THE EFFECT OF BIG-FIVE PERSONALITY TRAITS ON PSYCHOLOGICAL EMPOWERMENT

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ABSTRACT

The conceptualization of psychological empowerment, which operationalized empowerment from individual perspective, has made it feasible to identify individual characteristics that boost employees’ feeling of empowerment. By testing some personality traits as antecedents of psychological empowerment, few empirical studies suggested that some individuals are more empowered. Despite the importance of identifying empowered individuals, only few personality traits had been tested as antecedent of psychological empowerment, and most of those personality traits were limited to the individuals’ perception of self-worth. Therefore, a thorough investigation for assessing a wide range of personality traits as antecedents of psychological empowerment was required in order to properly answer the question: who is empowered? To fill this void, this research tested big-five personality traits (i.e. one of the best measures of personality which covers a wide range of human personality) as antecedents of psychological empowerment to clarify which personality trait enhances employees’ feeling of empowerment. For the development of hypothesis, this study used a similar mechanism to Spreitzer’s (1995). In other words, for justifying the relationship between each of the big-five personality traits and psychological empowerment, the theoretical link between each of those personality traits and at least one of psychological empowerment’s dimensions was identified. All the big-five personality traits were found to be theoretically related to at least one of the psychological empowerment’s dimension. After finalizing the translated measurement instrument using the pilot study (with sample of 44 service-workers), research hypotheses were tested using both the regression analysis and structural equation modelling on the sample of 372 front-line employees working in organizations within the service sector in Malaysia. The research findings indicated that service-workers high
in extraversion, openness, conscientiousness, and agreeableness are more empowered. The relationship between agreeable and psychological empowerment was found to be mediated by affect-based trust and some of the intra-organizational relationship (i.e. leader-member exchange, and customer supportiveness). In other words, thanks to their trusting characteristics and their ability to develop and maintain relationship, agreeable service-workers tend to feel more empowered. Service workers high in openness to experience, as expected, was found to be more empowered since they had stronger notions of impact, self-determination, and competence. Additionally, extraversion was found to be significantly related to psychological empowerment’s dimensions of competence and meaning, and agreeableness was significantly associated with dimensions of meaning, self-determination, and competence. Finally, as expected agreeable service-workers were found to be empowered as they experience higher level of competence. Beside the theoretical contribution, assessing the relationship between a wide range of personality traits and psychological empowerment had a significant practical implication. By identifying empowerment-related personality traits, this study helps organizations to identify and select employees who can reach higher level of empowerment.
ABSTRAK

DEDICATION

First and foremost, I dedicate my thesis to my very dear mother, Vida Samimi and my lovely wife, Mahtab Samadi, whose love and support enabled me to finish my thesis. I also dedicate it to my mother’s family (Jinous, Rita, Afshin, maman Pari, and baba Samimi), whose kindness have always kept me warm.
ACKNOWLEDGMENT

I would like to specially thank my supervisor, Dr. Norizah Binti Mohd Mustamil, who has kindly guided me in my long journey of research. Your wonderful personality and attitude inspired and motivated me to overcome my anxiety throughout the hardships. The magic of your “no worries” will always be with me reminding that positivity can go a long way. Thank you.
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CHAPTER 1- INTRODUCTION

1.1 Overview of Research Topic

To succeed in today’s fierce global business environment, companies need to harness the creativity, ideas, energy, and knowledge of every employee. The best way for utilizing these resources is by empowering employees to take initiatives and act as owners of business (O’Tool & Lawler, 2006). In addition, recent changes in competitive business environment caused by recent trends such as globalizations, technological, and communication advancement have imposed growing pressure on organizations to be more flexible, productive, responsive, and supportive of innovation. By empowering employees, organizations will have better opportunities to respond rapidly to new environmental changes (Moye et al., 2005). Evidence indicates that organizations are cognizant of the indispensable role of empowered employees in today’s ruthless competitive environment. By assessing 1000 fortune companies, Lawler et al. (2001) provided evidence that 70% of those organizations have some sort of empowering initiative in place.

Strong body of research supported that having empowered employees has numerous positive individual and organizational outcomes. For instance, Seibert et al.’s (2011) meta-analytic review of 142 empirical studies indicated that psychological empowerment is significantly associated with higher job satisfaction, organizational commitment, organizational citizenship behavior, task performance, innovation, and lower job strain and turnover.
1.2 Background of the Research

The main goal of this research is to answer the question: Who is empowered? Some studies (e.g. Spreitzer, 1995) have provided evidence that individuals high in certain personalities are more empowered. Before mentioning these studies, it is essential to briefly explain empowerment approaches and conceptualization of psychological empowerment and operationalization of psychological empowerment.

1.2.1 Empowerment Approaches and Conceptualization of Psychological Empowerment

Prior to 1988, when Cogner and Kanungo started the movement of psychological empowerment, the concept of empowerment had been synonymous to managerial techniques and organizational structures or conditions (e.g. designing the job facets and organizational policies and procedures) which facilitate transferring power from higher-ups to lower-level employees (Maynard et al., 2012). One of the most seminal researches within this period was Kanter’s (1977) study, proposing that power will be transferred to lower-level employees when they have access to information, support, opportunity, and resources (Spreitzer, 2007). This approach of empowerment is now being called structural empowerment.

Cogner and Kanungo (1988) started the movement of psychological empowerment when they conceptualized empowerment as a “motivational construct”. In other words, they held that the managerial techniques and organizational conditions, mentioned above, cannot “enable or empower” employees unless they enhance employees’ feeling of self-efficacy (i.e. the degree to which individuals believe in their work-related competencies) (Seibert et al., 2011). Later on, Thomas and Velthouse (1990) extended
this notion using Hackman and Oldham’s (1980) job characteristic model, proposing that employees will be energized or motivated or empowered only when they feel more meaning, competence or self-efficacy, choice or self-determination, and impact.

In short, structural empowerment focuses on the “delegation of power”, whereas; psychological empowerment focuses more on the “feeling of power”. In other words, structural empowerment is more organizationally-centric, as opposed to psychological empowerment, which is more individually-centric (Spreitzer, 2007; Meng et al., 2015). As expected, many studies (e.g. Knol and Van Linge, 2009; Maynard et al., 2012; Spreitzer, 1996; Wagner et al., 2010; Priyadharshany & Sujatha, 2015) provided evidence that structural empowerment can be regarded as antecedents of psychological empowerment.

As structural and psychological empowerments are two completely distinct perspectives on empowerment, naturally, the definition of empowerment differs across these perspectives. For instance, within the structural approach, empowerment has been defined as a process of power delegation (Clutterbuck, 1994); process of disentangling employees from astringent policies, instruction, and orders (Carlzon, 1987); the process of “turning the front loose” (Zemke & Schaaf, 1989). On the other hand, within the boundaries of psychological empowerment, empowerment has been defined as a process of energizing individuals (Thomas & Velthouse, 1990) and an active orientation toward work role (Spreitzer, 1995).

1.2.2 Operational Definition of Psychological Empowerment

Spreitzer (1995) developed and validated a multidimensional construct of psychological empowerment using Thomas and Velthouse’s (1990) four task assessments. She operationalized psychological empowerment using four cognitions of meaning, self-
determination, impact, and competence. Spreitzer’s (1995) measurement of psychological empowerment has been used predominantly throughout the literature by empowerment-related empirical studies. The four dimensions of psychological empowerment are as follows:

- **Meaning**: Empowered individuals tend to find their work more meaningful. The cognition of meaning is the result of the fit between employees’ value and ideals and work role requirement.
- **Competence or self-efficacy**: Empowered employees believe in their capability to carry out their work-related task successfully.
- **Impact**: Empowered employees believe that they have significant influence on the strategic, administrative, and operation outcomes at their workplace.
- **Self-determination**: Empowered employees believe that they have freedom in determining how to do their work-related tasks.

It is important to note that psychological empowerment should be treated as a composite measure or “gestalt” of the above-mentioned dimensions as opposed to merely separate dimensions (Spreitzer, 2007).

**1.2.3 Empowerment-related Individual Characteristics**

By measuring empowerment based on individuals’ notions and feelings, psychological empowerment provided researchers with an opportunity to assess individuals’ characteristics, comprising demographics and personality traits, as antecedents of empowerment. In other words, psychological empowerment conceptualization has made it possible for researchers to assess which individual characteristics contribute to the
feeling of empowerment, or simply answer the question: Who is empowered? (Spreitzer, 2007).

These empowerment-related individual characteristics can be regarded as “empowerment potentials” because individuals, who have any of these characteristics, have the potential to reach a higher level of empowerment, since they are not only affected by the external empowering stimuli, but also, they benefit from their supporting characteristics as well.

Some studies have shown that individuals with some certain personality traits are more empowered. Spreitzer (1995) tested self-esteem and locus of control as antecedents of psychological empowerment and found evidence that individuals with higher degree of self-esteem are more empowered. Additionally, both Laschinger et al. (2009) and Seibert et al. (2011) found that employee, who scored higher on core self-evaluation, experienced higher degree of psychological empowerment. Finally, Yazdi and Mustamil (2014) indicated that employees who are high in narcissism (i.e. not that high to be considered as a disorder) tend to feel more empowered.

In terms of demographics as antecedents of psychological empowerment, the results of empirical studies vary significantly across the literature. For instance, among gender, race, age, tenure, and education, Spreitzer (1995) only found support for significant association between education, and psychological empowerment. On the other hand, Seibert et al.’s (2011) findings showed no significant relationship between education and gender, and psychological empowerment, but, identified age, tenure, and job level as significant antecedents of psychological empowerment. These contradictory results can be seen throughout the literature which will be elaborated in the following chapter.
1.3 Gap or Focus of the Research

As mentioned above, only a handful of personality traits have been tested as antecedents of psychological empowerment, and almost all of these personality traits only deal with perception of self-worth in individuals (e.g. self-esteem, narcissism, and core self-evaluation). Thereby, a thorough investigation between variation of personality traits and psychological empowerment is lacking. To fill this void, this study assesses the association between the big-five personality traits and psychological empowerment.

1.3.1 Usage of Big-five Personality

There are important reasons for choosing the Big-Five personality traits as antecedents of psychological empowerment. Five Factor Model (FFM) or Big-Five personality traits is a widely accepted instrument which describes personality variations and was proven to be applicable to over fifty societies across six continents. Additionally, it has been recognized by many psychologists as the best representation of personality structures across different cultures (Digman, 1990; Harari et al., 2014; Wiggins & Trapnell, 1997). There are many studies such as Yamagata et al. (2006), Bouchard Jr. and Loehlin (2001), Gurven et al. (2013), and McCrae and Costa (1997) that suggested that the FFM is rooted in human beings’ biology and genes, and therefore, it is universal.

1.3.2 Importance of Drawing Sample from Service Sector

The main sample of this research was drawn from the service sector. Why does the research focus on empowered service-employees? In spite of the fact that having empowered employees is beneficial to any organization, it is more vital for organizations within the service sector to have empowered employees for two main
reasons. Firstly is the fact that customers’ satisfaction is influenced by the high level of interaction between service-workers and customers, and also high degree of involvement of service-workers in service delivery (Bitner et al., 1990; Bowen & Lawler, 1992). Thus, by being responsive and flexible in addressing customers’ need, empowered service-workers can go a long way in benefiting organizations (Melhem, 2004). Secondly, research has shown that when a problem arose, the best place for solving the problem is the nearest place to the problem, thus, by being closest to the issue, empowered frontline service-workers are organizations’ best option for solving customers’ problem (Hart et al., 1990; Koc, 2013).

1.4 Theoretical and Practical Contribution of the Research

Considering the obvious link between personality traits and psychology, and also given the fact that psychological empowerment is a psychological experience (Spreitzer, 1995), identifying personality traits that foster the feeling of empowerment provides better understanding on how employees achieve certain level of empowerment.

Besides the contribution to the theory, identifying empowerment-related personality traits has a significant practical implication as well. Since, employees high in empowerment-related personality trait are considered to be empowered intrinsically (Spreitzer, 2007); therefore, identifying these personality traits simply enables Human Resource (HR) professionals to identify and select more empowered prospects. By selecting more empowered individuals, organizations can make sure that they have more empowered employees in the future.
1.5 Research Questions

As mentioned earlier, by finding support for the significant relationship between personality traits and psychological empowerment, empirical studies have suggested that some individuals are more empowered. Yet, the relationship between personality traits and psychological empowerment has been tested only by very few studies. Additionally, the tested personality traits were mostly limited to those dealing with the perception of self-worth (e.g. self-esteem and core self-evaluation). Therefore, a thorough investigation between personality traits and psychological empowerment is clearly needed. To fill the gap, the following research questions are constructed.

1) Which of the Big-Five personality traits is related to psychological empowerment?
2) Which of the Big-Five personality traits have more bearing on psychological empowerment?
3) How do the Big-Five personality traits influence psychological empowerment?

1.6 Research Objectives

In order to answer the research questions and consequently fill the gap, this research aims to achieve the following objectives.

1) To test the association between the Big Five personality traits and psychological empowerment.
2) To identify more influential Big-Five personality traits in predicting empowerment.
3) To assess the relationship between each of the big-five personality traits and psychological empowerment’s dimension.
1.7 Organization of the Research

The thesis is presented in five chapters. The current chapter (i.e. Chapter 1-Introduction), first, gives a brief review of psychological empowerment’s conceptualization and its operational definition in order to create a foundation for the background of the research. The first chapter continues with identifying the gap and focus of the research and its theoretical and practical contributions, and finally, it explains the research questions and objectives. Chapter 2 gives an extensive review of literature on psychological empowerment including conceptualizations, antecedents, and outcomes of psychological empowerment; both in individual and group level of analysis. It also comprehensively reviews the studies which tested individuals’ characteristics as antecedents of psychological empowerment as it is related to the gap which is filled by this research. Chapter 2 also explains the history and development of the Big-Five personality traits. After elaborating each trait and its established outcomes, Chapter 2 continues to discuss the direct and mediated theoretical links between the Big-Five personality traits and psychological empowerment in order to develop the research hypotheses.

Chapter 3 provides information about researcher’s epistemological positioning along with the methods by which research questions are answered. The epistemology section discusses the appropriateness of qualitative and quantitative methods for answering the research questions. In the following section, Chapter 3 goes through the process of finalizing the measurement instrument including back-to-back translation method, and then, explains about the data collection and data analysis procedures.

Chapter 4 gives the result of data analysis comprising preliminary analysis (e.g. testing for multivariate assumption, Pearson correlation, EFA, CFA, and etc.), hypotheses testing, and dimensional analysis. Data were analyzed using IBM Statistics SPSS v21
and IBM SPSS AMOS v21 softwares along with online Sobel test (http://quantpsy.org/sobel/sobel.htm).

Discussion of the result of data analysis in comparison with hypothesized relationship is provided in Chapter 5. The final chapter also includes discussion regarding the practical implications of the results. Table 1.1 summarizes the materials in this thesis covered by all the chapters.
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</table>
1.8 Conclusion

This chapter has provided necessary information on the conceptualization of psychological empowerment and background of the research in order to clarify the gap and show the significance of the research. In other words, by briefly reviewing the literature, this chapter conveyed that some individuals are found to be empowered, yet the identification of empowered individuals has not been thoroughly investigated. Theoretical and practical implications of identifying empowered individuals were also discussed to highlight the significance of the research. Following that, research questions and objectives were presented. In the final section, the organization of the research presented a big picture of how the research was conducted and clarified the aims of each chapter.
CHAPTER 2- LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Introduction

Overtime, the concept of empowerment has gone through significant changes, which opened new horizons for different areas of research. One of those areas is the possibility of testing whether or not individual characteristics support the feeling of empowerment. To explain how the development of psychological empowerment has made it possible to identify more empowered individuals and how identifying empowerment-related individual characteristics fits into empowerment literature; a thorough review of literature on psychological empowerment is needed. This chapter, firstly, elaborates on the conceptualization and operationalization of psychological empowerment to provide a foundation for developing hypotheses for this study and also to show how the transformation of empowerment from structural to psychological empowerment made it possible to answer the question: Who is empowered?

This chapter continues to review established antecedents of psychological empowerment to give a detailed background to the research and also to elaborate the information used for developing hypothesized mediations. Then, established outcomes of psychological empowerment were reviewed to describe the benefits of psychological empowerment both for the employees and organizations. Finally, literature on the Big-Five personality traits, which were used as a tool for identifying empowered employees, was reviewed.
2.2 The Conceptualization of Psychological Empowerment

As mentioned briefly in the previous chapter, prior to the conceptualization of psychological empowerment, empowerment has been synonymously associated with managerial practices and organizational process and structures, by which power could be transferred from higher-ups to lower level employees (Spreitzer, 2007). However, the conceptualization of empowerment as a psychological state has given empowerment a whole new meaning. Three seminal studies have played an important role in the conceptualization of psychological empowerment, as we know it today. These studies are by: Cogner and Kanungo (1988), Thomas and Velthouse, (1990), and Spreitzer (1995).

Conceptualization of psychological empowerment began when Cogner and Kanungo (1988) introduced empowerment as a “motivational construct”. Referring to the fact that in the psychology literature, control and power are considered to be internal motivational beliefs, Cogner and Kanungo (1988) held that individuals feel powerful only when their needs of self-efficacy (Bandura, 1977) or self-determination (Deci, 1975) are met. However, they conceptualized psychological empowerment by using only self-efficacy as they believed that the need of self-efficacy stems from other internal needs including self-determination. So, Cogner and Kanungo (1988) proposed that an employee feels empowered only when his or her self-efficacy belief (i.e. employee’s belief that he/she has the capability to carry out his/her work-related tasks successfully) is enhanced. Hence, Cogner and Kanungo (1988) defined empowerment as an “enabling process” rather than delegation.

To further develop the conceptualization of psychological empowerment, Thomas and Velthouse (1990) added three more notions (i.e. impact, choice/self-determination, and meaning) to Cogner and Kanungo’s (1988) dimension of self-efficacy or competence.
These three task assessments were extracted from Hackman and Oldhams’s (1980) job characteristics model. Therefore, to understand Thomas and Velthouse’s (1990) conceptualization of psychological empowerment, it is necessary to go through Hackman and Oldhams’s (1980) model.

According to Hackman and Oldham’s (1980) Job Redesign Model, in order for a job to internally motivate employees, it should improve employees’ notions of experienced meaningfulness or meaning, experienced responsibility or self-determination, and knowledge of results or impact. Hackman and Oldham’s (1980) identified five job characteristics (i.e. task identity, skill variety, task significance, job autonomy, and feedback) contributing to the above-mentioned notions, which will be further elaborated in the section entitled “Antecedents of psychological empowerment”.

### 2.2.1 Meaningfulness

This notion is the outcome of relative comparison between perceived value of a task’s purpose and the individual’s ideal. In other words, when a task is meaningful to an employee, it simply means that he or she intrinsically cares for that particular task. Thomas and Velthouse (1990) held that task’s meaningfulness, in terms of psychoanalytic practice, creates some kind of cathexis (i.e. psychic energy) in individuals to carry out their task energetically. Employees who find their task less meaningful tend to feel apathetic and detach themselves from work events, whereas those who find more meaning in their task will be more energetic and have more involvement and commitment (Thomas & Velthouse, 1990).
2.2.2 Knowledge of the Results or Impact

When the task assessment impact is high, employees tend to perceive their organizational task as something that “makes a difference”. Thomas and Velthouse (1990) maintained that the lower perceived impact acts in a similar way to learned helplessness (i.e. happens when impact is possible but perceived competencies is lacking). On the other hand, when knowledge of the result or impact is lower, employees feel more depressed, less motivated, and less capable of recognizing opportunities.

2.2.3 Experienced Responsibility or Choice

This task assessment is almost identical to DeCharms’ (1968) locus of causality, which refers to the degree to which employees perceive their work behaviors as self-determined (Thomas & Velthouse, 1990). Perceived self-determination improves individuals’ resiliency, initiatives, creativity, and flexibility. On the other hand, individuals who perceive less autonomy in their jobs are prone to negative emotions and have less self-esteem. As mentioned earlier, similar to self-efficacy, the notion of self-determination is regarded as one of the key ingredients for being intrinsically motivated (Cogner & Kanungo, 1988).

Finally, Spreitzer (1995) extended Thomas and Velthouse’s (1990) idea and conceptualized and validated empowerment as a “psychological state” and gave the name “psychological empowerment”. They also defined psychological empowerment as “employees’ active orientation towards work role”. In other words, employees, who “feel” empowered, have an orientation in which they feel able and have a desire to
shape their work role. Spreitzer (1995) contended that empowerment is a psychological state that manifests in employees’ cognitions of impact, meaning, self-determination, and competence.

**Impact**: the degree to which an individual believes he or she is important and has significant influence in the workplace.

**Meaning**: the degree to which, work is personally important for individuals.

**Self-determination or Autonomy**: the degree of freedom that each individual believes he or she has to carry out his or her job.

**Competence or self-efficacy**: the degree to which individuals believe they can perform the tasks successfully.

Spreitzer (1995) highlighted some assumptions about psychological empowerment which should be noted:

- The feeling of empowerment is not like an enduring personality that does not change over time, but, it is a combination of a set of cognitions, which are continuously shaped by environment.
- Psychological empowerment is a continuous variable as opposed to a dichotomous one. In other words, there are different levels of empowerment rather than just being empowered or not being empowered.
- The construct of psychological empowerment is applicable only to work domain, and it cannot be generalized to other life situations

Table 2.1 gives the summary of the above-mentioned seminal studies which contributed significantly to the conceptualization of psychological empowerment.
Table 2.1: Summary of Seminal Research Important in Conceptualization of Psychological Empowerment

<table>
<thead>
<tr>
<th>Seminal Studies</th>
<th>Contribution</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cogner and Kanungo (1988)</td>
<td>For the first time presented empowerment as motivational construct as they found that in psychology literature, feeling of power is regarded as a motivational belief.</td>
<td>Operationalized empowerment using Bandura’s (1977) self-efficacy (i.e. known to be one of the key ingredients for internal motivation). Since, Cogner and Kanungo (1988) believed employees feel powered or motivated when they feel they are capable of doing their jobs.</td>
</tr>
<tr>
<td>Spreitzer (1995)</td>
<td>Gave the name “psychological empowerment” and developed/validated psychological empowerment as a psychological state.</td>
<td>Similar to Thomas and Velthouse (1990) used the cognitions of meaning, self-determination, competence/self-efficacy, and impact.</td>
</tr>
</tbody>
</table>

2.2.4 Other operationalizations of empowerment as a “motivational construct”

Beside the Spreitzer (1995), there are other studies that operationalized the empowerment based on Cogner and Kanungo’s (1988) and Thomas and Velthouse’s (1990) propositions of viewing empowerment as a motivational construct. Yet, these operationalizations have not been adopted by many studies. For instance, Hayes (1994)
proposed three dimensions of responsiveness (i.e. degree of perceived flexibility in employees’ response to the customers), control (i.e. degree of perceived control over work processes) and discretion (i.e. degree of perceived self-determination). Menon (2001) also conceptualized empowerment using three dimensions of perceived control, perceived competence and goal internalization. These dimensions refer to: the degree of perceived control over the work’s outcome, perceive personal mastery on work tasks, and the degree to which an individual intrinsically accepts organization’s goals, respectively. These measurements are more or less the same; where higher score in each dimension will allude to higher intrinsic motivation.

2.3 Antecedents of Psychological Empowerment

In this section, established antecedents of psychological empowerment at the individual level of analysis are presented. Antecedents of psychological empowerment can be divided into five distinct categories: structural empowerment, job design, individual characteristics, role ambiguity mitigation, and relationships within the organization.

2.3.1 Structural Empowerment as Antecedent of Psychological Empowerment

As mentioned earlier, prior to the beginning of the psychological approach, empowerment-related studies (i.e. structural empowerment), which were mostly carried out under the terms of “high performance work system”, “high involvement practice”, “job enrichment”, and “alienation” (Spreitzer, 1996; 2007), focused on identifying
organizational policies and structures and managerial techniques, which helped the transferring of power to lower-level employees (Spreitzer, 2007).

On the other hand, as has been explained in the preceding sections, psychological empowerment assesses individuals’ feeling of empowerment (Spreitzer, 2007). Thus, it can be justified that structural empowerment’s techniques, policies, and procedures enhance employees’ feeling of empowerment (i.e. psychological empowerment), and therefore, act as antecedents of psychological empowerment.

Kanter’s (1977) famous ethnography, “Men and women of the corporation”, can be regarded as the most influential study within the boundaries of structural empowerment. Many empirical studies such as Spreitzer (1996), Knol and Van Linge (2009), Wagner et al. (2010), Laschinger et al. (2001), Laschinger et al. (2010), Meng et al. (2015), and Laschinger et al. (2004) identified Kanter’s (1977, 1983, 1993) power tools as significant antecedents of psychological empowerment. In the following sections, these power tools and their link with psychological empowerment will be elaborated.

Kanter (1977) basically proposed that to be empowered, employees should have access to two separate structures which are opportunity and power or otherwise, they will feel powerless.

2.3.1.1 The Structure of Opportunity

Kanter (1977, 1993) described the structure of opportunity as the degree to which jobs provide employees with challenges and give employees a chance to learn, be autonomous, expand their skills and knowledge, and to grow or be advanced in the
organization. When a job provides individuals with more opportunities, they tend to be more productive, satisfied with their jobs, eager to participate in innovation and change and finally, employees become more proactive in solving job-related problems. At the other extreme, in jobs with fewer opportunities, individuals tend to have lower self-esteem, organizational commitment and work aspiration. These people disengage themselves from their jobs and demonstrate “stuck” behaviors (Miller et al., 2001; Sarmiento et al., 2004; Laschinger et al. 2010).

2.3.1.2 The structure of Power

The structure of power refers to employees’ capability to access and mobilize resources in order to successfully carry out their tasks (Laschinger et al., 2010; Sarmiento et al., 2004). Kanter (1977, 1993) identified three social structural factors as the main sources of employees’ power namely Information, support, and resources.

(a) Information

Information, as one of Kanter’s (1977) power tools, denotes the availability of information comprising both downward and upward information, to more individuals at more levels in the organization. Downward information refers to transferring information about firm’s productivity, strategy direction, and goal to lower echelon in the organization ,whereas, upward information refers to information including employees’ improvement feedbacks to higher positions of the company (Spreitzer, 2007). Spreitzer (1996) found significant correlation between access to information and four dimensions of psychological empowerment: meaning, competence, self-determination and impact.
Gist and Mitchell (1992) maintained that access to information helps employees to perceive themselves as competent individuals, and therefore enhances psychological empowerment’s dimension of self-efficacy or competence. Moreover, availability of information regarding company’s strategic direction improves individuals’ intrinsic motivation and enhances their sense of meaning (Cogner & Kanungo, 1988). Access to information was also found to be related to autonomy or self-determination (Nonaka, 1988). In other words, employees who have access to more information are more likely to feel that they have freedom in doing their jobs. Additionally, Lawler (1992) contended that availability of information enhances employees’ ability to exert influence on other people’s decision in the organization. Thus, it is more likely that increasing the availability of information make employees believe that they have more impact on the organization as a whole.

(b) Resources

One of power sources in organization is having access to resources such as money, materials, rewards and time, which are necessary for accomplishing given tasks (Laschinger et al., 2001; Miller et al., 2001). These resources can be in the form of availability of budget for project teams, unallocated funds usable for problem-solving or more general managers for smaller units (Spreitzer, 1996). Employees who can tap into necessary resources and get things done successfully tend to have higher self-efficacy (Gist & Mitchell, 1992) and tend to be energetic and accept the responsibility for their roles (Cogner & Kanungo, 1988).
(c) Support

This source of power refers to the guidance, problem-solving advice and feedback from peers, supervisors or manager or subordinates (Casey et al., 2010). Appropriate support such as positive superiors’ feedback and supervisor’s support for employees’ proactive behaviors can help employees maximize their effectiveness (Laschinger et al. 2010).

Extracted from Kanter’s (1977) power tools, sociopolitical support (i.e. the degree to which work’s elements provide individuals with psychological, material and social resources) was identified as an antecedent of psychological empowerment (Spreitzer, 1996). Spreitzer, (1996) maintained that by becoming a member in an organizational network (i.e. organization’s social fabric that provides its member with essential means and channels), individuals receive approval and legitimacy from organizational constituencies which boost their feeling of power. The sense of power positively influences psychological empowerment dimensions of impact, self-determination and competence or self-efficacy, and consequently makes employees empowered.

2.3.1.3 Formal and Informal Power structure

According to Kanter (1983, 1993), individuals’ access to power tools (i.e. opportunity, information, resources and support) strongly depends on their formal and informal power in the organization. Jobs that are related to main organizational processes and those that allow more visibility, flexibility and discretion, provide the job holder with more formal power (Kanter, 1993). Formal power is also achieved by doing well in job-related activities which provide solution to organizational problems and activities that are exceptional and therefore attract attentions (Brown & Kanter, 1982). On the other hand, informal power is the outcome of social and political alliances with peers,
superiors, subordinates and sponsors (i.e. higher level positions such as coaches and mentors, who can support individuals and provide them with prestige and approval) that can help employees get the approval and cooperation necessary to successfully accomplish their tasks. Employees’ level of formal and informal power, determines how accessible both structures of opportunity and power to individuals (Miller et al., 2001; Sarmiento et al., 2004).

Structural empowerment construct, is measured in a formative manner, in other words, individuals’ perception towards the availability of information, support, opportunity, resources, formal and informal power among other empowering techniques, indicates their level of empowerment. Besides Kanter’s (1977, 1983) power tools, a vast body of research, within the social-structural boundaries, were focused on identification of practices, by which power can be shared democratically throughout the organization and employees’ involvement can be improved. However, many of these practices contribute to employees’ level of empowerment by providing individuals with better access to Kanter’s (1977) power tools of opportunity, information, resources and support (Spreitzer, 2007). In addition, it is important to note that interaction between these practices is way more influential compared to separate practices (Macduffie, 1995). These studies suggested that sharing the power may even require tremendous change in organization’s policies, structure and processes (Bowen & Lawler, 1995). Some of these practices are as follows:

2.3.2 High-Performance Work System (HPWS) Practices

High performance work system (HPWS) refers to the practices that are meant to improve employees’ performance by increasing their perceived control or impact and information-sharing, motivation, and improving the employees’ level of skill and
knowledge (Maynard et al. 2012; Seibert et al., 2011). Extracting from the literature on HPWS, Seibert et al., (2011) bundled some practices, including open information sharing, extensive training, and contingent rewards, under the term “high-performance managerial practices” and tested these practices as antecedents of psychological empowerment. Based on 27 empirical studies, they found significant associations between these high-performance managerial practices and psychological empowerment. Additionally, Liao et al. (2009) found empirical support for significant relationship between some other High Performance Work System (HPWS) practices, comprising performance feedback, service-quality-focused hiring, training, and performance-related information sharing and psychological empowerment.

Improving skill and knowledge is the other HPWS practice which has been tested by many empirical studies as antecedents of psychological empowerment. For instance, improving employees’ level of skill and knowledge and helping them to better understand the economics of organization using educative programs were identified as effective ways to enhance employees’ level of psychological empowerment (Lawler, 1996; Spreitzer, 2007). Lawler (1992) contended that having necessary knowledge and skill is the key ingredient for employees’ participation, and without it, it is almost impossible for employees to participate in business and influence the strategic direction of the organization. By conducting meta-analysis on these studies, Seibert et al. (2011) found significant association between improving skill and knowledge and psychological empowerment. They posited that improving employees’ skill and knowledge, with extensive training or other means, helped them to see themselves as competent individuals and therefore increase their self-efficacy or competence (i.e. dimension of psychological empowerment).
2.3.3 High-Involvement Work System

High involvement work system encompasses of managerial and organizational practices which foster employees’ involvement in decision-making through sharing of power, information, rewards, and knowledge (Bowen & Lawler, 1995).

(a) Participative Decision-making or Participative Organizational Climate

James and Jones (1974) defined organizational climate as company’s characteristics, which influences the behaviors of employees and gives organization specific personality. Evered and Selman (1989) maintained that organizations with participative climate, aim to create and liberate their employees, whereas organization with non-participative climate emphasize on more control and order. In other words, participative decision-making or participative organizational climate refers to managerial or organizational practices that emphasize on employees’ initiative and contribution as opposed to top-down control and command (Lawler, 1992). Many empirical studies such as Wallach and Mueller (2006), Huang (2012), Spreitzer (1996), and Huang et al. (2010) provided evidence of significant association between participative decision-making climate and psychological empowerment.

(b) Span of Control or Flat Organizational Structure

Fewer layers in an organizational structure lead to wider span of control. Spreitzer (1996) identified span of control (i.e. the number of subordinates controlled and supervised by a supervisor) as an antecedent of psychological empowerment. She
proposed the following mechanisms, through which wider span of control positively influences four dimensions of psychological empowerment:

- The wider the span of control, the more decentralized decision making will become (Lawrence & Lorsch, 1967). Decentralized decision making is synonymous with less control, which helps employees to feel that they can make decision on their own. Thereby, wider span of control improves employees’ cognition of self-determination.
- Less control caused by decentralized decision making also improves the perception of impact since in this condition, it is more likely that individuals feel they have significant influence on the organization as a whole.
- Under conditions, in which span of control is narrow and supervisors are in the habit of micro-managing their subordinates, employees’ perception of competence tend to be lower since they feel that supervisors do not trust their capabilities (Lawler, 1992).
- Cognition of meaning, which denotes the degree to which work is personally important for employees, is closely tied with employees’ intrinsic motivation. Lawler (1992) maintained that in situation with narrow span of control, employees’ intrinsic motivation is significantly lower compared to those in situations with wider span of control. Therefore, it is expected that the cognition of meaning will be higher when less control is imposed on individuals.

### 2.3.4 Job Design as Antecedent of Psychological Empowerment

As mentioned earlier, three dimensions of psychological empowerment (i.e. meaning, impact, and self-determination) were extracted from Hackman and Oldham’s (1975, 1980) job design model by Thomas and Velthouse (1990) since these psychological states have been found to be the underlying reasons for employees’ intrinsic motivation.
As mentioned earlier, Hackman and Oldham (1975) posited that characteristics of a job should influence three psychological states of experienced meaningfulness (i.e. similar to psychological empowerment’s dimension of meaning), experienced responsibility (i.e. similar to psychological empowerment’s dimension of self-determination) and knowledge of results (i.e. similar to psychological empowerment’s dimension of impact) in order for employees to be intrinsically motivated. In other words, to be intrinsically motivated, employees should find their jobs important and worthwhile, should believe that they are responsible for the consequences of their tasks, and should be able to understand how satisfactory his or her task’s outcome really is (Hackman et al., 1975). These three psychological states are the prerequisites for high internal motivation, high quality performance, high work satisfaction, and low turnover.

Hackman and Oldham (1975, 1980) identified skill variety, task identity, task significance, autonomy, and feedback as core job characteristics that have bearing on the above-mentioned psychological states. Among the five core job characteristics, skill variety, task identity and task significance contribute to the state of meaningfulness, whereas, autonomy and feedback contributes to experience responsibility and knowledge of result respectively (Hackman & Oldham, 1976). The following sections give more detailed description of these five core characteristics as antecedents of psychological empowerment (Hackman & Oldham, 1975; Hackman et al., 1975; Hackman & Oldham, 1976):
(a) Skill variety

This character refers to the involvement of various activities in a job. When a job is characterized by a high degree of skill variety, it means that a jobholder should have various skills and talent to carry out the task. Even the involvement of a single required skill, makes the job more meaningful. Regardless of the level of skill needed for a job, the number of required skills is the key ingredient that makes a job more attractive to a jobholder and save him or her from monotony of performing repetitive tasks.

(b) Task Identity

Job’s task identity is high when jobholders can complete an identifiable or “whole” piece of work by themselves. For instance, employees who assemble the whole product by themselves find their work more meaningful compared to those individuals who assemble only some parts of a product.

(c) Task significance

Jobs with high task significance provide job-holders with a feeling that their tasks have significant impact on other people’s lives both inside and outside of the organization. Each of these three core characteristics (i.e. skill variety, task identity and task significance) enhances employees’ sense of experienced meaningfulness. Therefore, individuals who hold jobs with high skill variety, task identity and task significance tend to find their jobs very meaningful (Hackman & Oldham, 1975; Hackman et al., 1975).
(d) Autonomy

A job with higher autonomy provides employees with more freedom in choosing the procedure and scheduling their work, and gives them more discretion in the way they carry out their tasks. This dimension contributes to psychological state of experienced responsibility. Therefore, the more substantial freedom a job bestow upon employees, the more likely that they take responsibility of their actions.

(e) Feedback

This job characteristic refers to the degree to which jobholders receive clear information regarding their performance. The feedback can be from the job itself or from agents. The feedback from the job, denotes the information received by jobholder as a result of performing work activities, for instance in assembly line, a worker may have a responsibility of inspecting a component he or she had just finished and learned in the process that by meeting some specifications, he or she has lowered the rejection rate. On the other hand, the feedback from agents refers to the direct and clear information received by employees from peers or supervisors (Hackman & Oldham, 1975).

Kraimer et al. (1999) tested the relationship between the abovementioned job characteristics and psychological dimensions of meaning, impact, competence and self-determination. They found that job characteristics related to psychological state of meaningfulness (i.e. task significance, task identity and skill variety), are significantly related to the dimension of impact. Autonomy was found to be related to self-determination and job feedback was associated with two dimensions of competence and impact. Additionally, Gagne et al. (1997) also tested Hackman and Oldham’s (1975,
1980) job characteristics of task significance, feedback (both from job and agents), and autonomy, and psychological empowerment dimensions. Gagne et al. (1997) found support for significant association between all tested job characteristics and all the four dimensions of psychological empowerment, except for the relationship between feedback from the job and psychological empowerment’s dimension of impact.

(f) Role Ambiguity Mitigation

Spreitzer (1996) found negative association between role ambiguity and psychological empowerment. So the higher the existence of uncertainty regarding work role, the less empowered employees will become. Role ambiguity happens when an employee has some degrees of doubt about others’ expectations of him or her. Spreitzer (1996) proposed that negative correlation between role ambiguity and empowerment can be justified by the negative influence of role ambiguity on psychological empowerment’s cognitions. In other words, individuals, who are uncertain of their work roles, will logically hesitate to act (Influences on self-determination) and consequently believe that their influences in the workplace is not significant (Cognition of impact; Sawyer, 1992).

Furthermore, employees who are working in environments with unclear limits of decision authority, tend to have less self-efficacy or competence (i.e. lower in psychological empowerment’s dimension of competence; Cogner & Kanungo, 1988). On the other hand, the work role will not take on personal meaning unless employees understand their work roles (dimension of meaning; Spreitzer, 1996). To avoid role ambiguity, managers are required to provide employees with necessary direction and guidance and to do so; role and responsibilities should be quite clear within the formal organizational structure (Rizzo et al., 1970).
2.3.5 Individual Characteristics as Antecedents of Psychological Empowerment

As mentioned earlier, Thomas and Velthouse (1990) posited that the perception of empowerment is in fact the outcome of individuals’ task assessment. They also strongly emphasized on the effect of individuals’ differences on their task assessments. On the other hand, Spreitzer (1995) contended that psychological empowerment is the result of continuous interaction between individuals and task environment, so how employees perceive themselves in relation of work environment determines their level of empowerment. Therefore, it is clear that individual differences, which obviously influence individuals’ perception towards work environment, have bearings on the feeling of psychological empowerment. Some studies found empirical evidence for significant association between individual characteristics (i.e. demographics and personality traits) and psychological empowerment which will be elaborated in the following sections.

2.3.5.1 Demographics as Antecedents of Psychological Empowerment

As mentioned in the first chapter, the relationship between demographic variables and psychological empowerment are not consistent across different empirical studies. Some of these findings can be seen in Table 2.2.
Table 2.2: Overview of the Relationship between Demographic Variables and Psychological Empowerment Across Different Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Demographics Tested as Antecedents of Psychological Empowerment</th>
<th>Identified Significant Antecedents of Psychological Empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seibert et al. (2011)</td>
<td>Education, Gender, Age, Position Tenure, and Job Level</td>
<td>Age, Position Tenure, and Job Level</td>
</tr>
<tr>
<td>Koberge et al. (1999)</td>
<td>Education, Gender, Race, and Position Tenure</td>
<td>Position Tenure</td>
</tr>
<tr>
<td>Spreitzer (1996)</td>
<td>Education, Gender, and Age</td>
<td>Education</td>
</tr>
<tr>
<td>Ergeneli et al. (2007)</td>
<td>Education, Gender, Age, Position Tenure, and Work Experience</td>
<td>Position Tenure</td>
</tr>
<tr>
<td>Harris et al. (2009)</td>
<td>Gender and Age</td>
<td>Gender and Age</td>
</tr>
<tr>
<td>Pieterse et al. (2009)</td>
<td>Education, Gender, Age, and Position Tenure</td>
<td>...</td>
</tr>
</tbody>
</table>

2.3.5.2 Personality Traits as Antecedents of Psychological Empowerment

Some studies have shown that employees, who score higher in certain personality traits, are more empowered. For example, Seibert, Wang, and Courtright (2011), found significant association between core self-evaluation and psychological empowerment. In addition, Spreitzer (1995) provided evidence for significant association between self-esteem and psychological empowerment. Identification of both core self-evaluation and self-esteem as antecedents of psychological empowerment indicates that perception of self-worth matters for empowerment. Thereby, employees who regard themselves in more positive light tend to be more empowered. Yazdi and Mustamil (2014) also tested the relationship between both narcissism and Machiavellianism, and psychological
empowerment. However, they only found significant association between narcissism and psychological empowerment.

According to Hon and Rensvold (2006), individuals with higher need for achievement, and where their cognitions of meaning, impact, competence are higher consequently, are more empowered. They also tested the relationship between individuals’ need for power and psychological empowerment dimensions, among which only dimension of competence showed significant association with individuals’ need for power.

According to Avey et al. (2008), individuals with more positive psychological capital tend to be more empowered. Positive psychological movement, focused on optimizing human resources’ performance and function in the organization, will result in positive organizational behavior (POB) and psychological capital (PsyCap; Luthans et al., 2007). Psychological capital is operationalized by four individuals’ characteristics of self-efficacy, hope, optimism and resiliency (Avey et al., 2008; Luthans et al., 2007). Therefore, when psychological capital is high in employees, they tend to feel they can carry out their tasks successfully (self-efficacy). Moreover, “hope” refers to positive motivation, which is achieved when individuals believe they have goal-directed energy (sense of urgency) and plans to meet their goals (sense of pathways; Luthans et al., 2007; Snyder et al., 1991). When optimism is high in people, they attribute positive events to permanent and personal causes, and attribute negative events to temporary and external causes, but pessimistic individuals are completely the opposite. Additionally, resiliency refers to individuals’ ability to bounce back or rebound from negative and positive events such as failure, conflict, and progress (Luthans, Youssef, & Avolio, 2007).
2.3.6 Relationships within the Organization as Antecedents of Psychological Empowerment

Tremendous number of research has provided evidence that interpersonal relationship within the organization boundaries is significant for psychological empowerment (Spreitzer, 2007). Inter-personnel relationships as antecedents of psychological empowerment have been tested under the terms Leader-Member Exchange (LMX) (LMX; i.e. exchange quality between employee and supervisor), customer supportiveness (i.e. a construct for measuring the relationship between employees and customers), and peer relationship or peer support.

2.3.6.1 Leader-Member Exchange (LMX) and Team-Member Exchange (TMX) as Antecedent of Psychological Empowerment

Leader-Member Exchange (LMX) is rooted in “role theory” positing that between a leader and each of his or her followers, there is a unique relationship, which is the outcome of exchange processes such as role making, role taking, and role routinization (Matta et al., 2015; Bauer & Green, 1996). Leader-followers dyadic relationship may range from a transactional exchange based on the contract to very high quality exchange characterized by trust, high respect, loyalty, and mutual obligation (Zhang et al., 2012). In short, the quality of relationship between employees and their leader is measured by LMX, so, the higher the LMX, the higher the quality of relationship or exchange which exits between the leader and followers (Chen et al. 2007; Wat & Shaffer, 2005; Chen et al., 2015; Jutras & Mathieu, 2016).
In various studies, Leader-Member Exchange (LMX) was measured from both the leader and members’ perspectives. However, leaders’ perspective and followers’ perspective in LMX are found to be closely related, and many studies have found significant correlation between LMXs in both perspectives (Gerstner & Day, 1997).

The link between LMX and psychological empowerment has been tested in many empirical studies. For instance, Liden et al. (2000), Schermuly and Meyer (2016), Chen et al. (2007), Wat and Shaffer (2005), and Harris et al. (2009) have all found evidence of significant association between LMX and psychological empowerment. Most of these studies used followers’ perspective LMX to test LMX’s role as antecedents of psychological empowerment.

An interesting question is: Why a higher quality exchange between employees and supervisor or leader makes employees feel more empowered? The reason is simple. Employees who enjoy higher quality exchange with their supervisor or manager tend to have better access to task challenges or opportunities and information (Aryee and Chen, 2006). Access to information and opportunities, as some of Kanter’s (1977) power tools; have been identified by many studies such as Spreitzer (1996), Wagner et al. (2010), and Knol and Van Linge (2009) as significant antecedents of psychological empowerment. Additionally, better access to information enhances employees’ self-efficacy by providing them with evidence of their enactive mastery (Liden et al., 2000). Access to information also improves employees’ sense of meaning (i.e. psychological empowerment’s dimension of meaning) because it helps employees to better understand their work role (Seibert et al., 2011). Liden et al. (2000) also contended that higher level of decisional responsibility enjoyed by in-group subordinates positively contributes to psychological empowerment’s cognitions of meaning, self-determination, impact, and competence or self-efficacy.
Chen and Klimoski (2003) tested the relationship between Team-Member Exchange (TMX) and psychological empowerment. They found support for significant association between TMX and psychological empowerment. The theoretical link between these two constructs is again rooted in Kanter’s (1977, 1983) power tools. As mentioned earlier, relationships and sociopolitical connections in the organization enhance employees’ access to information, support, resource, and opportunity and consequently make employees more empowered. Therefore, higher quality exchange with team members is also expected to improve employees’ feeling of empowerment.

2.3.6.2 Employees-customers Relationships and Peer Support/Peer Relationship as Antecedents of Psychological Empowerment

Employees-customer relationship as antecedent of psychological empowerment has been tested using two distinct constructs: employees-customer value congruity and customer supportiveness (Corsun & Enz, 1999; Spreitzer, 2007). The former, assesses the similarities between employees’ and customers’ values, whereas, the later construct refers to the degree to which employees perceive customers as supportive. The degree to which employees perceive customer as open, trusting, and honest constitutes the employees’ level of customer supportiveness (Corsun & Enz, 1999). Corsun and Enz (1999) tested both employees-customer value congruity and customer supportiveness as antecedents of psychological empowerment. However, only customer supportiveness was found to be significantly related to psychological empowerment.

Why perceiving customers as more supportive helps employees to feel more empowered? The reason is that perceiving customers as more supportive makes it easier
for employees to display positive emotions (Corsun & Enz, 1999). On the other hand, positive emotional display boosts employees’ perceived control (i.e. synonymous to psychological empowerment’s dimension of impact; Thomas & Velthouse, 1990) in dealing with customers (Rafaeli & Sutton, 1990). So, perceiving customers as more supportive enhances employees’ sense of impact and consequently makes them feel more empowered.

Peer relationship or Peer support has also been identified as a significant antecedent of psychological empowerment (Wallach & Mueller, 2006). In other words, the stronger employees’ connections within the organization and the more support each employee receives from other peers, the more empowered he or she becomes. The theoretical link between peer relationship and psychological empowerment again is rooted in Kanter’s (1977, 1993) power tools. Kanter (1977) held that organizational support, including support from peers, is one of the main power tools which make employees powerful. Later on, Kanter (1993) added “informal power” (i.e. the political alliance including relationship with peers improves employees’ access to information and opportunities) to her list of power tools. Kanter (1993) maintained that having connections and political alliances facilitate employees’ access to original power tools (i.e. opportunity, information, support, and resources). On the other hand, as it has been elaborated in the previous sections, access to information and opportunities have been found to enhance psychological empowerment dimensions of meaning, self-determination, and competence, and impact.

2.3.7 Leadership and Psychological Empowerment

Many studies attested to the significance of leader’s role on employees’ feeling of empowerment. Trust between leader and employees and transformational leadership
were found to be positively related to psychological empowerment which will be elaborated in the following sections.

### 2.3.7.1 Trust Between Leader and Employees

Trust has been defined as the degree to which, an individual is willing to be vulnerable to the other party (Lee K., 2016). Leader’s trust in employees was found to be a significant predictor of psychological empowerment (Schoorman et al., 2007). Trust in one’s supervisor or manager was also found to be significantly associated with psychological empowerment (Ergeneli et al., 2007; Moye et al., 2005). According to Moye and her colleagues (2004), teachers who trust the principal more than others are apt to find more meaning in their workplace (i.e. higher in dimension of meaning), and believe they have more freedom in doing their job (i.e. dimension of self-determination). Additionally, Khany & Tazik (2016) found support for the significant link between trust and psychological empowerment in education industry. In other words, they maintained that teachers who trust their colleagues, principals, student, and parents are likely to experience higher level of empowered.

Lewis and Weigert (1985) maintained that trust can be segregated into two different foundations: cognition-based and affect-based trust. Cognition-based trust is in fact the result of logical evaluation and rational decision-making. In other words, based on our experience, assumption and other factors, we decide that we have “good reason” to trust someone. Whereas, affect-based trust is an outcome of emotional bond, which is created by genuine concern and care for the other party. In short, contrast to cognition-based trust, which is the result of cognition process and logical assessment, affect-based trust
is a consequence of affection and emotional bonding (Ergeneli et al., 2007; Lewis et al., 1985; Mcallister, 1995). Ergeneli et al. (2007) found evidence that cognition-based trust is significantly related to psychological empowerment dimensions of meaning and self-efficacy or competent, whereas, affect-based trust is significantly associated with the dimension of impact.

2.3.7.2 Transformational leadership as Antecedent of Psychological Empowerment

Prior to 1978, when Burns proposed different definitions for transactional and transformational leadership, transformational leadership was considered a type of transactional leadership. Transformational and transactional leadership vary in the sense that transactional leaders tend to influence their follower by relying on getting compliance in exchange for rewards, whereas, transformational leaders influence followers by transforming their priorities and values and consequently by motivating them to go beyond their norms in increasing their performance (Yukl, 1998). In other words, transformational leaders are willing to take risks in order to support the changes and innovation (Eliophotou-Menon & Ioannou, 2016). Transformational leadership was found to be positively related to the followers’ psychological empowerment (Arnold et al., 2000; Kark et al., 2003; Pieterse et al., 2009). Moreover, by analyzing Israel military leaders and their defense forces, Dvir et al. (2002) found significant relationship between transformational leadership and followers’ level of empowerment in terms of self-efficacy, active task participation, and critical independent approach.
Bass (1985) noted that transformational leaders have four distinct behaviors (Bono & Judge, 2004):

- Transformational leaders are individuals, who follow strong code of ethics and behave in a way that leads to followers’ loyalty and respect (Idealized influence).
- Having a strong vision based on values, is another characteristic of a transformational leader called inspirational motivation. In other words, by using persuasive language and symbolic actions, a transformational leader inspires his or her followers and improves their confidence.
- A transformational leader always pushes the followers to transcend the organizational norms and be more creative (Intellectual stimulation).
- Transformational leaders should recognize and address followers’ developmental and growth needs (Individual consideration).

It is important to note that the above-mentioned leaders’ behavior do not have similar bearing on subordinates. For instance, according to Ahearne et al. (2005), the effect of leadership empowerment behaviors (LEB) varies based on employees' empowerment readiness (i.e. the degree to which individuals possess skill, knowledge and other task relevant expertise necessary for the job). They found that leadership empowerment behavior (LEB) will be more effective when employees possess less experience and knowledge. The evidence for the significant relationship between leaders’ empowering behaviors and subordinates’ level of psychological empowerment was provided by some empirical studies. For instance, Lee and Nie (2015) found that leaders who demonstrate more empowering behaviors have more empowered subordinates. These empowered behaviors comprise: (a) delegation of authority; (b) giving recognition and acknowledgement; (c) stimulating subordinates’ intelligent; (d) clearly stating the
vision; (e) fostering relationships; (f) demonstrating concern and support; (g) role-modeling.

Table 2.3 gives the summary of antecedents of psychological empowerment which are elaborated in previous sections.
Table 2.3: The Summary of Antecedents of Psychological Empowerment

<table>
<thead>
<tr>
<th>Category</th>
<th>Antecedents</th>
<th>Supporting Studies</th>
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<tr>
<td>High-performance work practices</td>
<td>– Open information sharing</td>
<td>Seibert et al. (2011), Liao et al. (2009)</td>
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<td></td>
<td>– Extensive training</td>
<td>Lawler (1996), Lawler (1992)</td>
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<td></td>
<td>– Contingent reward</td>
<td>Bartram et al. (2014), and Bonias et al. (2010)</td>
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<td></td>
<td>– Performance feedback</td>
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<td>– Service quality focus hiring</td>
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<td>– Performance-related information</td>
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<td>– sharing</td>
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<td></td>
<td>– Improving skill and knowledge</td>
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<td>– Flat organizational structure</td>
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<td>Job design</td>
<td>– Skill variety</td>
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<td>– Task identity</td>
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<td>– Autonomy</td>
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<td>– Feedback</td>
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Table 2.3: The Summary of Antecedents of Psychological Empowerment (Cont’d)

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<tr>
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<td></td>
<td>– Gender</td>
<td>Harris et al. (2009)</td>
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<td></td>
<td>– Position Tenure</td>
<td>Seibert et al. (2011), Koberge et al. (1999), and Ergenali et al. (2007)</td>
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<td></td>
<td>– Education</td>
<td>Spreitzer (1996) and Seibert et al. (2011)</td>
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<td></td>
<td>– Job Level</td>
<td>Seibert et al. (2011)</td>
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<td>Personality Traits</td>
<td>– Core Self-evaluation</td>
<td>Laschinger et al. (2009) and Seibert et al. (2011)</td>
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<td></td>
<td>– Self-esteem</td>
<td>Spreitzer (1996)</td>
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<td></td>
<td>– Narcissism</td>
<td>Yazdii and Mustamil (2014)</td>
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<td></td>
<td>– Need for Achievement</td>
<td>Hon and Rensvold (2006; only conducting dimensional analysis)</td>
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<tr>
<td></td>
<td>– Need for Power</td>
<td>Hon and Rensvold (2006; only conducting dimensional analysis)</td>
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<tr>
<td>Role Ambiguity Mitigation</td>
<td></td>
<td>Spreitzer (1996)</td>
</tr>
<tr>
<td>Relationships Within the Organization</td>
<td>Leader-Member Exchange (LMX)</td>
<td>Liden et al. (2000), Chen et al. (2007), Wat &amp; Shaffer (2005), and Harris et al. (2009)</td>
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<td></td>
<td>Team-Member Exchange (TMX)</td>
<td>Chen &amp; Klimoski (2003)</td>
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<td></td>
<td>Employee-customer Relationship</td>
<td>Corsun and Enz (1999) and Spreitzer (2007)</td>
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<td></td>
<td>Customer Supportiveness</td>
<td>Corsun and Enz (1999) and Spreitzer (2007)</td>
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Table 2.3: The Summary of Antecedents of Psychological Empowerment (Cont’d)

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<th>Category</th>
<th>Antecedents</th>
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<td>Leadership-related Antecedents</td>
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<td>Leader-follower Trust</td>
<td>Trust From Leader’s Perspective</td>
<td>Schoorman et al. (2007)</td>
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<td></td>
<td>Trust From Followers’ Perspective (comprising affect-based and cognition-based trust)</td>
<td>Moye et al. (2005) and Ergeneli et al. (2007)</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td>Kark et al. (2003), Arnold et al. (2000), Pieterse et al. (2009), and Dvir et al. (2002)</td>
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2.4 Outcomes of Psychological Empowerment

Consequences of psychological empowerment at the individual level of analysis can be classified into three groups: attitude-related outcomes, behavior related outcomes and performance-related outcomes.

2.4.1 Attitude-Related Outcomes of Psychological Empowerment

(a) Job satisfaction

Many empirical studies such as Aryee and Chen (2006), Koberg et al. (1999), and Sparrowe (1994) supported the significant relationship between psychological empowerment and job satisfaction. According to Locke (1976), job satisfaction depends on the degree to which employees’ needs are fulfilled in the workplace. Hayes et al. (2014) also provided evidence that empowering work environment improves employees’ level of job satisfaction.

There is a strong theoretical link between psychological empowerment and job satisfaction. For instance, Khany and Tazik (2016) noted that teachers who experience higher level of psychological empowerment are tend to be more satisfied with their jobs. Furthermore, by conducting meta-analysis on 53 empirical studies, Seibert and his colleagues (2011) found significant positive association between psychological empowerment and job satisfaction (with mean corrected correlation of 0.64). They posited that psychological empowerment’s cognitions of meaning and self-
determination help employees to fulfill their need for growth through perceived competence or self-efficacy and self-control or impact.

Spreitzer et al. (1997) conducted a dimensional analysis to assess the relationship between each psychological empowerment dimensions and job satisfaction. They found that dimensions of meaning and self-determination are the main cognition that contributes to work satisfaction. Self-determination (i.e. one of the dimensions of psychological empowerment) is one of the key ingredients for intrinsic motivation, and at the same it is one of the main prerequisites for job satisfaction (Deci & Ryan, 1987). Additionally, Hackman and Oldham (1980) showed that psychological state of meaningfulness (i.e. similar to psychological empowerment’ dimension of meaning) is strongly associated with job satisfaction.

(b) Organizational Commitment

Organizational commitment refers to the degree to which employees identify themselves with, and involved in an organization. In other words, highly committed employees are more likely to trust their organizational values and goals (Jung et al., 2016). As mentioned earlier, psychological empowerment is rooted in intrinsic motivation theories. In other words, more empowered employees are, at the same time more intrinsically motivated (Thomas & Velthous, 1990). Meanwhile, Meyer et al. (2004) contended that there is strong association between intrinsic motivation and affective commitment. According to Liden, Wayne, and Sparrowe (2000), by providing empowering stimuli (e.g. providing opportunity for challenges), organizations improve employees’ cognitions of meaning, self-determination, competence and impact which, in turn, prompt employees to reciprocate by being more committed to the company.
After job satisfaction, organizational commitment is the most tested outcome of psychological empowerment. For instance, Avolio et al. (2004) found that psychological empowerment mediates the relationship between transformational leadership and organizational commitment. Macsinga et al. (2015) found that psychological empowerment explains huge amount of positive organizational outcomes including organizational commitment. Seibert et al. (2011) also analyzed 31 studies, which found evidence of significant relationship between organizational commitment and psychological empowerment (with mean corrected correlation of 0.63).

There are some dimensional studies, in which the effect of each dimension of psychological empowerment on organizational commitment was evaluated. For example, Kraimer, Seibert, and Liden (1999) found that impact and self-determination dimensions are the only dimensions which predict organizational commitment.

(c) Lower Strain and Burnout as an Outcome of Psychological Empowerment

Stress and burnout (i.e. a response to prolonged stress) are known to be negatively related to employees’ productivity, wellness, and physical health (Moate et al., 2016). Some empirical studies showed that psychological empowerment is negatively associated with job-related strain. For instance, Spreitzer et al. (1997) tested the effect of each psychological empowerment dimensions on job strain. They found that employees, who believe more in their work-related competencies (i.e. higher psychological empowerment’ dimension of competence/self-efficacy), are apt to experience less job strain. By analyzing 20 empirical studies, Seibert, Wang, and Courtright (2011) reported negative association between psychological empowerment and strain (with mean corrected correlation of -0.37). They maintained that empowered employees are less susceptible to job strain since higher self-determination, competence,
and impact leads to higher perceived control, which in turn, reduces employees’ work-related strain. Besides the job strain, burnout was also found to be negatively related to psychological empowerment. Maslach and Jackson (1981) conceptualized the burnout with emotional exhaustion, de-personalization and personal accomplishment. The syndrome of burnout occurs when individuals feel that their energy and emotional resources are depleted and they become exhausted and overextended by their work (i.e. dimension of emotional exhaustion). In addition, individuals experience burnout when they distant themselves from others (including co-workers and customers/recipient of service) and acquire cynical and impersonal attitude towards them (dimension of depersonalization). Individuals with higher feeling of burnout are apt to feel insufficient and incompetent and assess their work in a negative light (Maslach & Jackson, 1981; Maslach & Schaufeli, 1993).

Cavus and Demir (2010) and Meng et al. (2015) among others found evidence of negative significant association between psychological empowerment and burnout. Hochwalder and Brucefors (2005) conducted a dimensional analysis between psychological empowerment dimensions and all three dimensions of burnout. Except for the relationship between self-determination and both de-personalization and personal accomplishment, all dimensions of psychological empowerment showed significant relationship with burnout’s dimensions. Hochwalder (2007) also showed that psychological empowerment mediates the relationship between psychological work environment and burnout.

Besides the psychological empowerment, structural empowerment, especially Kanter’s (1977) power tools, has also been tested as antecedent of burnout. For instance, Laschinger et al. (2009) found significant association between structural empowerment and burnout. Additionally, Gilbert et al. (2010) showed that burnout’s dimension of
emotional exhaustion partially mediates the relationship between structural empowerment and organizational citizenship behavior (OCB).

(d) Lower Turnover Intention

Substantial body of research attested to significant association between psychological empowerment and employees’ turnover intention, suggesting that empowered employees are less apt to quit their jobs (Harris et al., 2009; Koberg et al., 1999; Sparrowe, 1994). Employees cherish empowering workplaces, which provide necessary foundation for their intrinsic motivation and job satisfaction, and therefore they become more loyal to organizations and continue their employment (Seibert et al., 2011). In their dimensional analysis, Kraimer, Seibert, and Liden (1999) reported positive relationship between psychological empowerment’s dimension of meaning and career intention (i.e. duration of time employees expect to remain in their jobs). On the other hand, they found negative relationship between dimension of competence and career intention. It is likely that employees, who see themselves as competent individuals, look for more challenging jobs and thereby, are not expected to stay long in their current jobs (Maynard, Gilson, & Mathieu, 2012). Additionally, Meng et al. (2015) found support for significant positive and significant relationship between psychological empowerment and employees’ intent to stay. Furthermore, in their meta-analysis, Seibert, Wang, and Courtright (2011) identified 17 empirical studies that reported significant relationship between empowerment and turnover intention (with mean corrected correlation of -0.36).
2.4.2 Behavior-Related Outcomes

(a) Organization citizenship behavior

Conceptualized for the first time by Organ (1988), Organizational Citizenship Behaviors (OCBs) denote discretionary behaviors, that are not included in employees’ formal work role but they are influential in functioning of the company (Koopman, Lanaj, & Scott, 2016). Organ (1988) conceptualized organizational citizenship behaviors by five dimensions of altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Altruism refers to discretionary behaviors that manifest in helping other in their work-related tasks and problems. Conscientiousness denotes the employees’ behaviors that are symptomized by transcending the minimum role expectations, including taking breaks, attendance and obeying rules. In other words, employees with higher conscientiousness believe in the expression “honest day’s pay for honest day’s job”. Sportsmanship happens when employees are willing to tolerate hardships in organizations without complaining. Courtesy denotes employees’ tendency to take steps to avoid conflict with others and prevent problem with others from occurring. Finally civic virtue is a discretionary behavior that encompasses involvement, participation, and concern about life of the organization (Podsakoff et al., 1990). OCB has been associated with many positive outcomes. For instance, higher level of OCB is known to improve service quality, customer satisfaction, and organization profitability (MacDougall et al., 2016). Seibert and his colleagues (2011) posited that psychological empowerment dimensions of meaning and self-determination contribute to organizational citizenship behaviors (OCBs) by improving the sense of involvement and identification in the workplace as a whole. In addition, individuals
with higher cognitions of competence and impact are apt to believe they can achieve positive result if they try and consequently these employees tend to have higher OCBs.

In their dimensional analysis, Wat and Shaffer (2005) found significant relationship between psychological empowerment’s dimension of meaning and OCB’s dimension of courtesy. Given the fact that cognition of meaning is analogous to the feeling of energy (Thomas & Velthouse, 1990), therefore, less perception of meaning leads to apathy and detachment towards their workplace and consequently employees exert less effort to avoid problems with others in the workplace.

Dimension of competence was found to be related to OCB’s dimensions of conscientiousness and sportsmanship. Wat and Shaffer (2005) maintained that the significant link between competence and conscientious is accounted for by the fact that individuals with higher self-efficacy or competence tend to believe they have competency to achieve their goal so they do what is required (even go beyond their role expectation) to achieve them. Furthermore, Spreitzer (1995) maintained that in hardships and challenging situations, individuals with higher competence show more effort and persistence. In other words, employees who perceive themselves as capable individuals are less likely to complain in bad situations.

Wat and Shaffer (2005) also found significant association between self-determination and altruism, as well as between impact and conscientiousness. They noted that employees, who believe that their tasks have significant impact in the workplace, are more apt to go beyond their work role expectation (i.e. higher conscientiousness). Moreover, the link between self-determination and altruism can be explained by
Batson’s (1991) proposition that people require some kind egoistic motivation such as punishment avoidance or reward anticipation to help others. On the other hand, higher self-determination elevates the feeling of self-esteem in individuals that, in turn, act as a motivation for helping others (i.e. higher altruism; Wat & Shaffer, 2005). In addition, Seibert et al. (2011) identified 11 studies, conducted using non-self-rated instrument, and 6 studies with self-rated measurement which found significant association between empowerment and organizational citizenship behaviors (with mean corrected correlations of 0.34 and 0.47 respectively).

(b) Innovation

Innovation regarded as one of the most important means of changing organization, and it is considered as one of the main source of organizational growth and competitive advantage (Jung & Lee, 2016). For the first time, Spreitzer (1995) presented innovation (i.e. a change-oriented organizational behavior that leads to creation of something different and new) as a consequence of psychological empowerment. As previously mentioned, psychological empowerment is a motivational construct, which has been conceptualized based on the fact that empowered employees are energetic and intrinsically motivated. Furthermore, it is well established that intrinsic motivation is significantly associated with innovative behavior (Redmond et al., 1993). Individuals with higher perception of impact and self-determination are apt to feel less restricted by binding rules and technical aspects of the workplace and are more likely to be innovative (Amabile, 1988). On the other hand self-efficacy was found to be related to creativity, thereby empowered employees, who have higher perception of self-efficacy or competency, are expected to be more creative (Amabile, 1988).
Spreitzer, Janasz, and Quin (1999) also found that empowered supervisors are perceived by their subordinates as more innovative. Seibert et al., (2011) reviewed nine studies (eight of which employed non-self-rated measure and one studies used self-rated instrument) that reported significant relationship between empowerment and innovation at work (mean corrected correlation \( r_c \) of 0.33 for studies with self-reported measures and mean corrected correlation \( r_c \) of 0.28 for the study with non-self-rated measures).

2.4.3 Performance-Related Outcomes of Psychological Empowerment

Psychological empowerment has also been identified as a significant predictor of work performance. Spreitzer (1995) for the first time proposed managerial effectiveness (i.e. the degree to which managers meet and transcend work role expectation) as an outcome of psychological empowerment. She contended that empowered managers, in general, carry out their work roles in a proactive manner. In addition, each of the empowerment’s dimensions was found to be related to effectiveness-related results, individually. For instance, Kanter (1983) held that meaning will lead to higher concentration of energy and higher commitment. According to Locke et al. (1984) higher self-efficacy or competence results in higher performance. Ashforth (1990) also found that the higher perception of impact will result in higher performance and less withdrawal from difficult situations.

Beside the managerial effectiveness, employees’ effectiveness or task performance was also identified as outcomes of psychological empowerment (Seibert et al. 2011). Hackman and Oldham (1980) held that psychological state of meaningfulness is a
predictor of work performance. In terms of self-efficacy or competence dimension, Locke (1991) contended that individuals’ self-efficacy has direct influence on their performance. Moreover, Locke et al. (1984) found significant relationship between self-efficacy and future task performance. On the other hand, employees with higher perceived impact tend to have more actual impact on the organization and therefore are more effective (Ashforth, 1989). Spreitzer et al. (1997) tested the association between each of psychological empowerment dimensions and employees’ effectiveness. They found significant relationship between dimensions of self-determination and impact, and employees’ effectiveness. Maynard et al. (2014) tested the relationship between psychological empowerment and performance in a time-lagged/ longitudinal study. They also provided support for the significant link between psychological empowerment and employees’ performance. Despite the strong evidence for the significant relationship between psychological empowerment and performance, there are some studies that did not found significant relationship between psychological empowerment and performance. For instance, D’innocenzo et al. (2016) did not found evidence for the significant relationship between psychological empowerment and employees’ post-performance, although they found support for the significant relationship between prior performance and unit empowerment.
Table 2.4: Summary of Outcomes of Psychological Empowerment

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<thead>
<tr>
<th>Category</th>
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<th>Supporting Studies</th>
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<td>Organizational Commitment</td>
<td>Avolio et al. (2004), Liden et al. (2000), Seibert et al. (2011), and Kraimer et al. (2000)</td>
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<td>Work Strain</td>
<td>Spreitzer et al. (1997) and Seibert et al. (2011)</td>
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<td>Burnout</td>
<td>Cavus &amp; Demir (2010), Hochwalder &amp; Brucefors (2005), and Hochwalder (2007)</td>
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<td></td>
<td>Turnover Intention</td>
<td>Harris et al. (2009), Koberg et al. (1999), Sparrowe (1994), and Seibert et al (2011)</td>
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<td>Behavior-related Outcomes</td>
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<td>Seibert et al. (2011) and Wat &amp; Shaffer, (2005)</td>
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<td>Citizenship Behavior</td>
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<td>Innovation</td>
<td>Spreitzer (1995), Seibert et al. (2011) , and Spreitzer et al. (1999a)</td>
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<td>Performance-related</td>
<td>Managerial Effectiveness</td>
<td>Spreitzer (1995)</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Employee Effectiveness</td>
<td>Spreitzer et al. (1997) and Seibert et al. (2011)</td>
</tr>
</tbody>
</table>

2.5 Moderating Effect of Psychological Empowerment

Perceived over-qualification, which happens when skill, education, training, experience and other qualifications surpass the job requirement, is known to have abundant organizational and individual outcomes such as job dissatisfaction, less affective commitment and more turnover intentions (Maynard et al., 2006). Erdogan and Bauer (2009) found that higher level of empowerment in fact lessens the negative effects of perceived over-qualification. In other words, the negative effects of high perceived
over-qualification, including job dissatisfaction, tend to be ameliorated once employees feel more empowered.

2.6 Psychological Empowerment at Team Level of Analysis

The studies related to psychological empowerment at team level of analysis are quite limited. The term “psychological empowerment”, has been used almost exclusively for empowerment at individual level of analysis, and at the team level it is simply called “team empowerment”. However, most of empowerment-related studies, especially those which have been conducted during the last 15 years, treat team empowerment as a “motivational construct”. For instance, Kirkman and Rosen (1999) and Kirkman et al. (2004b) defined team empowerment as increased intrinsic motivation derived from collective and positive task evaluation of team members. Thereby, team empowerment can be regarded as “psychological empowerment” at the team level.

That is why, in her reviews of empowerment literature, Spreitzer (2007) called team empowerment “psychological empowerment” at team level.

2.6.1 Operationalization of Psychological Empowerment at Team level of Analysis

Psychological empowerment at team-level has been operationalized by two different approaches. In the first approach, team-level psychological empowerment has been measured using Spreitzer’s (1995) individual-level measures and then aggregated to the team level of analysis. Chen and Klimoski (2003) and Jung and Sosik (2002) studies are
examples of these approach. In the second approach, Kirkman and Rosen’s (1997) measures were used. Kirkman and Rosen (1997) operationalized empowerment specifically for teams. They noted that similar to empowered employees, empowered teams have common cognitions. These four cognitions are potency, autonomy, meaningfulness, and impact.

(a) Potency

Almost identical to competence or self-efficacy dimension of psychological empowerment at individual level, potency refers to the collective belief that a team can achieve its objectives successfully and effectively. Despite the similarity between potency (team level) and competence or self-efficacy (individual level), there are some differences as well. First, contrary to self-efficacy that deals with individual’s performance, potency deals with team’s performance. Second, self-efficacy/competence is an experience or perception that employees go through it individually, whereas the experience of potency is developed collectively. Finally, contrary to self-efficacy/competence which is associated with specific task performance, potency deals with team effectiveness in general (Kirkman & Rosen, 1999).

(b) Autonomy

Similar to the psychological empowerment dimension of choice or self-determination at individual level of analysis, autonomy refers to the degree to which team members collectively believe that as a team they have the freedom in determining how to carry out their tasks. Kirkman and Rosen, (1999) noted that team’s autonomy is expected to be negatively related to individual’s perception of self-determination/choice, because
the more perception of autonomy means that important decisions are made by the group and thereby each team member has less discretion.

(c) Meaningfulness

Similar to the psychological empowerment’s dimension of meaning at individual level, dimension of meaningfulness is also rooted in Hackman and Oldham’s (1976) psychological state of meaningfulness. This dimension reflects the collective beliefs of team-members in relation to the importance and worthwhileness of team’s tasks. Given the sense of meaningfulness is developed and shared in a collective manner; thereby each team member is quite influential in other team members’ experience of meaningfulness as well (Kirkman & Rosen, 1999; Kirkman et al., 2004a, b).

(d) Impact

This dimension is the collective version of individual empowerment’s dimension of impact. In other words, higher dimension of impact means that team-members collectively consider the team’s work to be important to the organization as a whole (Kirkman et al., 2004a, b; Spreitzer, 2007). As mentioned earlier, understanding the level of impact for individuals or teams depends on the information and feedback they receive from other members of the organization. Compared to individuals, teams have some privileges in understanding their impact on the organization since they have more interaction with customers and other people in the organization and therefore, they can gather more information and feedback (Kirkman & Rosen, 1999).

2.6.2 Antecedents of Psychological Empowerment at Team Level of Analysis

Many empirical studies have analyzed antecedents of team-level psychological empowerment, which will be elaborated in the following sections. However, compared
to psychological empowerment at the individual level of analysis, team-level psychological empowerment still lacks empirical testing. For example, each of the antecedents and outcomes of psychological empowerment at team level discussed below, have only been replicated by very few empirical studies or have not been replicated at all. The lack of replication obviously reduces confidence in the result.

2.6.2.1 Structural empowerment as Antecedents of Team-level Psychological Empowerment

(Organizational decentralization, organizational formalization, Production/service Responsibility, and High-Performance Work System Practices)

Hempel et al. (2012) tested some structural characteristics (i.e. organizational decentralization, organizational formalization, and job formalization) as antecedents of team-level psychological empowerment. They found positive association between both organizational decentralization and organizational formalization, and team-level psychological empowerment. The theoretical links between organizational decentralization and organizational formalization and team-level psychological empowerment are as follows:

Decentralization refers to the sharing of authority and power by moving decision-making discretion downward to lower echelons of the organization (Hage & Aiken, 1967; Lin & Germain, 2003). Organizational decentralization improves employees’ autonomy (dimension of self-determination; Ranson et al., 1980), and enhances employees’ ability to make influential decisions by improving the flow of downward information (dimension of potency and impact; Spreitzer, 1995; Van de Ven, 1980).
Organizations are considered to be highly formalized when they use formal policies and rules to regulate decision-making and employees’ behaviors and interactions within the organization (Khandwalla, 1974). As previously mentioned, role ambiguity is found to be negatively related to psychological empowerment at the individual level (Spreitzer, 1996). On the other hand, by clarifying work roles and goals, organizational formalization reduces the role ambiguity (Organ & Greene, 1981). Moreover, organizational formalization is expected to enhance teams’ self-determination by clarifying the organizational strategic goals and objective, which in turn endorse teams to decide on their own and proactively carry out their tasks (Hempel et al., 2012; Quinn & Spreitzer, 1997).

Kirkman and Rosen (1999) identified production or service responsibility as significant antecedent of empowerment. High degree of production or service exists when team-members set their own standards and schedules, develop practices that improve quality, and in general participate more in making decisions regarding goals and regulations (Kirkman & Rosen, 1997). Higher participation in goal-setting, transfers power from managers to teams and improves their sense of autonomy (team empowerment’s dimension of autonomy). In addition, higher team-members’ participation in making decisions on production scheduling, not only improves team-members’ autonomy, but also helps them to find more meaning from their work (team empowerment’s dimension of meaningfulness; Kirkman and Rosen, 1999).

Practices of high performance work system were also found to be related to psychological empowerment. Seibert et al. (2011) identified seven empirical studies, in which high-performance managerial practices were found to be significantly related to psychological empowerment at team level of analysis (mean corrected correlation: 0.42).
Contary to Seibert et al.’s (2011) meta-analysis, in which structural empowerment as antecedent of psychological empowerment was labeled high-performance managerial practice, the meta-analysis of Maynard et al.’s (2013) test the relationship between structural empowerment, as an unique antecedent, and psychological empowerment at team level of analysis. Maynard et al.’s (2013) defined structural empowerment at team level of analysis as practices that were built upon job design and job characteristics model. They assessed the relationship between structural empowerment and team-level psychological empowerment and found evidence for the significant relationship.

2.6.2.2 Social Structural Support

Similar to Spreitzer’s (1996) socio-political support at individual level, social structural support is defined as the approval, legitimacy, and endorsement which team-members obtain from different constituencies. Kirkman and Rosen (1999) found evidence for significant association between social structural support and team psychological empowerment. They posited that social structural support is likely to enhance team-members’ feeling of empowerment for two main reasons. First, Kirkman and Rosen (1999) held that being part of an organizational network and receiving support and approval from them, improves team-members’ “feeling of power”, which in turn, improves their sense of impact and competence (i.e. two of psychological empowerment dimensions). Second, given the fact that obtaining more legitimacy and participation as a result of being part of organizational network, increases team-members’ access to information along with other organizational resources, which in turn, is expected to improve psychological empowerment dimensions of potency and autonomy.
Seibert et al. (2011) also provided evidence that socio-political support is significantly associated with team empowerment (number of empirical studies: 3; mean corrected correlation: 0.54). Thus, the network connection of each team-member within the organization matters for team empowerment, and the stronger perception of organizational network will result in more empowered teams. By developing their own rules and policies, teams can decide on how to operate, consequently enhancing the sense of autonomy, meaningfulness, and impact of team-members (Kirkman & Rosen, 1999).

2.6.2.3 Open Communication and Social Exchange

According to Mathieu, Gilson, and Ruddy (2006), organizations, which foster open communication among teams, allow teams to freely exchange and share information with one another, and facilitate multi-team cooperation, which significantly improve the level of empowerment of their teams.

Social exchange, defined as the quality of exchange and relationship among team-members and also between team-members and team leader, has also been found to be significantly related to team’s psychological empowerment (Chen & Klimoski, 2003).

2.6.2.4 Team-based policies

Some team-based policies such as giving rewards on team basis, cross-training the teams, and allowing teams to make staffing decision was found to be related to team-level psychological empowerment (Kirkman & Rosen, 1999). Team-based rewards improve team-members’ intrinsic motivation and consequently enhance their feeling of empowerment (Gibson & Kirkman, 1999). Receiving cross-training enhances teams’ experience and flexibility and therefore increases their sense of meaningfulness.
Furthermore, Manz and Sims Jr. (1993) maintained that cross-training makes team-members believe they have significant impact on the organization (improves team empowerment’s dimension of potency; Kirkman & Rosen, 1999). Mathieu and his colleagues (2006) also found that team-based HR practices which foster team training and facilitate feedback to teams significantly improve team-empowerment.

2.6.2.5 Team Characteristics

Similar to demographics in individual-level psychological empowerment literatures, team characteristics as antecedents of teams’ psychological empowerment vary across some studies. Seibert et al. (2011) also found negative relationship between team size and team empowerment. For instance, Kirkman et al. (2004a) found negative association between team size team-level psychological empowerment, whereas, Chen and Klimoski (2003) found support for positive relationship between team size and psychological empowerment at team level. Racial heterogeneity among team-members and also between team-members and team leader has been found to have negative impact on teams’ psychological empowerment (Kirkman et al., 2004a).

2.6.2.6 Team structure and work design

According to Kirkman and Rosen (1999), teams, in which leaders are not team-members and merely have a supervisory role (i.e. external team leader structure), are more empowered. Because of being external, team-leaders have to ask for more team-members’ input and also delegate more responsibilities to team members, which in turn, boosts team-members’ perceived control. On the other hand, Hackman (1987)
contended that teams with higher perception of control are more likely to find their work meaningful (psychological empowerment’s dimension of meaning). By letting employees set their own output goals and performance, external team leaders enhance team-members’ sense of autonomy (dimension of self-determination; Manz & Sims Jr., 1987).

Empowering work design was also found to be significantly related to team-level psychological empowerment. Mathieu et al. (2006) contended that designing work for teams in a way that give teams control over their human resource function and also holding teams responsible for it can significantly boost team empowerment. They also found that when teams are enabled to develop and control their own performance strategy, they feel more empowered. Moreover, even by letting teams design their own work, organizations can significantly empower their teams (Mathieu et al., 2006). Chen and Klimoski (2003) also tested the Hackman and Oldham’s (1976) job characteristics on team level psychological empowerment, measured using an aggregated form of Spreitzer’s (1995) measure at individual level. Chen and Klimoski (2003) found evidence that these job characteristics positively predict psychological empowerment.

2.6.2.7 Team Leadership

Lawler (1986) described empowered teams as those that are in charge of scheduling their own working hours and vacations; and have authority to hire and fire their team members and even determine wages for themselves. As a result, supervising managers of empowered teams has quite a different role compared to the traditional manager and
they should be more willing to share the power. Arnold et al. (2000) identified the following behaviors, which are essential for managers of empowered teams:

a) **Leading by example**- A set of behaviors that display the manager’s high commitment to his or her job and to the work of other team members. For example, to lead by example, a manager should try to work harder than other team members.

b) **Coaching**- Managers of empowered team should teach every team member to be proactive and self-reliant. Coaching behaviors include making suggestions to other members in order to help them rely on themselves.

c) **Showing Concern**- Empowered teams need managers, who show concern for the well-being of team members. Making time for discussing team member’s problems and concerns can be considered as one these behaviors.

d) **Encourage**- Refers to set behaviors such as supporting team member to solve problems as a team and acknowledging team’s effort, that boost team’s performance.

e) **Informing**- Comprises those behaviors that facilitate the distribution of important information. Information can be company-wide such as information about strategic decision or any other important information.

Kirkman et al., (2004b) found that the number of face-to-face meetings is significantly related to virtual team’s performance. But in cases where virtual team members should
work independently and no face-to-face meeting is possible, having empowered team becomes critical. In addition, when organization is downsized, empowered survivors were found to have significantly higher sense of hope and attachment (Brockner et al., 2004; Mishra et al., 1998). Based on these findings, Spreitzer (2007) concluded that due to their higher level of proactivity, empowered employees are better in identifying the most suitable actions and making sense of organizational situations.

Kirkman and Rosen (1999) reported that leaders’ encouraging behaviors such as giving “voice” to teams and including their input in decision-making, widening the scope of team’s responsibility through delegation, trusting teams, improving team-members’ perceived control, and encouraging team’s self-evaluation and goal-setting can significantly enhance team empowerment. Furthermore, based on 11 empirical studies, Seibert and his colleagues (2011) concluded that supportive leadership behavior is significantly associated with team empowerment (mean corrected correlation: 0.61).

Transformational leadership was also identified as a significant antecedent of psychological empowerment at team level. According to Jung and Sosik (2002), transformational leaders, provide team-members with necessary conditions to learn from their shared experiences, improve teams’ efficiency by stressing on the importance of cooperation in team works, and provide teams with control and discretion to do what is necessary to carry out their task in the most desirable manner. As a result of the above-mentioned transformational leadership behaviors, teams are more likely to feel empowered and to carry out their tasks proactively without fear of being punished.
Table 2.5: Summary of Antecedents of Psychological Empowerment at Team Level of Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Supporting Studies</th>
</tr>
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<tbody>
<tr>
<td>Structural Empowerment</td>
<td></td>
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<tr>
<td></td>
<td>– Organizational Decentralization</td>
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<tr>
<td></td>
<td>– Production/service Responsibility</td>
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<td></td>
<td>– Organizational Formalization</td>
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<td></td>
<td>– High-performance Work System</td>
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<tr>
<td>Social Structural Support and</td>
<td></td>
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<tr>
<td>Team-based Reward</td>
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<td></td>
<td>– Team-based Reward</td>
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<td></td>
<td>– Team Cross-training</td>
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<td></td>
<td>– Team Staffing Discretion</td>
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<td></td>
<td>– Feedback facility</td>
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<tr>
<td>Team Characteristics</td>
<td>Race</td>
</tr>
<tr>
<td>Team Structure</td>
<td></td>
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<tr>
<td>Job design/Job Characteristics</td>
<td></td>
</tr>
<tr>
<td>Team Leadership</td>
<td>Leaders’ behaviors</td>
</tr>
<tr>
<td></td>
<td>Transformational Leadership</td>
</tr>
</tbody>
</table>
2.6.3 Outcomes of Psychological Empowerment at Team level of Analysis

2.6.3.1 Performance/Effectiveness-related Outcomes

Higher performance is the most established outcome of empowerment at team level of analysis. Kirkman and Rosen (1999) also found significant association between team psychological empowerment and three performance-related outcomes (i.e. proactivity, productivity, and customer service). They maintained that empowered teams are apt to show more proactive behaviors (i.e. taking initiatives to revise organizational processes, trying to continuously improve work conditions, and looking for innovative and new solutions for work-related problems). Empowered teams especially those with higher sense of potency (i.e. a dimension of team empowerment) were also found to be more productive than less empowered teams. In addition, because of the tendency to critically assess their own service quality and to take more responsibility of customers’ complaint, empowered teams deliver better internal and external services (Kirkman & Rosen, 1999).

Spreitzer et al. (1999b) found that team empowerment significantly influences team performance by increasing the team involvement in the workplace. They held that by increasing teams’ involvement, empowering stimuli prompt teams to utilize their untapped problem-solving abilities, knowledge, and creativity and consequently increase their level of performance. On the other hand, team involvement, as a result of team psychological empowerment, provides teams with more intrinsic rewards and therefore enhances their intrinsic motivation, which in turn, boosts teams’ performances. Chen et al. (2007) also showed that team empowerment mediates the relationship between leadership and team performance. Moreover, team empowerment
was found to play a mediating role for the relationship between race heterogeneity and
team effectiveness (Kirkman, Tesluk, & Rosen, 2004a).

Similarly, Mathieu and his colleagues (2006) provided evidence that team
empowerment improves team performance through effecting the team processes. Marks,
Mathieu, and Zaccaro (2001) categorized team processes (i.e. the ways, by which thing
are done by teams) into three subcategories of transition-phase processes, action-phase
processes, and inter-personal processes. Transition-phase refers to the period of time,
when team-members engage in goal-setting, planning, and evaluating activities to give
direction towards the accomplishment of teams’ objectives. During the action-phase,
team members’ activities are mostly focused on goals accomplishment. Finally,
interpersonal processes denote the processes (e.g. confidence building, motivating,
conflict management, and affect management), by which teams manage their
interpersonal relationship. Mathieu et al. (2006) contended that empowered teams will
have more freedom and discretion in their planning strategies, in aligning their efforts to
achieve their goals, and in managing their interpersonal processes. Therefore,
empowered teams can better carry out transition, action, and inter-personal processes
which lead to higher team performance.

Kirkman et al. (2004b) found significant relationship between team empowerment and
two indicators of team performance in a virtual setting (i.e. process improvement/team
learning and customer satisfaction). They considered process improvement (i.e. teams’
activities, through which teams acquire and process data which consequently lead to
their improvement; Edmondson, 1999) as an indicator of team performance in a virtual
setting because most of the teams in virtual settings are knowledge-based that create
new products or deal with customers’ problem. According to Kirkman and his
colleagues (2004b), when a team is empowered, there is a strong feeling of autonomy
(i.e. cognition of team empowerment), that supports team-members to engage in risk-taking activities critical for learning and process improvement. Higher sense of potency (i.e. dimension of team empowerment), on the other hand, prompts team-members to proactively attempt to revise processes, look for continuous improvement, and seek out innovative and new solutions for work-related problems. Moreover, higher collective perception of meaning in empowered teams, will result in higher team-members’ motivation and persistence that in turn, leads to better learning and process improvement. Finally, by expanding empowered teams’ collective understanding of situations, higher cognition of impact (i.e. team-empowerment’s dimension) help team-members to make appropriate adjustments in the workplace and reach a higher level of process improvement and learning.

In addition, Kirkman et al. (2004b) provided evidence that empowered teams are more capable of satisfying customers (i.e. a performance indicator for virtual teams). This is because of the higher level of autonomy in empowered teams, prompt team-members to personally take responsibility of handling customers’ complaints and take initiatives in self-diagnosing the quality problems (Wellins et al., 1991). Shea and Guzzo (1987) also found positive relationship between teams’ potency (i.e. a dimension of team empowerment) and the level of external and internal customer service. Finally, because of their higher sense of impact, empowered teams tend to have better understanding of situation and organization as a whole which helps them to better recognize what changes are needed in order to satisfy customers (Kirkman et al., 2004b). Mathieu and his colleagues (2006) also found that team empowerment boosts customer satisfaction by improving team processes (i.e. transition- phase, action- phase, and inter-personal processes).
As mentioned at the beginning of this section, team performance is the most tested outcome of team psychological empowerment. By conducting a meta-analytic review of 20 empirical studies, which tested the link between team psychological empowerment and team performance, Seibert and his colleagues (2011) also found support for the link between team-level psychological empowerment and effectiveness or performance (mean corrected correlation: 0.51). Additionally, based on 34 empirical studies, Maynard et al.’s (2013) meta-analysis showed that team-level psychological empowerment is significantly and positively related to team performance including effectiveness, innovation, customer satisfaction, and productivity.

2.6.3.2 Attitudinal Outcomes of Psychological Empowerment at Team Level

Only a handful of studies tested the relationship between team empowerment and attitudinal outcomes. According to Kirkman and Rosen (1999), more empowered teams have higher sense of commitment to their organizations. In addition, members of empowered-teams are more committed to their teams as well. Finally, within the more empowered teams, members tend to achieve more satisfaction from their jobs (Kirkman & Rosen, 1999).

The overview of the above-mentioned outcomes of team psychological empowerment is given in Table 2.6.
Table 2.6: Summary of Outcomes of Psychological Empowerment at Team Level of Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Supporting Studies</th>
</tr>
</thead>
</table>
| Performance-related Outcomes | Team Effectiveness/Performance  
- Team Proactivity  
- Team Productivity  
- Service Quality  
- Process Improvement/Team Learning  
- Customer Satisfaction |
|                           | Spreitzer et al. (1999b), Chen et al. (2007), Kirkman et al. (2004a), Mathieu et al. (2006), and Seibert et al. (2011)  
|                           | Kirkman & Rosen (1999)                                                          |
| Attitudinal-related Outcome | Organizational Commitment  
- Team Commitment  
- Job Satisfaction |
|                           | (Kirkman & Rosen, 1999)                                                         |

2.7 Big-Five Personality Traits /Five-Factor Model (FFM)

2.7.1 Overview

The Five-Factor model comprises of five dimensions, namely Agreeableness, Extraversion, Openness to Experience, Emotional Stability or Neuroticism, and Conscientiousness. These personality traits are the most acceptable measures of human personality (Gurven et al., 2013; Wilt & Revelle, 2015). The literature on the Big-Five personality traits including the established outcomes and the link to psychological empowerment are presented separately for each of personality traits. Prior to elaborating on each trait, the history and development process of FFM is presented in order to explain how the Five Factor Model (FFM) describes such a wide variations of personality traits.
In establishing the theoretical link between each of the Big-Five personality traits and psychological empowerment, a mechanism similar to that of Spreitzer (1995) was employed. In other words, hypotheses were developed and justified by finding the link between the Big-Five personality traits and any of the psychological empowerment’s cognitions or dimensions (i.e. meaning, self-determination, competence/self-efficacy, and impact) from the literature. The associations between all the Big-Five personality traits, except for agreeableness, and at least one of psychological empowerment dimensions were supported by the literature, which will be elaborated in the following sections. On the other hand, an indirect link (i.e. through mediating variables) between agreeableness and psychological empowerment was supported by literature. In other words, based on the literature, agreeableness was expected to predict some of the most established antecedents of psychological empowerment (i.e. Leader-Member Exchange (LMX), customer supportiveness, peers support/relationship, and affect-based trust).

### 2.7.2 History and Development of Big-five Personality Traits

Development of the Big-Five personality traits started in 1884, when Sir Francis Galton proposed “lexical hypothesis” (i.e. a proposition stating that all important individuals’ differences in human interaction will become encoded as a single terms in English and other languages), and looked into the dictionary for identifying descriptive terms that can be used for explaining individuals’ differences (Goldberg, 1993; Trull, 2012). Later on, Allport and Odbert (1936), and Norman (1967) revised and reduced Galton’s (1984) descriptive-terms based on the Second and Third edition of Webster’s dictionary, respectively.

One of the first investigators, who employed Galton’s (1984) terms to identify personality descriptors, was Louis Thurstone. Thurstone (1934), who pioneered factor analysis development, extracted five common factors from sixty descriptive adjectives.
Albeit, Thurstone did not continue his work and decided to use oblique rotation in his subsequent studies, which lead to identification of seven independent factors instead of five factors (Thurstone, 1953). Meanwhile, using Allport and Odbert’s (1936) 4500 descriptive traits, Cattell (1943) identified 35 bipolar variables (each pole comprised of several phrases and adjectives). We can say that today’s Big-Five personality traits are derivatives of these bipolars. In contrast to Cattell, who maintained for several times that more than dozen factors were extracted from bipolar variable by using oblique rotation, other researchers such as Smith (1967), and Digman et al. (1981) were among others who reported only five factors from Cattell’s (1943) variables (Goldberg, 1993; Laher, 2013).

As mentioned earlier, conceptualization of the Big-Five personality traits is rooted in lexical approach. Thereby, the first step was to look into the lexicon to identify terms that describe personality traits (i.e. individuals’ enduring styles of thinking, acting, and feeling). When these descriptive terms form a pattern (i.e. personality structure), they construct a personality. For instance, sociability in people usually comes with cheerfulness and energy. So, the pattern among these traits construct a personality called “extraversion” (McCrae & Costa Jr., 1997).

2.7.3 Big-Five personality traits and its Global Application

Since personality traits are derived from language, therefore, there is a possibility that personality traits varies across different cultures. Now, the question is whether or not personality is universal. Many cross-cultural analyses have been conducted to see whether the Five Factor Model (FFM) is generalizable to other cultures. Empirical studies have tested FFM in more than fifty societies and across six different continents,
and they have provided evidence of universality of FFM (Gurven et al., 2013; McCrae and Costa Jr., 1997; Bond et al., 1975; Schmitt et al. 2007).

2.7.4 Domains of Five-factor Model and Hypothesis Development

The Five Factor Model (FFM) was identified by many psychologists as the best representation of personality structures across different cultures (Digman, 1990). The FFM comprises five domains: (I) Openness vs. closeness to experience, (II) Extraversion vs. introversion, (III) Agreeableness vs. antagonism, (IV) Conscientiousness vs. negligence, and (V) Emotional stability vs. neuroticism (Trull, 2012). The following section elaborates these domains and their established organizational outcomes. Despite the fact that many studies have tested the Big-Five personality traits in organizational boundaries, the bulk of research related to Big-Five personality traits have been carried out under psychology confines.

2.7.4.1 Openness vs. Closeness to Experience

Openness to experience was conceptualized as a multifaceted construct with six distinct facets of: fantasy, aesthetics, feeling, actions, ideas, and values (Costa & McCrae, 1992). Thus, open people are quite imaginative (i.e. fantasy facet of openness to experience), which makes them more receptive to unprecedented perspectives. Aesthetics facet refers to open individuals’ tendency to be more sensitive and appreciative towards art and beauty. Moreover, individuals high in openness to experience are more receptive to emotion in comparison to closed individuals (i.e.
feeling facet). Action facet of openness to experience refers to the degree to which individuals are behaviorally flexible, and the degree to which they are ready to try new things. In addition, open individuals are more intellectually curious than others with lower openness. Finally, open individuals are more liberal in values. So, open people tend to question others’ political and social values more in comparison to others.

In contrast to individuals who are high in openness, close people are quite realistic and down to earth, they do not get fascinated easily with art and beauty, and they are emotionally shallow. Furthermore closed individuals usually do things in ways they are used to and they are set in their ways. In addition, individuals with low openness are not curious and they don’t challenge traditional values (McCrae & Sutin, 2009; Onraet et al., 2011; Shane et al., 2010).

Wanberg (2000) identified openness as a predictor of proactivity in socialization process. It is probable that psychological empowerment mediates the openness-proactivity relationship. Furthermore, higher openness in individuals usually comes with intellectual capacity and many studies found significant association between intellect and openness to experience. Thus, open individuals are expected to be more perceptive, intelligent, rational and analytical (McCrae & Sutin, 2009; Judge & Zapata, 2015), and have the tendency to embrace and understand unfamiliar phenomena (Watanabe et al, 2011).

As previously mentioned, the above mentioned openness to experience’s facets usually covaries with each other. For instance, individuals who are intellectually curious are apt to be artistically sensitive and imaginative as well. This is attributed to the fact that the same gene is responsible for shaping these three traits. Yamagata et al. (2006)
maintained that not only openness to experience similar to other basic factors, is heritable but also the co-variation among openness to experience’s facets can be observed in both genetic and phenotypic levels. Despite the fact that openness to experience shows differential stability throughout individuals’ lifespan (Terracciano et al., 2006; McCrae et al., 2005) reported that the level of openness to experience changes during the lifetime based on a pattern named maturational trend (i.e. the level of openness to experience goes up from adolescence until some time in 20s and then starts to go down gradually).

Throughout the literature, openness is associated with abundant outcomes. For instance, openness to experience was found to be positively related to creativity particularly to divergent thinking (McCrae, 1987; Kaufman, et al., 2016; Xu et al., 2014). Noftle and Robins (2007) contended that open individuals achieve higher verbal score on Scholastic Aptitude Test (SAT). In other words, open students tend to read more and in broader extent compared to other students. In their study which was conducted among African Americans and Caucasians, Terracciano and his colleagues (2003) showed that openness to experience significantly relates to facial and verbal emotion recognition.

Robust evidence suggests that observers can easily recognize open people from their daily habits and social interactions. According to Snee et al. (1998), individuals who score higher in openness to experience tend to have high sense of humor, be expressive in their social interaction, and speak fluently. In addition, Gosling et al. (2002) contended that open people are apt to decorate their homes and offices in unconventional manner and display diverse range of magazine and book according to their intellectual interests. Since open individuals have intellectual and artistic nature, they tend to express these inclination in their daily life. For instance, by assessing
personal website of open people, Marcus et al. (2006) reported that open individuals tend to share information that reflect their emotions and personal opinion, and tend to stress on their creative works. Mehl and his colleagues (2006) also studied individuals with different personality traits in their daily lives. They noted that individuals with higher openness to experience spend more time in cafés and restaurants compared to individual with other personality traits. Interestingly, Mehl et al. (2006) found that open people have the tendency to use fewer past-tense-verbs and third-person pronouns in their daily conversations. Besides the studies that focused on personality at individual level of analysis, many studies focused on team- personality and its outcomes. For instance, by analyzing 82 customer service-teams, Neuman et al. (1999) found that higher openness to experience in team’s personality is related to better team performance.

2.7.4.2 Extraversion vs. Introversion

Individuals, who score higher on extraversion, are more assertive, energetic, talkative, outgoing, high spirited, cheerful, positive, ambitious, optimistic, upbeat, gregarious and active. As opposed to extraverts, introverts are quiet and independent. Extraverts who usually seek social attention and excitement, have a propensity to spend most of their time among other people, maintaining more social contact, spending most time socializing and engaging in more social activity, whereas introverts are quite the opposite (Bono & Judge, 2004; Bruck & Allen, 2003; Kandler, 2012; Wanberg et al., 2000; Smillie et al. 2015).
Throughout the literature, many positive outcomes were associated with extraversion. For example, Barrick and Mount (1991) noted that extraverts show higher performance compared to other personality traits in sales representatives, managerial positions, and in any jobs that require a higher degree of interpersonal skills. According to Judge et al. (1999), extraversion positively relates to extrinsic career success, which is operationalized by occupational status and income. In other words, extraverts tend to be more successful in their jobs and are more likely to get higher positions and receive more income compared to those individuals with less extraversion. Extraversion is also found to be positively related to positive affect across various cultures (Lucas & Baird, 2004). Additionally, Spain and her colleagues (2000) found that extraversion is significantly associated with aggregated momentarily positive affect. In other words, extraverts are apt to be happier in general as well as in short periods of time compared to introverts.

Extraversion has been conceptualized as a combination of two main elements of dominance or agency and affiliation or sociability. The former component (i.e. dominance), refers to extraverts’ tendency to be authoritarian, in control, headstrong, and combative. Dominance aspect of extraversion makes extraverts strive to influence others and to stand firmly to their opinions. On the other hand, the latter component of extraversion refers to extraverts’ propensity to participate in social activity, social interaction and to be friendly and affectionate. Some scholars viewed dominance as the main characteristic of extraverts, whereas other scholars considered affiliation component to be the core of extraversion (Bono & Judge, 2004; Driskell et al. 2006).

Similar to other basic personality traits, extraversion can also be explained at the genetic level. Jang and his colleagues (2002) found that same genes accounted for high
covariation among extraversion’s facets. Bouchard Jr. and Loehlin (2001) also provided evidence for heritability of extraversion. Although, they maintained that the degree of extraversion which is accounted for by genes tends to decrease when people get older. In other words, when individuals grow older, environmental factors become more important in determining the level of extraversion, compared to genetic factors.

2.7.4.3 Agreeableness vs. Antagonism

Individuals high in agreeableness are kind, trusting, altruistic, courteous, good-natured, modest, helpful, honest, sympathetic to others, soft hearted, and tolerant. On the other hand, individuals low in agreeableness tends to be skeptical, competitive, uncaring, critical, and hostile (Bruck & Allen, 2003; Driskell et al., 2006; Liao et al., 2009).

The ability to trust others and to establish or maintain relationships are both hallmarks of agreeable individuals (Bono & Judge, 2004). Agreeableness is in fact a social trait (Judge & Bono, 2000). In other words, the degree of agreeableness in individual is one of the main determinants of the way we relate to each other and also the degree to which we value interpersonal relationship (Myers et al., 2010). Agreeable individuals are best for establishing and maintaining relationship whether inside or outside of the work environment and due to the high value they give to their relationship with others, they tend to experience less conflict, whereas individuals with lower agreeableness are less tolerant and therefore they cannot go along easily with other individuals (Bono et al., 2002). Asendorpf et al. (1998) held that, because of showing and provoking less
aggression from themselves and their partners respectively, individuals high in agreeableness are the best in minimizing conflict in any relationships.

Some studies have suggested negative association between agreeableness and performance in certain jobs. For instance, McClelland and Boyatzis (1982) maintained that agreeable managers may not perform well, since, given the affiliation aspect of agreeableness, it will be harder for agreeable managers to make difficult decisions which negatively affect co-workers or subordinates. Zhao and Seibert (2006) argued that high level of agreeableness in individuals in entrepreneurial role will be even more problematic compared to managerial jobs in more established organizations for two main reasons. First, entrepreneurs usually have thinner financial margin of error and less access to legal protections in comparison to managerial work in established businesses. Second, acting in overly self-interested manner has more negative consequences for managers in more established organizations than entrepreneurs, since managers are constrained by interlocking social network in more established organization whereas, entrepreneurs are not. Seibert and Kraimer (2001) also provided evidence of negative relationship between agreeableness in managers and both job satisfaction and salary level.

2.7.4.4 Neuroticism vs. Emotional Stability

Neuroticism has been defined as individuals’ susceptibility to negative emotions. Individuals with higher neuroticism or lower emotional stability are more prone to guilt, paranoid, anger, self-consciousness, mood swings, disgust, depression, anxiety, fear and embarrassment and they are more likely to lose control and do thing by the impulse. In addition, neurotic individuals are more self-conscious and they are more likely to find a
situation stressful and threatening (Driskell et al., 2006). Neurotic people have tendencies to avoid situations that require high degree of control, social skill, long term commitment and trust. In short, individuals with higher neuroticism or lower emotional stability react to any stimuli in more intense and repelling manner and tend to have negative perception towards daily events (Driskell et al., 2006; Smillie et al., 2006). On the other hand, individuals high in emotional stability are more confident, secure, well-adjusted, relaxed, and more capable of dealing with stressful situations (Bruck & Allen, 2003; Kandler, 2012).

Emotional stability has been found to predict many individuals and organizational outcome, among which job performance and job satisfaction are two of the most established outcomes of emotional stability. For instance, in three meta-analytic studies, Salgado (1997), Judge and Bono, (2001), and Tett et al. (1991) provided evidence of significant positive link between emotional stability and job performance. In terms of job satisfaction, many empirical studies such as Tokar and Subich (1997) and Furnham and Zacherl (1986) showed that employees high in emotional stability are more satisfied with their jobs. Judge and Bono’s (2001) meta-analysis also identified neuroticism as a significant predictor of job satisfaction.

Additionally, based on 32 empirical studies, the result of Judge and Ilies’ (2002) meta-analysis indicated that emotional stability significantly predicts self-efficacy. Schmitt (2008) found evidence that the relationship between emotional stability and self-efficacy is moderated by gender in a way that low emotional stability in women will result in lower level of self-efficacy compared to men, whereas, when there is high level of emotional stability, women tend to feel a higher level of self-efficacy in comparison to men.
2.7.4.5 Conscientiousness vs. Negligence

Conscientious people tend to be well-organized, self-disciplined, purposeful, detail-oriented, punctual, determined, reliable, risk averse, dependable, responsible, and achievement-oriented. In other words, the characteristics of conscientiousness individuals are mainly different in the aspects of planning, achievement striving, deliberation, order, and competence. On the other hand, individuals with lower conscientiousness, or negligent people, do not value prospective results and they are lackadaisical towards their goals, irresponsible, disorder, and unreliable (Bono & Judge, 2004; Driskell et al., 2006; Liao et al., 2009; Myers et al., 2010). Conscientiousness is also analogues to “socially impulse control” that help employees to perform their task easier (Costantini et al., 2015).

Throughout the literature, conscientiousness has been called with different names such as conformity, dependability, will to achieve and etc. (Barrick & Mount, 1991). Conscientiousness has been called dependability because from one aspect it reflects thoroughness, planfulness, and responsibility. Conscientiousness has also been called “will to achieve” as it is found to be strongly associated with educational achievement. In the organizational context, conscientious employees have been found to have stronger urge to meet their objectives and to work harder to fulfill their goals (Bono & Judge, 2004).

Conscientiousness has been associated with many organizational and individual outcomes. Performance is probably the most established outcome of conscientiousness in individuals in many job positions. For instance, Liao and Chuang (2004) provided evidence that conscientious service workers tend to perform better compared to those low in conscientiousness. Additionally, Ellershaw et al. (2015) noted that conscientious
nurses have significantly higher performance compared to nurses low in conscientiousness. The higher performance of conscientious employees has been attributed to their decisive and orderly characteristics, which provide them with an edge in various job positions (Judge & Ilies, 2002). Conscientiousness has also been found to be positively related to life satisfaction (DeNeve & Cooper, 1998) but negatively associated with Work-Family Conflict (WFC; Bruck & Allen, 2003). Lin et al. (2015) contended that employees low on conscientiousness tend to suffer less from work stressors (hindrance and challenge).

Strong body of research such as Burns and Christiansen (2011), Judge and Ilies (2002), Furumoto et al. (2007), and Van den Berg et al. (2003) provided evidence of significant association between conscientiousness and self-efficacy belief. Hence, the higher conscientiousness exists, the notion of self-efficacy will be higher, and it’s more likely that individuals perceive themselves capable of performing tasks in a desirable manner. Thoms et al. (1996) also found significant relationship between conscientiousness and self-efficacy in self-managed groups.

Furthermore, research has shown that conscientious employees are less affected by situations with higher degree of role ambiguity since they bring order to the situations (Spreitzer, 2007). Miller et al. (2010) also found that conscientiousness moderates the relationship between role ambiguity or clarity and employees’ well-being.

2.7.5 The measurement instruments of big-five personality

Costa and McCrae’s (1985, 1992) NEO and revised NEO personality inventories are the most comprehensive measurements of the Big-Five personality traits. However, the length and cost consideration of these measures have been problematic for many
studies. To overcome the problem, Goldberg, (1990, 1992) developed 100 item markers, so that they can be used as an alternative to NEO personality inventory. Later on, Saucier (1994) abbreviated Goldberg’s (1992) markers and came up with 40 mini-markers to measure Big-Five personality traits in a more efficient manner. By comparing the criterion-related validity estimates between Goldberg’s (1992) and Saucier’s (1994) measures, Dwight et al. (1998) showed that there is a strong similarity between both measures’ predictive validities.

2.8 Conclusion

By reviewing the literature, this chapter aimed to answer four questions:

- Is it possible to answer the research questions?
- Where does the current research fit in the literature?
- Why are the research questions important?

This chapter comprehensively reviewed the literature to address the above-mentioned objectives. The conceptualization of psychological empowerment was elaborated to show how it is possible to identify empowered employees (answering: Is it possible to answer the research questions?). Finally, antecedents and outcomes of psychological empowerment were thoroughly reviewed not only to provide the background of the research (answering: Where does the current research fit in the literature?) but also to show why identifying and having empowered employees are important (answering: Why are the research questions important?).
CHAPTER 3- HYPOTHESIS DEVELOPMENT AND METHODOLOGY

3.1 Introduction

At the beginning of this chapter, theoretical evidence behind the study hypotheses was elaborated. Once the hypotheses were developed, this chapter continues by explaining why qualitative method was not an option for answering the research questions. After clarifying the researcher’s epistemological positioning, the details of research methodology including data collection procedure, finalization of measurement instrument, and data analysis procedures were described.

3.2 Hypotheses Development

3.2.1 Openness to Experience and Psychological Empowerment

Spreitzer (2007) posited that high degree of openness to experience is likely to enhance psychological empowerment dimensions of impact and competence or self-efficacy for two main reasons. First, open employees’ tendency to deal with ambiguous dilemmas along with their propensity to embrace any opportunities and to learn from new perspectives, prompt open employees to achieve higher degree of efficiency, which in turn, improves their notion of impact and competence or self-efficacy. Second, with their high intellectual capacity and capability to learn from every experience, individuals who score higher on openness to experience are more likely to believe that they have significant impact in the workplace (i.e. higher dimension of impact).
As elaborated earlier, psychological empowerment is a motivational construct. In other words, psychological empowerment dimensions of meaning, impact, competence, and self-determination are four psychological states that reflect the level of individuals’ internal motivation (Seibert et al., 2011; Spreitzer, 2007; Maynard et al., 2012). Therefore, when employees are internally motivated, it is a sign of enhanced notion of meaning, self-determination, self-efficacy or competence, or impact.

Openness to experience, on the other hand, was found to be significantly related to individuals’ intrinsic motivation (Kamaraju et al., 2009; Watanabe & Kanazawa, 2009). Thereby, it is expected that higher level of openness to experience boosts at least one of psychological empowerment dimensions.

Moreover, Watanabe et al. (2011) held that open individuals are likely to find more meaning from their work environments and believe more in their work-related competencies in comparison to those who are low in openness to experience. Given the above-mentioned theoretical link between openness to experience and psychological empowerment dimensions, it is expected that open employees experience higher level of psychological empowerment and therefore are more empowered. Therefore,

\[ H1: \text{Openness to experience significantly and positively relates to psychological empowerment.} \]

### 3.2.2 Extraversion and Psychological Empowerment

Robust evidences support the theoretical link between extraversion and self-efficacy. These theoretical links are threefold. First, given the fact that arousal or high energy is
analogous to the notion of self-efficacy (Thoms, Moore, & Scott, 1996; Esfandagheh et al., 2012), it makes sense that extraversion, which is strongly associated with higher level of energy (Costa & McCrae, 1992), predicts self-efficacy. Second, due to their positive emotionality (i.e. one of the main characteristics of extraverts; Watson & Clark, 1997), individuals high in extraversion are likely to have greater confidence in their work-related abilities (i.e. higher self-efficacy; Judge & Ilies, 2002). Third, extraverts tend to perform better in jobs that require higher level of social interaction (e.g. service jobs; Liao & Chuang, 2004). Therefore, it is expected that service workers high in extraversion experience higher level of “competence”. Judge and Ilies (2002) and Esfandagheh et al. (2012) also testified for significant association between extraversion and self-efficacy. Hence, given the strong theoretical link between extraversion and psychological empowerment’s dimension of self-efficacy or competence, it makes sense that extraversion predicts psychological empowerment. So,

**H2: Extraversion is significantly and positively related to psychological empowerment.**

### 3.2.3 Agreeableness and psychological empowerment

Agreeable individuals are good at relationships, and they have tendency to establish and maintain the relationships and avoid conflict (Bono et al., 2002). In fact, agreeableness and the quality of relationship are so closely related that agreeableness is often regarded as a social trait (Judge & Bono, 2000). Additionally, as it was elaborated in the second chapter, agreeable individuals are trusting people. Trust is one of hallmarks of agreeable people (Bono & Judge, 2004; Driskell et al., 2006; Liao et al., 2009). On the other hand, both trust and relationship within the organizational boundaries are important for
individuals’ feeling of empowerment (Spreitzer, 2007). Higher-quality intra-organizational relationships, comprising relationships with supervisors, peers, and customers, enable employees to experience higher notions of meaning, self-determination, competence and impact (i.e. psychological empowerment’s dimensions) by improving their access to the information and facilitating the display of emotion (Aryee and Chen 2006; Spreitzer, 1996; Liden et al., 2000; Wat & Shaffer, 2005; Seibert et al., 2011; Rafaeli & Sutton, 1990; Corsun & Enz, 1999). So, because of their ability to trust others and to establish higher-quality intra-organizational relationship agreeable employees are expected to have higher psychological empowerment cognitions of meaning, self-efficacy/competence, self-determination, and impact. Thus, it was hypothesized that:

**H3: Agreeableness significantly and positively relates to psychological empowerment**

### 3.2.4 Mediating Role of LMX for Agreeableness-Psychological Empowerment

As elaborated in the second chapter, Leader-Member Exchange (LMX) represents the quality of dyadic relationship between subordinates and their supervisor (Chen et al., 2007; Wat & Shaffer, 2005). Leader-followers dyadic relationship can be simply a transactional exchange based on the contract or it may transform into a very high quality exchange, characterized by high respect, trust, mutual obligation, and loyalty (Zhang et al., 2012). Across the different studies conducted, leader-members exchange was measured from both leader and members’ perspectives. However, both measures were found to be strongly related to one another (Gerstner & Day, 1997).
(a) LMX -Psychological Empowerment Relationship

There is a strong theoretical and empirical association between LMX and psychological empowerment. Subordinates, who enjoy high quality exchange with their supervisor, tend to have better access to information, task challenges, decisional responsibilities, professional growth, and supervisory support (Aryee & Chen, 2006). Having better access to information and task challenges, on the other hand, enables in-group subordinates to experience higher level of self-efficacy since both information and job challenges provides them with evidence of their enactive mastery (Liden, Wayne, & Sparrowe, 2000). Access to information can also help employees to better comprehend their work roles and consequently find more meaning, and can also help employees to decide on their own how to carry out their jobs (Seibert et al., 2011). In addition, better access to information and task challenges are likely to help high quality LMX subordinates to find more meaning in the workplace by providing a fit with their work goals (Aryee & Chen, 2006). Finally, according to Hackman and Oldham (1980), information regarding the effectiveness and performance (i.e. feedback) is significantly related to employees’ knowledge of the result (i.e. identical to psychological empowerment’s dimension of impact; Thomas & Velthous, 1990).

As mentioned earlier, psychological empowerment’s dimension of self-determination is identical to Hackman and Oldham’s (1980) experience responsibility. Thereby, in-groups subordinates who enjoy more decisional responsibilities (Aryee & Chen, 2006), are expected to have higher self-determination belief. In short, High LMX is likely to boost psychological empowerment dimensions of self-efficacy or competence, meaning, and self-determination. Liden et al. (2000) and Wat and Shaffer (2005) provided
empirical evidence of significant relationship between LMX (mostly from subordinates’ perspectives) and psychological empowerment.

(b) Agreeableness- LMX relationship

As it was previously mentioned, agreeable individuals value relationships and avoid conflicts (Bono et al., 2002). The link between agreeableness and the quality of relationships or social interaction is so strong that agreeableness is often regarded as a social trait (Judge & Bono, 2000).

One of the most widely used measures of LMX is Liden and Maslyn’s (1998) instrument operationalized using four dimensions of loyalty, affection, professional respect, and contribution. In other words, the degree to which subordinates trust their supervisors (i.e. LMX’s dimension of loyalty), like their supervisor as a person (i.e. dimension of affect), respect their supervisors’ work-related competencies (i.e. dimension of professional respect), and finally the degree to which they are willing to work for their supervisor beyond the formal job description (i.e. dimension of contribution). On the other hand, agreeable people are trusting and kind-hearted individuals (Bono & Judge 2004; Bono et al., 2002), who consider others as more friendly and perceive other people in more positive light (Wood et al., 2010; Kammrath & Scholer, 2011). Thus, subordinate high in agreeableness are more likely to believe their supervisors are loyal to them (LMX’s dimension of loyalty) and like them (LMX’s dimension of affect) and willing to put extra effort for their supervisor beyond the formal job description (LMX’s dimension of contribution), and consequently enjoy high quality exchange with their supervisors.
In short, based on the above-mentioned evidence, agreeable subordinates are more likely to enjoy higher LMX. Higher level of LMX, in turn, is expected to improve the level of psychological empowerment by influencing cognitions of self-efficacy or competence, meaning, and self-determination. Therefore,

**H4: Leader-Member Exchange (LMX) significantly mediates the relationship between agreeableness and psychological empowerment.**

3.2.5 Mediating Role of Customer Supportiveness for Agreeableness-Psychological Empowerment Relationship

(a) Customer Supportiveness- Psychological Empowerment Relationship

Customer-employee relationship in relation to psychological empowerment has been studied using two different constructs: customer supportiveness and employee-customer value congruity (Spreitzer, 2007). The former refers to the degree to which employees perceive customers as supportive. In other words, the extent to which employees perceive customers as open, honest, and trusting individuals reflects the level of “customer supportiveness”. The latter construct simply refers to the value similarity between employees and customers. However, among these two constructs only customer supportiveness was found to be significantly related to psychological empowerment (Corsun and Enz, 1999). Corsun and Enz (1999) contended that stronger relationship with customers and having more affection toward them, make it easier for service-workers to display positive emotions. Positive emotional display enhances service-workers’ perceive control in dealing with customers (Rafaeli and Sutton, 1990).
Perception of control is almost synonymous to psychological empowerment’s cognition of impact (Thomas and Velthouse, 1990). So, in short, employees, who enjoy high quality exchange with customers, are expected to experience higher level of control over work situations and consequently to be empowered. On the other hand, given the agreeable people’s proficiency in establishing high quality relationships (Judge and Bono, 2000), it makes sense that agreeable service workers enjoy higher quality exchange with customers.

(b) Agreeableness- Customer Supportiveness Relationship

Customer supportiveness has been conceptualized by the degree to which employees perceive customer as open, honest and trusting individuals (Corsun and Enz, 1999). On the other hand, as mentioned previously, kindness, trust, and altruism are hallmarks of agreeable individuals (Bono and Judge, 2004). Agreeable people also have propensity to perceive others more positively (Wood et al., 2010). Thus, it is expected that agreeable service-employees perceive customers as more open, honest, and trusting individuals.

So, By perceiving customers more positively or with more affection, agreeable service-workers are likely to have higher Psychological empowerment’s dimension of impact, and therefore, be more empowered. Thus, it was hypothesized that:

**H5:** Customer supportiveness significantly mediates the relationship between agreeableness and psychological empowerment.
3.2.6 Mediating Role of Peers Relationship for Agreeableness-Psychological Empowerment Relationship

(a) Peer relationship- Psychological Empowerment Relationship
Kanter (1993) maintained that relationships within the organization (i.e. informal power), including relationships with peers are important determinants of employees’ level of access to information and opportunity. On the other hand, as mentioned earlier, having access to information improves employees’ cognitions of meaning, since, it helps employees to see “the big picture” and understand the work role in relation to the organization goal (Spreitzer, 1996). Additionally, access to information enables employees to decide on their own how to carry out their work-related task (i.e. higher P.E.’s dimension of self-determination; Seibert et al., 2011). Wallach and Mueller (2006) held that high quality interaction among peers improves employees’ sense of control over work situations. Perception of control, on the other hand, is analogous to psychological empowerment’s dimension of impact (Thomas & Velthouse, 1990), higher level of interaction among peers is expected to promote employees’ sense of impact. Moreover, according to Hackman and Oldham’s (1980) job characteristic model, access to information about performance improves employees’ psychological state of “knowledge of the result” (i.e. identical to P.E.’s dimension of impact; Thomas & Velthouse, 1990).

(b) Agreeableness- peer relationships association
As frequently mentioned earlier, agreeableness and the quality of social interaction are strongly related to one another (Bono et al., 2002; Judge & Bono, 2000). By taking into account the innate ability of agreeable individuals to establish and maintain higher
quality relationship with others, it makes sense that agreeable employees establish stronger relationship with peers.

In short, by establishing stronger relationship with peers, agreeable employees are expected to experience higher psychological empowerment’s cognitions of meaning, self-efficacy or competence, self-determination, and impact and consequently feel more empowered.

**H6: Peer relationship significantly mediates the relationship between agreeableness and psychological empowerment.**

### 3.2.7 Mediating role of Affect-based Trust for Agreeableness-Psychological Empowerment Relationship

(a) **Affect-based Trust-Psychological Empowerment Relationship**

As elaborated in the second chapter, trust in one’s manager or supervisor has important bearing on psychological empowerment (Spreitzer, 2007). Lewis and Weigert (1985) divided trust into two distinct constructs (i.e. cognition-based and affect-based trust; Mcallister, 1995). Cognition-based trust is the result of logical evaluation, whereas, affect-based trust is an outcome of positive affection towards someone. Ergeneli and his colleagues (2007) found that subordinates, who trust their supervisors as a result of the emotional ties (i.e. affect-based trust), tend to experience higher psychological empowerment’ cognition of impact. Moreover, Moye et al. (2005) contended that
teachers, who have more trust in the principal, are likely to find more meaning in their workplace and believe that they have more freedom in determining how to do their job.

(b) Agreeableness- Affect-based Trust Relationship

Trust is one of the hallmarks of agreeable people (Bono & Judge, 2004). Agreeable people are both trusting and trustworthy; they have the tendency to consider others as trustworthy until proven otherwise (Auh et al., 2011; Bono & Judge, 2004; Driskell et al., 2006; Liao et al., 2009). Trusting characteristic of agreeable individuals comes from their good nature, their love for people. Hence their trust is more affect-based rather than cognition-based, since it is the result of emotional ties rather than rational assessments. So, the higher the level of agreeableness in individuals, the higher their level of affect-based trust is expected to be.

**H7**: Affect-based trust significantly mediates the relationship between agreeableness and psychological empowerment.

3.2.8 Emotional Stability and Psychological Empowerment

Neurotic employees are expected to have less work-efficiency since they are likely to be distracted easily (Liao & Lee, 2009). There is strong evidence that anxiety reduces individuals’ self-efficacy through manifestation of stress, thought of failure, and weakened coping mechanism (Gist & Mitchell, 1992). On the other hand, individuals who score lower on emotional stability are susceptible to anxiety, and therefore it is expected that neurotic individual have lower self-efficacy.
Thoms and his colleagues (1996) posited that individuals high on emotional stability have higher self-confidence and self-esteem. Gist and Mitchell (1992), on the other hand, noted that higher self-esteem is strongly associated with self-efficacy belief in individuals across wide range of tasks. In addition, Spreitzer (1995) maintained that individual high on self-esteem are more likely to see themselves as able to make a difference in their workplace (i.e. psychological empowerment’s dimension of impact). Thus, individuals high in emotional stability are likely to experience higher level of self-efficacy and impact. Judge and Ilies’ (2002) meta-analysis provided empirical evidence of significant relationship between emotional stability and self-efficacy.

Spreitzer (2007) posited that emotionally stable individuals are likely to find their work meaningful because they usually are less threatened by any situation. Thus it is expected that emotional stability predicts empowerment by influencing psychological empowerment dimensions of self-efficacy or competence and meaning.

**H8**: Emotional stability significantly and positively relates to psychological empowerment.

### 3.2.9 Conscientiousness and Psychological Empowerment

Conscientious employees are punctual, well-organized, self-disciplined, responsible, dependable, and reliable (Bono & Judge, 2004; Driskell et al., 2006; Liao et al., 2009). These characteristics seem to describe an ideal employee. It is not surprising that a huge bulk of research has found strong relationship between conscientiousness and performance across a variety of job positions (Judge & Ilies, 2002; Liao & Chuang, 2004). Thereby, it is likely that conscientious employees perceive their ability
favorably, and start to believe that they have the ability to carry out their work-related
tasks with skill (i.e. higher self-efficacy). Judge and Ilies’ (2002) meta-analysis
provided an empirical evidence of the significant relationship between
conscientiousness and the psychological empowerment’s dimension of self-efficacy. So,
given the strong link between conscientiousness and psychological empowerment’s
dimension of self-efficacy or competence, it is hypothesized that,

**H8**: Conscientiousness significantly and positively relates to psychological empowerment.

Table 3.1 gives the summary of theoretical link for the study hypotheses depicted in
Figure 3.1.
### Table 3.1: The Summary of Hypotheses Development

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Justification</th>
<th>Reasons</th>
<th>Reference</th>
</tr>
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<tbody>
<tr>
<td><strong>H1</strong></td>
<td>Openness $\rightarrow$ P.E.’s dimensions of self-efficacy and impact</td>
<td></td>
<td></td>
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<tr>
<td>Openness $\rightarrow$ at least one of P.E.’s dimensions</td>
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<td></td>
<td>Open employees’ tendency to deal with ambiguous dilemmas and to embrace new opportunities and to learn from new perspectives</td>
<td>Spreitzer (2007)</td>
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<td></td>
<td>Open employees’ high capability to learn from every experience</td>
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<td></td>
<td>Openness was found to be significantly related to intrinsic motivation</td>
<td>Komarraju et al., (2009)</td>
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<td></td>
<td>For employees to be intrinsically motivated, at least one of the cognitions of meaning, self-determination, self-efficacy/competence, and impact should be enhanced</td>
<td>Thomas &amp; Velthouse, (1990) Hackman &amp; Oldham, (1980)</td>
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<tr>
<td><strong>H2</strong></td>
<td>Extraversion $\rightarrow$ P.E.</td>
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<tr>
<td>Extraversion $\rightarrow$ P.E.’s dimension of self-efficacy/competence</td>
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<td></td>
<td>Self-efficacy is almost synonymous with arousal/ high energy</td>
<td>Thoms et al. (1996) Costa and McCrae (1992)</td>
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<td></td>
<td>Extraversion is strongly associated with higher level of energy</td>
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<td></td>
<td>Extraverts’ positive emotionality helps them to have greater confidence in their work-related abilities</td>
<td>Judge and Ilies (2002)</td>
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<td></td>
<td>Extraverts tend to perform better in jobs with high social interaction such as service jobs. On the other hand, High performance is expected to lead to higher self-efficacy belief</td>
<td>Liao &amp; Chuang (2004)</td>
<td></td>
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<tr>
<td><strong>H3</strong></td>
<td>Agreeableness $\rightarrow$ P.E.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion $\rightarrow$ P.E.’s dimensions of impact, meaning, competence, and competence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreeable employees ability in establishing higher-quality intra-organizational relationship and also their trusting nature helps them to experience higher cognition of meaning, self-efficacy, impact self-determination, and impact</td>
<td>Aryee and Chen (2006) Liden et al. (2000) Moye et al. (2005) Seibert et al. (2011)</td>
<td></td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Reasons</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td><strong>H4</strong></td>
<td>Agreeable individuals value relationships and avoid conflicts</td>
<td>Bono et al. (2002)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The link between agreeableness and the quality of relationships/social interaction is so strong that interaction is regarded as a social trait</td>
<td>Judge &amp; Bono (2000)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMX, on the other hand, represents the quality of dyadic relationship between subordinates and their supervisor</td>
<td>Meyer et al. (2004) \n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreeable people are trusting and kind-hearted individuals, who consider others as more friendly and perceive other people in more positive light</td>
<td>Bono &amp; Judge (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thereby, agreeableness is likely to be positively related to LMX’s dimensions of loyalty, affect, and contribution</td>
<td>Bono et al. (2002) \n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher LMX will result in subordinates’ better access to information, task challenges, and decisional responsibility</td>
<td>Aryee &amp; Chen (2006) \n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>On the other hand, access to information and task challenges enhances employees’ self-efficacy by providing them with evidence of their enactive mastery (higher P.E.’s dimension of self-efficacy)</td>
<td>Spreitzer (1996) \n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access to information can also help employees to better comprehend their work roles in relation to larger organizational goals, and to decide on their dimensions of meaning and self-determination</td>
<td>Thomas &amp; Velthouse, (1990)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Therefore, in-group employees, who enjoy higher Level of decisional responsibility (Aryee and Chen, 2006) are likely to have higher self-determination</td>
<td>Wat &amp; Shaffer (2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>There is empirical evidence for the LMX-P.E. Relationship</td>
<td>Liden et al. (2000)</td>
<td></td>
</tr>
</tbody>
</table>

*a* Leader-Member Exchanger  \n*b* Psychological Empowerment
Hypothesis | Reasons | Reference
--- | --- | ---

**H5**
Agreeableness → C.S

- Customer supportiveness has been conceptualized as the degree to which employees perceive customers as trusting, open, and honest individuals
- On the other hand, kindness, trust, and altruism are hallmarks of agreeable individuals, and agreeable people has propensity to perceive others in more positive lights.
- So, it is likely that agreeable employees rate customers more as open, honest, and trusting compare to others

Wood et al. (2010)

Corson & Enz (1999)

C.S. → P.E.

- stronger relationship with customers and having more affection toward them, make it easier for service-workers to display positive emotions
- Positive emotional display enhances service-workers’ notion of having control (i.e. identical to P.E.’s dimension of impact; Thomas and Velthouse, 1990)
- Corsun and Enz (1999) found empirical evidence for significant relationship between customer supportiveness and P.E.

Rafaeli & Sutton (1990)

**Table 3.1:** The Summary of Hypotheses Development (Cont’d)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Reasons</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness → C.S. → P.E.</td>
<td>Customer Supportiveness</td>
<td>Psychological Empowerment</td>
</tr>
</tbody>
</table>
Table 3.1: The Summary of Hypotheses Development (Cont’d)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Reasons</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness → P.R. → P.E.</td>
<td>– Agreeable individuals value relationships, so they try to establish and maintain relationships</td>
<td></td>
</tr>
<tr>
<td>P.R. → P.E</td>
<td>– Better access to information improves P.E.’s dimensions of self-efficacy, meaning, and self-determination (it has been elaborated in previous tables)</td>
<td></td>
</tr>
<tr>
<td>P.R. → P.E</td>
<td>– High quality interaction among peers improves employees’ sense of control over work situations</td>
<td>Wallach &amp; Mueller (2006)</td>
</tr>
<tr>
<td>P.R. → P.E</td>
<td>– Since perception of control is almost identical to P.E.’s dimension of impact, stronger relationship with peer is expected to enhance employees’ notion of impact</td>
<td>Thomas &amp; Velthouse (1990)</td>
</tr>
</tbody>
</table>

*Peers Relationship  *Psychological Empowerment
Table 3.1: The Summary of Hypotheses Development (Cont’d)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Reasons</th>
<th>Reference</th>
</tr>
</thead>
</table>
| H7 Agreeableness → A.B.T. | – Trust of one of the hallmarks of agreeable people  
– Agreeable people are both trusting and trustworthy; they have tendency to consider others trustworthy until proven otherwise | Bono & Judge (2004)  
Driskell et al. (2006)  
Liao et al. (2009) |
| A.B.T. → P.E. | – Trust can be divided into two distinct constructs: affect-based and cognition-based trust  
– Cognition-based trust is the result of logical evaluation, whereas, affect-based trust is an outcome of positive affection toward someone  
– Obviously, trusting characteristic of agreeable individuals comes from their good nature, their love for people, rather than logical evaluation, therefore, it is more affect-based as opposed to cognition-based trust | Lewis & Weigert (1985)  
Ergeneli et al. (2007)  
Mcallister (1995) |
| | – Trust in one’s manager-supervisor helps subordinates to find meaning in their workplace and make them feel they have more freedom in determining how to do their jobs (i.e. higher P.E. dimension of meaning and self-determination)  
– Employees trusting their supervisors as a result of the emotional ties (i.e. affect-based trust), tend to experience higher psychological empowerment’ cognition of impact | Moye et al. (2005)  
Ergeneli et al. (2007) |

a Affect-based Trust  
b Psychological Empowerment
Table 3.1: The Summary of Hypotheses Development (Cont’d)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Reasons</th>
<th>Reference</th>
</tr>
</thead>
</table>
| **H8**     | Emotional Stability $\rightarrow$ P.E.’s dimensions of self-efficacy and impact | – individuals high on emotional stability have higher self-confidence and self-esteem  
– Self-esteem and P.E.’s dimension of self-efficacy are closely Related  
– Individual high on self-esteem are more likely to see themselves as able to make difference in their workplace (i.e. P.E. dimension of impact)  
Gist & Mitchell (1992)  
Spreitzer (1995) |
|            | Emotional Stability $\rightarrow$ P.E.’s dimensions of meaning | – Emotionally stable individuals are likely to find their work meaningful because they usually are less threatened by any Situation | Spreitzer (2007) |
| **H9**     | Conscientiousness $\rightarrow$ P.E. | – Employees high in conscientiousness were found to be performing well across variety of job positions including service Jobs  
– So, it is expected that conscientious employees perceive their work-related abilities more favorably and believe that they are capable in handling their task successfully (i.e. higher P.E.’s dimension of competence/self-efficacy)  

*Psychological Empowerment*
3.3 Preliminary Clarifications

As explained earlier, before discussing the methodology of this study, there are specific points which should be clarified first. The points are as follows:

- Why choose quantitative method in answering the research questions, and why not qualitative?
- Epistemological positioning
3.3.1 Underlying Reasons for Selecting Quantitative Method

Despite the fact that the usage of qualitative methods provides more in-depth information in comparison with quantitative methods, for some reasons, only the quantitative method is appropriate for answering the research questions of the current study. The reasons are as follows:

As previously mentioned in the first chapter, the main goal of this study is to see which of the Big-Five personality traits make employees more empowered, or in other words, which of the Big-Five personality traits are related to psychological empowerment. To achieve this goal by using qualitative method, three considerations should be noted: data source, qualitative data collection methods, and answering the research questions.

(a) Data source

The level of psychological empowerment, which assesses employees’ feeling of empowerment (Spreitzer, 1995, 2007), can be measured only by collecting data from the employees, whose level of psychological empowerment are being measured. In other words, the level of psychological empowerment cannot be measured by collecting data from third parties (e.g. supervisors, peers, and etc.), since, psychological empowerment deals with the “feeling” of empowerment (i.e. manifested in four notions of meaning, competence, self-determination, and impact) that third parties are not aware of. For instance, it will not be possible to interview employees’ supervisors or peers to assess the degree to which employees feel empowered.
(b) Qualitative data collection methods

Since, the only data source for assessing the level of psychological empowerment and Big-Five personality traits is the employees themselves, now the question is what type of qualitative data collection methods could be used in answering the research questions. It seems that the suitable qualitative data collection methods would be observation, field work, and interview.

Assessing employees’ level of psychological empowerment and personality traits by only observing them would be out of the question, since employees’ personality or their level of empowerment cannot be assessed by merely watching them. The other alternative would be to do a field study, which is also not suitable. Thus, to answer the study’s research questions using field work, the researcher needs to get to know the employees very well by spending a lot of time with them. However, even by spending a long time to get to know the employees, it seems impossible for the researcher to be able to assess employees’ level of empowerment and personality.

The only qualitative data collection method that seems reasonable for evaluating employees’ level of empowerment and personality would be the interview. By asking open-ended or close-ended questions to employees regarding psychological empowerment cognitions (i.e. meaning, impact, self-determination, and competence/self-efficacy) and Big-Five personality traits descriptive adjectives, the researcher might be able to assess employees’ level of psychological empowerment and their personality.
(c) Answering research questions using a qualitative method

Therefore, as a conclusion to the problem in the previous section, it seems logical that to answer the study’s research questions using qualitative method, the researcher can only interview employees to assess their level of psychological empowerment and their personality. To identify the personality traits among the Big-Five personality traits Big-Five that positively contribute to employees’ feeling of empowerment, the researcher should be able to compare each of the employees’ personality traits and their level of psychological empowerment. For instance, the researcher should be able to assess the level of extraversion and psychological empowerment for each employee and also be able to compare those with the level of extraversion and psychological empowerment of other employees; in order to determine whether or not extraversion is important for employees’ feeling of empowerment. However, using the interview method especially with open-ended questions and high number of interviewees, it seems almost impossible for the researcher to accomplish the task.

Thus, after considering the above-mentioned considerations (see Table 3.2), the qualitative method did not seem to be an appropriate method in answering the research questions. Generally, almost all researches on psychological empowerment were conducted using the quantitative method, since as explained above, identifying antecedents or outcomes of psychological empowerment using qualitative method is almost impossible.
In her review of psychological empowerment-related studies, Spreitzer (2007) identified only one empowerment related qualitative study (i.e. Arnold et al., 2000), in which leadership empowering behaviors for team was evaluated using interview. However, Arnold et al. (2000) did not assess psychological empowerment especially at the individual level of analysis. Additionally, in a few studies similar to this study, the relationship between personality traits and psychological empowerment has been tested (Laschinger et al., 2009; Spreitzer, 1995), and all of them used the quantitative method.

### 3.3.2 Epistemological positioning

In this section, researcher’s point of view regarding the philosophy of science or a better term, philosophy of social science will be elaborated. There are some questions which need to be answered:

- Whether or not social science is really a “science”?
Does social science develop in a similar way as natural science (e.g. physics and etc.)? 

Positivism or Interpretivism?

Is it all in our minds or social science really does exist? Despite the fact that social science deals with human beings whom are very complex and versatile creature, in many situations, in my opinion, people follow the same behavioral pattern. For instance, when people hate their jobs, they would have a tendency to quit their jobs. So, there is a science right there. However, it is clear that each individual is different to one another; therefore, social science is not as straight forward as natural science; in which everything behaves exactly as it is predicted. In short, I do believe that social science is valid, and it expands our understanding of people’s behavior.

Can social science be developed through calculation and statistical or mathematical formula as natural science does? Or should it go in a completely different direction and merely record stories and situations rather than try to extract a “law” from people’s behavior? In my personal opinion, social sciences can be expanded using mathematical formula. Many empirical studies have been frequently replicated, and there are many cases, in which the results of all the replicated empirical studies are surprisingly similar. These similar findings can be taken as a sign that statistical or mathematical formula do work in extracting pattern or “law” from people behaviors.

**Positivism or Interpretivism**

It is time to choose a position in terms of the epistemology of social science. It is obvious that qualitative research methods provide more in-depth analysis of a phenomenon compared to the qualitative method. But, as mentioned in above section, I do believe that
statistical analysis is applicable to social science, and similar to natural science, social science encompasses laws which can be tested and validated using mathematical means. Thus, based on this statement and the quantitative method which was employed for answering the research questions of this study, it is evident that I believe in **positivism**.

### 3.4 Sample and Procedure

**(a) Sample element**

The sample was drawn from front-line employees working in a service sector in Malaysia. As previously elaborated in the first chapter, despite the importance of empowered employees for any organization, having empowered employees is more beneficial for organizations within the service sector, since, empowered front-line service-workers can play more important role in improving customer satisfaction (See Chapter 1). Therefore, by identifying empowerment-related personality traits in the service sector, service-organizations would be able to identify and employ more empowered front-line employees, and consequently, improve the level of customer satisfaction.

**(b) Drawing the sample**

In conducting the pilot study, 50 questionnaires were distributed among employees in McDonald’s call center. Of the distributed questionnaires, only 44 were returned (i.e. response rate of 88%).
As for the main sample, to ensure the sample represents the service sector as much as possible, the sample must encompass different industries within the service sector. Thereby, quota sampling method was employed to ensure that the sample is drawn from diverse industries of the service sector (e.g. hospitality, health care, telecommunication, food, transportation and etc.).

Regarding the sample size, according to Hatcher (1994), the appropriate sample size required for structural equation modelling is around five times the number of measurement items. Thus, given the total number of measurement items in this study is 79, therefore, the appropriate sample size would be around 395.

For data collection, 422 questionnaires were distributed among front-line service-employees. However, only 384 were filled out by respondents (i.e. response rate of 91%). Among the collected questionnaires, 12 had some serious issues such as numerous missing variables or central tendencies, and therefore, they were discarded during the data screening process. So, the final remaining sample size is 372.

(c) **Data collection procedure**

After getting approval from HR office or managers/supervisors, the questionnaires were distributed, and later on, were collected by the researcher at the company during their operating hours from employees in their natural work setting. For ethical purposes and also to minimize social desirability bias, each respondent was assured of data confidentiality using both oral and written communication. In other words, at the beginning of questionnaire, a statement assured respondents that their data will only be used for academic purposes and will be kept confidential. In addition, during the distribution
process, each respondent was assured that the researcher himself would be collecting the questionnaire and their supervisors will not be cognizant of the responses.

3.5 Measures

As mentioned in the second chapter, NEO and revised NEO personality inventories (Costa & McCrae, 1985; 1992) are the most comprehensive measurement of the Big-Five personality traits. However, because of the high cost and length consideration, NEO inventories have been problematic in many studies. Saucier’s (1994) forty adjectives were validated (Dwight et al., 1998) and used by many empirical studies as an alternative to NEO personality inventory. Therefore, in measuring the Big-Five personality traits (i.e. extraversion [α = .798], conscientiousness [α=.851], openness to experience [α = .794], emotional stability [α = .817], and agreeableness [α = .820]), Saucier’s (1994) forty adjectives mini-markers were adopted.

Affect-based trust (α = .832), customer supportiveness (α = .847), and relationship with peers (α = .764) were measured using McAllister’s (1995), Corsun and Enz’s (1999), and Ji and Chuang’s (2011) instruments, respectively.

Instrument for measuring Leader-Member Exchange (LMX), comprising four dimensions of loyalty (α = .862; i.e. the extent to which members and leader are loyal to each other), affect (α = .908; i.e. the degree to which members and leader are affectionate towards each other), contribution (α = .737; i.e. the quality and the amount of work-related activity put forth by the members of dyadic relationship in direction of the mutual goal), and professional respect (α = .900; i.e. the degree to which each member of the dyadic
relationship has built a work-related reputation), was adopted from Liden and Maslyn (1998).

Finally, psychological empowerment, operationalized by four dimensions of meaning (α= .819), impact (α= .787), self-determination (α= .735), and competence or self-efficacy (α= .838), was measured using 12 items developed by Spreitzer (1995).

In total, the questionnaire consists of 79 items (see Table 3.3), where all except for the Big-Five personality traits were in 6-point Likert scale format (1= strongly disagree to 6= strongly agree). The original response format for the Big-Five personality measures were in 9-point scale format (1= extremely inaccurate to 4= slightly inaccurate; 5= neutral; 6= slightly accurate to 9= extremely accurate). However, the 9-point scale format was found to be confusing to respondents in previous studies conducted by the researcher. Therefore, the response format was changed to 6-point scale (1= does not describe me at all to 6= exactly describes me) prior to the pilot study.

**Table 3.3: Measurement references and number of items**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Developed by</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big-Five personality traits</td>
<td>Saucier (1994)</td>
<td>40</td>
</tr>
<tr>
<td>Affect-based Trust</td>
<td>McAllister (1995)</td>
<td>5</td>
</tr>
<tr>
<td>Leader-member Exchange</td>
<td>Liden &amp; Maslyn (1998)</td>
<td>11</td>
</tr>
<tr>
<td>Customer Supportiveness</td>
<td>Corsun &amp; Enz (1999)</td>
<td>3</td>
</tr>
<tr>
<td>Relationship with Peers</td>
<td>Ji et al. (2011)</td>
<td>8</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>Spreitzer (1995)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>
3.5.1 Parallel Back-to-back Translation and Pilot Study

Since there was a possibility that respondents may have problem understanding measurement instrument in the original language, the finalized questionnaire underwent parallel back-to-back translation from English to Bahasa Malaysia. According to Werner and Campbell’s (1970) and Brislin’s (1970) instructions, the whole process of parallel back-to-back translation was conducted using four professional translators. At first, two translators, independently, without being aware of one another, translated the questionnaire from English to Bahasa Malaysia. After comparing the two versions, the translators agreed on the wording and finalized the questionnaire. In the next step, two other translators translated the questionnaire back from Bahasa Malaysia to English while they were blind to the original questionnaire. Upon the completion of translation, both translated questionnaires were compared and one set of instrument was created. Then, the outcome of back-translation by two translators was compared to the original questionnaire, and if needed, changes in wording of the Bahasa Malaysia version were applied. Figure 3.2 depicts the procedure used in the back-to-back translation.

\[ Q_{OR} \rightarrow Q_{BM} \rightarrow Q_{BM} \rightarrow Q_{EN} \rightarrow Q_{EN} \rightarrow Q_{OR} \]

**Figure 3.2**: Back-to-back Translation Overview

\[ Q_{EN}: \text{Questionnaire in English} \quad Q_{BM}: \text{Questionnaire in Bahasa Malaysia} \quad Q_{OR}: \text{Original Questionnaire} \quad Q_{F}: \text{Finalized Questionnaire} \]

\[ TR: \text{Translator} \]
Once the Bahasa-Malaysia version of questionnaire was prepared, pilot study was carried out. Data for pilot study was drawn from the sample of 44 front-line service-employees. Collected questionnaires were subjected to data preparation process and they were checked to ensure that unacceptable questionnaire would not remain in the data set. Coded data were transcribed, cleaned (i.e. testing the appropriate range of transcribed responses and substituting the missing variables based on responses to similar items), and re-specified.

Pilot study data were tested in terms of multivariate assumptions. All the p-values of linearity test within the curve estimation method for all the proposed relationships were less than .05 and therefore were statistically significant. Skewness and Kurtosis for all items were between the ranges of ±1.96 (Table 3.4), which provided evidence of normal distribution of all the variables. Scatter plot for all the variables also provided evidence of equality of variance or homoscedasticity. Finally, Cronbach alpha for all the variables were more than 0.6 (see Table 3.4), which is the threshold for acceptable reliability (Malhotra et al., 2004).
Table 3.4: The Result of Univariate Analysis and Reliability Test for the Pilot Study

<table>
<thead>
<tr>
<th>Variables</th>
<th>$\mu$</th>
<th>S.D</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>$\alpha$</th>
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<tbody>
<tr>
<td>Ext1</td>
<td>3.98</td>
<td>1.267</td>
<td>.548</td>
<td>-.842</td>
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<tr>
<td>Ext2</td>
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<td>1.244</td>
<td>-.589</td>
<td>.582</td>
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<td>Ext3</td>
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<td>.983</td>
<td>-.229</td>
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<tr>
<td>Ext4</td>
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<td>.652</td>
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<tr>
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<td>.477</td>
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<td>Ext6</td>
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<td>1.584</td>
<td>-.241</td>
<td>-.997</td>
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<tr>
<td>Ext7</td>
<td>3.77</td>
<td>1.597</td>
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<tr>
<td>Ext8</td>
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<td>1.509</td>
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<tr>
<td>Con1</td>
<td>4.34</td>
<td>1.180</td>
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<td>-.525</td>
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<td>Con2</td>
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<td>1.335</td>
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<td>Con3</td>
<td>4.25</td>
<td>.918</td>
<td>.035</td>
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<td>Con4</td>
<td>4.61</td>
<td>1.166</td>
<td>-.750</td>
<td>.549</td>
<td>.794</td>
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<td>4.41</td>
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<td>1.436</td>
<td>-.808</td>
<td>-.118</td>
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<td>Con7</td>
<td>4.55</td>
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<td>Agr4</td>
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<td>Agr7</td>
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<table>
<thead>
<tr>
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<th>Skewness</th>
<th>Kurtosis</th>
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<td>Opn1</td>
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<td>-.034</td>
<td>-.117</td>
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<tr>
<td>Opn2</td>
<td>4.34</td>
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<tr>
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<td>-.619</td>
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<td>-.525</td>
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<td>Opn5</td>
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<td>-.627</td>
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<tr>
<td>Opn6</td>
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<tr>
<td>Opn8</td>
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<tr>
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<td>-.751</td>
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</tr>
<tr>
<td>Em3</td>
<td>4.34</td>
<td>1.599</td>
<td>-.770</td>
<td>-.429</td>
<td></td>
</tr>
<tr>
<td>Em4</td>
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<td>1.346</td>
<td>.056</td>
<td>-.707</td>
<td>.730</td>
</tr>
<tr>
<td>Em5</td>
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<td>1.235</td>
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<td>-.840</td>
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<tr>
<td>Em6</td>
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<tr>
<td>Em8</td>
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<td>1.562</td>
<td>.178</td>
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<td></td>
</tr>
<tr>
<td>Pr1</td>
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<td>1.030</td>
<td>-.125</td>
<td>.817</td>
<td></td>
</tr>
<tr>
<td>Pr2</td>
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<td>.902</td>
<td>.245</td>
<td>-1.299</td>
<td></td>
</tr>
<tr>
<td>Pr3</td>
<td>4.05</td>
<td>.939</td>
<td>.083</td>
<td>-.729</td>
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</tr>
<tr>
<td>Pr4</td>
<td>4.23</td>
<td>1.031</td>
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<td>.618</td>
</tr>
<tr>
<td>Pr5</td>
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<td>-.398</td>
<td>-1.080</td>
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</tr>
<tr>
<td>Pr6</td>
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<td>.876</td>
<td>.326</td>
<td>-.599</td>
<td></td>
</tr>
<tr>
<td>Pr7</td>
<td>4.73</td>
<td>.872</td>
<td>-.306</td>
<td>-.449</td>
<td></td>
</tr>
<tr>
<td>Pr8</td>
<td>4.61</td>
<td>.868</td>
<td>-.256</td>
<td>-.478</td>
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</table>
Table 3.4: The Result of Univariate Analysis and Reliability Test for the Pilot Study (Cont’d)

<table>
<thead>
<tr>
<th>Variables</th>
<th>μ</th>
<th>S.D</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
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<tr>
<td>Customer</td>
<td>Cs1</td>
<td>3.91</td>
<td>1.428</td>
<td>-.235</td>
<td>-.431</td>
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<tr>
<td>Supportiveness</td>
<td>Cs2</td>
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<td>1.140</td>
<td>.105</td>
<td>.293</td>
</tr>
<tr>
<td></td>
<td>Cs3</td>
<td>3.82</td>
<td>1.467</td>
<td>-.087</td>
<td>-.685</td>
</tr>
<tr>
<td>LMX- Contribution</td>
<td>Cn1</td>
<td>3.93</td>
<td>1.319</td>
<td>-.060</td>
<td>-.788</td>
</tr>
<tr>
<td></td>
<td>Cn2</td>
<td>4.16</td>
<td>1.311</td>
<td>-.373</td>
<td>-.598</td>
</tr>
<tr>
<td>LMX- Loyalty</td>
<td>Ly1</td>
<td>3.77</td>
<td>1.553</td>
<td>-.382</td>
<td>-.922</td>
</tr>
<tr>
<td></td>
<td>Ly2</td>
<td>3.64</td>
<td>1.313</td>
<td>-.376</td>
<td>-.584</td>
</tr>
<tr>
<td></td>
<td>Ly3</td>
<td>3.52</td>
<td>1.548</td>
<td>-.321</td>
<td>-.998</td>
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<tr>
<td>LMX- Affect</td>
<td>Afc1</td>
<td>3.82</td>
<td>1.618</td>
<td>-.382</td>
<td>-.804</td>
</tr>
<tr>
<td>Affect</td>
<td>Afc2</td>
<td>3.98</td>
<td>1.621</td>
<td>-.648</td>
<td>-.687</td>
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<tr>
<td></td>
<td>Afc3</td>
<td>3.73</td>
<td>1.573</td>
<td>-.273</td>
<td>-.971</td>
</tr>
<tr>
<td>LMX- Professional</td>
<td>Prl1</td>
<td>3.93</td>
<td>1.546</td>
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<td>-.412</td>
</tr>
<tr>
<td></td>
<td>Prl2</td>
<td>3.84</td>
<td>1.539</td>
<td>-.402</td>
<td>-.644</td>
</tr>
<tr>
<td></td>
<td>Prl3</td>
<td>4.39</td>
<td>1.368</td>
<td>-.1036</td>
<td>.702</td>
</tr>
<tr>
<td>PE- Self-</td>
<td>Sd1</td>
<td>4.52</td>
<td>.952</td>
<td>-.407</td>
<td>-.034</td>
</tr>
<tr>
<td>Determination</td>
<td>Sd2</td>
<td>4.20</td>
<td>1.391</td>
<td>-.928</td>
<td>.581</td>
</tr>
<tr>
<td></td>
<td>Sd3</td>
<td>4.14</td>
<td>1.391</td>
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<tr>
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<td>Abt1</td>
<td>3.91</td>
<td>1.552</td>
<td>-.467</td>
<td>-.677</td>
</tr>
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<td>Affect-based</td>
<td>Abt2</td>
<td>3.86</td>
<td>1.503</td>
<td>-.446</td>
<td>-.555</td>
</tr>
<tr>
<td>Trust</td>
<td>Abt3</td>
<td>3.75</td>
<td>1.780</td>
<td>-.355</td>
<td>-1.193</td>
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<tr>
<td></td>
<td>Abt4</td>
<td>3.25</td>
<td>1.713</td>
<td>-.002</td>
<td>-1.329</td>
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<tr>
<td></td>
<td>Abt5</td>
<td>3.16</td>
<td>1.430</td>
<td>.057</td>
<td>-.845</td>
</tr>
<tr>
<td>PE- Meaning</td>
<td>Mg1</td>
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<td>-.936</td>
<td>-1.080</td>
<td>1.433</td>
</tr>
<tr>
<td></td>
<td>Mg2</td>
<td>4.84</td>
<td>1.219</td>
<td>-.973</td>
<td>.961</td>
</tr>
<tr>
<td></td>
<td>Mg3</td>
<td>4.39</td>
<td>1.083</td>
<td>-.268</td>
<td>-.490</td>
</tr>
<tr>
<td>PE- Competence</td>
<td>Cpt1</td>
<td>4.93</td>
<td>.789</td>
<td>-.174</td>
<td>-.653</td>
</tr>
<tr>
<td></td>
<td>Cpt2</td>
<td>5.23</td>
<td>.774</td>
<td>-1.056</td>
<td>1.421</td>
</tr>
<tr>
<td></td>
<td>Cpt3</td>
<td>5.00</td>
<td>.807</td>
<td>-.556</td>
<td>.058</td>
</tr>
<tr>
<td>PE-Impact</td>
<td>Imp1</td>
<td>3.59</td>
<td>1.3</td>
<td>-.176</td>
<td>-.373</td>
</tr>
<tr>
<td></td>
<td>Imp2</td>
<td>3.3</td>
<td>1.440</td>
<td>-.156</td>
<td>-.854</td>
</tr>
<tr>
<td></td>
<td>Imp3</td>
<td>3.18</td>
<td>1.369</td>
<td>.226</td>
<td>-.290</td>
</tr>
</tbody>
</table>
3.6 Analytical Procedure

3.6.1 Data preparation process

Once data were collected, questionnaires went through data preparation process based on instructions suggested by Malhotra (2010). To do so, the questionnaire underwent questionnaire checking, coding, transcribing, data cleaning, and variable re-specification processes.

(a) Questionnaire checking

At the beginning of data preparation, questionnaires were checked for identification of unacceptable questionnaires. A questionnaire is deemed unacceptable when:

- some parts of the questionnaire were incomplete
- some pages of the questionnaire were missing
- it had too many missing variables
- questionnaire was answered by obvious central tendency
- the answers showed very little variance

As previously mentioned, during the data preparation process, 12 questionnaires were considered unacceptable and consequently were discarded from the data set.

(b) Coding

After the questionnaire checking process, a specific number was assigned to each answer. Table 3.5 gives the list codes for each answer.
**Table 3.5: The Summary of Coding Procedure**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>1: male 2: female</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>1: 18-28 2: 29-35 3: 36-45 4: Above 45</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>diploma and lower: 1 2: High school 3: Bachelor 4: Master</td>
</tr>
<tr>
<td><strong>Work experience</strong></td>
<td>1: Bellow 5 years 2: 5-10 years 3: 11-15 years 4: Above 15 years</td>
</tr>
<tr>
<td><strong>Duration of working under current supervisor</strong></td>
<td>1: Bellow 2 years 2: 2-5 years 3: 6-10 years 4: Above 10 years</td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td>---</td>
</tr>
<tr>
<td><strong>Big-five personality traits</strong></td>
<td>1: Not at all 2: Very little 3: Slightly 4: Moderately 5: Very much 6: Exactly</td>
</tr>
<tr>
<td><strong>P.E., affect-based trust, Peers Relationship, LMX, Customer supportiveness, and P.E.</strong></td>
<td>1: Strongly 2: Moderately 3: Slightly 4: Slightly 5: Moderately 6: Strongly</td>
</tr>
</tbody>
</table>
(c) Transcribing and data cleaning

Once the coding was clear, the coded data were entered in SPSS, and the frequency test was employed to make sure that all the coded data fall into the acceptable range. Data related to negatively worded items were re-coded using SPSS “re-code into same variable”. Since questionnaires with few missing variables were kept in the data set, a method for treating missing variable was needed. Thus, missing variables were substituted by imputed response (i.e. a method in which missing variables is substituted based on respondents’ responses to other similar items; Malhotra, 2010).

(d) Re-specification process

The total score for each variable was calculated by measuring the arithmetic mean of corresponding items. All these calculations were done using the function “compute” in the SPSS software. Since all the demographic variables apart from gender are ordinal variables, in which the code value was increased by the order (e.g. in case of education the higher number means higher level of education), no dummy variables were required. However, since gender variable is “nominal”, a dummy variable was needed. So, in the dummy variable, male was coded 0 and female was coded 1.

3.6.2 Testing the Multivariate Assumptions

Once data preparation process was completed, data were tested in terms of multivariate assumption (i.e. homoscedasticity, linearity, normality, and reliability). The homoscedasticity or equality of variance was tested using the scatter plot within the linear
regression method, the linearity for every proposed relationship was tested using the F-value and P-value of linear test within the curve estimation, and finally normality was tested by assessing the Skewness and Kurtosis for each variables (Salkind, 2010). Finally, reliability of items for measuring each factor was tested using Cronbach alpha.

Data preparation process and the tests for multivariate assumptions were the primary steps for both the data from pilot and the main sample. Once, the multivariate assumptions for pilot data were satisfied, data collection from the main sample was conducted. Again, similar to the data for pilot study, the main data went through the preparation process and tests for multivariate assumptions.

3.6.3 Exploratory Factor Analysis (EFA) , Confirmatory Factor Analysis (CFA) , and Pearson Correlation Test

Despite the fact that there is a debate over the fact that whether or not Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) can be used on a single data-set, many well-known statisticians and researchers believe that when a sample size is right usage of both EFA and CFA on a single data used can be useful as they complement one another (Hurley, et al., 1997; Hair, Black, Babin, & Anderson, 2010).

So, once the multivariate assumption was tested, Exploratory Factor Analysis (EFA) using principal component methods and Verimax rotation was used to make sure that each item loads on its corresponding factor in a satisfactory manner.

Once EFA was carried out Confirmatory Factor Analysis (CFA) was conducted. At first, CFAs (both first-order and second-order) were conducted to assess the covariance, factor
loading, goodness of fit between the data and the hypothesized model, internal consistency, and construct validity (in second-order). In order to assess the model fit, absolute, parsimony, and normative fit indices were checked. Adopted from Hair et al. (2010), Table 3.6 depicts the acceptable threshold for the fit indices.

**Table 3.6: The Acceptable Threshold of Fit Indices**

<table>
<thead>
<tr>
<th>Fit indices</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute fit indices</td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>&gt; .95 great; &gt; .9 permissible</td>
</tr>
<tr>
<td>AGFI</td>
<td>&gt; .8</td>
</tr>
<tr>
<td>$\chi^2$/df (i.e. normed chi-square)</td>
<td>&lt; 3 good; &lt; 5 sometimes permissible</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; .05 good; .05 to .1 moderate fit</td>
</tr>
<tr>
<td>Incremental fit index</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; .95 great; &gt; .9 good; &gt; .8 sometimes permissible</td>
</tr>
<tr>
<td>Parsimony fit index</td>
<td></td>
</tr>
<tr>
<td>PCFI</td>
<td>&gt; .8</td>
</tr>
</tbody>
</table>

To test the internal consistency of items measuring each factor, Composite Reliability (CR) was evaluated. CR was calculated using the following formula (Malhotra, 2010; hair et al., 2010):

$$CR = \frac{\left(\sum_{j=1}^{n} \lambda_j\right)^2}{\left(\sum_{j=1}^{n} \lambda_j\right)^2 + \left(\sum_{j=1}^{n} \delta_j\right)}$$

\(\lambda\): Standardized factor loading between latent construct and measured variables

\(\delta\): error term associated with measured variable

\(n\): number of measured variables

CR should be more than 0.7 in order to convey an acceptable internal consistency. To test the construct validity, comprising convergent and discriminant validity, for all the latent variables, Average Variance Extracted (AVE), Maximum Shared squared Variance (MSV)
and Average Shared square Variance (ASV) was calculated. AVE was calculated using the following formula (Malhotra, 2010; hair et al., 2010):

\[
AVE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n}
\]

\(\lambda_i\): Factor loading between latent construct and measured variables
\(n\): number of measured variables

As it is obvious from the name, MSV and ASV are the maximum and average of squared co-variances between a particular latent variable and other latent variables, respectively. To check for the convergent validity, AVE should be greater than 0.5, and Composite Reliability (CR) should be greater than AVE. In addition, discriminant validity for the first-order latent variable is considered valid when both MSV and ASV are found to be less than AVE. However, for the second-order factors, the requirement of discriminant validity will be satisfied when the square root of AVE is greater than all the correlation with other factors (Hair et al., 2010). Figure 3.2 depicts the summary of the requirements for the construct validity.
3.6.4 Hypothesis Testing

Structural Equation Modelling (SEM) was employed in order to test the study hypotheses. As previously mentioned, SEM was obtained using IBM SPSS AMOS v21. Therefore, the Structural Equation Modelling (SEM) used for testing the hypothesis is Covariance-based SEM (CB SEM) rather than Variance-based SEM (VB SEM) which is the product of other methods such as Partial Least Square method (PLS). For testing the study hypotheses CB SEM was employed because of several reasons (Hair et al., 2014):

1. The goal of using SEM was testing theory-based relationships rather than merely identifying “key constructs”.

Figure 3.3: Discriminant and Convergent Validity
2. All the study constructs were “reflective” as opposed to “formative” (although formative constructs can also be part of CB SEM, but in that case CB SEM requires construct specification modification).

3. Structural model had non-recursive relationships.

To test the hypotheses, postulating the direct relationship between the Big-Five personality traits and psychological empowerment (i.e. H1, H2, H3, H8, and H9), the proposed mediating variables for agreeableness-psychological empowerment relationship (i.e. LMX, affect-based trust, peer relationship, and customer supportiveness) were not included in the structural model in order to assess the relationship between big-five personality traits and psychological empowerment without the possible mediating effect.

For assessing the proposed mediation (i.e. H4, H5, H6, and H7), the combination of Baron and Kenny’s (1986) three steps and Sobel test was used. According to Baron and Kenny (1986), to test the mediation, first, psychological empowerment should be regressed on agreeableness. Second, mediating variable was regressed on agreeableness. Finally, psychological empowerment was regressed on the mediating variable while agreeableness was controlled. So, in the structural model, at first, the link between agreeableness and psychological empowerment was assessed while mediating variables were not included in the model. Then, the mediating variable was inserted in the model and the path between mediating variable and agreeableness and between mediating variable and psychological empowerment was analyzed while there was a direct link between agreeableness and psychological empowerment. In addition to Baron and Kenny’s (1986) instruction, Sobel test was also employed to ensure that mediation is not merely three significant direct affects rather than significant indirect affect (Sobel, 1982).
3.6.5 Dimensional Analysis

Once all the hypotheses were tested, similar to other similar studies such as Hon and Rensvold (2006), dimensional analysis was carried out using SEM in order to clarify the way by which each of Big-Five personality traits affects employees’ level of psychological empowerment. The dimensional analysis also provided more insights regarding the mediating role of proposed mediating variables and their dimension (i.e. in case on LMX) for the relationship between agreeableness and psychological empowerment dimensions of meaning, impact, competence or self-efficacy, and self-determination. Similar to the hypothesis testing, dimensional analysis was also conducted using Covariance-based Structural Equation Modelling (CB SEM).

Figure 3.3 gives the summary of preliminary and analytical procedure explained above for both the pilot and main study.
Figure 3.4: The Summary of Preliminary and Analytical Procedures
3.7 Conclusion

This chapter firstly aimed to provide the literature supporting the study hypothesis in order to systematically develop study hypotheses. Secondly, the possibility of using qualitative method for answering the research question along with the researcher’s epistemological positioning was elaborated. Finally, research methods including sampling, measures, and analytical was thoroughly discussed.
CHAPTER 4- THE RESULT

4.1 Introduction

In testing the hypothesized associations and mediations mentioned in Chapter 3, data from both the pilot (sample size: 44) and the main sample (sample size: 372 service-employees) were analyzed using IBM SPSS v21, IBM SPSS AMOS v21, and the online Sobel test (http://quantpsy.org/sobel/sobel.htm). This chapter aims to provide the result of data analysis necessary for testing and discussing the study hypotheses. The results provided in this chapter are organized according to data analysis procedure explained in the previous chapter.

4.2 The Results of the Main Study

4.2.1 Demographic Characteristics of the main sample

As depicted in Table 3.3, 39.5 percent of the respondents are between 18 and 28 years old, 34.1 percent are between 29 and 35 years old, 18 percent are between 36 and 45 years old and 8.1 percent of the respondents are above 45 years old. In terms of the gender, 44.9 and 55.1 percent of the respondents are male and female, respectively. 42.5 percent of the respondents have high school diploma and lower certificates while 39.5 and 15.1 percent of the sample have bachelor and master degrees respectively. 3 percent of respondents are medical doctors.
In terms of working experience, 38.7 percent of the respondents have working experience of less than 5 years, 27.4 percent have 5 to 10 years of working experience, 16.4 percent of sample elements have working experience of between 11 to 15 years. Only 15.9 percent of the respondents have more than 15 years of working experience. Furthermore, 56.5 percent of the respondents worked under their current supervisors for less than 2 years, 27.7 percent worked under their current supervisor between 2 and 5 years, 6.2 percent of sample elements worked under their current supervisors between 6 to 10 years while 5.9 percent of respondents worked under their current supervisors for more than 10 years. Moreover, respondents have the average position tenure of 5 years. Further classification of position tenure indicated that 57 percent of respondents have position tenure of less than 3 year, 18 percent have position tenure of between 3 and 7 years and 19.9 percent have position tenure of more than 7 years. Table 4.2 shows main sample demographic characteristics.
<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>levels</th>
<th>N</th>
<th>%</th>
<th>Demographic Variables</th>
<th>levels</th>
<th>N</th>
<th>%</th>
<th>Demographic Variables</th>
<th>levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18-28</td>
<td>147</td>
<td>39.5</td>
<td></td>
<td>High-school diploma and lower certificates</td>
<td>158</td>
<td>42.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29-35</td>
<td>127</td>
<td>34.1</td>
<td></td>
<td>Bachelor</td>
<td>147</td>
<td>39.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>36-45</td>
<td>67</td>
<td>18</td>
<td></td>
<td>Master</td>
<td>56</td>
<td>15.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 45</td>
<td>30</td>
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4.3.2 Data Preparation and Multivariate Assumptions

Similar to the pilot study’s data analysis, the main sample data analysis started with data preparation process. Once questionnaire checking, coding, transcribing, data cleaning, and re-specification were completed, multivariate assumptions were evaluated. Linear’s p-value for all the model relationships were significant (Table 4.2).

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<th>Relationships</th>
<th>Linear ‘s F-value</th>
<th>Linear ‘s P-</th>
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</thead>
<tbody>
<tr>
<td>Extraversion → Psychological Empowerment</td>
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<td>Conscientiousness → Psychological Empowerment</td>
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<tr>
<td>Agreeableness → Psychological Empowerment</td>
<td>19.752</td>
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<td>Openness to Experience → Psychological Empowerment</td>
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<td>.024</td>
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<tr>
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<td>Agreeableness → Affect-based Trust</td>
<td>13.348</td>
<td>.000</td>
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<tr>
<td>Agreeableness → Peer Relationship</td>
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<td>.041</td>
</tr>
<tr>
<td>Agreeableness → Leader-member Exchange</td>
<td>14.335</td>
<td>.000</td>
</tr>
<tr>
<td>Customer Supportiveness → Psychological Empowerment</td>
<td>15.539</td>
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</tr>
<tr>
<td>Affect-based Trust → Psychological Empowerment</td>
<td>26.352</td>
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</tr>
<tr>
<td>Peer Relationship → Psychological Empowerment</td>
<td>4.317</td>
<td>.038</td>
</tr>
<tr>
<td>Leader-member Exchange → Psychological Empowerment</td>
<td>25.833</td>
<td>.000</td>
</tr>
</tbody>
</table>
For testing homoscedasticity, the residual scatterplot was used (Hair et al., 2010; Tabachnick & Fidell, 2007; Salkind, 2010). The assumption of equality of variance for all the hypothesized association was met as the residual in all cases scattered randomly around the center without any consistent pattern (Figure 4.1).

As mentioned in previous chapter, Skewness and Kurtosis were used in order to test the normality (Salkind, 2010). Both skewness and kurtosis for all the observed variables were between ±1.96 (see Table 4.3). Thus, assumptions of homoscedasticity, normality, and linearity were all satisfied. According to the result of descriptive analysis (see table 4.3), one of the observed variables for measuring extraversion (i.e. Ext1) had the lowest mean (\( \bar{x} = 3.80 \)) and one of observed variables for measuring psychological empowerment’s dimension of meaning (i.e. Mg1) had the highest mean (\( \bar{X} = 5.06 \)) among all the observed variables. In addition, second item for measuring psychological empowerment’s dimension of competence (i.e. Cpt2) had the lowest standard deviation (S.D= .977) and one of the items for measuring emotional stability (i.e. Em4) had the highest standard deviation (S.D= 1.420) among all the observed variables.

As mentioned in the previous chapter, Cronbach alpha values for items measuring the same factor were all more than 0.7. Thereby, all the measurement items are satisfactory reliable.
Figure 4.1: The Result of Residual Scatterplots for Assessing Homoscedasticity
### Table 4.3: Univariate Analysis of the Observed Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Ext1</th>
<th>Ext2</th>
<th>Ext3</th>
<th>Ext4</th>
<th>Mean</th>
<th>S.D</th>
<th>Skewness</th>
<th>Kurtosis</th>
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4.3.3 Exploratory Factor Analysis (EFA)

In the next step, EFA with principal component method and Verimax rotation were carried out. As depicted in Table 4.4, all the items loaded strongly on the corresponding factors. KMO measure of sample adequacy was 0.802, which was more than the threshold of 0.5, and Bartlett’s test of sphericity was significant (p-value< .001). Thus, the data were appropriate for factor analysis.

4.3.4 Checking for Common Method Bias

Given the fact that all the measures were self-assessed, therefore data is susceptible to common method variance. In order to check whether or not common method bias is problematic, both Harmon’s single factor method and Zero-constrained test were used (Podsakoff et al., 2003). Harmon’s single factor only explained 14.771% of the whole variance suggesting that common method bias is not problematic single factor explained less than 50% of the total variance. In addition, unconstrained common factor model was compared to zero-constrained common factor model. Since the chi-square difference test was not found to be significant, further evidence was obtained showing that common method bias is not an issue.
### Table 4.4: The Result of EFA Using Principal Component Method

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<th>Loading</th>
<th>Component</th>
<th>Loading</th>
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*a Verimax rotation was employed*
4.3.5 Confirmatory Factor Analysis (CFA)

As it was mentioned in the last chapter, many well-known scholars believe that usage of both EFA and CFA on a single data set is quite useful as despite the similarities they complement on another (Hurley, et al., 1997; Hair, Black, Babin, & Anderson, 2010). Thus, after EFA, first-order and second-order Confirmatory Factor Analysis (CFA) were conducted to assess both the goodness of fit and construct validity before proceeding to structural model.

4.3.5.1 First-order CFA

Fit indices of the first-order CFA (GFI= .873, AGFI=.848, \( \text{RMSEA} = .029; P > .05 \), \( \chi^2/\text{df} = 1.304 \), CFI=.960, and PCFI=.831) provided evidence for moderate-to-good fit between data and the hypothesized model as except for GFA which ideally should be above .9, all the fit indices were ideal. According to Hair et al.’s (2010) instruction mentioned in the previous chapter, construct validity (convergent and discriminant validity) of all the latent variables in the first-order measurement model was evaluated. Based on the results, except for the convergent validity of openness to experience (AVE=.474<.5), data provided evidence for both convergent and discriminant validity of all the latent variables since all the AVEs (except for that of openness to experience) were equal and more than .5, CRs were less than AVEs, MSVs were less than AVEs, and finally ASVs were less than AVEs (Table 4.5). Additionally, Composite Reliabilities (CRs) for all the factors in the model were more than .7. So, the evidence of factors’ internal consistency was found. Table 4.6 also gives the standardized covariance for all the first-order latent variables.
Table 4.5 : The Summary of the Result of First-order CFA

<table>
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<th>Latent Variables</th>
<th>Loadings(λ)</th>
<th>CR</th>
<th>AVE</th>
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<th>ASV</th>
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^a Composite Reliability  ^b Average Variance Extracted  ^c Maximum Shared Squared Variance  ^d Average Shared Squared Variance
Table 4.6: Standardized covariance (correlations) table as the result of first-order CFA

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<td>0.313***</td>
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*a Leader-member Exchange  bPsychological Empowerment  *P<.05  **P<.01  ***P<.001
4.3.5.2 Second-order CFA

Once the first-order CFA was conducted, second-order Confirmatory Factor Analysis was carried out. Conducting second-order CFA (for assessing model fit and construct validity and internal constancy) was important since some of the constructs in the hypothesized model were second-level constructs (i.e. LMX and psychological empowerment). Fit indices of second-order model (GFI= .860, AGFI= .842, [RMSEA= .031; P > .05], $\chi^2$/df= 1.360, CFI= .950, and PCFI= .872) suggested moderate-to-good fit between data and hypothesized model as except for GFI, which ideally is expected to be greater than .9, other fit indices were within the acceptable range. As expected, compared to the first-order CFA, second-order CFA showed better fit between data and hypothesized model. Composite reliabilities (CR) for all the latent variables were greater than 0.7. Thus, internal consistency for those variables is valid. The results of the second-order CFA can be seen in Appendix A.

As mentioned in the previous chapter, for testing the construct validity (discriminant and convergent validity) Hair et al.’s (2010) instruction was followed. Once the Composite Reliability (CR), Average Variance Extracted (AVE), Average Shared squared Variance (ASV), and Maximum Shared squared Variance (MSV) was obtained for all the first-order and second-order factors, construct validity was assessed. Except for the convergent validity of psychological empowerment, the data provided evidence for both discriminant and convergent validity of all the latent variables. For the first-order latent variables (i.e. Big-Five personality traits, customer supportiveness, and peer relationship) both Maximum shared Squared Variance (MSV) and Average shared Squared Variance (ASV) were less
than AVE. In addition, square root of AVE for the second-order factors (i.e. psychological empowerment and Leader-Member Exchange [LMX]) was greater than all the correlations of other factors. Therefore, the data provided evidence for discriminant validity of all factors. Since all the CRs were more than AVEs, and all AVEs except for psychological empowerment were greater than 0.5, thereby the data provided evidence for convergent validity for all the factors except for psychological empowerment (see Table 4.7).

4.3.6 Univariate Analysis and Pearson Correlation

After checking for the construct validity, univariate analysis and Pearson correlation test were carried out (see Table 4.8). Among all the variables, LMX's dimension of loyalty and psychological empowerment’s dimension of meaning had the highest and the lowest arithmetic mean, respectively ($\mu =3.88$ and 4.88). Additionally, the highest and the lowest standard deviation were observed in LMX's dimension of affect (S.D = 1.291) and the composite measure of psychological empowerment (S.D = .723), respectively.
Table 4.7: Indices and Factor Correlations Matrix as the Result of Second-order CFA for Assessing Construct Validity

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<td>0.124</td>
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<td>0.770</td>
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<td>0.197</td>
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<td>LMX e</td>
<td>0.799</td>
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<td>P.E. f</td>
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<td>0.105</td>
<td>0.060</td>
<td>0.324</td>
<td>0.226</td>
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<td>0.305</td>
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<td>0.280</td>
<td>0.092</td>
<td>0.310</td>
<td>0.679</td>
</tr>
</tbody>
</table>

*Square root of AVE for each factor was reported on the diagonal

a Composite Reliability  
b Average Variance Extracted  
c Maximum Shared squared Variance  
d Average Shared squared Variance  
e Leader-member Exchange  
f Psychological Empowerment
Table 4.8: Pearson correlation and univariate analysis of unobserved variables

| Variable                      | α     | μ     | S.D.  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
|-------------------------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Extraversion                 | .798  | 4.13  | 1.037 | 1    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Conscientiousness            | .851  | 4.69  | 1.006 | -0.086 | 1  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Agreeableness                | .820  | 4.78  | .892  | .144** | .172** | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Openness to Experience       | .794  | 4.01  | .994  | .049  | .022 | .015 | 1    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Emotional Stability          | .817  | 4.28  | 1.087 | .056  | .265** | .206** | -102** | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Customer Supportiveness      | .847  | 4.55  | 1.135 | .112* | .198** | .262** | .014  | .138** | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Affect-based Trust           | .832  | 4.10  | 1.178 | .045  | .107* | .187** | .048  | .139** | .109* | 1   |     |     |     |     |     |     |     |     |     |     |     |     |
| Peer Relationship            | .764  | 4.59  | 1.059 | .190** | .016 | .025 | .072  | .039  | .28  | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| LMX-Affect                   | .908  | 4.16  | 1.291 | .022  | .020 | .230** | -0.11 | .052  | .108* | .331** | .015 | 1   |     |     |     |     |     |     |     |     |     |     |     |
| LMX- Contribution            | .737  | 4.12  | 1.137 | .099  | .071 | .065 | .168** | .049  | .132** | .200** | .036 | .342** | 1   |     |     |     |     |     |     |     |     |     |     |
| LMX- Loyalty                 | .862  | 3.88  | 1.221 | -.011 | .037 | .171** | -.056 | .061  | .127** | .322** | -.092 | .555** | .372** | 1   |     |     |     |     |     |     |     |     |     |     |
| LMX-Professional Respect     | .900  | 4.30  | 1.195 | .041  | .027 | .103* | .027  | .066  | .065  | .277** | .077  | .467** | .310** | .444** | 1   |     |     |     |     |     |     |     |     |     |     |
| PE-Meaning                   | .819  | 4.88  | .924  | .131** | .140** | .177** | .052  | .130** | .270** | .148** | .062  | .166** | .151** | .146** | .092 | .186** | 1   |     |     |     |     |     |     |     |     |     |     |
| PE-Impact                    | .787  | 4.10  | 1.04  | .098  | .142** | .134** | .072  | .337** | .105  | .300** | -.056 | .159** | .258** | .223** | .104 | .246** | .338** | 1   |     |     |     |     |     |     |     |     |     |     |
| PE-Self-Determination        | .735  | 4.33  | 1.137 | .061  | .095  | .134** | .123  | .030  | .107** | .222** | .039  | .133** | .166** | .195** | .069 | .187** | .393** | .440** | 1   |     |     |     |     |     |     |     |     |     |     |
| PE-Competence                | .838  | 4.87  | .846  | .211** | .185** | .231** | .089  | .092  | .119  | .052  | .152** | .088  | .192** | .073  | .002  | .116** | .481** | .343** | .286** | 1   |     |     |     |     |     |     |     |     |     |     |
| PEb                          | .455  | .723  | .163** | .188** | .225** | .117** | .129** | .201** | .258** | .060  | .189** | .263** | .225** | .095  | .255** | .736** | .741** | .760** | .682** | 1   |     |     |     |     |     |     |     |     |     |     |

*a* Leader-member Exchange  
*b* Psychological Empowerment  
*P<.05*  
*P<.01*
4.3.7 Hypothesis Testing

4.3.7.1 Testing the Direct Association Between Big-five Personality Traits and Psychological Empowerment

To test the hypotheses proposing the direct relationship between the Big-Five personality traits and psychological empowerment (i.e. H1, H2, H3, H8, and H9) structural equation modeling was carried out. Proposed mediating variables (i.e. LMX, customer supportiveness, peer relationship, and affect-based trust) were not included in the structural model as it may have mediated the relationship between any of big-five personality traits and psychological empowerment. As mentioned in the previous chapter, gender, age, education, work experience, position tenure, and duration of working under current supervisor were controlled for in the model.

Fit indices of the structural model for testing the direct antecedents of psychological empowerment (GFI = .894, AGF= .868; $\chi^2$/df = 1.494, CFI= .947, PCFI = .803, and [RMSEA = .036; P >.05]) indicated a good fit between data and the hypothesized model. Structural model provided evidence for significant association between openness to experience ($\gamma= .129$, SE= .044, P < .05) conscientiousness ($\gamma= .162$, SE=.040, P < .05), extraversion ($\gamma= .184$, SE=.041, P < .01), and agreeableness ($\gamma= .214$, SE=.062,  P < .01) and psychological empowerment.
Figure 4.2: The Result of Structural Equation Modeling for Direct Antecedents of Psychological Empowerment

Standardized estimates and one-tailed standardized regression weights were reported:
AGFI = .868; $\chi^2$/df = 1.494, CFI = .947, PCFI = .803, and [RMSEA = .036; P > .05]

PE: Psychological Empowerment

Self-D: Self-determination

* P < .05  ** P < .01  *** P < .001
4.3.7.2 Testing the Proposed Mediation

As explained in the previous chapter, a combination of Baron and Kenny’s (1986) three steps and Sobel test was used in order to check whether or not the mediation is significant. It is important to note that similar to demographics, personality traits are enduring and unchangeable individuals’ characteristics and cannot mediate any relationship between variables. Thus, all the Big-Five personality traits were entered in the structural model to test whether that proposed mediating constructs mediate the relationship between agreeableness and psychological empowerment. Mediating role of Leader-Member Exchange (LMX), affect-based trust, peer relationship, and customer supportiveness for agreeableness-psychological empowerment relationship was assessed using structural equation modeling.

(a) Mediation Role of LMX for Agreeableness-psychological Empowerment Relationship

For testing the mediating role of Leader-member Exchange (LMX) for agreeableness-psychological empowerment relationship, according to Baron and Kenny’s (1986) instruction, at first, psychological empowerment was regressed on agreeableness while excluding all the mediating variables. Agreeableness was found to be significantly related to psychological empowerment ($\gamma = .214$, $SE = .062$, $P < .01$; figure 4.2). The fit indices for this structural model ($GFI = .894$, $AGF= .868$; $\chi^2/df = 1.494$, $CFI= .947$, $PCFI = .803$, and $[RMSEA = .036; P > .05]$) indicated good fit between data and hypothesized model. In the
following step agreeableness was significantly associated with LMX ($\gamma = .252$, SE = .092, $P< .001$; figure 4.3). Fit indices of the structural model for assessing the relationship between agreeableness and LMX (AGFI=.884, $\chi^2/df = 1.294$, CFI=.972, PCFI = .833, and [RMSEA = .028; $P >.05$] showed a good fit between data and hypothesized model.

In the third step of mediation test, LMX was found to be significantly related to psychological empowerment ($\beta = .245$, SE = .043, $P< .001$; figure 4.4) while agreeableness was controlled for. Fit indices of structural model for assessing the link between LMX and psychological empowerment showed good fit between data and hypothesized model (AGFI=.848; $\chi^2/df = 1.370$, CFI=.952, PCFI = .853, and [RMSEA = .032; $P >.05$]).

After including the LMX in the model, the relationship between agreeableness and psychological empowerment remained significant ($\gamma = .149$, SE = .062, $P< .05$; see figure 4.4). P-value of Sobel test also provided evidence for significant mediation ($P= .009 < .01$). Thereby, both the result of structural model and Sobel test indicated that Leader-Member Exchange (LMX) partially mediates the relationship between agreeableness and psychological empowerment.
Standardized estimates and one-tailed standardized regression weights were reported

1 AGFI = .884; $\chi^2$/df = 1.294, CFI = .972, PCFI = .833, and (RMSEA = .028; P > .05)

Self-D: Self-Determination  LMX: Leader-Member Exchange

* P < .05  ** P < .01  *** P < .001

**Figure 4.3:** The result of structural model for assessing the relationship between agreeableness and LMX (2nd step of mediation test)**
Figure 4.4: The result of SEM for assessing the relationship between LMX and PE while controlling for agreeableness (3rd step of mediation test). Standardized estimates and one-tailed standardized regression weights were reported. AGFI = .848; $\chi^2$/df = 1.370, CFI = .952, PCFI = .853, and (RMSEA = .032; P > .05).

LMX: Leader-Member Exchange

PE: Psychological Empowerment

Self-D: Self-determination

Control variables:
- Gender
- Tenure
- Age
- Education
- Work Experience
- Duration of working under current supervisor

* Standardized estimates and one-tailed standardized regression weights were reported.
AGFI = .848; $\chi^2$/df = 1.370, CFI = .952, PCFI = .853, and (RMSEA = .032; P > .05).

PE: Psychological Empowerment
Self-D: Self-determination
LMX: Leader-Member Exchange

* P<.05 ** P<.01 *** P<.001
(b) Mediating Role of Customer Supportiveness

To test the mediating role of customer supportiveness for agreeableness-psychological empowerment relationship, the same procedure was followed. In the first step, which is identical to the first step for assessing LMX mediating role, agreeableness was found to be significantly associated with psychological empowerment ($\gamma = .214, SE = .062, P < .01$; figure 4.2). As previously mentioned fit indices of this model ($GFI = .894, AGF = .868; \chi^2/df = 1.494, CFI = .947, PCFI = .803$, and $[RMSEA = .036; P > .05]$) showed good fit between data and hypothesized model. In the next step, the link between agreeableness and customer supportiveness was evaluated. Structural model showed that agreeableness is significantly related to customer supportiveness ($\gamma = .247, SE = .082, P < .001$; figure 4.5). Fit indices of structural model for testing the second step of mediation test ($AGFI = .886; \chi^2/df = 1.585, CFI = .954, PCFI = .795$, and $[RMSEA = .040; P > .05]$) showed good fit between data and hypothesized model. Customer supportiveness was also significantly related to psychological empowerment ($\beta = .153, SE = .037, P < .05$) while agreeableness was controlled. After including the customer supportiveness in the model, agreeableness-psychological empowerment remained significant ($\gamma = .175, SE = .067, P < .05$; see figure 4.6). In this model, data was satisfactorily fitted the hypothesized model ($AGFI = .8855; \chi^2/df = 1.538, CFI = .938, PCFI = .811$, and $[RMSEA = .038; P > .05]$). P-value of the Sobel test also was significant ($P = .040 < .05$). Thus, the result of structural model provided evidence for partial mediation of customer satisfaction for agreeableness-psychological empowerment relationship.
Figure 4.5: The result of structural model for assessing the relationship between agreeableness and customer supportiveness
Figure 4.6: The structural model for assessing the mediating role of customer supportiveness for agreeableness-psychological empowerment relationship.
(c) Mediating Role of Peers Relationship for Agreeableness-psychological Empowerment Relationship

For testing the mediating role of peer relationship for agreeableness-psychological empowerment relationship, similar to above-mentioned mediating variables, at first, the relationship between agreeableness and psychological empowerment was assessed using the structural equation modelling without including the mediating variable (i.e. peer relationship). The result of SEM provided evidence that agreeableness is significantly associated with psychological empowerment ($\gamma = .214$, $SE = .062$, $P < .01$; figure 4.2). Fit indices of the structural model ($GFI = .894$, $AGF = .868; \chi^2/df = 1.494$, $CFI = .947$, $PCFI = .803$, and $[RMSEA = .036; P > .05]$) indicated good fit between data and hypothesized model.

For testing the second step of Baron and Kenny’s (1986) procedure, the relationship between agreeableness and psychological empowerment was evaluated using the structural model. The fit indices of the structural model ($AGFI = .891; \chi^2/df = 1.583$, $CFI = .952$, $PCFI = .796$, and $[RMSEA = .040; P > .05]$) showed moderate-to-good fit between data and hypothesized model. Unexpectedly, structural model didn’t show did not show any significant association between agreeableness and peer relationship construct ($\gamma = .022$, $SE = .082$; see Figure 4.7). Thereby, it was concluded that peer relationship does not mediate the relationship between agreeableness and psychological empowerment.
Figure 4.7: The result of structural model for assessing the relationship between agreeableness and peer relationship (2nd step of mediation test)

* Standardized estimates and one-tailed standardized regression weights were reported
  AGFI=.891; χ2/df = 1.583, CFI=.952, PCFI = .796, and (RMSEA = .040; P > .05)
  * P<.05 ** P<.01 *** P<.001
(d) Mediating Role of Affect-Based Trust for Agreeableness-Psychological Empowerment Relationship

In order to check for the mediating role of affect-based trust for the relationship between agreeableness and psychological empowerment, as previously carried out, Baron and Kenny’s (1986) three steps were evaluated using the structural equation modelling. In the next step, structural model tested the relationship between agreeableness and psychological empowerment without including the proposed mediating variable in the model. Based on the result of SEM, agreeableness was significantly related to psychological empowerment ($\gamma = .214, \text{SE} = .062, P < .01$; figure 4.2). Additionally, the support for the goodness of fit between data and hypothesized model was found ($\text{GFI} = .894, \text{AGF} = .868; \chi^2/\text{df} = 1.494, \text{CFI} = .947, \text{PCFI} = .803, \text{and } [\text{RMSEA} = .036; P > .05]$). For testing the second step, structural model was used to assess the relationship between agreeableness and affect-based trust (figure 4.8). Agreeableness was found to be strongly related to affect-based trust ($\gamma = .212, \text{SE} = .087, P < .001$). Fit indices of this structural model ($\text{AGFI} = .898; \chi^2/\text{df} = 1.441, \text{CFI} = .965, \text{PCFI} = .753, \text{and } [\text{RMSEA} = .034; P > .05]$) also showed moderate-to-good fit between data and hypothesized model. Finally, in the last step, the link between affect-based trust and psychological empowerment was tested using SEM while agreeableness was controlled for (figure 4.9). The structural model provided evidence of significant relationship between affect-based trust and psychological empowerment ($\beta = .234, \text{SE} = .040; P < .001$). The data also was satisfactorily fitted the hypothesized model ($\text{AGFI} = .864; \chi^2/\text{df} = 1.448, \text{CFI} = .947, \text{PCFI} = .819, \text{and } [\text{RMSEA} = .035; P > .05]$). Once the Baron and Kenny’s (1986) three step were satisfied, Sobel test was carried out to assess whether or not the mediation is significant. Similar to Baron and Kenny’s (1986) three step, Sobel test’s p-
value (P=.011<.05) also provided evidence for significant mediating role affect-based trust for agreeableness-psychological empowerment relationship.
Figure 4.8: The result of structural model for assessing the relationship between agreeableness and peer relationship
Figure 4.9: The Result of structural model for assessing the mediating role of affect-based trust for agreeableness-psychological Empowerment Relationship

- Standardized estimates and one-tailed standardized regression weights were reported.
- AGFI = .864; χ²/df = 1.448, CFI = .947, PCFI = .819, and (RMSEA = .035; P > .05).
- PE: Psychological Empowerment
- Self-D: Self-determination
- * P < .05
- ** P < .01
- *** P < .001

Control variables:
- Gender
- Tenure
- Age
- Education
- Work Experience
- Duration of working under current supervisor
4.3.8 Dimensional Analysis

Once the empowerment-related big-five personality traits were identified, dimensional analysis was needed to clarify how each of the big-five personality traits boosts employees’ feeling of empowerment. In addition, mediating role of LMX, customer supportiveness, and affect-based trust for the relationship between agreeableness and all the psychological empowerment dimensions was assessed in order to see how agreeableness trait boosts employees’ feeling of empowerment through these mediating variables.

4.3.8.1 Dimensional Analysis for Assessing The Link Between Big-five Personality Traits and Psychological Empowerment’s Dimensions

At first, structural equation modelling was carried out for testing the paths between big-five personality traits and psychological empowerment’s dimension of meaning. Based on the structural model extraversion ($\gamma = .140$, SE = .051, P < .05) and agreeableness ($\gamma = .147$, SE = .076, P < .05) were significantly related to the dimension of meaning (see figure 4.10). Fit indices (AGFI = .890; $\chi^2$/df = 1.548, CFI = .956, PCFI = 806, and [RMSEA = .038; P > .05]) indicated a good fit between data and hypothesized model.
Figure 4.10: The result of SEM for assessing the link between big-five personality traits and dimension of meaning

Standardized estimates and one-tailed standardized regression weights were reported:
- AGFI = .890
- $\chi^2/df = 1.548$
- CFI = .956
- PCFI = .806
- (RMSEA = .038; $P > .05$)

* $P < .05$  ** $P < .01$  *** $P < .001$
The result of structural model for assessing the relationships between big-five personality traits and psychological empowerment’s dimension of impact only provided evidence for the significant association between agreeableness ($\gamma = .112, \ SE = .076, \ P < .05$) and dimension of impact (figure 4.11). The structural model for assessing the link between big-five personality traits and dimension of impact had moderate-to-good fit with data ($AGFI = .895; \chi^2/df = 1.470, \ CFI = .961, \ PCFI = 791,$ and $[RMSEA = .036; \ P > .05]$).

The paths between big-five personality traits and psychological empowerment’ dimension of self-determination was also evaluated using the structural equation modelling. The structural model showed the significant relationships between both the openness to experience ($\gamma = .188, \ SE = .080, \ P < .01$) and agreeableness ($\gamma = .127, \ SE = .097, \ P < .05$) and dimension of self-determination (figure 4.12). Fit indices for this structural model ($AGFI = .895; \chi^2/df = 1.514, \ CFI = .958, \ PCFI = 796,$ and $[RMSEA = .037; \ P > .05]$) showed moderate-to-good fit between data and hypothesized model.

Finally, the structural model for assessing the relationship between big-five personality traits and psychological empowerment’s dimension of competence/self-efficacy indicated that conscientiousness ($\gamma = .179, \ SE = .050, \ P < .01$), extraversion ($\gamma = .213, \ SE = .045, \ P < .001$), and agreeableness ($\gamma = .172, \ SE = .066, \ P < .01$) is significantly related to the dimension of competence (figure 4.13). In this structural model data was also satisfactorily fitted the hypothesized model ($AGFI = .885; \chi^2/df = 1.598, \ CFI = .953, \ PCFI = 794,$ and $[RMSEA = .040; \ P > .05]$).
Figure 4.11: The result of SEM for assessing the link between big-five personality traits and dimension of impact
Figure 4.12: The result of SEM for assessing the link between big-five personality traits and dimension of self-determination

- Standardized estimates and one-tailed standardized regression weights were reported
  AGFI = .895; χ²/df = 1.514, CFI = .958, PCFI = .796, and (RMSEA = .037; P > .05)
- Self.D.: self-determination
- *P < .05  **P < .01  ***P < .001
Figure 4.13: The result of SEM for assessing the link between big-five personality traits and dimension of competence
4.3.8.2 Dimensional Analysis for Testing the Proposed Mediation

In order to analyze how agreeableness boosts employees’ feeling of empowerment through proposed mediating variables, the mediating role of customer supportiveness, LMX, and affect-based trust for the relationship between agreeableness and each of the psychological empowerment’s dimensions was assessed. Similar to the mediation test for the relationship between agreeableness and the composite measure of psychological empowerment, the mediation for the relationship between agreeableness and psychological empowerment’s dimensions was tested using the combination of Baron and Kenny’s (1986) three steps and Sobel test.

(a) Dimensional Analysis for the Mediating Role of Customer Supportiveness and Psychological empowerment dimensions

For testing the mediating role of customer supportiveness for agreeableness-meaning relationship, at first, the relationship between agreeableness and dimension of meaning was evaluated using the structural model without including the mediating variable in the model. Based on the result of structural equation modelling, agreeableness was significantly related to psychological empowerment’s dimension of meaning ($\gamma = .147$, SE $=.076$, $P<.05$; figure 4.10). Data satisfactorily fitted the hypothesized model ($\text{AGFI} = .890$; $\chi^2/\text{df} = 1.548$, $\text{CFI} = .956$, $\text{PCFI} = .806$, and $\text{RMSEA} = .038$; $P > .05$). In the next step, the relationship between agreeableness and customer supportiveness was test. The structural model provided evidence for the significant association between agreeableness and customer supportiveness ($\gamma = .247$, SE $=.082$, $P<.001$; see figure 4.5). Fit indices ($\text{AGFI} = .886$; $\chi^2/\text{df}$
= 1.585, CFI= .954, PCFI = .795, and [RMSEA = .040; P >.05]) reflected moderate-to-good fit between data and hypothesized model. Finally, the relationship between customer supportiveness and dimension of meaning was tested while agreeableness was controlled for in the model. The structural model showed significant link between customer supportiveness and dimension of meaning (β= .231, SE= .045, P<.001; figure 4.14[a]). According to SEM, once the customer supportiveness was included in the model, the relationship between agreeableness and meaning was no longer significance, therefore, suggesting a full mediation. Fit indices for this structural model (AGFI= .877; χ2/df = 1.585, CFI= .948, PCFI = .788, and [RMSEA = .040; P >.05]) also suggested moderate-to-good fit between data and hypothesized model). Since all the Baron and Kenny’s (1986) three steps were satisfied for customer supportiveness, Sobel test was conducted in order to ensure that the mediation is significant. Sobel test’ s P-value (p=.003<.001) also indicated that customer supportiveness significantly mediates the relationship between agreeableness and psychological empowerment’s dimension of meaning.

Similar procedure was followed in order to evaluate the mediating role of customer supportiveness and dimension of impact. So, in the first structural model the relationship between agreeableness and dimension of impact was tested without including customer supportiveness in the model. The result showed significant relationship between agreeableness and dimension of impact (γ= .112, SE= .076, P<.05; figure 4.11). Data satisfactorily fitted the hypothesized model (AGFI= .895; χ2/df = 1.470, CFI= .961, PCFI = .791, and [RMSEA = .036; P >.05]). In the second step of mediation test, the relationship between agreeableness and customer supportiveness was tested. Based on the result of SEM (fit indices: AGFI= .886; χ2/df = 1.585, CFI= .954, PCFI = .795, and [RMSEA = .040; P >.05]), agreeableness was significantly related to customer supportiveness (γ= .247,
SE= .082, P< .001; see figure 4.5). For assessing the third step of mediation test, the path between customer supportiveness and dimension of impact was analyzed while agreeableness was controlled for in the model. Based on the result of structural equation modelling (fit indices: AGFI= .881; χ2/df = 1.514, CFI= .953, PCFI = .793, and [RMSEA = .037; P >.05]), customer supportiveness was not significantly related to dimension of impact (β= .041, SE= .082; figure 4.14[b]).

First step for testing the mediating role to customer supportiveness for the link between agreeableness and psychological empowerment’s dimension of self-determination was about testing the link between agreeableness and dimension of self-determination without including the customer supportiveness in the model. The structural model (fit indices: AGFI= .895; χ2/df = 1.514, CFI= .958, PCFI = 796, and [RMSEA = .037; P >.05]) provided evidence for the significant relationship between agreeableness and dimension of self-determination (γ= .127, SE= .097, P<.05; figure 4.12). SEM was used in the next step to assess the association between agreeableness and customer supportiveness. The structural model indicated that agreeableness is significantly related to customer supportiveness (γ= .247, SE= .082, P< .001; see figure 4.5). Data also was satisfactorily fitted the hypothesized model (AGFI= .886; χ2/df = 1.585, CFI= .954, PCFI = .795, and [RMSEA = .040; P >.05]). Finally, the relationship between customer supportiveness and dimension of self-determination was evaluated while agreeableness was controlled for in the model. According to the result of SEM (fit indices: AGFI= .881; χ2/df = 1.550, CFI= .952, PCFI = .791, and [RMSEA = .038; P >.05]), customer supportiveness was not significantly associated with psychological empowerment’s dimension of self-determination (β= .062, SE= .082; figure 4.14[c]).
For testing the mediating role of customer supportiveness for the relationship between agreeableness and psychological empowerment’s dimension of competence, in the first step, agreeableness-competence relationship was tested using the structural equation modelling. Based on the SEM result, agreeableness was significantly associated with dimension of competence/self-efficacy ($\gamma = .172$, SE $= .066$, $P < .01$; figure 4.13). Fit indices (AGFI $= .885$; $\chi^2$/df $= 1.598$, CFI $= .953$, PCFI $= 794$, and [RMSEA $= .040$; $P > .05$]) for this structural model showed good fit between data and hypothesized model. Additionally, the path between agreeableness and customer supportiveness was tested using the structural model. The result of structural model (fit indices: AGFI $= .886$; $\chi^2$/df $= 1.585$, CFI $= .954$, PCFI $= .795$, and [RMSEA $= .040$; $P > .05$]) provided evidence for the significant relationship between agreeableness and customer supportiveness ($\gamma = .247$, SE $= .082$, $P < .001$; figure 4.5). Finally, the relationship between customer supportiveness and psychological empowerment’s dimension of competence was tested while agreeableness was controlled for in the model. The finding didn’t provide support for the significant link between customer supportiveness and dimension of competence ($\beta = .014$, SE $= .038$; figure 4.14[d]). Data was satisfactorily fitted the hypothesized model (AGFI $= .872$; $\chi^2$/df $= 1.631$, CFI $= .945$, PCFI $= .790$, and [RMSEA $= .041$; $P > .05$]).
Figure 4.14: The result of structural model for testing the mediating role of customer supportiveness for the relationship between agreeableness and psychological empowerment's dimensions (3rd step)

- One-tailed standardized regression weights were reported
- (a) AGFI = .877; \( \chi^2/df = 1.585 \), CFI = .948, PCFI = .788, and (RMSEA = .040; P > .05)
- (b) AGFI = .881; \( \chi^2/df = 1.514 \), CFI = .953, PCFI = .793, and (RMSEA = .037; P > .05)
- (c) AGFI = .881; \( \chi^2/df = 1.550 \), CFI = .952, PCFI = .791, and (RMSEA = .038; P > .05)
- (d) AGFI = .872; \( \chi^2/df = 1.631 \), CFI = .945, PCFI = .790, and (RMSEA = .041; P > .05)

* P<.05  ** P<.01  *** P<.001
(b) Dimensional Analysis for the Mediating Role of Affect-based Trust and Peers Relationship

The mediating role of affect-based trust for the relationship between agreeableness and all the four cognitions of psychological empowerment was tested using the structural equation modeling. To see whether or not affect-based trust mediate the relationship between agreeableness and psychological empowerment’s dimension of meaning, at first, the path between agreeableness and dimension of meaning was tested without including the mediating variable in the model. The result indicated that agreeableness is significantly related to dimension of meaning ($\gamma = .147$, $SE = .076$, $P < .05$; figure 4.10). The finding also suggested a good fit between data and hypothesized model ($AGFI = .890$; $\chi^2/df = 1.548$, $CFI = .956$, $PCFI = .806$, and $[RMSEA = .038; P > .05]$). In the second step, the link between agreeableness and affect-based trust was tested using the structural model. The result of SEM (fit indices: $AGFI = .898$; $\chi^2/df = 1.441$, $CFI = .965$, $PCFI = .753$, and $[RMSEA = .034; P > .05]$) provided evidence for the significant association between agreeableness and affect-based trust ($\gamma = .212$, $SE = .087$, $P < .001$; figure 4.8). Finally, the path between affect-based trust and dimension of meaning was analyzed while agreeableness was controlled for in the model. The result of structural model (fit indices: $AGFI = .889$; $\chi^2/df = 1.450$, $CFI = .959$, $PCFI = .777$, and $[RMSEA = .035; P > .05]$) showed a significant path between affect-based trust and dimension of meaning ($\beta = .113$, $SE = .049$, $P < .05$; figure 4.15[a]). It is important to note that once the affect-based trust was included in the model the relationship between agreeableness and psychological empowerment’s dimension of meaning remained significant ($\gamma = .123$, $SE = .078$, $P < .05$). Moreover, Sobel test’s p-value ($p = .047$) provided evidence for the significance of the mediation. In short,
both Baron and Kenny’s (1986) three steps and Sobel test were satisfied suggesting that affect-based trust significantly and partially mediates the relationship between agreeableness and psychological empowerment’s dimension of meaning.

Similar to the above-mentioned procedure, for testing the mediating role of affect-based trust for agreeableness-impact relationship, in the first step, the relationship between agreeableness and psychological empowerment’s dimension of impact was tested using SEM. Structural model provided evidence for the significant path between agreeableness and impact ($\gamma = .112$, SE= .076, $P<.05$; figure 4.11) while the data satisfactorily fitted the hypothesized model ($AGFI= .895; \chi^2/df = 1.470$, $CFI = .961$, $PCFI = .791$, and $[RMSEA = .036; P >.05]$). Furthermore, SEM showed a significant link between agreeableness and affect-based trust ($\gamma = .212$, SE= .087, $P< .001$; figure 4.8). Fit indices ($AGFI= .898; \chi^2/df = 1.441$, $CFI = .965$, $PCFI = .753$, and $[RMSEA = .034; P >.05]$) indicated a moderate-to-good fit between data and hypothesized model. Finally, in the third step, the path between affect-based trust and dimension of impact was analyzed while agreeableness was included in the model. Based on the result of SEM (fit indices: $AGFI= .893; \chi^2/df = 1.382$, $CFI = .964$, $PCFI = .782$, and $[RMSEA = .032; P >.05]$), affect-based trust was significantly related to psychological empowerment’s dimension of impact ($\beta = .309$, SE= .052, $P<.001$; figure 4.15[b]). The structural model also showed that the agreeableness-impact relationship was no longer significant ($\gamma = .046$, SE= .076; figure 4.15[b]) when affect-based trust was included in the model. Once all the three prerequisites were satisfied, Sobel test was conducted. Sobel test’s p-value ($p=.003<.01$) indicated that the mediation is significant. Thus, based on Baron and Kenny’s (1986) three steps and Sobel test, it can be concluded that affect-based trust fully mediates the relationship between agreeableness and psychological empowerment’s dimension of impact.
For testing the mediating role of affect-based trust for the relationship between agreeableness and psychological empowerment’s dimension of self-determination, first, the link between agreeableness and dimension of self-determination was assessed without including the mediating variable (affect-bases trust) in the model. The result showed that agreeableness is significantly related to dimension of self-determination ($\gamma = .127$, SE= .097 P<.05; figure 4.12). Additionally, the data satisfactorily fitted the hypothesized model (fit indices: AGFI= .895; $\chi^2$/df = 1.514, CFI= .958, PCFI = 796, and [RMSEA = .037; P >.05]).

For testing the second step of mediation analysis, the path between agreeableness and affect-based trust was tested using the structural equation modeling. According to the result of SEM (fit indices: AGFI= .898; $\chi^2$/df = 1.441, CFI= .965, PCFI = .753, and [RMSEA = .034; P >.05]), agreeableness was significantly associated with affect-based trust ($\gamma = .212$, SE= .087, P< .001; figure 4.8). Finally, affect-based trust was found to be significantly related to psychological empowerment’s dimension of self-determination ($\beta = .245$, SE= .066, P<.001; figure 4.15[c]). Fit indices (AGFI= .894; $\chi^2$/df = 1.418, CFI= .962, PCFI = .770, and [RMSEA = .034; P >.05]) reflected moderate-to-good fit between data and hypothesized model. Once affect-based trust was included in the model, the path between agreeableness and self-determination lost its significance ($\gamma = .097$, SE= .091; figure 4.15[c]). So, it can be concluded that the link between agreeableness and dimension of self-determination was fully mediated by affect-based trust. Since all the Baron and Kenny’s (1986) three steps was satisfied, Sobel test was carried out. Sobel test p-value (p=.0097<.01) indicated that the mediation is significant. In short, Baron and Kenny’s (1986) three steps and Sobel test showed that affect-based trust significantly and fully mediates the relationship between agreeableness and psychological empowerment’s dimension of self-determination.
The mediating role of affect-based trust for relationship between agreeableness and psychological empowerment’s dimension of competence/self-efficacy was tested using the structural equation modelling. So, in the first structural model the path between agreeableness and competence was tested without including mediating variable in the model. The structural model showed significant relationship between agreeableness and dimension of competence ($\gamma = .172$, $SE = .066$, $P < .01$; figure 4.13) while there was a good fit between data and hypothesized model ($AGFI = .885$; $\chi^2/df = 1.598$, $CFI = .953$, $PCFI = .794$, and $RMSEA = .040$; $P > .05$). In the next structural model, the link between agreeableness and affect-based trust was evaluated. Based on the SEM result (Fit indices: $AGFI = .898$; $\chi^2/df = 1.441$, $CFI = .965$, $PCFI = .753$, and $RMSEA = .034$; $P > .05$), agreeableness was significantly related to affect-based trust ($\gamma = .212$, $SE = .087$, $P < .001$; figure 4.8). Finally, the path between affect-based trust and psychological empowerment’s dimension of competence was tested while agreeableness, along with other big-five personality traits, was controlled for. The structural model (fit indices: $AGFI = .885$; $\chi^2/df = 1.484$, $CFI = .957$, $PCFI = .775$, and $RMSEA = .036$; $P > .05$) did not show significant association between affect-based trust and dimension of competence ($\beta = .025$, $SE = .042$; figure 4.15[d]). Thereby, affect-based trust didn’t significantly mediate the relationship between agreeableness and dimension of competence.
Figure 4.15: The result of structural model for testing the mediating role of affect-based trust for the relationship between agreeableness and psychological empowerment's dimensions (3rd step)

- One-tailed standardized regression weights were reported

(a) AGFI= .889; χ²/df = 1.450, CFI= .959, PCFI = .777, and (RMSEA = .035; P > .05)
(b) AGFI= .893; χ²/df = 1.382, CFI= .964, PCFI = .782, and (RMSEA = .032; P > .05)
(c) AGFI= .894; χ²/df = 1.418, CFI= .962, PCFI = .770, and (RMSEA = .034; P > .05)
(d) AGFI= .885; χ²/df = 1.484, CFI= .957, PCFI = .775, and (RMSEA = .036; P > .05)

* P<.05  ** P<.01  *** P<.001
Dimensional Analysis for Mediating Role of LMX for the Relationship Between Agreeableness and Psychological Empowerment’s Dimensions

The mediating role of Leader-member Exchange (LMX) for the relationship between agreeableness and psychological empowerment’s dimension of meaning was analyzed using SEM. For testing the first step of Baron and Kenny’s (1986) prerequisites the relationship between agreeableness and psychological empowerment’s dimension of meaning was assessed. The result of structural model indicated that agreeableness was significantly associated with dimension of meaning ($\gamma= .147$, SE=.076, $P<.05$; figure 4.10). Fit indices of the structural model showed a good fit between data and hypothesized model (AGFI= .890; $\chi^2/df = 1.548$, CFI= .956, PCFI = .806, and [RMSEA = .038; $P >.05$]). In the second step, the relationship between agreeableness and LMX was assessed. The result of SEM provided evidence for the significant link between agreeableness and LMX ($\gamma= .252$, SE=.092, $P< .001$; figure 4.3) while the fit indices (AGFI= .884, $\chi^2/df = 1.294$, CFI= .972, PCFI = .833, and [RMSEA = .028; $P >.05$]) reflected good fit between data and hypothesized model. Finally, the path between LMX and dimension of meaning was tested while agreeableness was controlled for. The structural model (fit indices: AGFI= .874; $\chi^2/df = 1.326$, CFI= .966, PCFI = .835, and [RMSEA = .030; $P >.05$]) showed a significant link between LMX and dimension of meaning ($\beta= .177$, SE=.052, $P<.01$; figure 4.16[a]). It is important to note that after the inclusion of LMX in the model, the path between agreeableness and dimension of meaning remained significant ($\gamma= .101$, $P< .05$; figure 4.16[a]). Since all the Baron and Kenny’s (1986) three steps were satisfied, Sobel test was carried out in order to ensure that the mediation is significance. Sobel test’s p-value ($p=.03<.05$) was found to be significant. Thus, the support for mediating role of LMX for agreeableness-meaning was found.
Similar to above-mentioned steps, for testing the mediating role of LMX for the relationship between agreeableness and psychological empowerment’s dimension of impact, at first, the path between agreeableness and dimension of impact was tested without including the LMX in the model. The result of SEM showed that agreeableness is significantly related to dimension of impact ($\gamma = .112$, $SE = .076$, $P < .05$; figure 4.11). The data also satisfactorily fitted the hypothesized model (fit indices: $AGFI = .895$; $\chi^2/df = 1.470$, $CFI = .961$, $PCFI = 791$, and $[RMSEA = .036; P > .05]$). The path between agreeableness and LMX was also analyzed using the structural model. The finding provided evidence for the significant path between agreeableness and LMX ($\gamma = .252$, $SE = .092$, $P < .001$; figure 4.3). The fit indices of the structural model reflected good fit between data and hypothesized model ($AGFI = .884$, $\chi^2/df = 1.294$, $CFI = .972$, $PCFI = .833$, and $[RMSEA = .028; P > .05]$). Finally, the link between LMX and psychological empowerment’s dimension of impact was tested while agreeableness, along with other big-five personality traits, was included in the model. The structural model showed a significant link between LMX and dimension of impact ($\beta = .177$, $SE = .055$, $P < .01$; figure 4.16[b]). The data also was satisfactorily fitted the hypothesized model (fit indices $AGFI = .876$; $\chi^2/df = 1.282$, $CFI = .970$, $PCFI = .838$, and $[RMSEA = .028; P > .05]$). Once the LMX was included in the model, the link between agreeableness and dimension of impact lost its significance ($\gamma = .049$, $SE = .093$; figure 4.11; figure 4.16[b]). Sobel test’ p-value ($p = .009 < .01$) also provided evidence that the mediation is significant. Thereby, based on the result of structural model (Baron and Kenny’s (1986) three steps) and Sobel test it can be concluded that LMX significantly and fully mediates the relationship between agreeableness and psychological empowerment’s dimension of impact.
For testing the mediating role of LMX for the relationship between agreeableness and psychological empowerment’s dimension of self-determination, in the first step, the relationship between agreeableness and dimension of self-determination was assessed while LMX was not included in the model. The result of SEM provided evidence for the significant link between agreeableness and psychological empowerment’s dimension of self-determination ($\gamma= .127$, $SE= .097$, $P<.05$; figure 4.12) while fit indices ($AGFI= .895$; $\chi^2/df = 1.514$, $CFI= .958$, $PCFI = 796$, and $[RMSEA = .037; P >.05]$) showed a good fit between data and hypothesized model. For assessing the second step of Baron and Kenny’s (1986) process, the path between agreeableness and LMX was analyzed using structural equation modeling. According to the structural model, agreeableness was significantly related to LMX ($\gamma= .252$, $SE= .092$, $P< .001$; figure 4.3). In addition, data satisfactorily fitted the hypothesized model ($AGFI= .884$, $\chi^2/df = 1.294$, $CFI= .972$, $PCFI = .833$, and $[RMSEA = .028; P >.05]$). Furthermore, the path between LMX and dimension of self-determination was tested while agreeableness was controlled for in the model. The result showed that LMX is significantly related to dimension of self-determination ($\beta= .182$, $SE= .073$, $P<.01$; figure 4.16[c]). Data also satisfactorily fitted hypothesized model (fit indices: $AGFI= .879$; $\chi^2/df = 1.292$, $CFI= .970$, $PCFI = .832$, and $[RMSEA = .028; P >.05]$). Since the path between agreeableness and self-determination lost its significance when LMX was included in the model, it can be concluded that LMX fully mediates the relationship between agreeableness and psychological empowerment’s dimension of self-determination. Once all the Baron and Kenny’s (1986) prerequisites for mediation were satisfied, Sobel test was conducted. Sobel test’s p-value ($p=.03<.05$) provided evidence that the mediation is significant. In short, based on structural model (Baron and Kenny’s [1986] steps) and
Sobel test, LMX significantly and fully mediates the relationship between agreeableness and psychological empowerment’s dimension of self-determination.

The mediating role of LMX for the relationship between agreeableness and psychological empowerment’s dimension of competence/self-efficacy was assessed using the similar procedure. At first, the path between agreeableness and dimension of competence was tested while LMX was absent from the model. The structural model (fit indices: AGFI= .885; \( \chi^2/df = 1.598 \), CFI= .953, PCFI = 794, and [RMSEA = .040; P >.05]) showed significant link between agreeableness and dimension of competence (\( \gamma = .172, SE= .066, P<.01 \); figure 4.13). Additionally, the link between agreeableness and LMX was tested. The result indicated that agreeableness significantly relates to LMX (\( \gamma = .252, SE= .092, P<.001 \); figure 4.3). Fit indices of this model (AGFI= .884, \( \chi^2/df = 1.294 \), CFI= .972, PCFI = .833, and [RMSEA = .028; P >.05]) reflected good fit between data and hypothesized model. Finally, the path between LMX and dimension of competence was assessed while agreeableness, along with other big-five personality traits, was controlled for in the model. The result of SEM did not provided evidence for the significant association between LMX and dimension of competence (\( \beta = .071, SE= .045 \); figure 4.16[d]). Fit indices of this structural model (AGFI= .871; \( \chi^2/df = 1.352 \), CFI= .964, PCFI = .833, and [RMSEA = .031; P >.05]) indicated a good fit between data and hypothesized model. In short, the mediating role of LMX for the relationship between agreeableness and psychological empowerment’s dimension of competence/self-efficacy was not supported by the data.
Figure 4.16: The result of structural model for testing the mediating role of LMX for the relationship between agreeableness and psychological empowerment’s dimensions (3rd step)

- One-tailed standardized regression weights were reported
  
  (a) AGFI = .874; χ²/df = 1.326, CFI = .966, PCFI = .835, and (RMSEA = .030; P >.05)  
  (b) AGFI = .876; χ²/df = 1.282, CFI = .970, PCFI = .838, and (RMSEA = .028; P >.05)  
  (C) AGFI = .879; χ²/df = 1.292, CFI = .970, PCFI = .832, and (RMSEA = .028; P >.05)  
  (d) AGFI = .871; χ²/df = 1.352, CFI = .964, PCFI = .833, and (RMSEA = .031; P >.05)
### Table 4.9: Result Summary

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<th>Analysis</th>
<th>Results</th>
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| Multivariate Assumptions         | ✓ Reliability – all Cronbach Alphas >.07  
✓ Normality – -1.96< Skewness & Kurtosis < 1.96  
✓ Linearity - Supported by linearity test for all the proposed relationships  
✓ Homoscedasticity - supported by scatter plot                                                                                                                                                                                                                              |
| Exploratory Factor Analysis      | – All items were loaded strongly on the corresponding factor.  
KMO test of sample adequacy >.5; Bartlett’s P-value<.001                                                                                                                                                                                                                   |
| Confirmatory Factor Analysis     | – Fit indices of both first and second order CFA indicated good fit between data and hypothesized model  
– 2nd order CFA provided evidence for both convergent and discriminant Validity for all the factor                                                                                                                                                                       |
| Hypothesis testing               | – Openness to experience, extraversion, agreeableness and conscientiousness were related to psychological empowerment (√H1, √H2, √H3 and √H9)  
– LMX, customer supportiveness, and affect-based trust partially mediated the relationship between agreeableness and psychological empowerment (√H4, √H5, and √H7)                                                                 |
| Dimensional analysis            | – Openness to experience was significantly related to Psychological empowerment’s dimension of self-determination  
– Extraversion was significantly associated with psychological empowerment’s dimensions of meaning and competence  
– Conscientiousness was significantly related to psychological empowerment’s dimension of competence  
– Agreeableness was significantly related to all four cognitions of Meaning, impact, self-determination, and competence.  

– Customer supportiveness significantly mediated the relationship Between agreeableness and P.E.’s dimension of meaning  
– Affect-based trust mediated the relationship between agreeableness and P.E.’s dimensions of meaning, impact, and self-determination.  
– LMX was significantly mediated the relationship between agreeableness and P.E.’s dimensions of meaning, self-D, and impact. |
4.4 Conclusion

The results of data analysis were presented in this chapter. As the map of data analysis procedure depicted in the last chapter, prior to testing the hypothesis, data underwent data perpetration process and preliminary analysis (i.e. testing multivariate assumption, EFA, and CFA). As shown in result-summary table, all the multivariate assumptions were satisfied. Exploratory and confirmatory factor analysis (both 1st and 2nd order) also showed satisfactory factor loading and construct validity respectively. Among study hypotheses, the support for direct association between openness, extraversion, agreeableness, and conscientiousness and psychological empowerment was found (H1, H2, H3, and H9). Unexpectedly, the support for the relationship between emotional stability and psychological empowerment (H8) was not found. Data provided support for significant partial mediation role of LMX (H4), customer supportiveness (H5), and affect-based trust (H7) for agreeableness-psychological empowerment relationship. Yet, no support for mediating role of peer relationship (H6) for the relationship between agreeableness and psychological empowerment was found. Dimensional analysis also was conducted in order to further analyze how each of big-five personality traits affected psychological empowerment. Based on the study findings, extraversion tend to boost employees’ feeling of empowerment because it enhances notions of “meaning” and “competence”. In other words, extraverts feel more empowered since they believe that their work is more meaningful to them and also because they believe that they have sufficient skill and capability to do their jobs. In addition, agreeable employees were found to be more empowered since they believe that their work is more meaningful (psychological empowerment’s dimension of meaning), they have significant impact on their workplace (dimension of impact), they have freedom in determining how to do
their jobs (i.e. dimension of self-determination), and because they believe that they have skill for doing their jobs (i.e. dimension of competence).

Employees high in openness to experience were found to be more empowered since they believe they have freedom in determining how to do their jobs (i.e. psychological empowerment’s dimension of self-determination). Finally, dimensional analysis provided evidence that conscientious service-worker tend to feel more empowered because they see themselves as competent individuals (i.e. higher dimension of competence/ self-efficacy). The result clarified that agreeable service workers are more empowered because of their trusting nature and their capability in establishing stronger relationship with people within the organization. For instance, because of their propensity and capability in establishing higher-quality relationship with customers and supervisors, agreeable service-workers are more likely to find meaning in their workplace and consequently be more empowered. The result of dimensional analysis also indicated that agreeable employees are more empowered because their higher-quality relationship with their supervisor enables them to experience higher level of “impact” and “self-determination”. Moreover, the findings showed that agreeable employees feel more empowered because their trusting nature enables them to experience higher cognition of “meaning”, “impact”, and “self-determination”.

University of Malaya
CHAPTER 5- DISCUSSION

5.1 Introduction

The current chapter provides the discussion and conclusion of the research. Prior to discussing the study findings, an overview of the research is given. In this chapter, at first, the findings associated with each hypothesis are thoroughly and separately discussed using the result of dimensional analysis presented in the previous chapter. In the next part, theoretical and practical contribution of the study findings and its considerations are discussed. Finally, in the last section, limitations of the current research as well as the direction for future research are provided.

5.2 Overview of the study

Conceptualization of psychological empowerment, which is operationalized using individuals’ beliefs, made it possible to ascertain who is empowered. Some studies such as Spreitzer (1995) provided evidence that some employees, in this case, individuals with higher self-esteem; are more empowered. The study is worthy, considering the importance of identifying empowered individuals and also the fact that only few personality traits had been tested as antecedents of psychological empowerment. In addition, almost all the tested personality traits dealt only with perception of self-worth.
This study was aimed to investigate the relationship between the wide range of personality traits and psychological empowerment. By taking into account the credibility of Five-Factor Model (FFM) as one of the best tools for measuring a wide range of personality traits across different geographical locations (Digman, 1990; Wiggins & Trapnell, 1997), and also the theoretical link between the Big-Five personality traits and psychological empowerment, the Big-Five personality traits were selected as a tool for testing who is empowered.

To answer the research questions, the quantitative method was found to be the only possible option. As discussed in Chapter 3, since psychological empowerment is a motivational construct which deals with individual beliefs, the only qualitative data collection method for answering the research questions was the interview (employees were the only possible data source). Thus, in order to answer the research questions using qualitative methods, the combination and the level of personality traits in each employee and their level of psychological empowerment (by assessing each of its dimensions) could be assessed using the interview, but seems almost impossible especially using unstructured interview. If we assumed that assessing the personality traits (both the combination and the level of each trait) and the level of psychological empowerment was possible using an interview, in the next step for answering who is empowered, what should be tested is which of the personality traits boost the level of psychological empowerment in individuals. Given the vast possible combination of personality traits in different individuals, finding personality traits related to psychological empowerment without quantitative statistical mean seems impossible.

Previously, none of Big-Five personality traits had been tested as antecedents of psychological empowerment. To justify the link between the Big-Five and psychological empowerment (similar to Spreitzer’s (1995) mechanism), the links
between each of the Big-Five personality traits and psychological empowerment dimensions (i.e. competence/self-efficacy, meaning, self-determination, and impact) were investigated by reviewing related literature. Except for agreeableness, all the Big-Five personality traits were found to be theoretically related to at least one of psychological empowerment dimensions. In spite of the fact that no theoretical link between agreeableness and psychological empowerment dimensions was found, agreeableness was found to be theoretically related to some of the established antecedents of psychological empowerment (i.e. Leader-Member Exchange (LMX), customer supportiveness, affect-based trust, and peer relationship). Thus, mediated relationships between agreeableness and psychological empowerment were hypothesized.

Once the measurement instrument was finalized and translated from English to Bahasa Malaysia using parallel back-to-back translation, a pilot study was carried out using the sample of 44 service-workers in order to test for multivariate assumptions prior to the main study. Data for the main study were collected from 372 front-line service-workers working in Malaysia. Once the preliminary analysis was completed, study hypotheses were tested using the Covariance-based Structural Equation Modelling (CB SEM).

Among the hypotheses, H2, H2, H3, H4, H5, H7, and H9 were supported by the data. In general, the current study showed that due to their personality traits, some individuals are empowered. The following section further assesses the study findings.

5.3 Discussion on Study Findings

(a) H1: Openness to Experience →Psychological Empowerment
The result of structural equation modeling provided evidence for the significant relationship between openness to experience and psychological empowerment. In other words, the result showed that open service-workers are more empowered. The result of dimensional analysis showed that open service-workers feel more empowered because they tend to find more meaning from their work (i.e. higher psychological empowerment’s dimension of meaning). The relationship between openness to experience and psychological empowerment’s dimension of meaning was expected since, as explained in the hypothesis development section, openness to experience has been found to be significantly related to intrinsic motivation. On the other hand, self-efficacy and self-determination notions are two of the main underlying reasons for intrinsic motivation. Moreover, because of “action” and “value” facets of openness to experience, open individuals have the propensity to question social values and political authority (McCrae & Sutin, 2009). So, it is comprehensible if they believe that they have higher level of autonomy in determining how to carry out their jobs.

(b) H2: Extraversion→Psychological Empowerment

Structural equation modelling provided evidence for the significant link between extraversion and psychological empowerment. As dimensional analysis revealed, this significant association is accounted for by the significant relationship between extraversion and psychological empowerment dimensions of competence or self-efficacy and meaning. The link between extraversion and self-efficacy was expected since, as previously elaborated, strong body of research has provided theoretical and empirical support for the relationship between extraversion and the notion of self-efficacy. Thus, extraverts are more empowered because their higher level of energy (i.e.
analogues to self-efficacy; Thoms et al., 1996) and positive emotionality which boosts their confidence in their work-related abilities (Judge and Ilies, 2002).

On the other hand, by taking into account the extravert’s propensity for social interaction (Bono & Judge, 2004), they are expected to enjoy job positions that require high level of social interaction (e.g. service-jobs). Therefore, it is likely that extravert service-workers enjoy their job and find their work meaningful.

(c) H3: Agreeableness \(\rightarrow\) Psychological Empowerment

The findings showed there is strong link between agreeableness and psychological empowerment. In other words, agreeable employees were found to be more empowered. Dimensional analysis indicated that agreeable employees are more empowered because they tend to find more meaning in their workplace (i.e. dimension of meaning), believe they are capable in doing their jobs (i.e. dimension of competence), believe they have more freedom in doing their jobs (i.e. dimension of self-determination), and because they believe they have significant impact on their workplace (i.e. dimension of impact). The link between agreeableness and psychological empowerment’s dimensions of meaning, competence, self-determination, and impact was expected. Agreeable employees’ capability in establishing relationship (Judge & Bono, 2000; Wat and Shaffer, 2005) improves their access to information (Aryee and Chen 2006; Spreitzer, 1996) and helps them to display positive emotion (Rafaeli & Sutton, 1990; Corsun & Enz, 1999). On the other hand, better access to information as well as easier display of positive emotion enable agreeable employees to experience higher cognition of meaning, self-determination, competence, impact (Spreitzer, 1996; Hackman & Oldham, 1980; Seibert et al.; Corsun & Enz, 1999; Liao et al., 2009).
(d) H4: Agreeableness $\rightarrow$ LMX $\rightarrow$ Psychological Empowerment

Study finding provided support for the mediating role of Leader-Member Exchange (LMX) for the relationship between agreeableness and psychological empowerment. The significance of this mediation was found to be the result of significant mediating role of LMX for the relationship between agreeableness and psychological empowerment’s cognitions of meaning, self-determination, and impact.

It is understandable that a stronger relationship with supervisors helps subordinates to like their jobs and find their work more meaningful. In addition, agreeable employees’ ability to establish better relationship with their supervisors is expected to improve their decisional responsibility and their access to information (Aryee & Chen, 2006), which in turn, make agreeable employees to believe that they have more freedom in determining how to carry out their jobs (i.e. P.E.’s dimension of self-determination) and more impact on their workplace (i.e. as the result of improved knowledge on the results). In spite of the fact that Seibert et al. (2011) posited that higher LMX result in higher cognition of competence (because it provides employees with the evidence of their enactive mastery), the result of regression analysis did not support this proposition. The three main factors may account for the lack of significant link between LMX and psychological empowerment’s dimension of competence or self-efficacy.

First, Seibert et al.’s (2011) proposition is based on Hackman and Oldham’s (1980) job characteristic model and studies related to high-performance work system practices (Liao et al., 2009; Spreitzer, 1996). The relationship between access to information and the notion of self-efficacy was not mentioned in any of the above-mentioned studies; therefore, the theoretical link between access to information and self-efficacy is not strong. Second, demographic characteristics of the sample showed that most of the respondents were young service-workers (i.e. between 18 to 28 years old) who had high
school diplomas and lower certificates (42.5%) and had working experience of less than 5 years (38.7%). Although, none of the demographics showed significant association with any of psychological empowerment dimensions, it is understandable that lower level of education and working experience reduce employees’ confidence in their work-related competencies (i.e. lower self-efficacy). Therefore, lower level of education and working experience might have negatively moderated the relationship between LMX and psychological empowerment’s cognition of self-efficacy. Third, negative yet non-significant relationship between LMX’s dimension of professional respect and psychological empowerment’s dimension of self-efficacy might be the underlying reason for the lack of significant relationship between LMX and P.E.’s dimension of competence. It might be the case that the more subordinates trust and respect their supervisors’ work-related competencies, the less they tend to trust their own capability.

(e) H5: Agreeableness → Customer Supportiveness → Psychological Empowerment

Although, the result provided evidence of the mediating role of customer supportiveness for agreeableness-psychological empowerment relationship, unexpectedly, customer supportiveness only mediated the relationship between agreeableness and psychological empowerment’s dimension of meaning instead of impact. As previously elaborated, Corsun and Enz (1999) posited that higher customer supportiveness make it easier for service workers to display positive emotion, which in turn enhances employees’ feeling of control (i.e. identical to P.E.’s dimension of impact). However, it seems reasonable that easier display of positive emotion makes service workers happier in their job as opposed to making them feel that they are in control. So, it is possible that stronger relationship with customers help agreeable service-workers to find more meaning from their workplace and consequently feel more empowered.
(f) **H6: Agreeableness → Peers Relationship → Psychological Empowerment**

Among the results of data analysis, the result of testing the mediating role of peer relationship for agreeableness-psychological empowerment association was the most surprising. It was expected that higher quality relationship with peers, similar to higher quality exchange with supervisor, improve agreeable service-workers’ access to information (Kanter, 1977). On the other hand, access to information was expected to help agreeable service workers to understand their role in relation to organizational goal and consequently find more meaning and sense of purpose in their workplace (Spreitzer, 1996). Additionally, access to information was also expected to help employees to determine on their own how to carry out their jobs and improve their skill and knowledge that would be reflected on their self-efficacy belief (Seibert et al., 2011). In general, as Spreitzer (2007) put it, relationships matters for empowerment.

The lack of significance between peer relationship and psychological empowerment may be due to the fact that, not only access to information is important but also the type of information matters. In other words, the type of information enjoyed by employees as the result of their stronger relationship with their supervisor obviously varies compared to information received from peers. So the question is whether the information received from peers provides them with the “big picture” and clarifies the organizational goal and the role employees are playing in relation to those goals (i.e. to improve P.E.’s dimension of meaning). Whether the information received from peers improve the level of their skill and knowledge (i.e. to improve P.E.’s dimension of competence), it help employees to decide on their own (i.e. to improve dimension of self-determination), or
enhances their knowledge of the result and makes them in control (i.e. to improve dimension of impact).

The information employees received from their peers may not have the above-mentioned effects, especially when most of the sample elements have low position tenure. As previously mentioned, the majority of respondents had position tenure of less than 3 years (57%). Therefore, these employees are less likely to have a clear idea about the organizational strategies and the “big picture”. Additionally, information from peers with low position tenure is less likely to help employees decide on their own how to carry out their jobs, provide them with knowledge of the result, or enhance their work-related skill and knowledge.

The lack of significance for the relationship between agreeableness and peer relationship may also be explained by the low position tenure of the majority of the sample. In a workplace in which most of the peers change frequently, no matter how friendly an employee is, he or she may not have opportunity to develop a strong relationship with their peers.

In addition, in some types of service-jobs such as call centers, employees do not even know most of their peers. Therefore, even high level of agreeableness would not make service employees believe that they have strong relationship with peers.

(g) H7: Agreeableness→Affect-based Trust→Psychological Empowerment

Affect-based trust mediated the relationship between agreeableness and psychological empowerment. This mediation was attributed to the mediating role of affect-based trust
for the link between agreeableness and psychological empowerment dimensions of meaning, self-determination, and impact. As expected, by trusting supervisors, agreeable service-workers logically are less stressful and consequently happier in their jobs, and therefore, they tend to find their work more meaningful (i.e. higher dimension of meaning). Additionally, by feeling the mutual trust, agreeable service-workers are likely to believe that they have more freedom in determining how to perform their work-related tasks (i.e. P.E.’s dimension of self-determination). Finally, believing that they can trust their supervisors is likely to help agreeable service-workers to feel more in control of work situations (i.e. higher P.E.’s dimension of impact).

(h) H8: Emotional Stability → Psychological empowerment

Contrary to expectation, emotional stability did not significantly relate to psychological empowerment and any of its dimensions. It was expected that emotionally stable service workers have higher self-efficacy belief because of the higher level of self-esteem (i.e. closely related to self-efficacy; Gist & Mitchell, 1992). The lack of significant association between emotional stability and psychological empowerment’s dimension of competence or self-efficacy may be explained by lower level of education and working experience of the majority of sample elements. As elaborated, the majority of respondents had high school diploma and lower certificates (42.5%) and working experience of less than 5 years (38.7%). It is understandable that lower level of education and working experience reduces individuals’ self-confidence, self-esteem, and self-efficacy.

Service-workers who are high in emotional stability were also expected to see themselves as able to make a difference in the workplace (i.e. higher P.E.’s dimension of impact). Although, the relationship between emotional stability and dimension of impact was relatively high compared to other dimensions, yet it was not significant.
Again, demographic characteristics of the sample may explain the lack of significance. The majority of the respondents were somehow newcomers, as position tenure of the majority of the sample was less than 3 years (57%). Obviously, newcomers are less likely to feel that they can make a difference in the workplace.

Low position tenure of the majority of the respondents may also account for the lack of significance in the relationship between emotional stability and psychological empowerment’s dimension of meaning. Emotionally stable employees were expected to find more meaning since they are less threatened by the different situations. However, the level of stress and anxiety for newcomers is logically higher since they are not sure of their work role, and therefore, they tend to suffer more from role ambiguity. In short, higher level of stress for the majority of the sample might have reduced the association between emotional stability and psychological empowerment’s dimension of meaning.

The lack of significant association between emotional stability and dimensions of psychological empowerment may also be accounted for by the conceptualization of the Big-Five personality traits itself. Although, many studies such as Yamagata et al. (2006), Bouchard Jr. and Loehlin (2001), and McCrae and Costa (1997) held that Five Factor Model (FFM) is universal, there are few studies which did not find support for the universality of FFM. As elaborated previously, the Big-Five personality traits were developed using the descriptive adjectives from the dictionary. Since most of the languages in the world are analogous in terms of descriptive characteristics (Digman, 1990), yet, in some languages these descriptive characteristic may vary to a certain degree. For instance, Gurven et al. (2013) tested the applicability of FFM in Bolivia. They found that only extraversion, conscientiousness, and agreeableness are applicable to the Tsimane people in Bolivia. Although, there have
been many empirical studies which assess the Big-Five personality traits in Malaysia, no study has tested the conformity of FFM in Bahasa Malaysia.

(i) **H9: Conscientiousness → Psychological Empowerment**

Conscientiousness was significantly related to psychological as it significantly predicted psychological empowerment dimension of competence or self-efficacy. Despite the fact that one-tailed regression analysis showed significant relationship between conscientiousness and psychological empowerment dimensions of impact, self-determination, and competence, structural equation modeling only provided evidence for the significant link between conscientiousness and dimension of self-efficacy. The link between conscientiousness and psychological empowerment’s dimension of competence or self-efficacy was expected as Judge and Ilies’ (2002) meta-analysis previously provided evidence for this association. Given the nature of conscientious individuals, who are disciplined, punctual, and hardworking, it is expected that they believe in their competencies in general as well as their work-related competencies.

**5.4 Theoretical Contribution**

As mentioned earlier, a few empirical studies such as Laschinger et al. (2009), Spreitzer (1995), and Yazdi and Mustamil (2014) found significant link between some personality traits and psychological empowerment, suggesting that some individuals are more empowered. Yet, the range of tested personality traits as antecedents of psychological empowerment had been very limited, since, these personality traits mostly represented individuals’ perception of self-worth. By assessing the Big-Five
personality traits (which covers a wide range of personality) as antecedents of psychological empowerment, this study extends the literature and provides necessary information in answering the important question: Who is empowered? This research showed that service-workers high in extraversion, conscientiousness, and agreeableness are empowered. The findings also provided evidence that the feeling of empowerment in agreeable employees is the result of their trusting nature, their propensity to establish and maintain relationships, and their tendency to perceive others in a more positive light.

The other important contribution of this research was that it provides a fuller understanding on how empowerment-related personality traits enhance employees’ feeling of empowerment. By conducting a comprehensive dimensional analysis, this research shed some light on the relationship between each of the Big-Five personality traits and psychological empowerment’s cognitions. The findings showed that extravert service-workers feel empowered since they find more meaning in service-jobs and also because they believe that they are capable of handling their work-related tasks. Because of their high task performance, conscientious service-workers believe that they have the necessary skills to carry out their jobs successfully. This notion contributes to self-efficacy dimension of psychological empowerment and makes conscientious employees more empowered.

This research also showed that perceiving customers in more positive light helps agreeable employees to find their workplace more meaningful and consequently make them feel more empowered. Higher level of trust in their supervisor make agreeable service-workers feel more empowered since trusting in supervisor help agreeable service workers to find more meaning in the work place, believe they have more freedom in doing their jobs, and believe they have more impact on their workplace. The
findings of this research also showed that establishing and maintaining higher quality relationship with supervisors helped agreeable service-workers to experience a higher notion of meaning, self-efficacy, impact and self-determination and consequently be more empowered.

5.5 Practical Contribution

Now it is time to answer the golden question: So what? In practice, what are the benefits of identifying empowered individuals? As summarized in Chapter 2, so far, identified antecedents of psychological empowerment are mostly external factors. In other words, most of empowerment-related studies have only identified work environment, organizational processes, and type of leaderships which enhance employees’ feeling of empowerment. But, some studies such as Laschinger et al. (2009) showed that individual characteristics, including personality traits and demographics, can also influence employees’ feeling of empowerment. Identifying individuals high in these empowerment-related personality traits is important for organizations since those individuals can reach higher level of empowerment. That is because, not only they respond to external empowering stimuli (same as others), but also, they benefit from their supporting characteristics. In other words, by finding personality traits, which enhance the feeling of empowerment, this research enables organizations– especially those within the service sector– to select more empowered prospects. Given the established link between empowerment and many positive individuals and organizational outcomes such as higher job satisfaction, organizational commitment and OCB, innovation, performance, and less strain and burnout (see Chapter 2), identifying and selecting more empowered employees can be quite beneficial to the organizations. Additionally, as discussed earlier in the first chapter, empowered employees can
significantly improve the level of customer satisfaction. Thus, using the findings of this study, service organization can employ more empowered service-workers and consequently improve the level of customers’ satisfaction.

**5.6 Assumptions and Considerations**

It is important to note that finding individual characteristics, which support individuals’ feeling of empowerment, is important but not sufficient in identifying more empowered individuals. There are some assumptions that should be noted. First, each individual is a combination of all personality traits, each of which exists at different levels. Second, given that both psychological empowerment and personality traits are continuous variables, as the higher level of empowerment-related personality traits increases psychological empowerment, conversely a lower level may also decrease the level of psychological empowerment.

Thus, it is very much possible that an individual, who scores very high on one empowerment-related personality traits, at the same time, scores very low on the other. So, the question is whether he or she is empowered? To solve this dilemma, it seems that a construct is needed to encompass all the empowerment-related personality traits. Only when such a construct is developed and validated, individuals’ empowerment potential can truly be measured.

**5.7 Limitations**

As with any research, this study naturally has some limitations. First, the usage of non-probability sampling method may have introduced some bias into the result. Second, in
spite of the fact that Harmon’s single factor method showed that common method bias was not problematic, usage of self-assessed measures may still introduced some bias into the result. Finally, measuring the Big-Five Big-Five personality traits by Saucier’s (1994) forty mini-markers may not be as accurate as more comprehensive measures (e.g. Revised NEO Personality Inventory [NEO-PI-R; McCrae & Costa, 1992]).

5.8 Direction for Future Research

Future researches should address the limitation inherent in this study. Therefore, it is recommended that future researches to assess the relationship between the Big-Five personality traits and psychological empowerment using McCrae and Costa’s (1992) NEO personality inventory. As previously explained, in order to truly measure individuals’ potential in reaching higher level of empowerment, a construct that covers all the empowerment-related personality traits is needed.

By taking into account that many of empowerment-related studies deal with perception of self-worth (i.e. self-esteem [Spreitzer, 1995], narcissism [Yazdi & Mustamil, 2014], and core self-evaluation [Laschinger et al., 2009]), it is expected that those personality traits overlap significantly. Thereby, using the exploratory factor analysis and validity test on all the empowerment-related personality traits, future research should operationalize a new construct for measuring the empowerment potential.

5.9 Conclusion

Before discussing the research findings, an overview of the whole research was provided in order to give a gist of all the previous chapters. In the following section of
this chapter, the study findings were discussed separately for each of the hypothesized relationship. Using the result of dimensional analysis, the discussion made a comparison between hypothesized association between the Big-Five personality traits and psychological empowerment dimensions and the research findings. Then, the underlying reasons for the difference between expected association and the research findings were discussed. This chapter continued by elaborating the theoretical and practical contribution of the research. These sections conveyed that there has been a lack of comprehensive analysis for the identification of empowerment-related personality traits. In other words, the theoretical contribution section implied that by assessing the relationship between the Big-Five personality traits and psychological empowerment, this study filled up an important theoretical gap in answering the question: Who is empowered? These sections also clarified how identifying more empowered individuals can be useful in practical terms. In other words, it became clear that by answering who is empowered, this research provided organizations with necessary information which can be used during HR selection procedure for selecting prospective employees who can reach higher level of empowerment. Given the fact that embedded in any studies are certain limitations which should be noted, in the next part, the limitations of the current research were discussed. In order to provide guidance for future studies, the next section provided direction for future research. Overall, by taking into account the importance of individual characteristics for individuals’ feeling of empowerment and also the lack of studies in this area, this research tried to provide a fuller understanding regarding the effects of personality traits on employees’ feeling of empowerment (i.e. psychological empowerment). To do so, this research employed the Five-Factor Model (FFM), which is considered as one of the best measures of personality that covers a wide range of human personality (Digman, 1990; Wiggins & Trapnell, 1997). In spite of the fact that empowerment-related personality traits were
identified using the sample of Malaysian service-workers, the research findings are not
only restricted to Malaysia, although replication is required and can be used throughout
the world for identification of more empowered individuals.
REFERENCES


Hochwälder, J. (2007). The psychosocial work environment and burnout among Swedish registered and assistant nurses: The main, mediating, and moderating role of empowerment. *Nursing & Health Sciences*, 205-211.


Norman, W. T. (1967). *Personality trait descriptors: Normative operating characteristics for a university population.* University of Michigan, Department of Psychology: Ann Arbor.


LIST OF PUBLICATIONS

