an individual is supposed to note down at least 3 positive mindful day to day experience date wise every day for next 4 weeks.
- The participants are asked to download a free android app 'Step up go app' to keep record of their daily physical activity. The minimum recommended steps to be covered every day is 2000 steps per day (2 kilometres) for next 4 weeks. The participants are supposed to keep a record of these steps in a log.
- The participants are supposed to practice Mindfulness meditation 10 minutes daily for 4 weeks and record the same in the provided logs (John Kabat Zin Guided Meditation).
- The participants are supposed to adopt formal and informal way of practising Mindfulness at work. This process involves mindful communication and mindful team meetings. A minute's silence before a group meeting may be a good example of mindful team meetings.
- The participants are supposed to read the chapters of the most influential book on Mindfulness by Jon Kabat-Zinn 'Wherever you go, there you are'. The participants are supposed to read 5 pages daily and record the same in the provided log.
- A follow up feedback session is conducted by the researcher after 4 weeks. A sample log
  to be filled by the participants is displayed below.

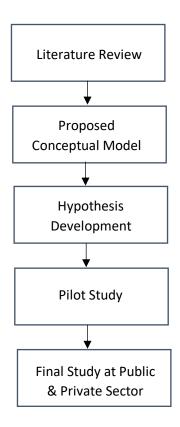
**Table 4.3 Sample Log for Mindfulness Intervention** 

| Date   | 1 <sup>st</sup> January,<br>2022 | 2 <sup>nd</sup> January,<br>2022 | 3 <sup>rd</sup> January,<br>2022 | 4 <sup>th</sup> January,<br>2022 |
|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Filled the 'Good<br>Book'  | Yes                              | Yes                              | Yes                              | Yes                              |
| Number of steps<br>taken (Step up go<br>app)                       | 2000                             | 2050                             | 2100                             | 2000                             |
| Practiced the<br>Mindfulness<br>Meditation                         | Yes                              | Yes                              | Yes                              | Yes                              |
| Chapters of the book<br>"Wherever you go,<br>there you are".       | Page no. 1-5                     | Page no. 5-10                    | Page no. 10-15                   | Page no. 15-20                   |
| Mindfulness at work<br>(Mindful<br>communication/<br>team meeting) | Yes                              | Yes                              | Yes                              | Yes                              |
| Changes observed   |                                  |                                  | •                                |                                  |

#### 4.13 Conclusion

The chapter explains the step by step process adopted for the study. The chapter explains in detail the research design adopted for the study along with the justification for the adoption of such research design. It also lists down the measurement instruments and the sampling techniques adopted for the study.

The chapter also explains the ethical protocols and considerations involved in this research. The results of the final study and the derived interrelationships between the variables are explained in detail in Chapter 5. A flowchart is depicted below to explain the flow of research accomplished till Chapter 4.



**Figure 4.3 Flowchart of Research Progress** 

# **Chapter 5: Data Analysis**

## 5.1 Introduction

This chapter presents the results of the pilot and the final data analysis in detail. The pilot study results discuss the distribution of demographic profile, results of exploratory factor analysis and validity assessment. The final study results comprise of demographic profiling of the respondents, path analysis results, paired-t test analysis results, hierarchical regression results and the hypothesis testing results respectively. Demographic profiling is an important part where any patterns concerning the similarity of demographic characteristics can be traced and reported. The flowchart depicting visual summary of the chapter is presented below.

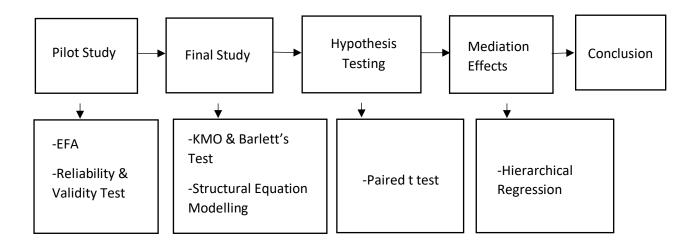


Figure 5.1 Flowchart Summarizing Data Analysis

# **5.2 Results from Pilot Study**

In the forthcoming sections, details of the demographic profiling, results of exploratory factor analysis and validity assessment are explained.

## 5.2.1 Distribution of Demographic Profile

This section provides a detailed demographic profiling of the respondents of the pilot study. 117 responses were considered for the analysis. 65 respondents (55.55%) were male, 52 respondents (44.44%) were female. 74 respondents (63.24%) were married. 81 respondents (69.23%) were Doctors from a Government hospital and remaining 36 respondents (30.76%) were nursing and administrative staff from the same Government hospital.

# **5.2.2 Results from Exploratory Factor Analysis (EFA)**

The final study included a web based questionnaire that took approximately 15 minutes to complete. The study included six variables. Ostracism was measured by a 10 item scale (Ferris, 2008). Belongingness was measured by a 10 item scale 'Need to Belong Scale' (Leary, Kelly, Cottrell, and Schreindorfer 2013). Mindfulness was measure by a 15 item 'Mindful Attention Awareness Scale (MAAS) (Brown, K.W. & Ryan, R.M., 2003). Wellbeing was measured by a 20-item 'Job-related affective Wellbeing scale' (JAWS) (Katwyk, Fox, Spector and Kalloway, 2000). Counterproductive Work Behavior was measured by a 19-item 'workplace deviance scale' (Bennett and Robinson 2000). Organizational Citizenship Behavior was measured by a 16 item scale (Lee and Allen, 2002). Along with these variables, there were six demographic open-ended questions: age, gender, marital status, educational qualification, professional designation and year of joining. The questionnaire had a total of 96 questions while the pilot run. Principal component analysis was conducted using the SPSS 16 software to check for the factor loadings and Cronbach's alpha values associated with each item on the questionnaire. It was found out that 8 items on the questionnaire had a factor loading value<0.6 and the Cronbach's alpha value< 0.7. These eight items were individually analysed to check for duplication and relevance. It was found out that item no. 2, 5 from the Belongingness scale, item no. 9 from the Mindfulness scale, item no. 14, 19 from the Counterproductive Work Behavior scale, and item no. 3, 10 from the Wellbeing scale could be eliminated as there are similar items in the questionnaire that capture the same trait. Whereas item no. 16 from the Counterproductive Work Behavior scale could not be eliminated as it did not have any substitute item to capture the same trait. Hence, seven out of eight identified items from the pilot study were eliminated to arrive at the final questionnaire. The final questionnaire consists of 89 items.

# **5.2.3** Results from Validity Assessment

Construct validity can be investigated with the help of two components: convergent validity and discriminant validity. The assessment of the convergent and discriminant validity are explained in detail in the following sub-sections.

## **5.2.3.1** Convergent Validity

In SmartPLS software, the convergent validity can be measured with three statistical parameters: factor loading, average variance extracted (AVE) and composite reliability. To attain statistical significant results the factor loadings should not be less than 0.5, the average variance extracted (AVE) should be equal to or greater than 0.5 and the composite reliability value should be equal or greater than 0.6. The obtained convergent validity values are displayed in the following table.

**Table 5.1 Convergent Validity** 

| Construct      | Item | Standardized<br>Factor Loadings | Average Variance<br>Extracted (AVE) | Composite<br>Reliability (CR) |
|----------------|------|---------------------------------|-------------------------------------|-------------------------------|
| Ostracism (OM) | OM 1 | 0.813                           | 0.694                               | 0.807                         |
|                | OM 2 | 0.711                           |                                     |                               |
|                | OM 3 | 0.693                           |                                     |                               |
|                | OM 4 | 0.736                           |                                     |                               |

|                    | OM 5  | 0.765 |       |       |
|--------------------|-------|-------|-------|-------|
|                    | OM 6  | 0.822 |       |       |
|                    | OM 7  | 0.771 |       |       |
|                    | OM 8  | 0.682 |       |       |
|                    | OM 9  | 0.673 |       |       |
|                    | OM 10 | 0.806 |       |       |
| Belongingness (BG) | BG 1  | 0.735 | 0.565 | 0.721 |
|                    | BG 2  | 0.741 |       |       |
|                    | BG 3  | 0.691 |       |       |
|                    | BG 4  | 0.812 |       |       |
|                    | BG 5  | 0.622 |       |       |
|                    | BG 6  | 0.634 |       |       |
|                    | BG 7  | 0.725 |       |       |
|                    | BG 8  | 0.803 |       |       |
| Mindfulness (MS)   | MS 1  | 0.648 | 0.528 | 0.634 |
|                    | MS 2  | 0.652 |       |       |
|                    | MS 3  | 0.721 |       |       |
|                    | MS 4  | 0.810 |       |       |
|                    | MS 5  | 0.672 |       |       |
|                    | MS 6  | 0.671 |       |       |
|                    | MS 7  | 0.724 |       |       |
|                    | MS 8  | 0.713 |       |       |
|                    |       |       |       |       |

|                | MS 9  | 0.704 |       |       |
|----------------|-------|-------|-------|-------|
|                | MS 10 | 0.802 |       |       |
|                | MS 11 | 0.813 | _     |       |
|                | MS 12 | 0.614 |       |       |
|                | MS 13 | 0.621 |       |       |
|                | MS 14 | 0.613 |       |       |
| Wellbeing (WB) | WB 1  | 0.714 | 0.527 | 0.813 |
|                | WB 2  | 0.732 |       |       |
|                | WB 3  | 0.681 |       |       |
|                | WB 4  | 0.624 |       |       |
|                | WB 5  | 0.721 |       |       |
|                | WB 6  | 0.711 |       |       |
|                | WB 7  | 0.692 |       |       |
|                | WB 8  | 0.741 | -     |       |
|                | WB 9  | 0.803 | -     |       |
|                | WB 10 | 0.713 |       |       |
|                | WB 11 | 0.770 |       |       |
|                | WB 12 | 0.641 |       |       |
|                | WB 13 | 0.607 |       |       |
|                | WB 14 | 0.771 |       |       |
|                | WB 15 | 0.814 |       |       |
|                | WB 16 | 0.613 |       |       |

|                                     | WB 17  | 0.661 |       |                                       |
|-------------------------------------|--------|-------|-------|---------------------------------------|
|                                     |        |       |       |                                       |
|                                     | WB 18  | 0.746 |       |                                       |
| Counterproductive<br>Work Behavior  | CWB 1  | 0.713 | 0.672 | 0.821                                 |
| (CWB)                               | CWB 2  | 0.634 |       |                                       |
|                                     | CWB 3  | 0.752 |       |                                       |
|                                     | CWB 4  | 0.665 |       |                                       |
|                                     | CWB 5  | 0.721 |       |                                       |
|                                     | CWB 6  | 0.742 |       |                                       |
|                                     | CWB 7  | 0.611 |       |                                       |
|                                     | CWB 8  | 0.647 |       |                                       |
|                                     | CWB 9  | 0.732 |       |                                       |
|                                     | CWB 10 | 0.776 |       |                                       |
|                                     | CWB 11 | 0.783 |       |                                       |
|                                     | CWB 12 | 0.692 |       |                                       |
|                                     | CWB 13 | 0.703 |       |                                       |
|                                     | CWB 14 | 0.714 |       |                                       |
|                                     | CWB 15 | 0.654 |       |                                       |
|                                     | CWB 16 | 0.721 |       |                                       |
|                                     | CWB 17 | 0.772 |       |                                       |
| Organizational Citizenship Behavior | OCB 1  | 0.621 | 0.627 | 0.813                                 |
| (OCB)                               | OCB 2  | 0.662 |       |                                       |
|                                     | OCB 3  | 0.712 |       |                                       |
|                                     | -      |       |       | · · · · · · · · · · · · · · · · · · · |

| OCB 4  | 0.824  |   |
|--------|--|---|
| OCB 5  | 0.657  |   |
| OCB 6  | 0.754  |   |
| OCB 7  | 0.723  |   |
| OCB 8  | 0.647  |   |
| OCB 9  | 0.753  |   |
| OCB 10 | 0.663  |   |
| OCB 11 | 0.711  |   |
| OCB 12 | 0.802  |   |
| OCB 13 | 0.682  |   |
| OCB 14 | 0.746  |   |
| OCB 15 | 0.695  |   |
|        | 0.745  |   |
|        | OCB 5 OCB 6 OCB 7 OCB 8 OCB 9 OCB 10 OCB 11 OCB 12 OCB 13 OCB 14 | OCB 5       0.657         OCB 6       0.754         OCB 7       0.723         OCB 8       0.647         OCB 9       0.753         OCB 10       0.663         OCB 11       0.711         OCB 12       0.802         OCB 13       0.682         OCB 14       0.746         OCB 15       0.695 |

From the above table, it is evident that all the items demonstrate factor loadings more than or equal to 0.5, the average variance extracted (AVE) is greater than or equal to 0.5 and the composite reliability value is greater than 0.6. Hence, the convergent validity values can be considered as statistically significant.

## **5.2.3.2 Discriminant Validity**

The traditional way to assess discriminant validity is by contrasting the average variance extracted (AVE) values with the square of the correlation estimate. Ideally the discriminant validity is said to be significant when the average variance extracted (AVE) values are larger than the squared correlation estimate (Fornell and Larcker, 1981). The SmartPLS software

eases the entire process by contrasting the mentioned values and returning the results as significant or not-significant. In this study, all the generated average variance extracted (AVE) values were greater than the squared correlation estimate and hence the results from the SmartPLS software demonstrated significant discriminant validity for each variable. Majorly the Fronell-Larcker criterion, HTMT Ratio and the Cross loadings were used to assess the discriminant validity. Fronell-Larcker criterion is one of the most popular techniques used to check the discriminant validity of measurements models. According to this criterion, the square root of the average variance extracted by a construct must be greater than the correlation between the construct and any other construct. The recommended value of HTMT ratio should be below 0.9. HTMT ratio must be ideally less than 1.00 to approve of discriminant validity (Henseler, Ringle, & Sarstedt, 2015). The results of the pre and post Mindfulness intervention analysis at the public and private sector are given below. All the sets of pre and post data show the HTMT value <1, hence the results approve of the discriminant validity. The results from HTMT (Heterotrait Monotrait Ratio of Correlations) and cross loadings in the premindfulness intervention analysis at the public sector organization are displayed below.

**Table 5.2 HTMT & Cross Loadings in Public Sector (Pre- Mindfulness Intervention)** 

|     | Laten | t Variabl | Is Fronell-Larcker criterion |       |       |    |                            |
|-----|-------|-----------|------------------------------|-------|-------|----|----------------------------|
|     | BG    | CWB       | MS                           | OCB   | OM    | WB | met? (Square root of AVE > |
|     |       |           |                              |       |       |    | LVC)                       |
| BG  |       |           |                              |       |       |    | Yes                        |
| CWB | 0.541 |           |                              |       |       |    | Yes                        |
| MS  | 0.452 | 0.602     |                              |       |       |    | Yes                        |
| OCB | 0.515 | 0.532     | 0.552                        |       |       |    | Yes                        |
| OM  | 0.524 | 0.489     | 0.495                        | 0.523 |       |    | Yes                        |
| WB  | 0.492 | 0.535     | 0.480                        | 0.510 | 0.546 |    | Yes                        |

Note: The square root of AVE values is shown on the diagonal and represented in bold and italics font; non-diagonal elements are the latent variable correlations (LVC).

**Table 5.3 HTMT & Cross Loadings in Private Sector (Pre- Mindfulness Intervention)** 

|     | Late  | nt Varia | Is Fronell-Larcker criterion |       |       |    |                            |
|-----|-------|----------|------------------------------|-------|-------|----|----------------------------|
|     | BG    | CWB      | MS                           | OCB   | OM    | WB | met? (Square root of AVE > |
|     |       |          |                              |       |       |    | LVC)                       |
| BG  |       |          |                              |       |       |    | Yes                        |
| CWB | 0.541 |          |                              |       |       |    | Yes                        |
| MS  | 0.511 | 0.512    |                              |       |       |    | Yes                        |
| OCB | 0.421 | 0.351    | 0.402                        |       |       |    | Yes                        |
| OM  | 0.414 | 0.439    | 0.335                        | 0.510 |       |    | Yes                        |
| WB  | 0.419 | 0.427    | 0.372                        | 0.422 | 0.501 |    | Yes                        |

Note: The square root of AVE values is shown on the diagonal and represented in bold and italics font; non-diagonal elements are the latent variable correlations (LVC).

**Table 5.4 HTMT & Cross Loadings in Public Sector (Post- Mindfulness Intervention)** 

|     | Laten | t Variabl | Is Fronell-Larcker criterion met? |       |       |    |                              |
|-----|-------|-----------|-----------------------------------|-------|-------|----|------------------------------|
|     | BG    | CWB       | MS                                | OCB   | OM    | WB | (Square root of AVE $>$ LVC) |
| BG  |       |           |                                   |       |       |    | Yes                          |
| CWB | 0.431 |           |                                   |       |       |    | Yes                          |
| MS  | 0.412 | 0.507     |                                   |       |       |    | Yes                          |
| OCB | 0.392 | 0.432     | 0.511                             |       |       |    | Yes                          |
| OM  | 0.412 | 0.435     | 0.395                             | 0.523 |       |    | Yes                          |
| WB  | 0.371 | 0.435     | 0.351                             | 0.431 | 0.552 |    | Yes                          |

Note: The square root of AVE values is shown on the diagonal and represented in bold and italics font; non-diagonal elements are the latent variable correlations (LVC).

**Table 5.5 HTMT & Cross Loadings in Private Sector (Post- Mindfulness Intervention)** 

|     | Laten | t Variable | Is Fronell-Larcker criterion met? (Square root of AVE > |       |       |    |      |
|-----|-------|------------|---|-------|-------|----|------|
|     |       |            |   |       |       |    | LVC) |
|     | BG    | CWB        | MS  | OCB   | OM    | WB |      |
| BG  |       |            |   |       |       |    | Yes  |
| CWB | 0.520 |            |   |       |       |    | Yes  |
| MS  | 0.421 | 0.501      |   |       |       |    | Yes  |
| OCB | 0.415 | 0.412      | 0.531   |       |       |    | Yes  |
| OM  | 0.510 | 0.407      | 0.452   | 0.452 |       |    | Yes  |
| WB  | 0.413 | 0.415      | 0.401   | 0.411 | 0.516 |    | Yes  |

Note: The square root of AVE values is shown on the diagonal and represented in bold and italics font; non-diagonal elements are the latent variable correlations (LVC).

## **5.3 Results of the Final Study**

The results from the final data analysis are explained in detail in the following sections. A pre and post Mindfulness training study was conducted at the public sector organization. A pre and post Mindfulness training study was conducted at the private sector organization. The response rates for the study are mentioned in the following sub-section.

# **5.3.1 Response Rate**

275 respondents had filled the questionnaire in the pre-training session at the public sector organization. Two of the missing data cases were eliminated and hence 273 final responses were considered for the analysis. A response rate of 99.27% was attained for the public sector study. This was due to the fact that the respondents volunteered for the Mindfulness training programme and were looking forward to the results of the same.

273 respondents had filled the questionnaire in the pre-training session at the private sector organization. There were no missing cases reported in this study. All the responses received were complete and a total of 273 responses were considered for the data analysis. A response rate of 100% was attained for the private sector study.

There was a probability of the sample demonstrating non-response bias. Non-response bias can occur when subjects who refuse to take part in a study, or who drop out before the study can be completed, are systematically different from those who participate. Non-response bias can be dealt in an experimental study by minimization of occurrence of non-response. Non-response becomes a critical issue and interferes with the result when response rates fall below 70% (Berg, 2005; Prince, 2012). In this study, the non-response percentage is negligible, hence the non-response bias can be ignored.

The response rates obtained for the study were statistically appropriate. This could be due to two probable reasons. The first one could be the ease to fill a web administered

questionnaire at one's own speed. The second one could be the respondent's volunteering for the study which reduces the chances of incomplete responses or dropping out from the process.

# 5.3.2 Distribution of Demographic Profile

The questionnaire captured information regarding four different demographic variables. This section systematically analysis and reports the demographic information captured during the study. The demographic variables under study are age, gender, marital status, highest level of education and professional designation, and year of joining. The detailed analysis of each demographic variables is explained in the following sub-sections.

## **5.3.2.1** Gender

The results of the pre and post training analysis at the public sector organization reveals that 187 participants (68.49%) out of 273 participants were male. The remaining 86 participants (31.50%) were female. The results of the pre and post analysis at the private sector organization reveals that 154 participants (66.66%) out of 231 participants were male. The remaining 77 participants (33.33%) were female.

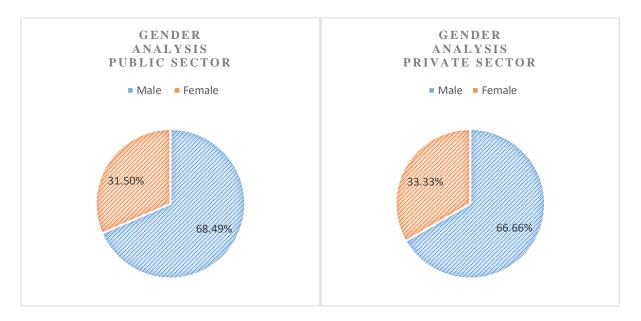


Figure 5.2 Gender Profiling

## 5.3.2.2 Age

The results of the pre and post Mindfulness training analysis at the public sector organization reveals that 189 participants (69.23%) out of 273 participants were below 30 years of age. The second highest number of participants (51 participants, 18.68%) belonged to the age bracket of 31-40 years. The results of the pre and post Mindfulness training analysis at the private sector organization reveals that 174 participants (75.32%) out of 231 participants were below 30 years of age. The second highest number of participants (37 participants, 16.01%) belonged to the age bracket of 31-35 years.

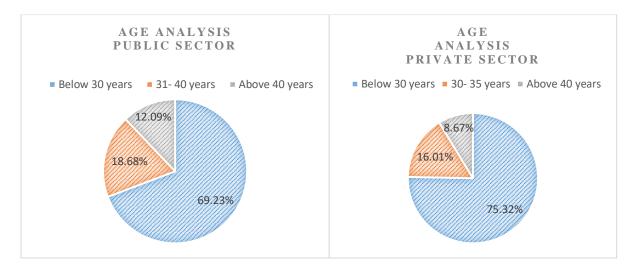


Figure 5.3 Age Profiling

## **5.3.2.3 Marital Status**

The results of the pre and post Mindfulness training analysis at the public sector organization reveals that 154 participants (56.41%) out of 273 participants were unmarried. 117 participants (42.85%) were married and 2 participants (0.73%) belonged to the 'other' option category.

The results of the pre and post Mindfulness training analysis at the private sector organization reveals that 137 participants (59.30%) out of 231 participants were married. 94 participants (40.69%) were unmarried and none of them chose the 'other' option category.

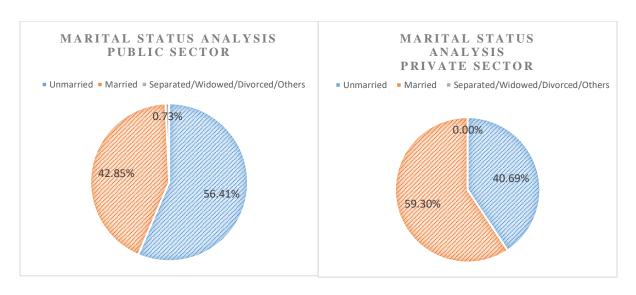


Figure 5.4 Marital Status Profiling

# 5.3.2.4 Educational Qualification

The largest number of participants (134 participants) in the pre and post Mindfulness training analysis at the public sector organization reported that their highest level of education was MBA (49.08%). 112 participants (41.02%) mentioned their highest level of education as B.TECH, 23 participants (8.42%) as M.TECH and 4 participants (1.46%) as Ph.D.

In the pre and post Mindfulness training analysis at the private sector organization, 123 participants reported that their highest level of education was MBA (53.24%). 108 participants (46.75%) mentioned their highest level of education as engineering (B.TECH/B.E.).

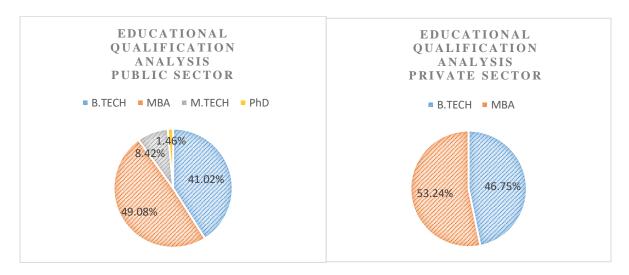


Figure 5.5 Educational Qualification Profiling

## **5.3.2.5 Professional Designation**

The pre and post Mindfulness training analysis at the public sector organization reported the highest percentages of respondents (153 participants) were senior managers (56.04%), while 40.65% were officials from middle management and 3.29% were officials from top management. The pre and post Mindfulness training analysis at the private sector organization), the highest numbers of respondents (122 participants) were senior managers (52.81%), while 45.02% were officials from middle management and 2.16% were officials from top management.

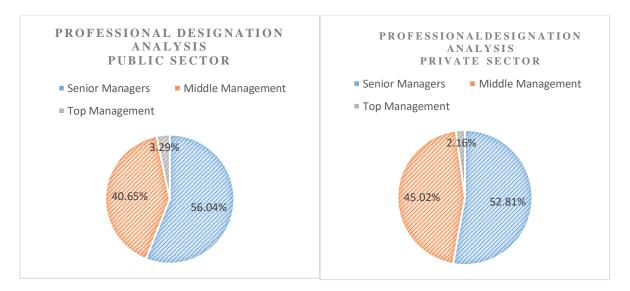


Figure 5.6 Professional Designation Profiling

# 5.3.2.6 Year of Joining

The pre and post Mindfulness training analysis at the public sector organization reported that highest percentage of respondents were employees (189 participants) 68.72% who joined during or after 2019, while 31.27% respondents were employees who joined before 2019. In the pre and post Mindfulness training analysis at the private sector organization, the highest number of respondents were employees (166 participants) 71.86% who had joined before 2019, while 28.13% respondents were employees who joined after 2019.

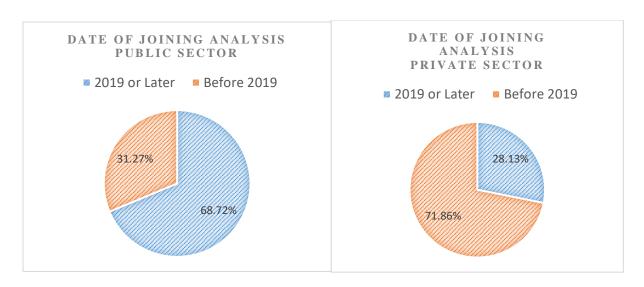


Figure 5.7 Year of Joining Profiling

# 5.3.3 Results from Kolmogorov and Shapiro Method

The two most reliable statistical methods to assess the normality of data sets are: the Kolmogorov and Shapiro method, and the Skewness and Kurtosis test. The Kolmogorov and Shapiro method is a reliable and validated statistical method for assessment of normality. Kolmogorov and Shapiro method displays the data set as normal when the p value >0.5. The results of the study involving 504 respondents' displays a deviation range from 0.112 to 0.210 at a significance level of p < 0.001. The results obtained from the K-s (the Kolmogorov and Shapiro) were significant and hence the data set was distributed normally. To validate the findings from this method, the skewness and kurtosis method was conducted. The details of the analysis are mentioned in the following sub-section.

#### 5.3.4 Results from Skewness and Kurtosis

Skewness and kurtosis are essential parameters of data normality. In ideal scenario, the skewness and kurtosis values for the calculated variables should be zero. This shows that the data set has a normal distribution. But while conducting the study, a lot of external factors interfere with the set up and the replication of an ideal scenario is not possible. Hence,

researches in this field suggest a value of  $\pm 3$  to be acceptable for normal distribution in the skewness and kurtosis method (Kline 2005; Hair et.al, 2010). All the measured variables had kurtosis values between -0.571 and 1.322 and skewness values between -0.152 and -1.451. The calculated skewness and kurtosis value for the given data set falls within an acceptable range. Hence, it can be validated that the data set is normally distributed and can be considered for further data analysis.

## 5.3.5 Results from Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The results of the Kaiser-Meyer-Olkin (KMO) of sampling adequacy and Barlett's test of sphericity are explained here. The minimum value required for the Kaiser-Meyer-Olkin (KMO) is 0.60, while the Bartlett's test should have a value of p < 0.05. The pre Mindfulness training analysis at the public sector indicates that the value of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.857 and that the Bartlett's test of sphericity was p < 0.05). The results obtained from the analysis display a statistically significant value. The results obtained from post Mindfulness training analysis at the public sector show that the value of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.813 and that the Bartlett's test of sphericity was p < 0.05). The results from the pre Mindfulness training analysis at the private sector demonstrate that value of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.751 and that the Bartlett's test of sphericity was p < 0.005. The results from the post Mindfulness training analysis at the private sector show that value of the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.803 and that the Bartlett's test of sphericity was p < 0.005. Hence, the values obtained from the analysis are statistically significant and indicate the appropriateness of the data set for further statistical analysis.

Table 5.6 Results from Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

| Pre-Post Study   | Kaiser-Meyer-Olkin (KMO) | Barlett's Test of Sphericity |
|--|--------------------------|------------------------------|
| Pre Mindfulness Training<br>Analysis at the Public<br>Sector   | 0.857                    | p < 0.05                     |
| Post Mindfulness Training<br>Analysis at the Public<br>Sector  | 0.813                    | p < 0.05                     |
| Pre Mindfulness Training<br>Analysis at the Private<br>Sector  | 0.751                    | p < 0.05                     |
| Post Mindfulness Training<br>Analysis at the Private<br>Sector | 0.803                    | p < 0.05                     |

# **5.3.6** Results from Path Analysis

The path analysis assisted the study in defining strong interrelationships. The path coefficients concerning variables that had a positive impact on the behavioral outcomes (such as Belongingness, Mindfulness, Wellbeing, Organizational Citizenship Behavior) saw an increase in the intensity of the relationship. Whereas the path coefficients concerning variables that had a negative impact on the behavioral outcomes (such as Ostracism, Counterproductive Work Behavior) saw a decrease in the intensity of the relationship. A unique finding reported in the path analysis was the backward relationship between Counterproductive Work Behavior and Ostracism. The significant path coefficients confirm that the presence of Counterproductive Work Behavior symptoms in an individual can lead to feeling ostracized at the workplace. Another significant finding in the proposed conceptual model was the interrelationship between Mindfulness and Wellbeing. The path coefficient for the impact of Mindfulness on Wellbeing was statistically significant. Hence, it can be said that when the Mindfulness quotient of an individual increases, it also has a positive impact on the Wellbeing quotient of an individual.

The path diagram for the pre-post study conducted in the public as well as private sector is displayed below.

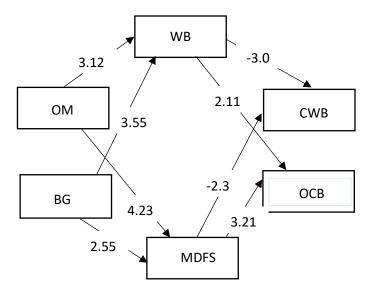


Figure 5.8 Representation of Path Diagram (Pre Mindfulness Training Analysis at Public Sector)

In Fig. 5.8, direct paths such as OM>CWB=4.85; OM>OCB= (-5.02); BG>CWB= (-4.75); BG>OCB=1.0

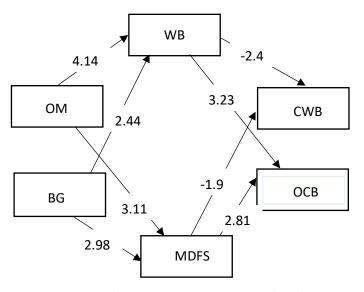


Figure 5.9 Representation of Path Diagram (Pre Mindfulness Training Analysis at Private Sector)

In Fig. 5.8, direct paths such as OM>CWB=4.31; OM>OCB= (-4.43); BG>CWB= (-5.25); BG>OCB=1.02

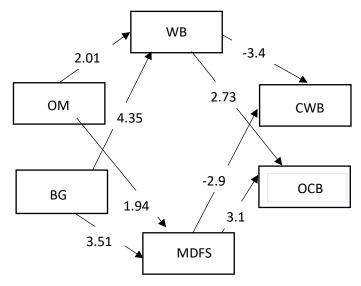


Figure 5.10 Representation of Path Diagram (Post Mindfulness Training Analysis at Public Sector)

In Fig. 5.8, direct paths such as OM>CWB=4.85; OM>OCB= (-5.02); BG>CWB= (-4.75); BG>OCB=1.99

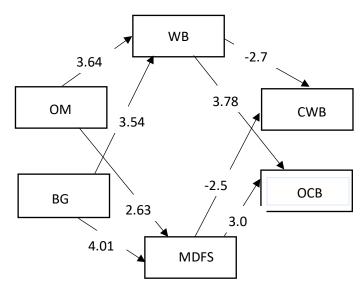


Figure 5.11 Representation of Path Diagram (Post Mindfulness Training Analysis at Private Sector)

In Fig. 5.8, direct paths such as OM>CWB=4.31; OM>OCB= (-4.43); BG>CWB= (-5.25); BG>OCB=1.02

The path coefficients for all the statistically significant relationships is displayed in the table below.

**Table 5.7 Path Coefficients** 

| Path<br>Coefficients  | Pre Mindfulness<br>Training<br>Analysis at<br>Public Sector | Post Mindfulness Training Analysis at Public Sector | Pre Mindfulness Training Analysis at Private Sector | Post Mindfulness Training Analysis at Private Sector |
|---|---|---|---|--|
| OM > WB   | 3.12 (p= 0.042)   | 2.01 (p= 0.036)                                     | 4.14 (p=0.028)                                      | 3.64 (p=0.031)                                       |
| OM > MS   | 4.23 (p= 0.038)   | 1.94 (p= 0.015)                                     | 3.11 (p= 0.022)                                     | 2.63 (p= 0.019)                                      |
| WB > CWB  | -3.03 (p= 0.024)  | -3.41 (p= 0.031)                                    | -2.41 (p= 0.020)                                    | -2.77 (p= 0.017)                                     |
| WB > OCB  | 2.11 (p= 0.017)   | 3.45 (p= 0.025)                                     | 2.99 (p= 0.033)                                     | 3.13 (p= 0.041)                                      |
| MS > CWB  | -2.35 (p= 0.024)  | -2.94 (p= 0.015)                                    | -1.98 (p= 0.043)                                    | -2.56 (p= 0.012)                                     |
| WB > OCB  | 2.43 (p= 0.014)   | 2.73 (p= 0.028)                                     | 3.23 (p= 0.024)                                     | 3.78 (p= 0.032)                                      |
| OM > CWB<br>(Direct Path)                                     | 4.85 (p= 0.011)   |   | 4.31 (p= 0.019)                                     |  |
| OM > OCB<br>(Direct Path)                                     | -5.02 (p= 0.014)  |   | -4.43 (p= 0.023)                                    |  |
| BG > WB   | 3.55 (p= 0.035)   | 4.35 (p= 0.041)                                     | 2.44 (p= 0.025)                                     | 3.54 (p= 0.037)                                      |
| BG > MS   | 2.55 (p= 0.027)   | 3.51 (p= 0.035)                                     | 2.98 (p= 0.025)                                     | 4.01 (p= 0.038)                                      |
| BG > CWB<br>(Direct Path)                                     | -4.75 (p= 0.031)  |   | -5.25 (p= 0.027)                                    |  |
| BG > OCB<br>(Direct Path)                                     | 1.99 (p= 0.013)   |   | 1.02 (p= 0.017)                                     |  |
| CWB > OM<br>(Backward<br>Significant<br>Path: Key<br>Insight) | 2.21 (p= 0.024)   | 1.24 (p= 0.019)                                     | 2.07 (p= 0.031)                                     | 1.23 (p= 0.027)                                      |
| MS > WB   | 1.24 (p= 0.022)   | 2.07 (p= 0.031)                                     | 0.91 (p= 0.019)                                     | 1.76 (p= 0.020)                                      |
| (Key Insight)   |   |   |   |  |
| Insignificant Paths (p >0.05)                                 |   |   |   |  |
| CWB > WB  | -0.55 (p= 0.058)  | -1.42 (p= 0.079)                                    | -0.54 (p=0.1)                                       | -1.27 (p= 0.061)                                     |
| CWB > MS  | -2.43 (p= 0.073)  | -1.61 (p= 0.056)                                    | 0.22 (p= 0.064)                                     | -4.03 (p= 0.082)                                     |
| OCB > WB  | 0.62 (p= 0.058)   | 1.25 (p= 0.062)                                     | 2.43 (p= 0.071)                                     | 1.46 (p= 0.056)                                      |
| OCB > MS  | 0.13 (p= 0.081)   | 1.66 (p= 0.072)                                     | -0.42 (p= 0.085)                                    | 2.94 (p= 0.079)                                      |

# 5.3.7 Paired T Test for Hypothesis Validation

This section explains the hypothesis testing in detail. The assessment of a hypothesis being accepted is if there is a significant difference in the pre and post training values. The details of the results for the hypothesis testing are explained below.

# Paired T-Test Analysis for the Variables

This section investigates the difference in t values pre and post the intervention for all the six variables. The t statistic is usually calculated as: (M1 - M2) / SE where M1= Mean 1 (pre training), M2= Mean 2 (post training and SE= Standard Error. If M1>M2, the t value will be in positive representing considerable decrease in the mean value post training. If M2>M1, the t value will be in negative representing considerable increase in the mean value post training. The results of the Paired t test analysis are shown below.

**Table 5.8 Results from Paired T Test Analysis** 

| Variable                               | Pre and Post<br>training (Public<br>Organization) | Pre and Post training<br>(Private<br>Organization) | P value  |
|--|---|--|----------|
| Ostracism                              | 2.13  | 1.98   | p < 0.05 |
| Belongingness (Need to Belong)         | 1.51  | 2.04   | p < 0.05 |
| Wellbeing                              | -2.94   | -3.22  | p < 0.05 |
| Mindfulness                            | -4.74   | -5.24  | p < 0.05 |
| Counterproductive Work<br>Behavior     | 2.71  | 3.03   | p < 0.05 |
| Organizational Citizenship<br>Behavior | -3.01   | -2.31  | p < 0.05 |

On the basis of the data collected from the pre and post Mindfulness intervention, the hypothesis established in Chapter 3 were tested using paired t test analysis. The detailed explanation of these are as follows:

#### Ostracism

H0 (Null): There is no significant decrease in Ostracism post the Mindfulness intervention

H1a (Alternate): There is a significant decrease in Ostracism post the Mindfulness intervention

The paired t test values clearly demonstrate that the post training values decrease by 2.13units

and 1.98units for public and private sector organizations respectively. Hence the null

hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be

inferred that the Mindfulness intervention has been successful in reducing Ostracism.

Belongingness

H0 (Null): There is no significant decrease in the 'Need to Belong' pre and post the Mindfulness intervention

H1b (Alternate): There is a significant decrease in the 'Need to Belong' post the Mindfulness intervention

The scores calculated here are for the Need to Belong quotient. The Need to Belong is inversely related to the Belongingness quotient. As and when the Need to Belong value decreases, the Belongingness quotient improves. The paired t test values clearly demonstrate that the post training values decrease by 1.51units and 2.04units for public and private sector organizations respectively. Hence the null hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be inferred that the Mindfulness intervention has been successful in reducing the 'Need to Belong' quotient.

Wellbeing

H0 (Null): There is no significant increase in Wellbeing post the Mindfulness intervention

H1c (Alternate): There is a significant increase in Wellbeing post the Mindfulness intervention

The paired t test values show that the post training values increase by 2.94units and 3.22units

for public and private sector organizations respectively. The negative paired t test values

indicate that the post mean value is greater than the pre mean value (M2 > M1). Hence the null hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be inferred that the Mindfulness intervention has been successful in enhancing Wellbeing. Mindfulness

H0 (Null): There is no significant increase in Mindfulness post the Mindfulness intervention

H1d (Alternate): There is a significant increase in Mindfulness post the Mindfulness intervention

The paired t test values shows that the post training values increase by 4.74units and 5.24units for public and private sector organizations respectively. The negative paired t test values indicate that the post mean value is greater than the pre mean value (M2 > M1). This means that the quotient of Mindfulness is improved after this intervention. Hence the null hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be inferred that the Mindfulness intervention has been successful in enhancing the Mindfulness quotient of an individual.

Counterproductive Work Behavior

H0 (Null): There is no significant decrease in Counterproductive Work Behavior post the Mindfulness intervention

H1e (Alternate): There is a significant decrease in Counterproductive Work Behavior post the Mindfulness intervention

The paired t test values shows that the post training values decrease by 2.71units and 3.03units for public and private sector organizations respectively. This means that the negative and harmful behavior at work decreased after the introduction of training. Hence the null hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be inferred that the Mindfulness intervention has been successful in reducing Counterproductive Work Behavior.

Organizational Citizenship Behavior

H0 (Null): There is no significant increase in Organizational Citizenship Behavior post the Mindfulness intervention

H1f (Alternate): There is a significant increase in Organizational Citizenship Behavior post the Mindfulness intervention

The paired t test values shows that the post training values increase by 3.01units and 2.31units for public and private sector organizations respectively. The negative paired t test values indicate that the post mean value is greater than the pre mean value (M2 > M1). This means that the quotient of Organizational Citizenship Behavior is improved after this intervention. Hence the null hypothesis has not been accepted and the alternate hypothesis is accepted. Thus it can be inferred that the Mindfulness intervention has been successful in enhancing Organizational Citizenship Behavior.

Public vs Private Sector

H0 (Null): There is no significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

H1g (Alternate): There is a significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

The effectiveness of the results from the private sector (6.43% increase in Mindfulness quotient) were slightly less effective than the public sector (11.12% increase in Mindfulness quotient). Hence, the null hypothesis has not been accepted and the alternate hypothesis is accepted. Some of the possible reasons for this could be the nature of the organization viz. public vs private sector and the number of years the employees have worked in an organization. Thus it can be inferred that the Mindfulness intervention has been more effective in the public

sector organization. The underlying reasons for the same and relevant literature support has been given in detail in Chapter 6.

The statistical analysis and hypotheses testing for the proposed conceptual model suggests that there is a strong mediating role of Mindfulness in the equation between job environment factors and behavioral outcomes. Mindfulness reduces the impact of negative job environment factor Ostracism and behavioral outcome of Counterproductive Work Behavior to a great extent. Mindfulness also helps in empirically enhancing the Belongingness and Organizational Citizenship Behavior quotient of an individual promoting organizational Wellbeing. Results also indicate that Mindfulness also has a huge impact in improving the Wellbeing of an individual. The results of the accepted significant hypothesis are displayed in the table below.

**Table 5.9 Summary of Hypothesis Testing** 

| S.No. | Hypothesis | Description   | Results (Public Sector<br>Organization; Private<br>Sector Organization) |
|-------|------------|---|---|
| 1.    | Ha1        | There is a significant decrease in Ostracism post the Mindfulness intervention.                           | (t value = 2.13; 1.98, p = 0.028; 0.039)                                |
| 2.    | Ha2        | There is a significant decrease in Need to Belong post the Mindfulness intervention.                      | (t value = 1.51; 2.04, p = 0.001; 0.021)                                |
| 3.    | На3        | There is a significant decrease in Counterproductive Work Behavior post the Mindfulness intervention.     | (t value = 2.72; 3.03, p = 0.01; 0.022)                                 |
| 4.    | Ha4        | There is a significant increase in Organizational Citizenship Behavior post the Mindfulness intervention. | (t value = (-) 3.01; (-) 2.31, p = 0.041; 0.039)                        |
| 5.    | На5        | There is a significant increase in Wellbeing post the Mindfulness intervention.                           | (t value = (-) 2.94; (-) 3.22, p = 0.001; 0.043)                        |
| 6.    | Наб        | There is a significant increase in Mindfulness post the Mindfulness intervention.                         | (t value = (-) 4.74; (-) 5.24, p = 0.03; 0.021)                         |

| 7. | На7 | Ha7 (Alternate): There is a significant difference in the effectiveness of the Mindfulness intervention at the public sector and private sector | = 0.03; 0.021) |
|----|-----|---|----------------|
|    |     |   |                |

An important part of the results and findings is the mediation effect by Mindfulness and Wellbeing. The next section explains the mediation effect in detail.

#### **5.3.8 Mediation Effects**

During development of the conceptual model, the possibility of a mediation effect emerged. Before proceeding towards the results of the mediation effect, the difference between the mediation and moderation effect has to be understood. A mediator mediates the relationship between the independent and the dependent variables and explains the process through which both the variables are related, whereas the moderator affects the strength and direction of the relationship between independent and dependent variable (Baron and Kenny, 1986). Moderation implies an interaction effect, where introducing a mediating variable changes the impact the independent variables would have on the dependent variable.

As per Baron and Kenny (1986), to test the presence of mediation or moderation in a model, the indirect effect on the paths need to be studied. In this study, the impact of Ostracism and Belongingness on Counterproductive Work Behavior and Organizational Citizenship Behavior have to be studied with and without the presence of Mindfulness and Wellbeing. There are two ways to understand the effect, first by path analysis through SmartPLS software and second by hierarchical regression through SPSS software. While noting the results of the path analysis from the SmartPLS software tool, the path with significant statistical values were observed. It was concluded that when Ostracism and Belongingness go through Mindfulness and Wellbeing towards the behavioral outcomes, the effect is mediated. For example, it was noted that the path coefficient from OM>CWB was higher than OM>MS>CWB. This confirms

that after the introduction of Mindfulness, Ostracism first impacts Mindfulness, which reduces the intensity of impact on Counterproductive Work Behavior. Similarly multiple paths and their significance levels were tested.

There are two types of mediation effects: partial mediation and complete mediation. Complete mediation is the case in which independent variable no longer affects the dependent variable after the mediator has been controlled or removed and so path coefficient is zero. Partial mediation is the case in which the path from independent variable to dependent variable is reduced in absolute size but is still different from zero when the mediator is introduced (Rucker et.al, 2011; Memon et.al, 2018). To understand the mediation effects in SmartPLS, VAF (Variance Accounted For) is used. VAF = indirect effect / total effect \* 100; Total effect = indirect effect + direct effect. If the indirect effect is significant but does not absorb any of the independent variable's effect on the dependent variable, the VAF is rather low. This occurs when the direct effect is high and declines only very slightly after a mediator variable with a significant but very small indirect effect is included. In this situation, the VAF would be less than 20%, and one can conclude that (almost) no mediation takes place. In contrast, when the VAF has very large outcomes of above 80%, one can assume a full mediation. A situation in which the VAF is larger than 20% and less than 80% can be characterized as partial mediation (Sleimi et.al, 2017; Malik et.al, 2021). In this study, on the basis of obtained path coefficients, a VAF of 0.316 and 0.347 post the mindfulness training intervention was obtained for the public and private sector respectively. The VAF percentage of 31.6% and 34.7% signifies partial mediation observed in the process. To further test the presence of any mediation effect, hierarchical multiple regression can be used. While conducting the hierarchical regression, the impact of independent variables of Ostracism and Belongingness on Counterproductive Work Behavior and Organizational Citizenship Behavior has to be studied. Mindfulness is selected as the control variable, so that the impact on the equation can be tested with and without

Mindfulness. The purpose is to see if Mindfulness mediates the relationship between the independent and dependent variables. Multiple models were tested with one dependent and multiple independent variables, with and without the control variables. The result indicates the strong presence of a mediating effect.

**Table 5.10 Hierarchical Regression Results** 

| Model Summary  | R square value | R square change | F change | Significance |
|--|----------------|-----------------|----------|--------------|
| Model 1 (Mindfulness and<br>Wellbeing as control variables)  | 0.058          | 0.058           | 8.24     | 0.000        |
| Model 2 (Mindfulness and Wellbeing as interacting variables) | 0.073          | 0.033           | 11.13    | 0.000        |

The results indicate that when Mindfulness and Wellbeing are controlled, the total variance caused in Counterproductive Work Behavior is 5.8%. The R square change value shows that when Mindfulness and Wellbeing are considered, it shows a mediating impact and the variance caused in Counterproductive Work Behavior is reduced to 3.3%. Similarly, the same process is conducted for Organizational Citizenship Behavior and the total variance before and after the introduction of Mindfulness and Wellbeing is 4.2% and 6.3% respectively. Thus, it can be inferred that Organizational Citizenship Behavior shows an increase from 4.2% to 6.3% post the introduction of the Mindfulness intervention.

#### **5.4 Conclusion**

The final results conclude that there is an 11.25 % and 12.24% increase in the Mindfulness and Wellbeing score post the training intervention respectively. There is a 9.8% and 3.16% decrease in the Ostracism and Need to Belong score post the training intervention. There is a 5.52% decrease in the Counterproductive Work Behavior score and 3.05% increase in the Organizational Citizenship Behavior score post the training intervention. The key insight of

the analysis is that the path coefficient for a backward relationship between Counterproductive Work Behavior and Ostracism is significant (2.21units and 2.07units for public and private sector respectively). There is a possibility of Counterproductive Work Behavior leading to Ostracism. There is also a possibility of Mindfulness enhancing the Wellbeing of an individual. One of the key findings of the analysis is the statistically significant path coefficients of 1.24units and 0.91units reported for public and private sector organization respectively. There is also a presence of strong mediating effect of Mindfulness and Wellbeing in the proposed conceptual model. The results indicate that the mediation by Mindfulness and Wellbeing can cause significant change in the behavioral outcomes. The mediators can reduce the total variance caused in Counterproductive Work Behavior from 5.8% to 3.3%. The mediating impact of Mindfulness and Wellbeing also increases the variance caused in Organizational Citizenship Behavior from 4.21% to 6.22%.

# **Chapter 6: Research Findings**

## **6.1 Introduction**

This chapter relates the results obtained from the study to the objectives of the study and lists down the implications of the same. The purpose of the study is to understand the impact of job environmental factors namely Ostracism and Belongingness on the behavioral outcomes of Counterproductive Work Behavior and Organizational Citizenship Behavior with the mediating effect of Mindfulness and Wellbeing in the equation. This chapter is organised into three sections. The first section tries to relate the findings of the study to the established literature in this domain. The second section discusses the key insights found during the study. The flowchart for the visual representation this chapter is depicted below.

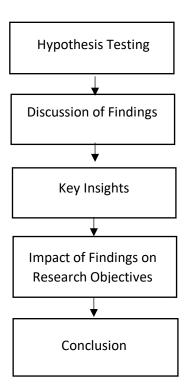


Figure 6.1 Flowchart Summarizing Research Findings

## **6.2 Discussion of Findings**

The study discusses the findings of the relationship between six variables and relates it to the literature established in this domain. Each hypothesis is explained with significant literary support as well as the empirical evidence for acceptance or rejection of the hypothesis. The interrelationships between the variables are not only investigated, but also put together in a relevant theoretical model. The detailed discussion on each hypothesis is as follows:

Ho1 (Null): There is no significant decrease in Ostracism post the Mindfulness intervention

Ha1 (Alternate): There is a significant decrease in Ostracism post the Mindfulness intervention

Relevant literary studies that contribute towards the relationship between Mindfulness and Ostracism are shown in the table below. The studies provide a literary support to the fact that Mindfulness reduces the negative impact of Ostracism on individual, group and organizational level.

**Table 6.1 Literary Support for Ostracism Hypothesis Testing** 

| Researcher/s &<br>Year | Independent<br>Variable | Dependent<br>Variable | Major Findings   |
|------------------------|-------------------------|-----------------------|--|
| Chan, 2012             | Mindfulness             | Ostracism             | To explore the effectiveness of brief mindfulness training in reducing the psychological distress induced by ostracism.                        |
| Molet et.al, 2013      | Mindfulness             | Ostracism             | Mindfulness based intervention reduces the impact of Ostracism   |
| Ramsey & Jones, 2015   | Mindfulness             | Ostracism             | Mindfulness decreases the degree to which individuals ostracize others.  |
| Scott & Duffy,<br>2015 | Mindfulness             | Ostracism             | Adoption of Mindfulness techniques at work will reduce the ill effects of Ostracism.   |
| Kong, 2016             | Mindfulness             | Ostracism             | The research examines how trait self-esteem, mindfulness, and facial emotion recognition ability (ERA) jointly determine ostracism perception. |

| Berry et.al, 2018       | Mindfulness            | Ostracism          | The study tests mindfulness and its training fostered pro-sociality toward ostracized strangers.  |
|-------------------------|------------------------|--------------------|---|
| Yusainy et.al, 2019     | Mindfulness            | Ostracism          | To investigate the role of trait mindfulness as a potential emotion regulation mechanism to replace the mood-improving qualities in aggression. |
| Jones et.al, 2019       | Mindfulness            | Ostracism          | Individuals with higher traits of<br>Mindfulness are less likely to<br>ostracize and demonstrate more<br>inclusive behavior                     |
| Jahanzeb et.al,<br>2020 | Workplace<br>Ostracism | Job<br>performance | Mindfulness reduces the impact of Ostracism on job performance.   |

Empirically, the values (t value = 2.13; 1.98, p = 0.028; 0.039) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The second hypothesis to be discussed involves the Need to Belong and Mindfulness.

Ho2 (Null): There is no significant decrease in the 'Need to Belong' post the Mindfulness intervention

Ha2 (Alternate): There is a significant decrease in the 'Need to Belong' post the Mindfulness intervention

Mindfulness and Need to Belong are inversely proportional, whereas Mindfulness and Belongingness are directly proportional. Significant studies that contribute towards the relationship between Mindfulness and Belongingness are shown in the table below. The studies provide a literary support to the fact that Mindfulness enhances the positive impact of Belongingness on individual, group and organizational level.

**Table 6.2 Literary Support for Belongingness Hypothesis Testing** 

| Researcher/s &<br>Year | Independent<br>Variable                         | Dependent<br>Variable     | Major Findings  |
|------------------------|---|---------------------------|---|
| DeWall et.al, 2011     | Mindfulness                                     | Belongingness             | Belongingness reduces the impact of social exclusion and enhances the impact of Mindfulness.  |
| Bice et.al, 2014       | Mindfulness<br>(Belongingness<br>as a mediator) | Mental Health             | Belongingness enhances the impact of Mindfulness on mental health.  |
| Collins et.al, 2016    | Mindfulness                                     | Thwarted<br>Belongingness | The study experimentally tests the effects of resilience factors (Mindfulness) that reduce the impact of selected interpersonal factors (thwarted Belongingness and others).                        |
| Penpeci, 2020          | Mindfulness                                     | Belongingness             | To examine the impact of emotional labor on the sense of belonging of individuals in the workplace, and the role of mindfulness on that relationship.   |
| Brat, 2022             | Mindfulness                                     | Belongingness             | Adoption of Mindfulness enhances the quotient of inclusivity and Belongingness.   |
| Raban-Motounu,<br>2022 | Mindfulness                                     | Belongingness             | The study investigated the associations between obsessing, and the feeling of belonging and mindfulness, with its two dimensions, the here-and-now awareness and the acceptance of this experience. |

Empirically, the values (t value = 1.51; 2.04, p = 0.001; 0.021) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The third hypothesis to be discussed involves Counterproductive Work Behavior and Mindfulness.

Ho3 (Null): There is no significant decrease in Counterproductive Work Behavior post the intervention

Ha3 (Alternate): There is a significant decrease in Counterproductive Work Behavior post the intervention

Mindfulness and Counterproductive Work Behavior share an inversely proportional relationship with each other. Significant studies that contribute towards the relationship between Mindfulness and Counterproductive Work Behavior are shown in the table below. The studies provide a literary support to the fact that Mindfulness reduces the behavioral outcome of Counterproductive Work Behavior which further promotes productivity and harmony at the workplace.

Table 6.3 Literary Support for Counterproductive Work Behavior Hypothesis Testing

| Researcher/s & Year           | Independent<br>Variable | Dependent<br>Variable              | Major Findings  |
|-------------------------------|-------------------------|------------------------------------|---|
| Krishnakumar & Robinson, 2015 | Mindfulness             | Counterproductive<br>Work Behavior | Mindful people are less<br>counterproductive in their<br>behaviors because they are<br>less prone to hostile feelings.                |
| Yang et.al, 2016              | Mindfulness             | Counterproductive<br>Work Behavior | Mindfulness is said to decrease the quotient of Counterproductive Work Behavior caused by social burden.                              |
| Schwager et.al, 2016          | Mindfulness             | Counterproductive<br>Work Behavior | Trait Mindfulness is negatively correlated with counterproductive academic behavior.  |
| Patel, 2017                   | Mindfulness             | Counterproductive<br>Work Behavior | To examine the impact of mindfulness on Counterproductive Workplace Behaviors (CWBs) and Organizational Citizenship Behaviors (OCBs). |

| Long, 2017               | Mindfulness | Counterproductive<br>Work Behavior | To explore relationship among meaningfulness, state mindfulness and counterproductive work behavior. |
|--------------------------|-------------|------------------------------------|--|
| Gupta and Reina,<br>2013 | Mindfulness | Counterproductive<br>Work Behavior | To test the effect of mindfulness and work stressors on counterproductive work behaviors (CWBs).     |

Empirically, the values (t value = 2.72; 3.03, p = 0.01; 0.022) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The fourth hypothesis to be discussed involves the impact of Mindfulness on the behavioral outcome of Organizational Citizenship Behavior.

Ho4 (Null): There is no significant increase in Organizational Citizenship Behavior post the intervention

Ha4 (Alternate): There is a significant increase in Organizational Citizenship Behavior post the intervention

Mindfulness and Organizational Citizenship Behavior share a directly proportional relationship with each other. Relevant literary studies that contribute towards the relationship between Mindfulness and Organizational Citizenship Behavior are shown in the table below. The studies provide a literary support to the fact that Mindfulness enhances the behavioral outcome of Organizational Citizenship Behavior which further promotes a healthy work environment.

**Table 6.4 Literary Support for Organizational Citizenship Behavior Hypothesis Testing** 

| Researcher/s &<br>Year   | Independent<br>Variable                    | Dependent<br>Variable                      | Major Findings  |
|--------------------------|--|--|---|
| Allred, 2012             | Mindfulness<br>(Empathy as a<br>moderator) | Organization<br>al Citizenship<br>Behavior | The study provides the theoretical rationale and establishes the relationship between Mindfulness and Organizational Citizenship Behaviors (OCBs) moderated by empathy.             |
| Mulligan, 2018           | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | Mindfulness helps facilitate certain positive behaviors at the workplace such as Organizational Citizenship Behavior.   |
| Nguyen et.al,<br>2019    | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | Mindfulness enhances the quotient of<br>Organizational Citizenship Behavior,<br>which positively affects employee<br>performance through customer-oriented<br>citizenship behavior. |
| Nauly et.al,<br>2022     | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | To examine the influence of Mindfulness, Collective Values, Transformational Leadership, Working Conditions, Psychological Empowerment on Organizational Citizenship Behavior.      |
| Nourafkan et.al,<br>2022 | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | To examine mindfulness as a factor that leads to Organizational Citizenship Behavior (OCB) and Innovative Work Behaviors (IWB).   |
| Askun and<br>Cetin, 2022 | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | The study aims to understand the mechanisms underlying the predictive relationship between mindfulness and organizational citizenship behaviors.                                    |
| Chen et. al,<br>2023     | Mindfulness                                | Organization<br>al Citizenship<br>Behavior | The study aims to assess the impact of frontline managers' green mindfulness on green organizational citizenship behavior (G-OCB).  |

Empirically, the values (t value = (-) 3.01; (-) 2.31, p = 0.041; 0.039) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The fifth hypothesis to be discussed involves the impact of Mindfulness on the Wellbeing of an individual.

Ho5 (Null): There is no significant increase in Wellbeing post the Mindfulness intervention

Ha5 (Alternate): There is a significant increase in Wellbeing post the Mindfulness intervention

Mindfulness and Wellbeing share a directly proportional relationship with each other. Relevant

literary studies that contribute towards the relationship between Mindfulness and Wellbeing

are shown in the table below. The studies provide a literary support to the fact that Mindfulness
enhances the positive impact of Wellbeing which further promotes individual health as well as
organizational health and Wellbeing.

Table 6.5 Literary Support for Wellbeing Hypothesis Testing

| Researcher/s &<br>Year   | Independent<br>Variable | Dependent<br>Variable | Major Findings   |
|--------------------------|-------------------------|-----------------------|--|
| Collard et.al, 2008      | Mindfulness             | Wellbeing             | The study explores the role of Mindfulness in enhancing individual Wellbeing.  |
| Cohen & Miller,<br>2009  | Mindfulness             | Wellbeing             | A pre-post study model of 'Mindfulness Based Stress Reduction' (MBSR) technique confirms that Mindfulness enhances the Wellbeing quotient of an individual.        |
| Shier & Graham,<br>2011  | Mindfulness             | Wellbeing             | The study explores the interrelationship between Mindfulness, Wellbeing and social work. It confirms that increase in the Mindfulness quotient enhances Wellbeing. |
| Bluth & Blanton,<br>2014 | Mindfulness             | Wellbeing             | It proposes a theorized model to study<br>the relationship between Mindfulness,<br>emotional Wellbeing and self-<br>compassion. The study confirms that            |

|                           |             |           | Mindfulness enhances the quotient of emotional Wellbeing.  |
|---------------------------|-------------|-----------|--|
| Roche et.al, 2014         | Mindfulness | Wellbeing | The study tries to investigate the impact of Mindfulness on Wellbeing with the mediating effect of psychological capital.  |
| Adarves-Yorno et.al, 2020 | Mindfulness | Wellbeing | The study establishes social identity processes and Mindfulness as two important predictors of well-being.   |
| Crego et.al, 2020         | Mindfulness | Wellbeing | The study establishes the fact that experiencing meaning in life and practicing Mindfulness in daily life promote individual Wellbeing.                                  |
| Zhang et.al, 2023         | Mindfulness | Wellbeing | The study examined the association between mindfulness and physical activity to better understand a possible mediating role of eudaimonic wellbeing in this association. |

Empirically, the values (t value = (-) 2.94; (-) 3.22, p = 0.001; 0.043) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The sixth hypothesis to be discussed involves the effectiveness of Mindfulness based interventions on improving the Mindfulness quotient.

Ho6 (Null): There is no significant increase in Mindfulness post the Mindfulness intervention

Ha6 (Alternate): There is a significant increase in Mindfulness post the Mindfulness
intervention

Mindfulness based interventions have been considered as a revolution in clinical as well as non-clinical studies. Relevant literary studies that contribute towards the relationship between Mindfulness based interventions and the quotient of Mindfulness are shown in the table below. The studies provide a literary support to the fact that Mindfulness based interventions enhance the quotient of trait and state Mindfulness which further promotes positive behavioral outcomes at the workplace.

Table 6.6 Literary Support for Mindfulness Hypothesis Testing

| Researcher/s &<br>Year                       | Independent<br>Variable               | Dependent<br>Variable | Major Findings   |
|--|---------------------------------------|-----------------------|--|
| Shapiro et.al, 2006                          | Mindfulness<br>based<br>interventions | Mindfulness           | Mindfulness-based interventions are effective for treatment of both psychological and physical symptoms.   |
| Farb et.al, 2014                             | Mindfulness<br>based<br>interventions | Mindfulness           | This paper establishes the theoretical foundation of Mindfulness, reviews some of the best-validated Mindfulness training interventions, discussing their clinical benefits and limitations. |
| Zoogman et.al, 2015                          | Mindfulness<br>based<br>interventions | Mindfulness           | Mindfulness meditation is a well-validated intervention for symptoms of depression and anxiety disorders in youth.   |
| Creswell, 2017                               | Mindfulness<br>based<br>interventions | Mindfulness           | Mindfulness interventions improve outcomes in multiple physical and psychological domains such as chronic pain, depression relapse, addiction and others.                                    |
| Sosa-Cordobes and<br>Ramos-Pichardo,<br>2023 | Mindfulness<br>based<br>interventions | Mindfulness           | This study aimed to determine the efficacy of mindfulness-based interventions for stress and weight reduction in the short, medium, and long term and improving the mindfulness quotient.    |
| Rad et.al, 2023                              | Mindfulness<br>based<br>interventions | Mindfulness           | The study tested the effectiveness of mindfulness training in reducing procrastination among students.   |

Empirically, the values (t value = (-) 4.74; (-) 5.24, p = 0.03; 0.021) also support the alternate hypothesis. Hence on the basis of literary and empirical support, the null hypothesis has not been accepted and the alternate hypothesis is accepted. The seventh hypothesis to be discussed involves the comparison between public and private sector. The hypothesis is listed as follows:

Ho7 (Null): There is no significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

Ha7 (Alternate): There is a significant difference in the effectiveness of the Mindfulness intervention at the public and private sector

The study made a choice of one public sector organization and one private sector organization to contrast the difference in the obtained results. The underlying assumption during the beginning of the study was that the stability and prestige associated with public sector jobs would make the employees reluctant to quit the job despite of being challenges with negative emotions at work. The effectiveness of the results from the private sector (6.43%) increase in Mindfulness quotient) were slightly less effective than the public sector (11.12% increase in Mindfulness quotient). The data collection process revealed that the maximum number of participants associated with the public sector have joined after 2019. Due to the shorter tenure, they might not have experienced Ostracism to a great extent, and hence, their acceptance to the intervention could be more positive, thereby enhancing its effectiveness. The private sector organization had the most participants from the employee group who had joined before 2019. It could be possible that due to comparatively longer tenure, they might have experienced Ostracism and hence, the impact of the Mindfulness intervention could not be immediately established in some cases. In addition to this, public sector organizations have better infrastructure for learning and development and stress reduction interventions. (Crawford and Helm, 2009). Hence, these employees would be more aware of the benefits of such interventions, thereby leading to higher effectiveness. Further, research is required to identify other reasons. Empirically, the values (t value = (-) 4.74; (-) 5.24, p = 0.03; 0.021) also support the alternate hypothesis. The next section discusses the obtained key insights in detail.

## **6.3 Key Insights**

- The key insight from the analysis is that the path coefficient for a backward relationship between Counterproductive Work Behavior and Ostracism is significant (2.21units and 2.07units for public and private sector respectively). There is a possibility of Counterproductive Work Behavior leading to Ostracism.
- There is also a possibility of Mindfulness enhancing the Wellbeing of an individual. The
  relationship is statistically significant with path coefficients of 1.24units and 0.91units
  reported for public and private sector organization respectively.
- There is also a presence of strong mediating effect of Mindfulness and Wellbeing in the proposed conceptual model. The results indicate that the mediation by Mindfulness and Wellbeing can cause significant change in the behavioral outcomes.
- The mediators can reduce the total variance caused in Counterproductive Work Behavior from 5.8% to 3.3%. The mediating impact of Mindfulness and Wellbeing also increases the variance caused in Organizational Citizenship Behavior from 4.21% to 6.22%.

## 6.4 Impact of Findings on Research Objectives

This section attempts to discuss the findings from the study in the backdrop of stated research objectives. This research fulfils the following three research objectives:

**Table 6.7 Research Objectives** 

| Objective | Description  |
|-----------|--|
| 1         | To investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study. |
| 2         | To statistically validate and administer a Mindfulness intervention for individual Wellbeing.                                |
| 3         | To investigate the relationship between Wellbeing and Mindfulness  |

## **6.4.1** Objective 1

To investigate the interrelationship between the job environment variables and the behavioral outcomes chosen for the study.

The interrelationship between the job environmental factors and behavioral outcomes may look simple and direct, but it has got many dimensions to it. The role of the job environment factors was emphasised through their direct impact on behavioral outcomes at work and by the mediating effect of Mindfulness and Wellbeing on the relationship. In order to address this question, it was necessary to evaluate the impacts of the job environmental factors on the behavioral outcomes at work during separate time periods (before the training, and 4 weeks after the introduction of the training programme). This preliminary step was intended to operationalise the variables and test their impact on the behavioral outcomes at the workplace.

## 6.4.2 Objective 2

To statistically validate and administer a Mindfulness intervention for individual Wellbeing. The research focusses on the effectiveness of the Mindfulness training intervention in present day workplaces. The empirically significant paths and relationships in the research findings were noted. The current study establishes the adapted Mindfulness training as a successful intervention in the public and private sector organizations in the power sector of India. An important observation made during the study conducted after four weeks of self-training was the interrelationship between the training characteristics and the enthusiasm of the participants to explore the process. Hence, it can be said that along with developing a good intervention, a pre study and development of training characteristics aids the attainment of desired outcome.

## 6.4.3 Objective 3

To investigate the relationship between Wellbeing and Mindfulness.

The research findings suggest that there is a direct relationship between Wellbeing and Mindfulness. The relationship is statistically significant. The Mindfulness intervention is not only successful in reducing the impact of negative job environmental variables and negative behavioral outcomes at the workplace, but also enhances positive job environmental variables, positive behavioral outcomes and the quotient of Wellbeing at the workplace.

### 6.5 Revised Model for Mindfulness Intervention

The key insight of the analysis is that the path coefficient for a backward relationship between Counterproductive Work Behavior and Ostracism is significant. There is a possibility of Counterproductive Work Behavior leading to Ostracism. There is also a possibility of Mindfulness enhancing the Wellbeing of an individual.

One of the key findings of the analysis is the statistically significant path coefficients reported for public and private sector organization respectively. There is also a presence of strong mediating effect of Mindfulness and Wellbeing in the proposed conceptual model. The results indicate that the mediation by Mindfulness and Wellbeing can cause significant change in the behavioral outcomes. The revised model for Mindfulness intervention is depicted below.

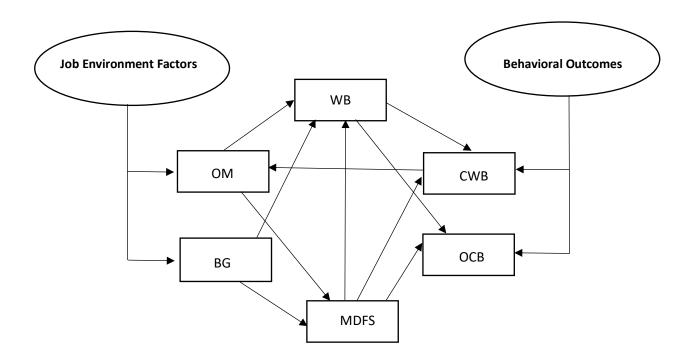


Figure 6.2 Revised Model for Mindfulness Intervention

**Note:** Here, OM=Ostracism; BG= Belongingness; WB=Wellbeing; MDFS=Mindfulness; CWB = Counterproductive Work Behavior; OCB=Organizational Citizenship Behavior

#### **6.6 Conclusion**

The adapted intervention proves successful in limiting the ill effects of negative job environmental factor of Ostracism and negative behavioral outcome of Counterproductive Work Behavior. The Mindfulness intervention has also been empirically successful in enhancing the positive job environmental factor of Belongingness and positive behavioral outcome of Organizational Citizenship Behavior. The findings of the study are aligned with the research objectives. The objectives of statistically validating the Mindfulness intervention, defining the interrelationships between the job environment variables, behavioral outcomes, mediators and to explore the relationship between Wellbeing and Mindfulness have been met.

# **Chapter 7: Implications & Future Scope of Research**

#### 7.1 Introduction

This chapter tries to understand the implications of the study and future scope of research in the light of the research objectives. In the forthcoming sections, the major findings, implications for theory, implications for practice, and methodological limitations are discussed. Towards the end of the chapter, theoretical limitations of the study are considered, practical and managerial implications of this research are discussed and findings are established. Lastly, suggestions are provided for future directions of research and further research on the subject. The flowchart depicting the pictorial representation of the flow in this chapter is provided below.

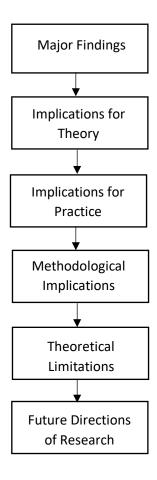


Figure 7.1 Flowchart Summarizing Implications & Future Scope of Research

## 7.2 Major Findings

Based on the systematic literature review and the identified literature gaps, a conceptual framework was proposed. The purpose of developing this conceptual framework was to aid the process of finding answers to the research questions. The conceptual framework was validated through a questionnaire distributed to 507 employees from the power sector of India. The data collected from the study was further analyzed using statistical tools and techniques to provide empirical validation to the conceptual framework and the intervention. The findings establish the validity and reliability of the Mindfulness intervention with empirical support. The intervention is successful in reducing the impact of negative job environment factors and enhancing the effect of positive job environment factors at the workplace. Ostracism has been one of the major reasons for increasing negative behavioral outcomes at the workplace (Ramsey & Jones, 2015; Kwan et.al, 2018; Zhang et.al, 2022). This Mindfulness intervention reduces the impact of Ostracism at the workplace. For the globally evolving workplaces, a successful intervention to deal with Ostracism is a major victory. The findings also suggest a significant mediating role of Mindfulness in the equation. The mediating role of Mindfulness confirms the rational choice of Mindfulness intervention as a positive intervention. For the constantly evolving workplaces, the empirical evidence of Mindfulness acting as a mediator to reduce the impact of negative job environmental variables is a boon to this research.

The findings suggest that Counterproductive Work Behavior may lead to Ostracism. Most studies have considered Counterproductive Work Behavior as an outcome of job environment variables at the workplace (Spector & Fox, 2002; Gruys & Sackett, 2003; Dalal, 2005; Griep et.al, 2022). This is a major finding because Counterproductive Work Behavior can act as an antecedent due to its found impact on Ostracism. Another insight confirms the role of Mindfulness in enhancing the Wellbeing quotient. This is another significant insight as it confirms that the intervention is successful in increasing the Mindfulness quotient, which in

turn enhances the Wellbeing quotient. One of the aims of this research is to understand and investigate Wellbeing at constantly evolving workplaces. The second insight helps in the fulfilment of this aim. The implications for theory are discussed in detail in the following section.

## 7.3 Implications for Theory

- Organizations have witnessed drastic changes post the pandemic. Organizations are dealing with organizational wellbeing challenges along with the slowed down economic outcomes. The post pandemic workplaces are dealing with complex human emotions and a Mindfulness intervention is the need of the hour. The theoretical implications of this research includes the contribution it makes to the existing literature of Mindfulness and Wellbeing. Williams (2007) in his work on job environmental variables and Ostracism, expressed concern over the future issues, he quoted "Can Ostracism be coped with successfully, without making individuals become aggressive or overly susceptible to social influence?" In his quest to investigate future concerns, he explores the Theory of Cognitive Deconstruction & Self-Regulation Impairment by Baumeister et.al, (2002). The Theory of Cognitive Deconstruction & Self-Regulation Impairment is the base theory for this research. The significant finding of counterproductive behavior acting as an antecedent for Ostracism is a major extension and addition to the existing theory. The empirical evidence of the backward relationship between Counterproductive Work Behavior and Ostracism gives a new dimension to the future concern raised by Williams (2007).
- This Mindfulness intervention is successful in reduction of stress and anxiety at the workplace. It also helps in enhancing positive behavioral traits at the workplace, and promotes happiness and Wellbeing at the workplace. This study adds to the existing literature on job environment variables, behavioral outcomes and Wellbeing.

• The study has contributed to the existing literature on Mindfulness by developing a theoretical framework that examined the impact of Mindfulness intervention on behavioral outcomes at the workplace. This research studied the comparison between the effects of Mindfulness training in the public and private sector organization in the power sector.

## 7.4 Implications for Practice

- This study highlights the extent to which job environmental factors have the potential to affect behavioral outcomes. Thus, understanding the effect of varied job environmental factors would better equip managers, trainers, practitioners, and researchers to create effective Mindfulness training programmes that are designed and delivered properly.
- The intervention is significant for training designers to develop appropriate training characteristics that are relevant to Mindfulness training for employees in the power sector of India. The intervention could be used as a consulting tool in the services and manufacturing industries. The intervention is customizable as per the change in working patterns in the post pandemic workplaces.
- The results suggest that pre-training information disclosure is a significant factor contributing to building trust with the trainer. Meanwhile, trainee readiness most strongly supported positive expectations for the training outcomes. Therefore, the study involved participants who volunteered for the study.
- Another practical implication of the Mindfulness intervention is the self-training mechanism of the training. Employee Wellbeing and organizational health have been the focus of the human resource policies in most public and private organizations. This self-training module makes it an intervention that is easy to implement and saves a lot of time, effort and cost.

## 7.5 Methodological Implications

- All of the measurement scales were validated before framing the final questionnaire. The
  factor loadings and the relevance of each item were checked and seven items were
  eliminated after multiple rounds of analysis and discussion. This made the measurement
  instrument much more reliable for researchers and practitioners for further research.
- Longitudinal research was conducted using questionnaires to gather data from the same set of participants at two separate times: before training, and four weeks after the training programme. A longitudinal study was more suitable for this study. Thus, a longitudinal design for this study is useful to understand the relationships between job environment factors, mediating variables and behavioral outcomes before and after training is completed.
- This is one of few studies to examine self-training Mindfulness intervention at Indian workplaces. This study fills this research gap by exploring predictor variables in Indian workplaces that may be useful for generalising these predictors.

## 7.6 Limitations for Study

The research limitations can be understood in two ways: the theoretical limitations and the methodological limitations. The study has some limitations, but these limitations pave the way for the future direction of research. This study tests the effectiveness of Mindfulness training intervention in the power sector of India, which may limit generalisability. The predictor variables may be different in organisations from different sectors. Therefore, the predictor variables in the theoretical framework should be examined in other organisations that demonstrate varied work environments and cultures. Thus, further research is necessary to strengthen the generalizability of the conceptual framework.

- Another limitation is that the study only tests the effects of the intervention pre and four weeks post the training. The results may vary when the intervention is tested at varied time intervals. But looking at the practical aspects of implementing a Mindfulness intervention in an organization, it is extremely difficult to test the intervention at varied time intervals. Organizations run on the principle of optimum utilization of available resources, hence conducting experimental research at varied time intervals may affect the routine functioning of the organization. This research is an example of action research that tries to improve conditions and practices in the current environment (Whitehead et.al, 2003; Lingard et.al, 2008). However, this could serve as a future direction of research. In future, if the time and ease of access are available, this experimental study could be replicated for varied time intervals. Therefore, the limitations could guide further research in this area. The study is based in the pandemic era, where concepts like work from home were in practice. Due to the change in the working patterns, the personal touch of the experimental design was lost. A major part of the intervention was conducted virtually. This was a major limitation for the studies based on the COVID-19 era. But this limitation also serves as a strength for this research. If the Mindfulness intervention is successful in attaining its objectives despite the barrier of COVID-19, this experimental study could be replicated with non-virtual aspects to explore the success of the intervention. Hence, this could be one of the significant future directions of research.
- The research design used in this research has certain methodological limitations. The first methodological limitation is that the data was only collected from individuals who participated voluntarily in the training. Due to the limitations of time and ease of access, the research could not include a control or comparison group that has not received the training. This could be a limitation that can be considered for further research in the area.

- Another limitation is the self- assessment nature of the intervention. The employees were supposed to keep a record of their everyday Mindfulness activities. This self-assessment nature of the study might have induced some common-method variance. The variance might have inflated the actual relationships between the variables in this study. Therefore, if time and ease of access are available, further studies could use multiple sources of assessment to establish the results.
- The data were collected using a self-administered questionnaire. The questionnaire was self-reported by the respondent, which may have created reliability and validity issues and may have produced high correlations between the measures, demonstrating common method variance (Park and Kim, 2009).
- The employees had volunteered for the study, which sometimes makes the sample an inaccurate representative of the general population. The experimental research involves data collection from the same participants over a period of them, which requires the participants to be involved in the research and not leave the process in between (Schreuder et.al, 2001; Pruchno et al., 2008). Keeping the response rates of experimental studies as a major constraint in a running organization, employees were asked to volunteer for the study based on their interests. This voluntary participation of the employees has given the study a higher response rate with lesser redundant information. Hence, the choice of sample is justified here.
- The generalisation of the results of this study should be treated with caution. Further research is needed to demonstrate that these study results are not unique to this particular sample. The limitations of this study do not reduce the importance of the results. The above points are simply mentioned to direct future research that could support greater improvement in this area. The following section discusses the future directions of research.

#### 7.7 Future Directions of Research

This study provides several opportunities for future research. This study examined the direct relationships between the job environment variables and the behavioral outcomes with the mediation effect of Mindfulness and Wellbeing. One of the key issues for future research is to investigate more possible relationships between the job environment variables and the behavioral outcomes.

Furthermore, the conceptual framework developed for this study could be tested in other types of organisations and multinational corporations to improve generalisability. This study examined the effect of the intervention, before the training and four weeks after the training. Further research that follows up and examines the effect of intervention six months or one year after training is recommended. Thus, further research in varied work settings and organizations is required to better understand the job environmental variables, behavioral outcomes, mediation effects and their impact on the training effectiveness. This study paves way for further exploration and empirical validation of the derived equations in varied workplace settings. There has been a manifold increase in the number of Mindfulness-based studies in the last two decades. The rise in interest of scholars and researchers has been due to the scientific reports and corresponding media coverage describing the potential benefits of Mindfulness interventions. The scientifically established benefits range from mental and physical health outcomes to cognitive, affective, and interpersonal outcomes (Ludwig & Kabat-Zinn 2008; Brown et al. 2015). Mindfulness interventions have a positive impact on clinical as well as non-clinical populations.

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### <u>APPENDIX I (A) – PILOT STUDY QUESTIONNAIRE</u>

### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI

Dear Participant,

Thank you for agreeing to be a part of this research on well-being. Please respond to the given questions to the best of your ability as there are no right or wrong answers. The responses would be kept confidential and would be used only for academic purpose. In the following questions the term work/job/education are used interchangeably as per the context. It would take approximately 15 minutes to answer.

Shilpi Kalwani

PhD Scholar

# Section A – Demographic Details

## Please answer the following questions

| 1. | Gender (Male/Female/Others)              |
|----|--|
| 2. | Age (In Years)                           |
| 3. | Marital Status (Unmarried/Married/Other) |
| 1  | Educational Qualification                |

| 5. | Professional Designation.        |  |
|----|----------------------------------|--|
| 6. | Year of Joining the Organization |  |

# Section B

**B1:** In your opinion, please tick the most appropriate response on scale of 1-7, where 1 = 'Never' and 7 = 'Always'.

| S.No | Items  | Never (1) | Once in a<br>While (2) | Sometimes (3) | Fairly<br>Often (4) | Often (5) | Constantly (6) | Always (7) |
|------|--|-----------|------------------------|---------------|---------------------|-----------|----------------|------------|
| 1    |  |           |                        |               |                     |           |                |            |
| 1.   | Others ignored me at work                              |           |                        |               |                     |           |                |            |
| 2.   | Others left the area where I entered                   |           |                        |               |                     |           |                |            |
| 3.   | My greetings have gone unanswered at work              |           |                        |               |                     |           |                |            |
| 4.   | I involuntary sat alone in a crowded lunchroom at work |           |                        |               |                     |           |                |            |
| 5.   | Others avoided me at work                              |           |                        |               |                     |           |                |            |
| 6.   | I noticed that others would not look at me at work     |           |                        |               |                     |           |                |            |
| 7.   | Others at work shut me out of the conversation         |           |                        |               |                     |           |                |            |
| 8.   | Others refused to talk to me at work                   |           |                        |               |                     |           |                |            |

| 9.  | Others refused to talk to me at work  |  |  |  |  |
|-----|---|--|--|--|--|
| 10. | Others at work did not invite me or ask me if I wanted anything when they went out for a coffee break |  |  |  |  |

**B2:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Not at all' and 5 = 'Extremely'.

| S.No. | Items  | Not at all (1) | Slightly (2) | Moderately (3) | Very<br>(4) | Extremely (5) |
|-------|--|----------------|--------------|----------------|-------------|---------------|
| 1.    | If other people don't seem to accept me, I don't let it bother me          |                |              |                |             |               |
| 2.    | I try hard not to do things that will make other people avoid or reject me |                |              |                |             |               |
| 3.    | I seldom worry about whether other people care about me                    |                |              |                |             |               |
| 4.    | I need to feel that there are people I can turn to in times of need        |                |              |                |             |               |
| 5.    | I want other people to accept me   |                |              |                |             |               |
| 6.    | I do not like being alone  |                |              |                |             |               |
| 7.    | Being apart from my friends for long periods of time does not bother me    |                |              |                |             |               |
| 8.    | I have a strong 'need to belong'   |                |              |                |             |               |
| 9.    | It bothers me a great deal when I am not included in other people's plans  |                |              |                |             |               |

| 10. | My feelings are easily hurt when I feel that others do not accept me |  |  |  |
|-----|--|--|--|--|
|     |  |  |  |  |

**B3:** In your opinion, please tick the most appropriate response on scale of 1-6, where 1 = 'Almost Always' and 6 = 'Almost Never'.

| S.No. | Items   | Almost<br>Always<br>(1) | Very<br>Frequently<br>(2) | Somewhat<br>Frequently<br>(3) | Somewhat<br>Infrequently<br>(4) | Very<br>Infrequently<br>(5) | Almost<br>Never<br>(6) |
|-------|---|-------------------------|---------------------------|-------------------------------|---------------------------------|-----------------------------|------------------------|
| 1.    | I could be experiencing some emotion and not be conscious of it until sometime later                      |                         |                           |                               |                                 |                             |                        |
| 2.    | I break or spill things because of carelessness, not paying attention, or thinking of something else      |                         |                           |                               |                                 |                             |                        |
| 3.    | I find it difficult to stay focused on what's happening in the present                                    |                         |                           |                               |                                 |                             |                        |
| 4.    | I tend to walk quickly to get where I'm going without paying attention to what I experience along the way |                         |                           |                               |                                 |                             |                        |
| 5.    | I tend not to notice feelings of physical tension or<br>discomfort until they really grab my attention    |                         |                           |                               |                                 |                             |                        |
| 6.    | I forget a person's name almost as soon as I've been told it for the first time                           |                         |                           |                               |                                 |                             |                        |
| 7.    | It seems I am "running on automatic," without much awareness of what I'm doing                            |                         |                           |                               |                                 |                             |                        |

| 8.  | I rush through activities without being really attentive to them  |  |  |  |
|-----|---|--|--|--|
| 9.  | I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there |  |  |  |
| 10. | I do jobs or tasks automatically, without being aware of what I'm doing                                     |  |  |  |
| 11. | I find myself listening to someone with one ear, doing something else at the same time                      |  |  |  |
| 12. | I drive places on "automatic pilot" and then wonder why I went there  |  |  |  |
| 13. | I find myself preoccupied with the future or the past   |  |  |  |
| 14. | I find myself doing things without paying attention   |  |  |  |
| 15. | I snack without being aware that I'm eating   |  |  |  |

**B4:** In your opinion, please tick the most appropriate response on scale of 1-6, where 1 = 'Never' and 5 = 'Extremely Often'.

| S.No. | Items   | Never | Rarely | Sometimes | Quite     | Extremely |
|-------|---|-------|--------|-----------|-----------|-----------|
|       |   | (1)   | (2)    | (3)       | Often (4) | Often (5) |
| 1.    | My job made me feel angry (In the past 30 days)   |       |        |           |           |           |
| 2.    | My job made me feel anxious (In the past 30 days) |       |        |           |           |           |
| 3.    | My job made me feel at ease (In the past 30 days) |       |        |           |           |           |
| 4.    | My job made me feel bored (In the past 30 days)   |       |        |           |           |           |

| 5.  | My job made me feel calm (In the past 30 days)         |  |  |
|-----|--|--|--|
| 6.  | My job made me feel content (In the past 30 days)      |  |  |
| 7.  | My job made me feel depressed (In the past 30 days)    |  |  |
| 8.  | My job made me feel discouraged (In the past 30 days)  |  |  |
| 9.  | My job made me feel disgusted (In the past 30 days)    |  |  |
| 10. | My job made me feel ecstatic (In the past 30 days)     |  |  |
| 11. | My job made me feel energetic (In the past 30 days)    |  |  |
| 12. | My job made me feel enthusiastic (In the past 30 days) |  |  |
| 13. | My job made me feel excited (In the past 30 days)      |  |  |
| 14. | My job made me feel fatigued (In the past 30 days)     |  |  |
| 15. | My job made me feel frightened (In the past 30 days)   |  |  |
| 16. | My job made me feel furious (In the past 30 days)      |  |  |
| 17. | My job made me feel gloomy (In the past 30 days)       |  |  |
| 18. | My job made me feel inspired (In the past 30 days)     |  |  |
| 19. | My job made me feel relaxed (In the past 30 days)      |  |  |
| 20. | My job made me feel satisfied (In the past 30 days)    |  |  |

**B5:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Never' and 5 = 'Always'.

| S.No. | Item   | Never (1) | Rarely (2) | Sometimes (3) | Often (4) | Always (5) |
|-------|--|-----------|------------|---------------|-----------|------------|
| 1.    | I made fun of someone at work  |           | (=)        | (6)           | (-)       |            |
| 2.    | I said something hurtful to someone at work  |           |            |               |           |            |
| 3.    | I made an ethnic, religious, or racial remark at work  |           |            |               |           |            |
| 4.    | I cursed at someone at work  |           |            |               |           |            |
| 5.    | I played a mean prank on someone at work   |           |            |               |           |            |
| 6.    | I acted rudely toward someone at work  |           |            |               |           |            |
| 7.    | I publicly embarrassed someone at work   |           |            |               |           |            |
| 8.    | I have taken property from work without permission   |           |            |               |           |            |
| 9.    | I spend too much time fantasizing or daydreaming instead of working                          |           |            |               |           |            |
| 10.   | I falsified a receipt to get reimbursement for more money than I spent on a business expense |           |            |               |           |            |
| 11.   | I have taken an additional or longer break than is acceptable at my workplace                |           |            |               |           |            |
| 12.   | I come in late to work without permission  |           |            |               |           |            |
| 13.   | I littered the work environment  |           |            |               |           |            |
| 14.   | I neglect to follow instructions at work   |           |            |               |           |            |

| 15. | I intentionally worked slower than I could have worked                   |  |  |  |
|-----|--|--|--|--|
| 16. | I discussed confidential company information with an unauthorized person |  |  |  |
| 17. | I used an illegal drug or consumed alcohol on the job                    |  |  |  |
| 18. | I put little effort into my work   |  |  |  |
| 19. | I dragged out work in order to get overtime                              |  |  |  |

**B6:** In your opinion, please tick the most appropriate response on scale of 1-6, where 1 = 'Never' and 7 = 'Always'.

| S.No. | Items  | Never (1) | Once in a<br>While (2) | Sometimes (3) | Fairly<br>Often (4) | Often (5) | Constantly (6) | Always (7) |
|-------|--|-----------|------------------------|---------------|---------------------|-----------|----------------|------------|
| 1.    | I help others who have been absent   |           |                        |               |                     |           |                |            |
| 2.    | I willingly give my time to help others who have work-related problems   |           |                        |               |                     |           |                |            |
| 3.    | Adjust your work schedule to accommodate other employees' requests for time off                                    |           |                        |               |                     |           |                |            |
| 4.    | I go out of the way to make newer employees feel welcome in the workgroup  |           |                        |               |                     |           |                |            |
| 5.    | I show genuine concern and courtesy towards co-workers, even under the most tiring business or personal situations |           |                        |               |                     |           |                |            |
| 6.    | I give up time to help others who have work or non-work problems   |           |                        |               |                     |           |                |            |

| 7.  | I assist others with their duties   |  |  |  |  |
|-----|---|--|--|--|--|
| 8.  | I share personal property with others to help their work                        |  |  |  |  |
| 9.  | I attend functions that are not required but that help the organizational image |  |  |  |  |
| 10. | I keep up with developments in the organization                                 |  |  |  |  |
| 11. | I defend the organization when other employees criticize it                     |  |  |  |  |
| 12. | I show pride when representing the organization in public                       |  |  |  |  |
| 13. | I offer ideas to improve the functioning of the organization                    |  |  |  |  |
| 14. | I express loyalty toward the organization                                       |  |  |  |  |
| 15. | I take action to protect the organization from potential problems               |  |  |  |  |
| 16. | I demonstrate concern about the image of the organization                       |  |  |  |  |

### <u>APPENDIX I (B) – FINAL STUDY QUESTIONNAIRE</u>

### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI

Dear Participant,

Thank you for agreeing to be a part of this research on well-being. Please respond to the given questions to the best of your ability as there are no right or wrong answers. The responses would be kept confidential and would be used only for academic purpose. In the following questions the term work/job/education are used interchangeably as per the context. It would take approximately 15 minutes to answer.

Shilpi Kalwani

PhD Scholar

# Section A – Demographic Details

## Please answer the following questions

| 1. | Gender (Male/Female/Others)              |
|----|--|
| 2. | Age (In Years)                           |
| 3. | Marital Status (Unmarried/Married/Other) |
| 4. | Educational Qualification.               |

| 5. | Professional Designation.        |  |
|----|----------------------------------|--|
| 6. | Year of Joining the Organization |  |

# Section B

**B1:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'. An item score of 3 was assigned the 'Neutral'.

| S.No | Items  | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|------|--|-----------------------|--------------|-------------|-----------|--------------------|
|      |  |                       |              |             |           |                    |
| 1.   | Others ignored me at work                              |                       |              |             |           |                    |
| 2.   | Others left the area where I entered                   |                       |              |             |           |                    |
| 3.   | My greetings have gone unanswered at work              |                       |              |             |           |                    |
| 4.   | I involuntary sat alone in a crowded lunchroom at work |                       |              |             |           |                    |
| 5.   | Others avoided me at work                              |                       |              |             |           |                    |
| 6.   | I noticed that others would not look at me at work     |                       |              |             |           |                    |
| 7.   | Others at work shut me out of the conversation         |                       |              |             |           |                    |

| 8.  | Others refused to talk to me at work  |  |  |  |
|-----|---|--|--|--|
| 9.  | Others refused to talk to me at work  |  |  |  |
| 10. | Others at work did not invite me or ask me if I wanted anything when they went out for a coffee break |  |  |  |

**B2:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'.

An item score of 3 was assigned the 'Neutral'.

| S.No. | Items   | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------|---|-------------------|----------|---------|-------|----------------|
|       |   | (1)               | (2)      | (3)     | (4)   | (5)            |
| 1.    | If other people don't seem to accept me, I don't let it bother me         |                   |          |         |       |                |
| 2.    | I seldom worry about whether other people care about me                   |                   |          |         |       |                |
| 3.    | I need to feel that there are people I can turn to in times of need       |                   |          |         |       |                |
| 4.    | I do not like being alone   |                   |          |         |       |                |
| 5.    | Being apart from my friends for long periods of time does not bother me   |                   |          |         |       |                |
| 6.    | I have a strong 'need to belong'  |                   |          |         |       |                |
| 7.    | It bothers me a great deal when I am not included in other people's plans |                   |          |         |       |                |
| 8.    | My feelings are easily hurt when I feel that others do not accept me      |                   |          |         |       |                |

**B3:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'.

An item score of 3 was assigned the 'Neutral'.

| S.No. | Items   | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|-------|---|-----------------------|--------------|-------------|-----------|--------------------|
| 9.    | I could be experiencing some emotion and not be conscious of it until sometime later                      |                       |              |             |           |                    |
| 10.   | I break or spill things because of carelessness, not paying attention, or thinking of something else      |                       |              |             |           |                    |
| 11.   | I find it difficult to stay focused on what's happening in the present                                    |                       |              |             |           |                    |
| 12.   | I tend to walk quickly to get where I'm going without paying attention to what I experience along the way |                       |              |             |           |                    |
| 13.   | I tend not to notice feelings of physical tension or discomfort until they really grab my attention       |                       |              |             |           |                    |
| 14.   | I forget a person's name almost as soon as<br>I've been told it for the first time                        |                       |              |             |           |                    |
| 15.   | It seems I am "running on automatic," without much awareness of what I'm doing                            |                       |              |             |           |                    |
| 16.   | I rush through activities without being really attentive to them  |                       |              |             |           |                    |

| 17. | I do jobs or tasks automatically, without being aware of what I'm doing                |  |  |  |
|-----|--|--|--|--|
| 18. | I find myself listening to someone with one ear, doing something else at the same time |  |  |  |
| 19. | I drive places on "automatic pilot" and then wonder why I went there                   |  |  |  |
| 20. | I find myself preoccupied with the future or the past                                  |  |  |  |
| 21. | I find myself doing things without paying attention                                    |  |  |  |
| 22. | I snack without being aware that I'm eating  |  |  |  |

**B4:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'. An item score of 3 was assigned the 'Neutral'.

| S.No. | Items   | Strongly<br>Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly<br>Agree (5) |
|-------|---|--------------------------|--------------|-------------|-----------|-----------------------|
| 1.    | My job made me feel angry (In the past 30 days)   |                          |              |             |           |                       |
| 2.    | My job made me feel anxious (In the past 30 days) |                          |              |             |           |                       |
| 4.    | My job made me feel bored (In the past 30 days)   |                          |              |             |           |                       |
| 5.    | My job made me feel calm (In the past 30 days)    |                          |              |             |           |                       |
| 6.    | My job made me feel content (In the past 30 days) |                          |              |             |           |                       |

| 7.  | My job made me feel depressed (In the past 30 days)    |  |  |  |
|-----|--|--|--|--|
| 8.  | My job made me feel discouraged (In the past 30 days)  |  |  |  |
| 9.  | My job made me feel disgusted (In the past 30 days)    |  |  |  |
| 10. | My job made me feel energetic (In the past 30 days)    |  |  |  |
| 11. | My job made me feel enthusiastic (In the past 30 days) |  |  |  |
| 12. | My job made me feel excited (In the past 30 days)      |  |  |  |
| 13. | My job made me feel fatigued (In the past 30 days)     |  |  |  |
| 14. | My job made me feel frightened (In the past 30 days)   |  |  |  |
| 15. | My job made me feel furious (In the past 30 days)      |  |  |  |
| 16. | My job made me feel gloomy (In the past 30 days)       |  |  |  |
| 17. | My job made me feel inspired (In the past 30 days)     |  |  |  |
| 18. | My job made me feel relaxed (In the past 30 days)      |  |  |  |
| 19. | My job made me feel satisfied (In the past 30 days)    |  |  |  |

**B5:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'. An item score of 3 was assigned the 'Neutral'.

| S.No. | Item   | Strongly<br>Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|-------|--|--------------------------|--------------|-------------|-----------|--------------------|
| 1.    | I made fun of someone at work  |                          |              |             |           |                    |
| 2.    | I said something hurtful to someone at work  |                          |              |             |           |                    |
| 3.    | I made an ethnic, religious, or racial remark at work  |                          |              |             |           |                    |
| 4.    | I cursed at someone at work  |                          |              |             |           |                    |
| 5.    | I played a mean prank on someone at work   |                          |              |             |           |                    |
| 6.    | I acted rudely toward someone at work  |                          |              |             |           |                    |
| 7.    | I publicly embarrassed someone at work   |                          |              |             |           |                    |
| 8.    | I have taken property from work without permission   |                          |              |             |           |                    |
| 9.    | I spend too much time fantasizing or daydreaming instead of working                          |                          |              |             |           |                    |
| 10.   | I falsified a receipt to get reimbursement for more money than I spent on a business expense |                          |              |             |           |                    |

| 11. | I have taken an additional or longer break than is acceptable at my workplace |  |  |  |
|-----|---|--|--|--|
| 12. | I come in late to work without permission                                     |  |  |  |
| 13. | I littered the work environment   |  |  |  |
| 14. | I intentionally worked slower than I could have worked                        |  |  |  |
| 15. | I discussed confidential company information with an unauthorized person      |  |  |  |
| 16. | I used an illegal drug or consumed alcohol on the job                         |  |  |  |
| 17. | I put little effort into my work  |  |  |  |

**B6:** In your opinion, please tick the most appropriate response on scale of 1-5, where 1 = 'Strongly Disagree' and 5 = 'Strongly Agree'.

An item score of 3 was assigned the 'Neutral'.

| S.No. | Items                              | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree<br>(4) | Strongly Agree (5) |
|-------|------------------------------------|-----------------------|--------------|-------------|--------------|--------------------|
| 1.    | I help others who have been absent |                       |              |             |              |                    |

| 2.  | I willingly give my time to help others who have work-related problems  |  |  |  |
|-----|---|--|--|--|
| 3.  | Adjust your work schedule to accommodate other employees' requests for time off   |  |  |  |
| 4.  | I go out of the way to make newer employees feel welcome in the workgroup   |  |  |  |
| 5.  | I show genuine concern and courtesy towards co-<br>workers, even under the most tiring business or<br>personal situations |  |  |  |
| 6.  | I give up time to help others who have work or non-work problems  |  |  |  |
| 7.  | I assist others with their duties   |  |  |  |
| 8.  | I share personal property with others to help their work  |  |  |  |
| 9.  | I attend functions that are not required but that help the organizational image   |  |  |  |
| 10. | I keep up with developments in the organization   |  |  |  |
| 11. | I defend the organization when other employees criticize it   |  |  |  |
| 12. | I show pride when representing the organization in public   |  |  |  |
| 13. | I offer ideas to improve the functioning of the organization  |  |  |  |
| 14. | I express loyalty toward the organization   |  |  |  |
| 15. | I take action to protect the organization from potential problems   |  |  |  |
| 16. | I demonstrate concern about the image of the organization   |  |  |  |

# APPENDIX II (A)

### **List of Publications & Conferences**

#### **Journal Articles**

Kalwani, S., & Mahesh, J. (2020). Trends in Organizational Behavior: A Systematic Review and Research Directions. *Journal of Business & Management*, Vol. 26 No. 1, pp. 40-78. DOI: 10.6347/JBM.202003\_26(1).0003.

Kalwani, S., Mahesh, J., Bhat A. (2022). Ostracism and Belongingness: Are they contrary forms of potential antecedents? *Empirical Economic Letters*, Vol. 20 SI. 3, pp. 21-40.

#### **Conference Papers**

Kalwani, S., Mahesh, J., & Bhat, A. K. (2021). Creating Mindfulness at Stressed Environment Work-Places through a Self-Training Intervention. *Academy of Management Proceedings*; 1, 14857. Presented paper in the 81<sup>st</sup> AOM Virtual Annual Conference held on 29<sup>th</sup> July- 4<sup>th</sup> August, 2021.

Kalwani, S., Mahesh, J., & Bhat, A.K. (2021). Are COVID Survived Workplaces transforming into Zen Workplaces? *BVIMSR Journal of Management Research*. Presented paper in the International Conference on Circular Economy, Management and Industry 4.0 Leading Towards Sustainability held on 21<sup>st</sup>- 22<sup>nd</sup> October 2021.

# **APPENDIX II (B)**

# **Brief Biography of the Candidate**

Shilpi Kalwani is a PhD research scholar at Department of Management, BITS Pilani. She has completed her PhD programme under the supervision of Dr. Jayashree Mahesh & Prof. Anil K. Bhat. She specializes in the area of employee wellbeing, mindfulness, and organizational behavior. She is a TEDx Speaker, Author and a Columnist due to the right blend of skills and opportunities.

She received the IBSAF Top 10 SIP Award & scholarship jointly by ICFAI Hyderabad and Coal India Limited for her work on 'Carbon Credits'. She has presented her work on mindfulness intervention at the prestigious Academy of Management Conference, 2021. She has also attended workshops on paper writing and research methodology. Her teaching interest lies in the area of Human Resource Management and Organizational Behavior.

# **Brief Biography of the Supervisor**

Prof. Jayashree Mahesh is currently an Associate Professor in the Department of Management of Birla Institute of Technology & Science - (BITS)- Pilani, Pilani Campus. She has a PhD degree from BITS- Pilani. The title of her thesis is 'Indian' Management Practices in the I.T. Sector - An Empirical Investigation.

She has more than 15 years of teaching experience. She has developed content and taught courses on HR & OB, Managerial Communication, Leadership, Change Management and Performance Management. She is presently focusing on developing training workshops and courses for graduate students in the areas related to personal brand development, teamwork skills and leadership orientation in order to help students realize their potential.

Her research interests are in the area of Innovative Pedagogies for Student Engagement,
Leadership and Futuristic Skills for Generation Z, Mindfulness and Employee Wellbeing,
Performance and Talent Management Practices, Cross Cultural Management, Indian
Management and Culture.

She is a member of Academy of Management, British Academy of Management and INDAM (an affiliate of AOM). She has successfully completed her Accreditation to be a MBTI Certified Practitioner and Trainer. Through positive student relationships, she aims to create teaching spaces that help students break mental barriers, develop social and critical skills thereby leading to their self-actualization.

# **Brief Biography of the Co-Supervisor**

Prof. Anil Bhat graduated in Mechanical Engineering in 1982 from REC, (now NIT) Srinagar and obtained his doctorate (fellowship) from IIM-Bangalore. His specialization is Marketing Research and his methodological contribution has been in the area of "Cluster analysis of rank order data". He is a member of Academy of Management (AOM), American Marketing Association (AMA), Academy of International Business (AIB), British Academy of Management (BAM) and a Fellow of Institution of Engineers (India). He has been trained at international workshops conducted by Haas School of Business, University of California, Berkeley and STVP, Stanford & has completed "10,000 Women Program: Tools for Growing your Business" organised by Goldman Sachs in partnership with London Business School. Prof. Bhat has worked in managerial capacity for organizations before turning to academics and has headed the Department of Management at BITS Pilani for almost a decade. He has more than a hundred publications to his credit and has conceptualized, designed and conducted many MDP's both for private as well as for public sector companies. He has served as a management expert on Union Public Service Commission expert panel. He has been certified as an Entrepreneur Educator by STVP Stanford, NEN and IIMB. Besides guiding many Ph.D's, he has co-authored a book on management published by Oxford University Press. He is presently Professor, Department of Management BITS Pilani, Member Department Research Committee and Faculty Advisor, Center for Entrepreneurial Leadership (CEL) at BITS-Pilani. He believes that Business is a force for Good and his Management Philosophy is anchored around the Goal of Maximizing the Impact of Individual Actions for the Good of Society.