



## Mediating Role of Leader Member Exchange in the Relationship between Supervisor Support and Pro-Environmental Behavior (A Case Study of Private Universities in Jalalabad City Nangrahar, Afghanistan)

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### Abstract

*Environmental sustainability has become an increasingly important concern for organizations, particularly in developing countries such as Afghanistan where environmental challenges are severe and organizational resources are limited. Employees' pro-environmental behavior plays a vital role in reducing the environmental impact of organizational activities; however, such behavior is often influenced by leadership-related factors. This study examines the relationship between supervisor support and employees' pro-environmental behavior, with a specific focus on the mediating role of Leader-Member Exchange (LMX) in the Afghan organizational context. Drawing on social exchange theory, the study proposes that supervisor support enhances the quality of leader-member relationships, which in turn encourages employees to engage in voluntary environmentally responsible behaviors. A quantitative research design will be employed, using survey data collected from employees across selected public and private organizations in Afghanistan. Structural equation modeling will be used to test the proposed relationships. The findings are expected to provide empirical evidence on the importance of high-quality LMX in translating supervisory support into pro-environmental behavior. This study contributes to the limited literature on green organizational behavior in Afghanistan and offers practical implications for managers and policymakers seeking to promote environmental sustainability through effective leadership practices. For the data collection three universities of private sector are selected that are Speenghar, Alfalah and Altaqwa university, the total population for this study will be 90 and the sample size will be 70. So the 70 respondents will be fill the questionnaires and the four hypotheses are developed all hypotheses are positive effect the variables.*

**Keywords,** Supervisory support, leader member exchange and pro environmental behavior

### 1. Introduction

#### 1.1 Introduction

This chapter describes the background of the research, problem statement, the significance of the study, the objectives of the research, and the important research questions addressed through this study.

## 1.2 Background of study

The previous decade has seen a prospering enthusiasm among scholars and practitioners in the point of pro-environmental behavior. Obviously, this is credited to the developing environmental worries about; entomb alia, global warming urban air contamination and water deficiencies. In this vein, there has been an incipient consideration regarding the work environment pro-environmental behavior. Indeed, different theoretical frameworks have been proposed in connection to the predecessors and outcomes of pro-environmental behavior including the cognitive theory of stress (Homburg and Stolberg, 2006), the theory of planned behavior (Andersson et al., 2005) and the value-belief norm theory (Scherbaum et al., 2008). In like manner, social exchange theory has as of late been utilized as a critical system for understanding pro-environmental behavior in the work environment. Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) contended that people who get profits by others certainly feel obliged to reciprocate. Following this worldview, scientists (Paille and Boiral, 2013; Paille and Mejia-Morelos, 2014) have appeared perceived organizational support is identified with pro-environmental behavior through the intervention of employment frames of mind. So also, as respects the connection between chief subordinate a few examinations have called attention to that boss support upgrades representatives' pro-environmental behavior (Ramus and Steger, 2000; Daily et al., 2009; Lulfs and Hahn, 2013). However, little is thought about the basic components that represent this relationship.

Drawing for the most part on social exchange theory this examination plans to underscore the significant job of leader-member exchange (hereafter LMX) for the connection between boss support and pro-environmental behavior. High exchange connections among leader and member produce sentiments of shared reciprocity and commitment (Liden et al., 1997). In such manner, great exchange connections are emphatically identified with both leader and subordinate behaviors (Wayne et al., 1997). Critically, an ongoing meta-investigation showed that LMX may fill in as a vital mediator that clarifies the impact of leader behaviors on various worker results (Dulebohn et al., 2012). Taken together, the present research set out to look at the impact of director support on task related pro-environmental behavior through the intervention of LMX. In doing so, this study adds to the literature by featuring the impact of LMX on assignment related pro-environmental behavior and, further, outlining the mental system that relate manager support with the present green behavior. Environmental sustainability has emerged as a critical concern for organizations worldwide, as workplace activities significantly contribute to environmental degradation and resource depletion. In developing countries such as Afghanistan, environmental challenges are intensified by rapid urban growth, limited institutional capacity, and weak enforcement of environmental regulations, making employee pro-environmental behavior increasingly important for sustainable organizational performance. Leadership plays a vital role in shaping such behaviors, particularly through supervisor support that encourages employees to engage in environmentally responsible actions beyond formal job requirements. However, the effectiveness of supervisory support largely depends on the quality of the relationship between leaders and employees, known as Leader–Member Exchange (LMX), which influences trust, communication, and mutual obligation. Despite extensive international research on leadership and environmental behavior, empirical studies examining the interactive role of supervisor support and LMX in promoting pro-environmental behavior are scarce in the

Afghan context. Therefore, this study seeks to examine the mediating role of Leader–Member Exchange in the relationship between supervisor support and employees’ pro-environmental behavior in Afghanistan, contributing context-specific insights to both organizational behavior and environmental sustainability literature

### 1.3 Problem Statement

Environmental degradation poses a serious challenge for Afghanistan, yet pro-environmental behavior within organizations remains limited and largely dependent on informal practices rather than structured leadership strategies. Although supervisor support is widely recognized as a key factor in encouraging positive employee behaviors, its effectiveness in fostering pro-environmental behavior among Afghan employees is not clearly understood. In many Afghan organizations, hierarchical leadership styles, limited environmental awareness, and weak supervisor–employee relationships may hinder the translation of supervisory support into actual environmentally responsible actions. The quality of **Leader–Member Exchange (LMX)**, characterized by trust, mutual respect, and open communication, may play a crucial mediating role in strengthening this relationship. However, empirical evidence examining the mediating role of LMX between supervisor support and pro-environmental behavior is largely absent in the Afghan context. This lack of context-specific research limits the ability of organizations and policymakers to design effective leadership-based interventions for environmental sustainability. Therefore, this study aims to investigate the mediating role of Leader–Member Exchange in the relationship between supervisor support and employees’ pro-environmental behavior in Afghanistan.

### 1.4 significance of study

The quantitative examination has been directed to discover the effect of manager support, pro environmental behaviors with interceding job of LMX of open division colleges. The aftereffect of this investigation will be useful to understand the instrument through which a firm can improve workers' execution. The associations contribute gigantic sum on preparing, however the organizations need to concentrate on manager support to accomplish superior of representatives. This examination provides experimental confirmations in regards to the impact manager support on worker execution.

### 1.5 Research Objectives

1. To find out the relationship between supervisor support and pro-environment behavior.
2. To find out the relationship between supervisor support and leader member exchange.
3. To find out the relationship between leader member exchange and pro-environment behavior.
4. To find out relationship between support and pro-environment behavior mediated by Leader member exchange.

### 1.6 Research Questions

1. What is relationship between supervisor support and pro-environment behavior?
2. What is the relationship between supervisor support and leader member exchange?
3. What is the relationship between leader member exchange and pro-environment behavior?
4. Is the relationship between supervisor and pro-environment is mediated by leader member exchange

## **2. Literature review**

### **2.1 Introduction**

The second chapter of this study consists of the definition of the variables and detailed explanation of the variables. This section of the study discusses the relationship between the all variables and also shows the positive impact of the variables on each other's.

### **2.2 Supervisor support**

In this modern age there is consistent increment in rivalry and the organizational condition is additionally persistently changing; to handle such kind of circumstance, the job of supervisor is important. Supervisors have important and basic job to spur, connected with and hold the employee of the organization (Rathi and Lee, 2017). Supervisor support characterized as the level of support and participation with respect to employee care and prosperity (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades, 2002). To help subordinate in their work and additionally encourage in ability improvement, supervisor support contains the general articulations and substantial help to work concern issues of the employee (Kossek, Pichler, Bodner, and Hammer, 2011). The behavior and frame of mind of Supervisor assumes an important job in the utilization and usage of skills, information and exchange of learning (Martin, 2010). The human skills or interpersonal skills of supervisor assume an important job to support their subordinate and in variable condition of work put (Hongvichit, 2015). The incredible social alliance among the board and their employee mirror that the support of the supervisor is extremely important, by the support of supervisor the employee is proficient for a challengeable condition to accomplish organizational objectives (Mushtaq, Raja, and Khan, 2017).

According to the ongoing examination discoveries, those employees who get the proposals about vocation improvement and mental support from supervisor, their performance turn out to be additional ordinary (Sun et al., 2014). To take care of with the demand of the difficulties of work condition, the employee needs ceaseless improvement, advancement and the most important is the appropriate support of supervisor that the employee can without much of a stretch achieve testing destinations and objectives with adequacy and effectiveness (Carter et al., 2013). In this way, the support of the supervisor in testing work put assumes a job of impetus to improve employee performance (Rooney et al., 2009). Research expressed that the support of supervisor is likewise prompts clear up job of individual, expanded occupation fulfillment, work performance, organizational commitment, and decline strife and turnover rate and may likewise diminished work-family struggle (Rathi and Lee, 2017). The organizational theorist trust that supervisor has a crucial job to provide distinctive assets to their employee, information about various work-related things, reward, and opportunities to their employee (Jokisaari and Nurmi, 2009). According to Stinglhamber and Vandenberghe (2003) the supervisor support additionally causes the employee to fill their socio enthusiastic necessities. The support of supervisor feels to the employee simply like the organization perceives your commitment and the organization likewise care about your welfare and the employee additionally trust that the supervisor is the specialist of an organization (Eisenberger, Huntington, Hutchison, and Sowa, 1986).

The supportive supervision is useful in providing distinctive kind of assets to the employee at work put and additionally provide numerous different opportunities to their employee (Rathi and Lee, 2017). The support of

supervisor to employee feels like that the organization offer an incentive to your commitments and organization are additionally thinking about employee advancement (Rathi and Lee, 2017). The support of supervisor isn't just help in employee performance yet additionally help in the nature of work life (Rathi and Lee, 2017). Many research thinks about states that the support at work put, including supervisor support, and the organizational support, assume an essential job to the nature of work life (Cohen, Kinnevy, and Dichter, 2007). According to the Rathi and Lee (2017) the support of supervisor prompts the nature of work life, which increments organizational commitment and fulfillment of life and likewise diminishes turnover expectations. This examination likewise finds that the support of the supervisor isn't just constrained to the organizational commitment yet additionally holding the worker and expanded fulfillment of life. Supportive supervision is assuming key job to provide the organizational assets or assets, opportunities, and prizes to the worker that upgrade the fulfillment of their fundamental needs at work. What's more, the support of the supervisor feel to his organizational employee that the organization thinks about you, and the employee of the organization additionally imagine that the supervisor is the agent of the organization (Eisenberger et al., 2002).

### **2.3 Pro-environmental behavior**

Several organizations have espoused the beneficial role of environmental protection for their sustainability and effectiveness (Chang & Chen, 2013). In this pursuit, though, they largely focused on organizational policies and practices neglecting the potential contribution of employees' behaviors. As a consequence, researchers (Boiral, 2009; Ones and Dilchert, 2012) have recently called for theoretical and empirical research on employee pro-environmental behavior arguing that such "behaviors have been studied in both the public and private sphere, but rarely in work settings" (Ones and Dilchert, 2012,). Employee pro-environmental behavior has been described "as a broad set of environmentally responsible activities" (Graves et al., 2013). Ones and Dilchert (2012) proposed that there are five important green behaviors such as conserving (e.g. recycling and reusing), working sustainability (e.g. developing sustainable products), avoiding harm (e.g. preventing pollution), influencing others (e.g. encouraging others) and taking initiative (e.g. initiating practices and policies). This research adopts the categorization of Bissing-Olson et al. (2013) that separated pro-environmental behavior into task-related and proactive behavior. The former is defined as "the extent to which employees complete their required work tasks in environmentally friendly ways" whereas the latter refers to the "extent to which employees take initiative to engage in environmentally friendly behaviors that move beyond the realm of their required work tasks" (pp. 157-158). Although, pertinent pro-environmental constructs have emerged in the relevant literature, the present paper encompasses task-related pro-environmental behavior because empirical research on its antecedents and outcomes remain scarce. As a result, it is posited that both supervisor support and LMX are two important determinants of the present pro-environmental behavior.

This perspective of a typical persuasive root supporting pro-environmental behaviors has natural intrigue. It additionally has some theoretical support from models of behavior that hypothesize cross-situational objectives or general values (Lindenberg and Steg, 2007; Rokeach, 1973; Schwartz and Bilsky, 1990). Furthermore, there is a few – though restricted – proof of such overflow impacts in connection to pro-environmental behavior (e.g., Whitmarsh, 2009). Ongoing investigations propose behavior might be grouped

somehow or another that reflects either comparative 'types' of behavior, in regard of setting or recurrence or distinctive dimensions of environmental commitment (simple/troublesome), or comparative individual attributes, for example, values or demographics. Barr and associates' (Barr, Gilg, and Ford, 2005).

## **2.4 Leader Member Exchange**

The leader-member exchange (LMX) theory of leadership has formed into a noteworthy region of logical request and has gotten significant experimental research consideration in the organizational sciences. When it was first presented, this theory was way breaking for two primary reasons. To begin with, LMX concentrated on the different dyadic connections among leaders and every one of their devotees. Second, LMX stipulated that leaders don't build up a similar kind of association with every supporter. In particular, LMX theory expresses that leaders fluctuate their cooperation crosswise over supporters and, in doing as such, decide their associations with devotees. Starting examination on LMX theory principally was coordinated at the results of the relationship, and the two distributed meta-investigations on LMX provided support for various connections among LMX and a large group of attitudinal and behavioral results (Gerstner and Day, 1997; Ilies, Nahrgang, and Morgeson, 2007). Be that as it may, a generous assemblage of exact research has been led on a wide scope of forerunners engaged with deciding the idea of LMX connections (e.g., Epitropaki and Martin, 2005; van Breukelen, Schyns, and Le Blanc, 2006). To evaluate the general progress that has been made in the investigation of LMX precursors, a meta-scientific appraisal would distinguish the condition of our progress just as recommend themes for future examination. What's more, in light of the fact that most by far of essential research has included predecessors or (results) of LMX, however not both, meta-examination provides an opportunity to survey LMX's interceding job.

Therefore, our objectives in the ebb and flow examination are to provide a meta-diagnostic audit of LMX's precursors and results and to reveal insight into LMX as a mediator between its predecessors and significant outcomes, consequently uniting two distinct surges of LMX inquire about. To this end, we offer a theoretical framework that is intended to upgrade our understanding of the manner by which LMX intervenes connections among precursors and results. We at that point observationally test this framework to survey the interceding job of LMX. In the process, our examinations serve to assess the aggregate learning crosswise over investigations on the precursors and results of LMX, just as the directing impact of the setting encompassing leader-member connections. Therefore, the present examination speaks to an effort to provide a thorough evaluation of the logical status of LMX as a major build in the organizational sciences. Originally, LMX was established in job theory (Graen, 1976; Graen and Scandura, 1987) yet has advanced to depend vigorously on social exchange theory (Erdogan and Liden, 2002; Kamdar and Van Dyne, 2007; Liao, Liu, and Loi, 2010; Wayne and Green, 1993). Low LMX connections are described by financial exchange dependent on formally concurred on, immediate, and adjusted reciprocation of substantial resources, for example, work contracts concentrating on pay for performance (P. M. Blau, 1964). Then again, high LMX connections progressively incite sentiments of shared commitment and reciprocity (Gouldner, 1960; Liden, Sparrowe, and Wayne, 1997), which render such connections more social in nature. We battle that in spite of the fact that leaders are predominant in deciding

the nature of LMX connections, adherents impact the process also (Dienesch and Liden, 1986; Lapierre, Hackett, and Taggar, 2006; R. Martin, Thomas, Charles, Epitropaki, and McNamara, 2005; Schyns and von Collani, 2002). This viewpoint speaks to a takeoff from conventional leadership approaches, which depend on the commence that leader attributes and behaviors specifically impact adherent frames of mind and behaviors. Lord and associates (Engle and Lord, 1997; Lord and Maher, 1991) focused on that the two members of the dyad form view of their dyadic partner, which thusly impact leader and devotee responses to the relationship.

## **2.5 Relationship between supervisor support and pro-environmental behavior**

In the organizational space, social exchange theory has been utilized as a core fundamental instrument for understanding employee mentality and behavior (Cropanzano & Mitchell, 2005). Drawing on this theory, Paille and his associates (Paillé and Boiral, 2013; Paille and Mejia-Morelos, 2014) have featured that apparent organizational support emphatically influences employee pro-environmental behaviors. In doing as such, they demonstrated that supportive behavior and choices by the business are probably going to add to employees' commitment in pro-environmental behavior. Moreover, expanding on social exchange theory and the prior examinations, this paper inspects the connection between saw supervisor support and pro-environmental behavior. Sluss and Ashforth (2008) noticed that the supervisor subordinate relationship is of most extreme importance for the last in light of the fact that not just an extraordinary collaboration happens in connection to various work perspectives yet in addition the chief controls "the prizes and other organizational advantages the individual gets" (p. 810). In a related sense, Lord and Brown (2001) called attention to that leaders establish an abrogating focal point for subordinates in their effort to see and understand workplace issues. In that capacity, since supervisors fill in as delegates of the organization, their favorable demeanor and behavior toward employees might be generally ascribed to the organization (Rhoades and Eisenberger, 2002). In this vein, scientists (Cantor et al., 2012) exhibited that supervisor support for environmental activities prompts upgraded recognitions for separate organizational support. Importantly, at an organizational dimension Ones and Dilchert (2012) noticed that administrative support and commitment include critical facilitators of pro-environmentally feasible practices. In like manner, Zutshi and Sohal (2004) focused on that top administration support brings about expanding employees' commitment to environmental activities. Also, prior examines (Daily et al., 2009; Lulfs and Hahn, 2013; Ramus and Steger, 2000) have significantly contended that supervisor support emphatically adds to employees' pro-environmental behavior.

## **2.6 Relationship between Leader member exchange and pro-environmental behavior**

LMX comprises a standout amongst the most mainstream leadership ideas (Yammarino et al., 2005). LMX was at first presented in the literature as a Vertical Dyad Linkage approach which placed that leaders create diverse sorts of exchanges with their supporters and, therefore, they treat them in various ways (Dansereau et al., 1975). LMX portrays the nature of the dyadic social exchange connection among leaders and supporters (Graen, 1976; Graen and Scandura, 1987). Such connections may run from high caliber to low-quality exchanges. With respect to former, immense experimental examinations have reported the positive connection between high LMX and employee dispositions and behaviors, for example, organizational commitment, work fulfillment, organizational citizenship behavior, turnover aims and performance (for a survey see meta-investigation from Gerstner and

Day, 1997; Ilies et al., 2007; Dulebohn et al., 2012; Martin et al., in press). However, todate there is lacking observational research with respect to the effect of excellent connections among supervisor and employee on the last's pro-environmental behavior. Along these lines, utilizing three core theories the present research looks at the connection among LMX and employee errand related pro-environmental behavior. As noted above, social exchange theory offers a notable theoretical framework so as to clarify the linkage between supervisor support and employees' pro-environmental behavior. Thus, this theory might be utilized to delineate the positive job of LMX in improving such a behavioral result. A few researchers (Paparoidamis, 2005; Aryee and Chen, 2006; Erdogan et al., 2014) called attention to the effect of LMX on different work results. This is credited to the way that high LMX connections mean common trust, commitment and reciprocity (Gerstner and Day, 1997). Accordingly, it is contended that beside supporting their subordinates when supervisors develop their exchange associations with their subordinates the last will see and experience a favorable treatment and, therefore, are probably going to reciprocate by exhibiting positive behavioral results, for example, pro-environmental behavior.

## **2.7 Supervisor support, leader member exchange and pro-environmental behavior**

Drawing for the most part on social exchange theory this paper inspected the beneficial outcome of supervisor support and LMX on pro-environmental behavior. That is, support from the supervisor and top-notch exchanges among supervisor and subordinate are probably going to encourage employees' assignment related pro-environmental behavior. Furthermore, researchers have noticed that supervisor support is a key forerunner of LMX (Bhal et al., 2007; Chen and Chiu, 2008). In that capacity, employees who see their supervisor as supportive are probably going to shape a positive perspective of the last mentioned and feed top notch connections. Likewise, scientists have referenced that "it is the nature of the relationship that decides key results, not the devotee or leader behaviors and recognitions fundamentally" (Dulebohn et al., 2012, p. 1739) and, therefore, LMX may go about as a core interceding component that transmits the impact of its forerunners on different results. Following this rationale, it is set that LMX intervenes the relationship between supervisor support and employees' undertaking related pro-environmental behavior. Put in an unexpected way, supervisor support decidedly influences employees' pro-environmental behavior attributable to the support peruse as well as in light of the fact that this support ameliorates the exchange connections among supervisor and subordinates. Henceforth, given the above contentions and the heretofore theories, in particular that supervisor support(H1) and LMX (H2) emphatically influence pro-environmental behavior, it is contended that LMX fills in as a mediator in the connection between supervisor support and pro-environmental behavior

## **3. Research Methodology**

### **3.1 Introduction**

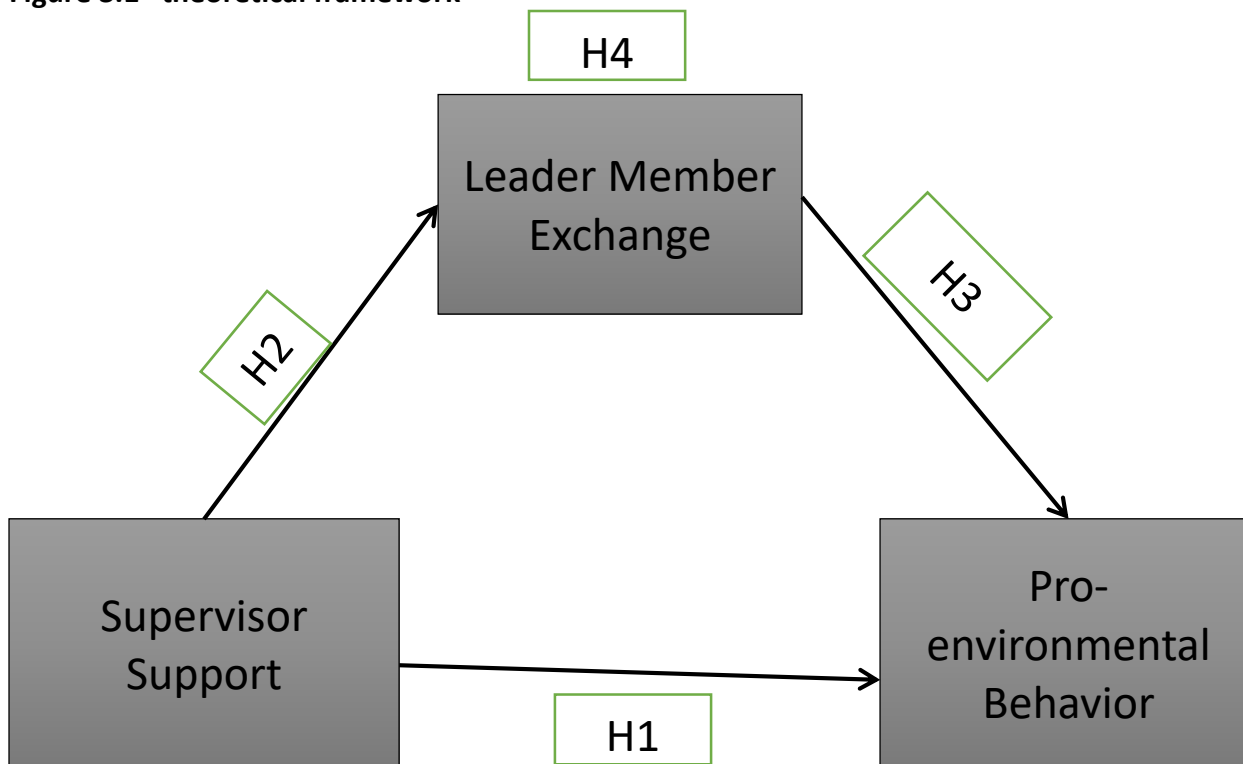
The way in which the researchers find the answers for the questions in the research problem that is called the research methodology (Woldemichael, 2012). Methodology is also instructions for the researchers that how research can be arranged. In this chapter includes the research design, population, target population, sample, sample size, sample techniques, theoretical framework and operational definitions of the variables.



### 3.3 Theoretical Framework and Definition of Variables

The operational definitions and theoretical framework of this study is given below in figure 3.1. Which is consist the one dependent variable, one independent variable and one mediating variable. Independent variable is (supervisor support) mediating variable (leader member exchange) and dependent variable (pro environmental behavior).

**Figure 3.1** theoretical framework



### 3.4 Research Hypotheses;

**H1.** There is positive and significant relationship between supervisor support and pro environmental behavior.

**H2.** There is positive and significant relationship between supervisor support and leader member exchange.

**H3.** There is positive and significant relationship between leader member exchange and pro environmental behavior.

**H4.** Leader member exchange positively and significantly mediates the supervisor support and pro environmental behavior.

### 3.5 Data collection Method

Primary and secondary both types of data is used in this study. Primary data of this research consist of that information or data which are directly collected from the respondents of the research population. The primary data is the information about the facts which are related to the respondents. The primary data or information collected from the survey, interview and questionnaires which is collected very first time. Secondary data for

this study is collected from the different papers, articles, journals and internet. The data which is exists already in the internet. Secondary type of data is gathered from the research papers and articles.

### **3.5.1 Primary Data Collection**

The primary for this research is collected through the structure questionnaires. The primary data for this research is collected from the academic and teaching staff of the three different universities of the Jalalabad division. Data and information is gathered through proper questionnaires which are adopted from the different research papers. For the data collection we distributed the (90) questionnaires among the three different universities in which (70) were returned. So the rest of the questionnaires were not properly completed. So the primary data for this study is collected from the academic and teaching staffs of the three private universities of the Jalalabad division.

### **3.5.2 Secondary Data Collection**

The collection of the secondary data is collected from the different research papers and articles, so the source of the secondary data of this study is journals, Google, Google scholar, articles, research papers and internet source. The secondary data is vital for the past studies and history for this research and very important for the definition of the variables.

### **3.6 Population**

Population is the classification of set of selected people which are chosen for the information or data gathering and for the explanation of data which are composed from the set of peoples (cooper & schindler, 2008). Used for this study we chosen the Jalalabad division, for information or data set and we composed the data from the academic and teaching staff, so the academic and teaching staff is the population for this study and we suppose the (90) population for study.

#### **3.7.1 Sample size**

The overall population of this study is (90) teaching and academic staff of university of Jalalabad division we elected the (70) teaching and academic staff as sample size throughout Cochran's formula. The convenience samples be utilize for the gathering of information from chosen population. Total (90) questionnaires be circulated among the academic and teaching staff 70 questionnaires be return, so (70) questionnaires be not correctly filled and done so the analysis of this study be stand on (70) questionnaires.

### **3.8 Reliability of variables**

The data of this research was analyzed on the basis of primary data. The primary data was collected through the self administrated and adopted questionnaires, for the measuring of variables the five point's likert scale was used by the researcher which ranging from 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree. Questionnaires were adopted and taken from the past research paper and articles for this study, The reliability of the factors were tested by utilized the cronbach's alpha coefficient to analyze the consistency and as well as the accuracy of factors which are used in the collection of data, so the purpose of reliability is to test the accuracy and consistency of variables through the cronbach's alpha analysis.

Reliability of Variables	
Variables	Cronbach's alpha
Total Reliability	.659
Supervisor support	.785
Leader member exchange	.741
Pro environmental behavior	.856

### 3.9 Analysis of Data

For the information and data analysis or interpretation the below tools and methods be use to understand the data.

#### 3.9.1 Descriptive statistical techniques

We measured and calculated the standard deviation and mean of the research through descriptive statistical techniques.

#### 3.9.2 Inferential statistics techniques

In inferential statistics techniques we deliberate and discover the regression and correlation and of the variables.

#### 3.10 Ethical consideration

While the investigator arranges the study so it is so very important to think about all the principles and ethics which are associated to the study. So, this research follows all the principles, policy and rule during the gather the primary data and information from the teaching and academic staff of Speenghar University, Al-Taqwa University and Alfalah University Jalalabad. This study is just conduct and data just together from the all University so all the moral rules and policy are followed by the investigator in the university when together the data. This together data just utilized for the study reason and every moral principle are follow in the study by the researcher.

### 4. Data analysis and interpretation

#### 4.1 Introduction

This chapter of the study consists of data analysis and interpretation. The data analysis and interpretation are based on the data which are collected from the three different private universities of Jalalabad.

## 4.2 Demographic variables analysis

The demographic variables of this research are discussed below one by one. Age, gender, employees, marital status and universities are the main demographic variables for this research which are explain below with briefly explanation.

### 4.2.1 Age

Age is the demographic variable of this research. Below table shows the age of respondents through which the data was collected. The table shows there are 20 respondents which have age between 20 to 25 and cover the 13.3% of the data, 10 respondents have the age between 26 to 30 which cover the 19.3% of the research, 5 respondents have the age between 31 to 35 which cover the 11.7% of the research, 15 respondents have the age between 36 to 40 which cover the 14% of the research, 10 respondents have the age between the 41 to 45 which cover 24.6% of the research and 10 respondents have the age between the 46 to 50 which cover the 17% of the research requirement.

	Frequency	Percent	Valid Percent	Cumulative Percent
1	20	13.3	13.3	13.3
2	10	19.3	19.3	32.6
3	10	11.7	11.7	44.3
Valid 4	5	14.0	14.0	58.3
5	15	24.6	24.6	83.0
6	10	17.0	17.0	100.0
Total	70	100.0	100.0	

### 4.2.2 Gender

Gender is the demographic variable of the study which shows the gender from which data was collected that how many females and male were there through which data was collected. So below table shows the gender. There were 0 female through which the data was collected which represent the 00% of the total population and there were 70 males through which the data was collected which represent the 100% of the total population.

**Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	00	00	00	00
Valid Male	70	100	100	100.0
Total	70	100.0	100.0	

### 4.2.3 Marital Status

Marital status is the demographic variable of this study which represent the marital status of the respondents that how much respondents are married and how much respondents are unmarried. The below table shows the

marital status of respondents. There are 45 respondents were married which represent the 57.2% of the total population and 25 respondents are unmarried which represents the 42.8% of the whole population.

**MS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Married	45	57.2	57.2	57.2
Valid Single	25	42.8	42.8	100.0
Total	70	100.0	100.0	

#### 4.2.4 Employees

Employees are the demographic variable of the study which are shows the employees position in the universities that which employees are working on contract, fulltime and part time. The below table represent the employees position in the organization. There are 10 employees which are working on the contract base in the organization which represent the 28.4% of the total population. 50 respondents work full time in the organization which are represent the 56.1% of the total population and 10 respondents work in the part time which are represent the 15.5% of the total population.

**Employee**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Contract	10	28.4	28.4	28.4
Valid Full time	50	56.1	56.1	84.5
Valid Part time	10	15.5	15.5	100.0
Total	70	100.0	100.0	

#### 4.2.5 Universities

A university is the demographic variable of this study it show the respondents of three different universes through which data were collected. The below table show the respondents of the three different universities. There were 25 respondents of the Speenghar University which represent the 32.2% of total population. The data was collected from the 25 respondents of the Alfalah University which represent the 38.3% of the total population and data was collected from the 20 respondents of the Altaqwa University which cover the 29.5% of the total population.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Speenghar	25	32.2	32.2	32.2
Alfalah	25	38.3	38.3	70.5
Altaqwa	20	29.5	29.5	100.0
Total	70	100.0	100.0	

### 4.3 Descriptive statistics

Below table shows descriptive statistics of this study. Gender is the control variable of this study which minimum value is 1 and maximum value is 2 so the mean of gender is 1.64 and standard deviation is .482. Marital status is the control variable of this study which minimum value is 1 and maximum value is 2 so the mean of marital status is 1.43 and standard deviation is .496. Employees are the control variable of this study which minimum value is 1 and maximum value is 3 so the mean of employees is 1.88 and standard deviation is .653. Universities are the control variable of this study which minimum value is 1 and maximum value is 3 so the mean of universities is 1.98 and standard deviation is .787. Age is the control variable of this study which minimum value is 1 and maximum value is 6 so the mean of age is 3.69 and standard deviation is 1.710.

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	70	1	2	1.64	.482
MS	70	1	2	1.43	.496
Employee	70	1	3	1.88	.653
University	70	1	3	1.98	.787
Age	70	1	6	3.69	1.710
Valid N (listwise)	70				

### 4.4 Reliability of Variables

According to Joppe, (2000) Reliability is a variables used to interpret and analyze items internal consistency when completed by different respondents. Cronbach's Alpha is coefficient of reliability showing how sound items are correlated to each other. Acceptable value of the Alpha ranging from .60 to .70 (Everet, 2006). The below table shows the over all reliability of variables.

Table; Cronbach's Alpha value of overall variables

Cronbach's Alpha value	No of items
.830	21

The value of Cronbach's Alpha for each and every variable presented in table showing internal consistency of the instrument is consistent.

Table: Cronbach's Alpha value of variables

Variables	Cronbach's Alpha value	No of items
Supervisor support	.866	08
Leader member exchange	.763	06
Pro environmental behavior	.711	07

#### 4.5 Correlation Analysis

To find out the relationship between the two variable's correlation analyses was conducted. Table shows correlation between the variables. Pearson correlation value  $r = 0.386$ , explains significant and positive correlation in the relationship between POS and JE. The value  $r = .361$ , represents that correlation in the relationship of POS and JE is positive and significant, and the value  $r = .412$  represents the correlation between the relationship of JE and IWB is significant and positive.

Table 4.8: Correlation statistics

		Supervisor support	Leader member exchange	Pro environmental behavior
Supervisor support	Pearson correlation	1	0.177**	0.135**
	Significant (2-tailed)		0.004	0.028
	N	70	70	70
Leader member exchange	Pearson correlation		1	0.051**
	Significant (2-tailed)			0.046

	N			70
Pro environmental behavior	Pearson correlation			1
	Significant (2- tailed)			0.000
	N			70

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4.6 Regression analysis

To find the regression analysis the SPSS is used for the analysis and results. Regression analysis is used for to find the relationship and strength of independent variable in the dependent variable. The regression analysis consists of model summary and coefficient of regression.

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.135 <sup>a</sup>	.018	.014	1.1347

a. Predictors: (Constant), SSM

##### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.251	1	6.251	4.855	.028 <sup>b</sup>
	Residual	337.348	262	1.288		
	Total	343.599	263			

a. Dependent Variable: PEBM

b. Predictors: (Constant), SSM

##### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.298	.281		11.741	.000
	SSM	.178	.081	.135	2.203	.028

a. Dependent Variable: PEBM



In above **table shows** the value of R Square is **“.018 or 1.8%”** showing that (pro environmental behavior) dependent variable is explained 1.8% by independent variable (supervisor support)..

The above Table shows standardized coefficient value of beta,  $\beta = .135$  represent that 1 percent change in supervisor support leads 13 percent change in pro environmental behavior.

The below table shows relationship and strength between supervisor support and leader member exchange.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.177 <sup>a</sup>	<b>.031</b>	.028	2.5080

a. Predictors: (Constant), SSM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	53.099	1	53.099	8.442	.004 <sup>b</sup>
	Residual	1647.949	262	6.290		
	Total	1701.048	263			

a. Dependent Variable: LMEM

b. Predictors: (Constant), SSM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.914	.621		3.082	.002
	SSM	.520	.179	<b>.177</b>	2.906	<b>.004</b>

a. Dependent Variable: LMEM

In above **table shows** the value of R Square is **“.031 or 3.1%”** showing that (leader member exchange) mediating variable is explained 3.1% by independent variable (supervisor support)..

The above Table shows standardized coefficient value of beta,  $\beta = .177$  represent that 1 percent change in supervisor support leads 17 percent change in leader member exchange

The following table represents the strength and relationship between leader member exchange and pro environmental behavior.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.051 <sup>a</sup>	<b>.003</b>	-.001	1.1437

a. Predictors: (Constant), LMEM

ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.901	1	.901	.689	.407 <sup>b</sup>
	Residual	342.698	262	1.308		
	Total	343.599	263			

a. Dependent Variable: PEBM

b. Predictors: (Constant), LMEM

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.813	.124		30.870	.000
	LMEM	.023	.028	.051	.830	.046

a. Dependent Variable: PEBM

In above **table shows** the value of R Square is **“.003 or 0.3%”** showing that (leader member exchange) mediating variable is explained 0.3% by dependent variable (pro environmental behavior).. The above Table shows standardized coefficient value of beta,  $\beta = .051$  represent that 1 percent change in leader member exchange leads 5 percent change in pro environmental behavior. The following table represents the strength and relationship between supervisor support, leader member exchange and pro environmental behavior.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.138 <sup>a</sup>	.019	.011	1.1364

a. Predictors: (Constant), SSM, LMEM

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.517	2	3.258	2.523	.082 <sup>b</sup>
	Residual	337.082	261	1.292		
	Total	343.599	263			

a. Dependent Variable: PEBM

b. Predictors: (Constant), SSM, LMEM

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.274	.286		11.432	.000
1 LMEM	.013	.028	.028	.454	.650
SSM	.172	.082	.130	2.085	.038

a. Dependent Variable: PEBM

In above **table** the value of R Square is **“.019 or 19%”** showing pro environmental behavior 19% explained by supervisor support and leader member exchange.

The above table shows standardized coefficient value of beta,  $\beta = .028$  and  $\beta = .130$  respectively showing that 1 percent change in supervisor support brings 2.8 percent change in pro environmental behavior while 1 percent change in leader member exchange brings 13 percent change in pro environmental behavior.

#### 4.7 Testing Hypotheses

In this study we selected four hypotheses, the all four hypotheses testing briefly explain below.

##### 4.7.1 Testing Hypothesis 1

**H1.** There is a positive and significant relationship between the supervisor support and pro environmental behavior

In above **table shows** the value of R Square is **“.018 or 1.8%”** showing that (pro environmental behavior) dependent variable is explained 1.8% by independent variable (supervisor support). The above Table shows standardized coefficient value of beta,  $\beta = .135$  represent that 1 percent change in supervisor support leads 13 percent change in pro environmental behavior. The correlation value  $r = .135$  with **sig= .028**. so in the basis of all results the value of correlation and regression shows the positive and significant relationship with each other, so we can say that the hypothesis 1 of this study is accepted.

##### 4.7.2 Testing Hypothesis 2

**H2.** There is a positive and significant relationship between supervisor support and leader member exchange.

In above **table shows** the value of R Square is **“.031 or 3.1%”** showing that (leader member exchange) mediating variable is explained 3.1% by independent variable (supervisor support)..

The above Table shows standardized coefficient value of beta,  $\beta = .177$  represent that 1 percent change in supervisor support leads 17 percent change in leader member exchange The following table represents the strength and relationship between leader member exchange and pro environmental behavior. The value of correlation  $r = .177$  with **sig= .004**. so we can say that regression and correlation analysis shows the positive and significant relationship between the supervisor support and leader member exchange, so in the basis of analysis we can say that the hypothesis 2 of this research is accepted.

### 4.7.3 Testing Hypothesis 3

**H3.** There is a positive and significant relationship between leader member exchange and pro environmental behavior.

In above **table shows** the value of R Square is **“.003 or 0.3%”** showing that (leader member exchange) mediating variable is explained 0.3% by dependent variable (pro environmental behavior). The above Table shows standardized coefficient value of beta,  $\beta = .051$  represent that 1 percent change in leader member exchange leads 5 percent change in pro environmental behavior. The value of correlation  $r = .051$  with  $\text{sig} = .046$ . the results and analysis of the regression and correlation shows that leader member exchange and pro environmental behavior have positive and significant relationship with each other and both have the positive impact with each other so we can say that the hypothesis 3 of this study is accepted.

### 4.7.4 Testing Hypothesis 4

**H4.** Leader member exchange positively and significantly mediates supervisor support and pro environmental behavior. For the mediation analysis we used Baron and Kenny's four steps which are briefly explain below.

**Step1.** The results of regression analysis between supervisor support (independent variable) and pro environmental behavior (dependent variable) have positive relationship ( $p < 0.001$ ) with R square .018 and the value of beta = .135. So the results and analysis is provided support for the hypothesis and condition 1.

**Step2.** The results and analysis of regression between the supervisor support (independent variable) and leader member exchange (mediating variable) have positively relationship ( $p < .004$ ) the value of R square = .031 and the beta value = .177. The results and analysis of hypothesis provided support for condition 2.

**Step3.** The regression results and analysis of the leader member exchange (mediating variable) and pro environmental behavior (dependent variable) have positive impact with each other ( $p < .046$ ) the value of r square = .003 and the value of beta = .051. The results and analysis of the hypothesis provided support for the condition 3.

**Step4.** The regression results of the mediation shows that the value of regression between the leader member exchange and supervisor support is not significant because the value of beta = .028 t value = .454 and P value = .650. the mediation between the pro environmental behavior is significant because the value beta = .130, t value = 2.085 and P value = .038. from the all necessary conditions we concluded that leader member exchange have the full mediation affect on the supervisor support and pro environmental behavior.

## 5. Findings, summary, Conclusion and Recommendations

### 5.1 Introduction

This chapter of the study consists of the findings, conclusion, discussion recommendations, and recommendations for the future research and limitation for the future research. First chapter of the study consists of introduction and definitions of the variables, second chapter of the study discussed literature and explanation of the variables, third chapter explain the methodology and instrument of the research last and final chapter discuss the summary and recommendations.

## 5.2 Findings and Summary

The aim of this research is to find the relationship between the supervisor support and pro environmental behavior and to find out the mediating role of the leader member exchange. Supervisor support and pro environmental behavior have the positive relationship with each other and leader member exchange has positively mediated the relationship between the dependent and independent variables. For the research we selected three universities that are Speenghar university, Alfalah university and AL-Taqwa university Data is collected from the teaching and academic for the analysis and analysis base on 70 questionnaires.

- I. There is a positive and significant relationship between the supervisor support and pro environmental behavior. In above **table shows** the value of R Square is **“.018 or 1.8%”** showing that (pro environmental behavior) dependent variable is explained 1.8% by independent variable (supervisor support). The above Table shows standardized coefficient value of beta,  $\beta = .135$  represent that 1 percent change in supervisor support leads 13 percent change in pro environmental behavior. The correlation value  $r = .135$  with **sig= .028**. So in the basis of all results the value of correlation and regression shows the positive and significant relationship with each other, when supervisor support the employees of the organization so the pro environmental of the firm and as well as the employees will be improve, so therefore this study concluded that if supervisor support these things so the employees will be increase their performance, so therefore the supervisor support and pro environmental behavior has the positive and significant relationship with each other.
- II. There is a positive and significant relationship between supervisor support and leader member exchange. In above **table shows** the value of R Square is **“.031 or 3.1%”** showing that (leader member exchange) mediating variable is explained 3.1% by independent variable (supervisor support). The above Table shows standardized coefficient value of beta,  $\beta = .177$  represent that 1 percent change in supervisor support leads 17 percent change in leader member exchange the following table represents the strength and relationship between leader member exchange and pro environmental behavior. The value of correlation  $r = .177$  with **sig= .004**. so, we can say that regression and correlation analysis shows the positive and significant relationship between the supervisor support and leader member exchange, so in the basis of analysis we can say that the hypothesis 2 of this research is accepted. The results and analysis show that if supervisor support mediates the leader member exchange so then the organization will be affected positively and significantly by the leader member exchange. So, supervisor support and leader member exchange have the significantly and positive relationship with each other. If supervisor support considered the leader member exchange important variable for the organization and leader member exchange their opinions, ideas, food and suggestions with each other so then the organization and pro environmental behavior will be improved and increase, so therefore the supervisor support and pro environmental behavior have the positive and significant relationship with each other.
- III. There is a positive and significant relationship between leader member exchange and pro environmental behavior. In above **table shows** the value of R Square is **“.003 or 0.3%”** showing that

(leader member exchange) mediating variable is explained 0.3% by dependent variable (pro environmental behavior). The above Table shows standardized coefficient value of beta,  $\beta = .051$  represent that 1 percent change in leader member exchange leads 5 percent change in pro environmental behavior. The value of correlation  $r = .051$  with  $\text{sig} = .046$ . the results and analysis of the regression and correlation shows that leader member exchange and pro environmental behavior have positive and significant relationship with each other and both have the positive impact with each other. If leader member exchange with each other in the organization exchange and share ideas, opinions and information about the organization for their improvement so the environmental of the firm will be efficient and improved. So, leader member exchange will have highly positive impact on the pro environmental behavior, when member exchange their ideas and suggestion for the betterment of the organization so the pro environmental behavior of firm will be good and efficient for the members of the organization.

IV. Leader member exchange positively and significantly mediates supervisor support and pro environmental behavior.

For the mediation analysis we used Baron and Kenny's four steps which are briefly explain below. The results of regression analysis between supervisor support (independent variable) and pro environmental behavior (dependent variable) have positive relationship ( $p < 0.001$ ) with R square .018 and the value of beta = .135. So, the results and analysis are provided support for the hypothesis and condition 1. The results and analysis of regression between the supervisor support (independent variable) and leader member exchange (mediating variable) have positively relationship ( $p < .004$ ) the value of R square = .031 and the beta value = .177. The results and analysis of hypothesis provided support for condition 2. The regression results and analysis of the leader member exchange (mediating variable) and pro environmental behavior (dependent variable) have positive impact with each other ( $p < .046$ ) the value of r square = .003 and the value of beta = .051. The results and analysis of the hypothesis provided support for the condition 3. The regression results of the mediation shows that the value of regression between the leader member exchange and supervisor support is not significant because the value of beta = .028 t value = .454 and P value = .650. the mediation between the pro environmental behavior is significant because the value beta = .130, t value = 2.085 and P value = .038. from the all-necessary conditions, we concluded that leader member exchange have the full mediation effect on the supervisor support and pro environmental behavior. Leader member exchange positively and significantly mediating the supervisor support and pro environmental behavior. The leader member exchange if leader member exchanges the better suggestions and ideas for organization so the firm will compete in the market and will be improve their performance. The leader member exchange will positive and highly significant impact the relationship between the dependent and independent variable, so the member exchange has important and significant effect on the organization environmental behavior. so, leader member exchange has the important role in the organization for the betterment and increasing of the performance of the organization and as well as

of employees. If leader member exchanges their information with each so the organization and member will improve their performance.

### **5.3 Research Implication**

The implication of this research is very important for the top and middle level managers, because top and middle managers have the decision power. The research can apply on the organization for the efficiency and improvement of the activities and operations. The supervisor support is very important for the efficiency of the employees. This research specially applies on the decision-making conditions if any manager want to take decision so it will be taking the suggestions and ideas from the other members the better option will be apply in the organization.

This study will apply on the organization improvement when supervisor support the other member in the organization so the organization will be achieving their goals and objectives, and it will be competing their competitive in market and will create good environment for the organization in which every member performing effectively. This research can be applied in the organization for the given respect to every member opinion and idea that can caused the improvement of the organization. For the betterment of the organization environment members should respect the each other ideas. This study can improve the supervisor support importance in organization so the betterment this research can be applied in every manufacturing and services organization.

### **5.4 Conclusion**

The aim of this research is to find out the relationship between the supervisor support and pro environmental behavior and also the mediating role of the leader member exchange. For the study we organized the four hypotheses and data was collected from the three different Speenghar university, Alfalah university and AL-Taqwa university. All the variables have the positive relationship with each other. The regression analysis shows the significant and positive relationship between the variables and leader member exchange also has the positive effect on the variables.

Supervisor support has the positive impact with pro environmental behavior because if the supervisor creates the better behavior and developed the supportive environment during the operations and activities of the organization so the behavior of the employees and other members will be positive for the organization as well as for the supervisor. Leader member exchange also has the positive effect on the supervisor support when the supervisor exchanges the ideas, opinions and important information about the organization so the different ideas will be collected so the better one will be applied in the organization so therefore we can say that the leader member exchange has the effective role in the organization for their improvement. Leader member exchange and pro environmental behavior have the strong relationship with each other when the supervisor create the environment that is in the favor of the organization so the organization must be improve their activities and their employees because the better environment has the positive role in the organization efficiency. Leader member exchange has the mediating positive role between the supervisor support and pro environmental behavior because when the supervisor has the close relation with employees and subordinates so the low-level management will perform effectively and the environment will be created positive and

effectively for the organization activities, so we can say that all hypotheses of this research is positively affected the organization and we will accept the all four hypotheses of this study.

### 5.5 Limitations of the Study

For this study we arranged some limitations that are shows the limitations of this study that are briefly discuss below;

- i. This study is arranged in Afghanistan; the related literature of review is inadequate because most of the related literature reviews gathering from the others countries.
- ii. The sample size of this research is 70 and it is limited of this study.
- iii. This research totally focuses on the three private Universities of the Jalalabad region so the results and analysis do not applicable on other organization.
- iv. For the findings and results analysis data just collected from the staff of three different Universities of the Jalalabad region of Afghanistan.
- v. This study arranged on the limited and specific area of the Jalalabad region of Afghanistan.
- vi. This study is only limited on the three private Universities of Afghanistan in Jalalabad region.

### 5.6 Recommendations for future research

- i. The further research will be conducted on public sectors.
- ii. The further research must be data collected from the academic staff.
- iii. Future study must qualitative.
- iv. The further study must be conducted on manufacturing concern also.
- v. Other variables should be tested instead of leader member exchange.

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