# Does Transformational Leadership Style effect on Employee Commitment in the Aviation Industry?

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**Abstract**

The purpose of this study is to examine the relationship between perceived transformational leadership style and employee commitment in Royal Jordanian Airlines (RJA). Leadership plays a significant role in all fields of life, including the public, private, and non-profit sectors. The effectiveness of a given leadership style can be appreciated and evaluated based on the level of commitment displayed by followers. Multivariate Analysis of Variance (MANOVA) is the research methodology employed in the RJA's study. The study utilizes Free Online Surveys link which included the transformational leadership questionnaires part from the Multifactor Leadership Questionnaires (MLQ) and the Three Components Models (TCM) Questionnaires. Results of this study showed a significant relationship between the affective and continuance commitments with the transformational leadership style and insignificant relationship between the normative commitment and the transformational leadership style.

**Keywords:** transformational leadership style, affective commitment, continuance commitment, normative commitment

## 1. Introduction

All over history, philosophers and theorists have struggled to establish a common perspective on which to base the study of leadership. They have developed many different leadership theories over time, such as the traditional approaches that include trait theories, situational/contingency theories, and behavioral theories. Leadership plays a significant role in all fields of life, including the public, private, and non-profit sectors. The effectiveness of a given leadership style can be appreciated and evaluated based on the level of commitment displayed by followers. In business, leadership style affects employee motivation and satisfaction which, in turn, affect customers who have the power to increase or decrease revenues and profits. Herb Kelleher, former CEO and a current chairman of Southwest Airlines, addressed the issue of priority through the following statement: "Who comes first, the employees, customers, or shareholder? That's never been an issue to me. The employees come first. If they are happy, satisfied, dedicated, and energetic, they will take good care of the customers. When the customers are happy, they come back. And, that makes the shareholders happy" (Godsey, 1996, p. 20). This answer reflects a deep understanding of the significance of leadership and how leaders must improve employee commitment to ensure the organization progresses to a new level.

Understanding the different leadership styles and the effectiveness of each is an essential undertaking for researchers and organizations (Yukl, 2001). Many studies have examined the relationship between leadership style and organizational commitment, which is an extremely significant issue because it ensures the support of the employees to deal with rising challenges and necessary changes. One study found that when the followers' trust in their leader increased, their commitment to the organizational mission was also enhanced (Kark, Shamir, & Chen, 2003). Some studies have focused on the positive relationship between transformational leadership, which is defined as "process by which followers trust, admire, and respect their leader, and are consequently motivated to do more than they were originally expected to do" (Bass, 2009, p. 75), and organizational commitment (K. A. Arnold, Barling, & Kelloway, 2001; Bycio, Hackett, & Allen, 1995).

The nature of trust between employees and organizations varies in individualistic and collectivist cultures. Trust has been described as taking on four possible forms, and these forms include deep dependence, shallow dependence, deep interdependence and shallow interdependence (Sheppard & Sherman, 1998). In individualistic

cultures, trust should theoretically obtain the form of shallow or deep dependence.

According to Sheppard and Sherman (1998), the strength of trust in such relationships is based on the employee's faith in the discretion and integrity of the organization. If trust is betrayed and the employee's trust is deep, then the employee may look for explanation that allows him/ her to stay with the organization. In such organizations, this solution may absorb the establishment of a third entity to oversee and judge future conflict, such as an employee's union. Conversely, in collectivist cultures, trust should theoretically take the forms of shallow interdependence and deep interdependence. The strength of trust would be a function of the level of interdependence between parties. Furthermore, if trust betrayed individuals whose personal identities are defined, in large part, by their organizational membership are likely to experience a tremendous amount of dissonance (House et al., 2004, P. 457).

This study is conducted to examine/observe the transformational leadership styles and effect on organization commitment. In this study we have developed the following research hypothesis.

*H: There is a significantly positive relationship between transformational leadership styles and organization commitment.*

## 2. Transformational Leadership Style

According to Burns (1978), who introduced the idea of transformational leadership, this style is the process that both leaders and followers use to move to more advanced stages of morality and motivation (Barnes & Morgeson, 2007). This kind of leadership focuses on and improves the level and quality of ethics and morals to preserve the integrity of the organization (Parry & Proctor-Thompson, 2002). Bass identified transformational leadership as "a process by which followers trust, admire, and respect their leader, and are consequently motivated to do more than they were originally expected to do" (as cited in Parry & Proctor-Thompson, 2002, p. 75). Transformational leadership aims to establish a collective identity and shared vision of both leaders and employees, which then leads to shared practices and beliefs (O'Connor & Day, 2005). Accordingly, leaders focus on influencing people's hearts and satisfying their needs to achieve a common vision and mission (Conger & Riggio, 2005; Kouzes & Posner, 2002).

### 2.1 Idealized Influence

Bass (1990a) substituted the term charisma for idealized influence. In his original transformational leadership model, Bass (1985) introduced the concept of a charismatic leader, who was described as: "An endowment of an extremely high degree of esteem, value, popularity, and/or celebrity-status by others…it engenders others with strong emotional responses of love or hate…the leader attains a generalized influence which is transformational…followers admire them, have the desire to identify with them, and emulate them….charismatic's actively shape and enlarge audiences through their own energy, self-confidence, assertiveness, ambitions, and seizing of opportunities" (p. 39-40).

Literature has shown that leaders who have charismatic leadership traits and use them wisely receive more appreciation and acceptance from employees who want to imitate the leader (Bass, Waldman, Avolio, & Bebb, 1987).

Successful and effective leaders avoid taking advantage of their positions to fulfill their interests and needs at the expense of their followers' needs. Effective leaders do not abuse the power of their position for their own gratification (Bass, 1990b). It is expected that leaders will use their positional power to gain more benefits for their stakeholders, including their followers. It is vital for leaders to consider the needs of their followers alongside the requirements of their organization to keep both flourishing. This can be done easily through establishing open and sincere channels of communication that respect the organization and followers' needs and goals. This approach helps to develop the followers' respect, trust, and values (Bass, 1990b).

### 2.2 Inspirational Motivation

Inspiration is most often derived from leaders, but it is not a uni-dimensional direction-it is a two-way relationship. Leaders can inspire their followers either through their communication ability or by using efficiently the organizational means to motivate employees to accomplish the vision, mission, and goals of the organization. Employees are encouraged and rise above their self-interests and surpass expectations when their leaders show charismatic and emotional appeals with the ability to change/transform the followers. Leaders can achieve this by employing easy, straight-forward words, slogans, and symbols (Bass, 1990a).

Leaders who inspire employees are able to challenge them to produce results, underscore their significance to the organization, and drive them to recognize themselves within the goals of the organization. These leaders are able

to develop team spirit, zeal, hopefulness, and confidence in the workplace rather than introducing competitiveness.

## 2.3 Intellectual Stimulation

Intellectual stimulation is defined as encouraging and modifying followers' problem alertness, problem resolution, concept, and imagination (Bass, 1985), as well as their attitudes, viewpoints, and standards. Intellectual stimulation includes the processes of identifying the problem, reviewing the circumstances, developing goals, and executing a vision while stimulating creative approaches and innovative solutions. Of course, all of these tasks must be accomplished without fear that the leader will retaliate or punish employees for miscalculations (Bass & Riggio, 2006).

Leaders push their followers to defy the status-quo and self-assumptions, when suitable, to eliminate obstructions to self-development, work innovation, and personal enlightenment. Employees appreciate leaders who provide support for their enlightenment and progress. Hellriegel and Slocum (2009) provided a very strong and direct definition of transformational leadership that fits comfortably with intellectual stimulation because it drives the point directly to the need for leaders and followers to learn and improve their awareness and understanding to improve and accomplish the organization's vision, mission, and goals.

## 2.4 Individualized Consideration

Individual consideration is the capacity of the leader to show admiration for the follower while understanding, improving, and utilizing the follower's skills. Individual consideration encourages mutual improvement through work and learning. While mentoring the follower, the leader should provide guidance for his or her employees with their personal problems. This is important in order to establish a bond between the leader and employees because employees must feel as though the leader cares about them and their well-being. Leaders can delegate challenging work and enhance tasks to underline their followers' development (Bass, 1985).

Many scholars and researchers have underlined that transformational leadership increases employees' organizational commitment (Bass, 1985; Burns, 1978; Yammarino & Bass, 1990), which leads to enhanced work effectiveness (Balfour & Wechsler, 1996; Romzek, 1990). Most experts would agree with Hellriegel and Slocum (2009) that transformational leadership is necessary in organizations regardless of size. The skills are necessary at all levels. Today's organizations need managers who have vision, confidence, and determination to move these organizations forward.

Bass and Avolio (2000) argued that the most important behavior of the transformational leader was to articulate a vision that centers on goal achievement while structuring followers' self-confidence. This is a nucleus component of general leadership. The leader should explain what is taking place and what needs to be achieved while communicating a vision to rally his or her followers, supplying purpose, direction, and motivation (Goodman & Zimmerman, 2000). Furthermore, leaders should trust their employees to accomplish their tasks with greater autonomy, enhance personal duty, and keep improving their skills to foster and accomplish the objectives of the leader. Both move the other to a higher level of motivation and morality (Gerber, 2002).

## 2.5 Organizational Commitment

Employee commitment is necessary to accomplish the vision, mission, and goals of an organization, and employees need resources, technology, and marketing in order to succeed. Leaders and committed employees are the core of the process and journey of success. It takes much effort and wisdom to reach the level of having committed employees, though the rewards are certainly worth the expenditures.

It is vital to distinguish between employing the human capital approach, which focuses on establishing the necessary environment that encourages followers' development, personal progress, and skill improvement to enhance employee productivity (Ramlall, 2004), and establishing employee commitment, which focuses on touching a few materialistic needs but touching more on values such as respect, justice, caring, loyalty, and trust.

The affection felt by employees toward an organization and their willingness to work to fulfill the mission of the organization are regularly understood as organizational commitment. The foundation of an organization is the individuals' shared beliefs in the organization's values, vision, mission, and goals (Mowday, Porter & Steers, 1982). Although organizational commitment is clearly understood, different viewpoints produce different definitions of organizational commitment. Nonetheless, most researchers identify loyalty as being vital for organizational commitment (Price & Mueller, 1986). Buchanan (1974) referred to commitment as "a partisan effective attachment to the goals and values of an organization, to one's role in relation to the goals and values, and to the organization for its own sake, apart from its purely instrumental worth" (p. 534). Organizational commitment has been defined as the "relative strength of an individual's identification with and involvement in a

particular organization" (Mowday et al., 1982, p. 27). Meyer and Allen (1991) defined organizational commitment through the comparison between one's values and goals to the organization's values and goals. In other words, this is the force that binds everyone together (Meyer & Herscovitch, 2001). The impact of organizational commitment is a well-documented and accepted construct (Meyer & Herscovitch, 2001)

## 2.6 Leadership and Organizational Commitment

Modern leadership theories have shown that leadership skills can be attained through special and appropriate training (Bass, 1998; Blake & Mouton, 1964; Fiedler, 1964). Leadership is a necessary mechanism to accomplish progress in all fields of life. Public, private, and non-profit sectors cannot survive without smart and able leaders. This is very important for management and leaders because followers will judge leaders based on their past actions. Therefore, consistency and credibility are significant traits in any leader who wants his or her followers to march with him or her. This means employee loyalty and commitment depend on the leader and his or her ability to understand the value of consistency and credibility. If a leader's failures seem to form a pattern, the effects will lead to a loss of faith in his or her future effectiveness (Neustadt, 1990). Consequently, a lack of credibility leads to the lack of ability to influence and persuade others in the future. This means a high possibility of failure in the future.

Kark et al. (2003) found that when the trust of the followers increases in their leader, their commitment enhances with regard to the organizational mission.

Researchers collected data from tellers and clerks in Kenya and the United States. Results suggested that transformational leadership and organizational commitment were positively correlated (Walumbwa et al., 2004). Walumbwa et al. showed that transformational leadership had a significant direct association to organizational commitment. Moreover, the results of the study suggested that employee satisfaction is correlated with supervisor leadership styles and satisfaction with general work conditions (Walumbwa et al., 2004).

Literature has shown the strength and usefulness of the transformational leadership style. Bass and Avolio (2000) suggested that transformational leadership positively correlates with professional attitudes and conduct, including organizational commitment, job satisfaction, job performance, reduced turnover, and trust. Furthermore, studies have shown that the transformational leadership style has more productive results and potential than the transactional leadership style. Numerous studies have revealed that there is a stronger relationship to effectiveness outcomes from leaders who demonstrate transformational behaviors in contrast to those who demonstrate transactional behaviors (Seltzer & Bass, 1990). More support for this theme comes from other studies by Humphreys (2002); Rubenstein (2005) and Wood (2005).

In another study that showed the power of the transformational leadership style, Jung (2001) studied the effect of leadership (i.e., transformational and transactional leadership between real and nominal groups) on individuals and teams using business undergraduates. This study found that the transformational leadership style supported higher levels of creativity, accordingly allowing followers to concentrate on the intrinsic motivation and satisfaction that they draw from the performance of their duties (Jung, 2001).

The transactional leadership style also has gained noticeable support through many studies and results. Brymer and Gray (2006) argued that transactional leadership is associated with organizational effectiveness and employee success. Aarons (2006) found that followers who had leaders who applied transactional leadership were positively associated with openness and requirements and adopted evidence-based practices. Bass et al. (1987) showed that transactional leadership provides effective results in both performance and satisfaction outcomes, particularly in highly structured organizations. They found that contingent reward showed a positive relationship with effective performance (Waldman et al., 1987). Bass (1990b) echoed this result by showing that contingent reward is a universally-accepted approach to motivate followers. Avolio et al. (1999) re-examined transformational and transactional leadership using the MLQ (Form 5X) and found that contingent reward "may be the basis for structuring development expectations, as well as building trust, because of a consistent honoring of contracts over time" (p. 458).

Results of many studies indicate that transformational leadership affects employees' job satisfaction, group and organizational performance, employee motivation, and the rating of leadership effectiveness (Nelson & Quick, 2009). Bass and Avolio (2000) mentioned that many studies showed that when followers work with transformational leaders, followers tend to enhance organizational involvement, show greater satisfaction, enhance motivation, and improve commitment to their organizations.

One of the most significant areas of stability in organizations, whether in the private, public, or non-profit sector, is called organizational commitment, or the level or degree of employees' commitment. This commitment is the

cornerstone of survival, stability, and progress in all types of organizations.

*2.7 Affective Commitment*

This is an emotional commitment based on the strong desire of an individual to remain in an organization. Affective commitment happens when a worker remains loyal to an organization based on emotional reasons. Normally, this kind of emotional connection takes place when an employee feels that his or her emotional needs are being met through the positive work environment. Affective commitment is a major indicator of how an employee feels about the work environment. Organizational dependability and leadership competency are two very important factors that make an employee feel comfortable and part of the organization (Allen & Meyer, 1990; Meyer & Allen, 1991). These factors create an environment where an employee establishes an emotional attachment to the organization (Meyer & Allen, 1991). According to Nelson and Quick (2009), an affective (emotional) commitment comprises three factors: when an employee shares the belief in the same vision and mission of the organization; when the employee is ready to invest effort to represent the organization; and when the employee has the desire to remain a member of the organization.

*2.8 Continuance Commitment*

This type of commitment occurs when an individual recognizes that he or she cannot afford the expected high costs associated with leaving the organization. Continuance commitment occurs when an employee worries about the potential loss of benefits or other advantages established by the organization (Allen & Meyer, 1990). Meyer and Allen (1991) argued that a relationship exists between continuance commitment and followers' on-the-job commitment since mutual interest is accomplished for the organization and employee. Therefore, employee commitment is increased because of the benefits that the organization provides.

Other theorists have presented a very grim understanding of this kind of commitment. They believe that these benefits have little significance when it comes to job performance. Employees who have a strong continuance commitment often have little emotional commitment to contribute to the organization's vision because their reason to keep this level of loyalty to the organization is to keep their benefits. The result of this kind of loyalty and commitment is that the worker starts to feel bitter and ensnared by the organization. Therefore, the employee's behavior can becomes disloyal, unproductive, and unresponsive to the organization's goals (Meyer & Allen, 1997).

Individualism and collectivism have been found to relate to job attitudes, including organizational commitment (Wasti, 2000) and job satisfaction (Hui, Yee, & Eastman, 1995). With respect to the former, Wasti (2000) argued that present conceptualizations of commitment are laden with individualistic elements in that they focus on cold computation of expenses and benefits. By contrast, she argued that in Turkey, a collectivist culture, continuance commitment would be laden with cultural expectations of loyalty toward the organization. In support of these notions, she found that Turkish employees' continuance commitment was predicted by generalized norms for loyalty and the endorsement of in-group members for staying in the organization. These finding were also replicated when examining individual-level attributes of individualism and collectivism as predictors. For individuals high on allocentrism, norms, for loyalty increased continuance commitment, whereas this relationship did not exist for individuals low in allocentrism. Thus, the nature of organizational commitment appears to take on different elements in individualistic and collectivist cultures (House et al., 2004, P. 456).

*2.9 Normative Commitment*

This type of commitment occurs when an individual feels that he or she has an obligation to remain with an organization (George & Jones, 2008, Hellriegel & Slocum, 2009; Nelson & Quick, 2009). Through socialization in the organization, workers have understood and realized that their leaders expect their loyalty to the organization (Allen & Meyer, 1990; Meyer & Allen, 1991). Normative commitment can be fostered by benefits with value to employees that help build a sense of obligation (Johns & Saks, 2001).

**3. Methodology**

This study looked at the influence of the perceived transformational leadership style on the commitment of the employees at RJA. It used a cross-sectional approach to collect data. Perceived transformational leadership style was measured using the transformational leadership portion of the leadership scale MLQ 5X Short (Avolio & Bass, 2004). The researcher used the TCM to measure employee commitment (Allen & Meyer, 1990).

The aim of this study was to examine, understood, and explained the influence of the transformational leadership style (independent variable) on employee affective, continuance, and normative commitment (dependent variables).

*3.1 Research Design*

This section focuses on establishing the necessary statistical techniques used and providing reasonable theoretical and practical justification for their use. Since there was one independent variable and several dependent variables, a multivariate analysis of variance (MANOVA) was used in this study. The main criterion of a research design focuses on whether the design reacts to the research questions or sufficiently tests the hypotheses. Answering these questions required discussing validity, reliability, and selection of the population, which are all necessary to produce a sound study.

The validity of MANOVA can be established using constructed validity, which asks whether the instrument measures what it is intended to measure. Internal validity focuses on the extent to which an experiment can rule out alternative explanations of the results (Campbell & Stanley, 1966). Campbell and Stanley (1966) underscored the significance of internal validity because they did not support sacrificing and jeopardizing internal validity in order to increase external validity. Moreover, researchers should not seek a minimal gain for a considerable loss (Campbell & Stanley, 1966).

*3.2 Sample*

The study's population consisted of approximately 375 employees who work as senior officers in various departments in RJA. A non-probability sampling approach that was based on purposive sampling was employed to select participants who are not supervisors or directors. The director of Human Resources has agreed through an official letter to assist in distributing the related surveys to potential participants through email.

Predicting the optimum sample size needed to achieve statistical significance and minimize the error in the sample means was the goal of the selection process (Black, 2005; Creswell, 2009). According to Black (2005), a sample should comprise at least 10% of the total population. Another factor that must be taken into consideration is that the sample size determines the validity of the results (Black, 2005; Creswell, 2009). In other words, the population identified the sampling technique and the size of the sampling determined the generalizability of the population. The sample and the relationship of the variables are less likely to be biased if the study has a high participation rate from a population (Creswell, 2009). The original sample consists of 100 respondents, who completed the survey, but after checking the outliers by using the Mahalanobis distance statistical procedure, the outliers impacted the equality of covariance matrices, so the researcher deleted these outliers from the sample, then the sample size became 66 respondents.

*3.3 Instrumentation*

To facilitate the collection of data and ensure smooth delivery of the surveys, this research study used Free Online Surveys, a web-based service that allowed users to generate and distribute surveys online.

*3.4 Three-Component Model of Commitment (TCM)*

The Three-Component Model of Commitment (TCM; Meyer & Allen, 1991) uses a series of measurement scales that are based on a 7-point scale (See Appendix A). According to Hoffman (2002) and Pittenger (2001), the TCM instrument has been reviewed and validated. The item-scale correlates with positive and negative items that are divided into three parts: affective commitment, continuous commitment, and normative commitment (Meyer & Allen, 2004).

Table 1 describes the reliability values for the coefficient alpha of TCM.

Table 1. Reliability value of the TCM scales (Alpha coefficient)

| Affective Commitment Scale | Continuance Commitment Scale | Normative Commitment Scale | Researchers |
|---|---|---|---|
| .87 | 0.75 | .79 | Allen & Meyer, 1990 |
| 0.74 - .87 | .73-.81 | .67 - .78 | Dunham, Grube, & Castaneda, 1994 |
| 0.86 | .79 | .73 | Bycio et al.,1995 |
| .79 | .69 | .65 | Cohen, 1996 |
| .85 | .79 | .73 | Meyer & Allen, 1997 |
| *Reliability Value of the TCM Scales (Alpha coefficient)* | | | |
| Affective Commitment Scale | Continuance Commitment Scale | Normative Commitment Scale | Researchers |
| .82 | .73 | .76 | Meyer, Stanley, Herscovitch, & Topolynytsky, 2002 |
| .91 | .87 | .90 | Herscovitch & Meyer, 2002 |

*Note.* Adapted from Meyer & Allen (2004).

Results of the above studies support the construct validity among the three dimensions of organizational commitment (Allen & Meyer, 1996; Bycio et al., 1995; Dunham et al., 1994; Herscovitch & Meyer, 2002; Meyer & Allen, 1997).

It should be noted that in the TCM survey some of the items in the commitment scales have been worded such that strong agreement actually reflected a lower level of commitment (these questions are indicated with an "R"). This was done to encourage respondents to think about each statement carefully rather than mindlessly adapting a pattern of agreeing or disagreeing with the statements. Because these questions operated in the opposite direction of employee commitment, the designers of the survey suggested that researchers recoded the responses so the response directions for these reverse-keyed questions concurred with the remainder of the survey for data analysis. This was done using the RECODE command in SPSS.

*3.5 MLQ 5X Short Questionnaire*

The researcher distributed the transformational leadership style questions that are part of the total MLQ survey (See Appendix B). The Transformational scales include: Idealized Influence (attributed), Idealized Influence (behavior), Inspirational Motivation, Intellectual Stimulation, and Individual Consideration.

Repeated studies have indicated that the MLQ survey was a valid method of measurement for leadership perception. The average coefficients range from .74 to .94 (Avolio & Bass, 2004). The Cronbach's alpha for the overall transformation leadership scale is .89 (Avolio & Bass, 1995).

Reliability values for the MLQ were obtained by using Cronbach's alpha. Researchers' used Cronbach's alpha to measure internal consistency, or how closely related a set of items are as a group. A researcher uses a "high" value of alpha as proof that the items calculate an underlying construct. Nevertheless, a high value of alpha should not mean that the measure is uni-dimensional. It is important to keep in mind that Cronbach's alpha is not a statistical test – it is a coefficient of reliability (or consistency). Reliability will always range between 0 and 1. The value of reliability estimate shows the percentage of variability in the measure that was derived from the true score. A reliability of .6 means that that almost 60% of the variance of the observed score is derived from the truth and 40 % is derived from the error. Table 2 shows the reliability scores for each of the Transformational scales of the MLQ.

Table 2. Total MLQ reliability scores

| Leadership Dimension | Reliability Score |
|---|---|
| Idealized Influence (IA) | .86 |
| Idealized Influence (IB) | .87 |
| Inspirational Motivation (IM) | .91 |
| Intellectual Stimulation (IS) | .90 |
| Individualized Consideration (IC) | .90 |

*Note*. Adapted from Avolio & Bass, (2004).

*3.6 Statistical Analysis*

MANOVA is designed to deal with only one independent variable and compares multiple dependent variables between independent groups. A MANOVA has similar properties to an ANOVA. The single distinction is that an ANOVA focuses on a 1 x 1 mean vector for any group while a MANOVA focuses on a p x 1 vector for any group, with p representing the number of dependent variables. In this study, there would be three dependent variables.

Having established the justification of the employment of MANOVA, it is necessary to mention the characteristics of MANOVA.

When a researcher has several correlated dependent variables, MANOVA is used because it enables researchers to carry out one statistical test rather than multiple single tests. In other words, MANOVA allows the researcher to measure multiple dependent variables, while ANOVA can measure only one dependent variable. The ability of MANOVA to allow measuring the effects of an independent variable on multiple dependent variables is valuable because the researcher can compare the effects of the independent variable in different settings.

MANOVA is often used to detect differences in the average values of the dependent variables between the different levels of the independent variable.

The usage of MANOVA improves the chance of finding an effect that an independent variable has on multiple dependent variables. MANOVA allows the researcher to determine whether the independent variable has a significant influence on one of the dependent variables, but not the others.

A researcher can execute post hoc comparisons to determine which values of a factor add heavily to the explanation of the dependent variables.

While an ANOVA focuses on testing whether the means for two or more groups are gathered from the identical sampling distribution, MANOVA focuses on testing whether the vectors of means for the two or more groups are gathered from the identical sampling distribution.

MANOVA can be used to construct composite variables that maximize group differences. Here, the focus is on creating a linear combination of dependent variables.

In MANOVA, "the goal is to maximally discriminate between two or more distinct groups on a linear combination of quantitative variables" (Grice & Iwasaki, 2007, p. 199).

### 3.5 Preliminary Analysis and Assumptions Checks

The selection of the MANOVA was based upon comparison of the means of the affective, continuance, and normative commitment. Before conducting the MANOVA, a preliminary analysis was conducted to check for multivariate outliers, linearity, normality, and the homogeneity of covariances. One of the basic assumptions of the MANOVA is the homogeneity of covariances. The researcher used **Box's Test of Equality of Covariance Matrices** (Box M test) to test this assumption. The Box M test statistic was 45.212 with a p value of **.274, which exceeds** .05 so the assumption of homogeneity of covariances was achieved, not violated.

Table 3. *Box's test of equality of covariance matrices*

| Box's M | 45.212 |
|---|---|
| F | 1.159 |
| df1 | 24 |
| df2 | 652.626 |
| P- value (Sig.) | .274 |

The Kolmogorov-Smirnov (K-S) Test serves to examine the assumption of normality for each of the variables from the TCM Survey. If the *p*-value is greater than .05, then the variable follows the normal distribution. Results in Table 8 of normality test show that all the variables were normally distributed as shown in the last column, the p values are 0.19, 0.77, 0.906, and 0.60 respectively for affective, continuance, normative, and transformational. Each of these p values exceeds 0.05, which indicated that the variables are normally distributed.

Table 4. One-Sample Kolmogorov-Smirnov test (K-S)

| | | Normal Parameters[a][b] | | Most Extreme Differences | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | N | Mean | Std. Deviation | Absolute | Positive | Negative | K-S Test | Asymp. Sig. (2-tailed) | |
| Affective | 66 | 5.0530 | 1.09216 | .133 | .052 | -.133 | 1.082 | .193 | |
| Continues | 66 | 4.8447 | 1.05408 | .081 | .076 | -.081 | .661 | .774 | |
| Normative | 66 | 4.7424 | .82096 | .070 | .044 | -.070 | .566 | .906 | |
| Transform. | 66 | 3.6667 | .61690 | .094 | .065 | -.094 | .766 | .600 | |

*Notes.* [a] Test distribution in normal. [b] Calculated from data.

### 3.6 Linearity Assumption

To check the linearity assumption, the researcher prepared a scatter plot for the independent variable and the dependent variables (affective, continuance, and normative commitments). Figure 1 shows the scatter points around the linear line, which indicates linearity and satisfying the linearity assumption.
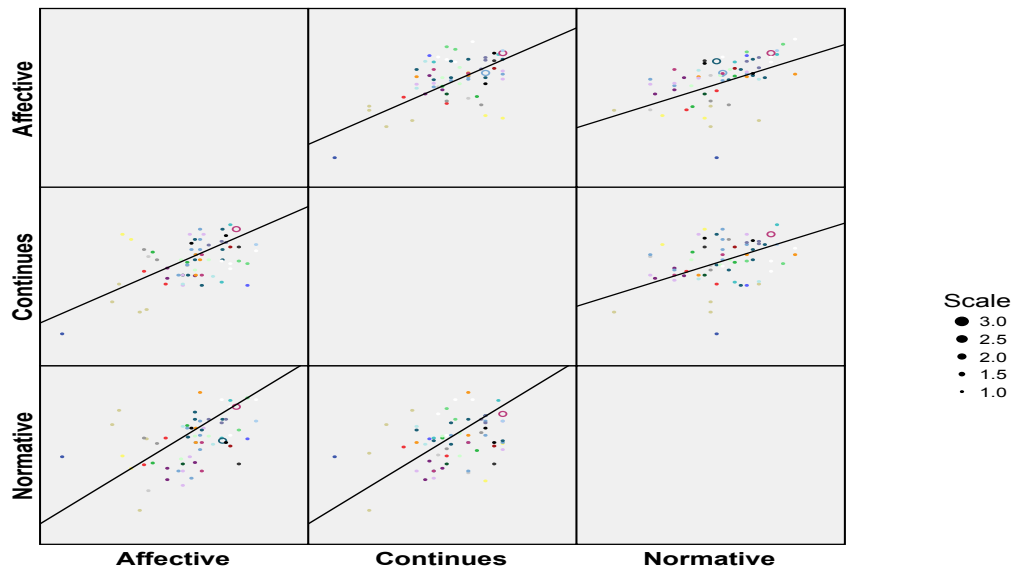
Figure 1. A scatter plot shows the linearity assumption

### 3.7 Outliers

Regarding the MANOVA assumption, the Box M test was statistically significant in the first run of data. After checking for outliers by using the Mahalanobis distance statistical procedure, the outliers impacted the equality of covariance matrices, so the researcher deleted these outliers from the sample. After removing these outliers, the Box M test showed no significance and as a result, the sample size became 66 from the original 100. The p value in the Box M test was originally .002, and after removing the outliers, the p value became 0.274.

### 3.8 Inferential Results

The research question was "Is the commitment of employees at Royal Jordanian Airlines influenced by the perceived transformational leadership style of their leaders?"

The corresponding null hypothesis from the research question was as follows:

$H_0$: There is not a statistically significant difference between the commitment of employees at Royal Jordanian Airlines influenced by the perceived transformational leadership style of their leaders.

The affective, continuance, and normative commitments consider the dependent variables, while the transformational leadership style considers the independent variable in this study. Preliminary assumption testing was conducted to check for normality, linearity, outliers, homogeneity of covariances, and multicollinearity, with violations noted. Table 9 summarizes the results of the MANOVA.

To determine whether the one-way MANOVA was statistically significant, the researcher looked at the p values, which reflect the results of the null hypothesis. Results in Table 5 show the p values of .000 for each style of leadership. Therefore, the employees' commitment is significantly dependent on the transformational leadership style of the organization since $p < .05$.

Table 5. Multivariate tests(c)

| Effect | | Value | F | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|---|
| Intercept | Pillai's Trace | .995 | 2358.049(a) | 3.000 | 39.000 | .000 | .995 |
| | Wilks's Lambda | .005 | 2358.049(a) | 3.000 | 39.000 | .000 | .995 |
| | Hotelling's Trace | 181.388 | 2358.049(a) | 3.000 | 39.000 | .000 | .995 |
| | Roy's Largest Root | 181.388 | 2358.049(a) | 3.000 | 39.000 | .000 | .995 |
| Transformational | Pillai's Trace | 1.820 | 2.633 | 72.000 | 123.000 | .000 | .607 |
| | Wilks's Lambda | .025 | 3.985 | 72.000 | 117.413 | .000 | .708 |
| | Hotelling's Trace | 11.403 | 5.965 | 72.000 | 113.000 | .000 | .792 |
| | Roy's Largest Root | 9.084 | 15.519(b) | 24.000 | 41.000 | .000 | .901 |

*Notes.* [a.] Exact statistic; [b.] The statistic is an upper bound on F that yields a lower bound on the significance level; [c.] Design: Intercept+Transformational.

The noncentrality index was used to compute the power level, which had to be .80 or greater in order to accept with confidence that the result does not produce the chance of Type II error to be existed. The results show that the power level is 100, which indicates that there is no chance for Type II error to occur.

To determine the effects of the independent variable on the dependent variable, the researcher used the Analysis of Variance (ANOVA), or more specifically, the **tests of between-subjects effects**. The results of the ANOVAs for the dependent variables of this study are presented in Table 10.

Table 6. Tests of between-subjects effects

| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|---|---|---|---|---|---|---|---|
| Corrected Model | Affective | 69.824(a) | 24 | 2.909 | 15.473 | .000 | .901 |
| | Continuance | 48.243(b) | 24 | 2.010 | 3.437 | .000 | .668 |
| | Normative | 20.134(c) | 24 | .839 | 1.453 | .143 | .460 |
| Intercept | Affective | 1209.977 | 1 | 1209.977 | 6435.150 | .000 | .994 |
| | Continuance | 1112.500 | 1 | 1112.500 | 1902.261 | .000 | .979 |
| | Normative | 1080.260 | 1 | 1080.260 | 1870.804 | .000 | .979 |
| Transformational | Affective | 69.824 | 24 | 2.909 | 15.473 | .000 | .901 |
| | Continuance | 48.243 | 24 | 2.010 | 3.437 | .000 | .668 |
| | Normative | 20.134 | 24 | .839 | 1.453 | .143 | .460 |
| Error | Affective | 7.709 | 41 | .188 | | | |
| | Continuance | 23.978 | 41 | .585 | | | |
| | Normative | 23.675 | 41 | .577 | | | |
| Total | Affective | 1762.719 | 66 | | | | |
| | Continuance | 1621.313 | 66 | | | | |
| | Normative | 1528.188 | 66 | | | | |
| Corrected Total | Affective | 77.533 | 65 | | | | |
| | Continuance | 72.221 | 65 | | | | |
| | Normative | 43.809 | 65 | | | | |

*Notes.* [a] R Squared = .901 (Adjusted R Squared = .842); [b] R Squared = .668 (Adjusted R Squared = .474); [c] R Squared = .460 (Adjusted R Squared = .143).

Results in Table 6 show that the transformational leadership style has a statistically significant effect on both Average Affective Commitment (15.473) and Average Continuance Commitment (3.43), but Average Normative Commitment (1.45) is insignificant since *the p value is less than .05*. The results indicate that there is a relationship between employee commitment (affective and continuance) and the perceived transformational leadership style at Royal Jordanian Airlines.

## 4. Findings

Perceived transformational leadership style was measured using the transformational leadership portion of the leadership scale MLQ 5X Short (Avolio & Bass, 2004). The researcher used the TCM to measure employee commitment (Allen & Meyer, 1990). The hypotheses were tested using data drawn from survey instruments distributed to employees of RJA through Free Online Surveys. The data were collected and exported into SPSS. A one way multivariate analysis of variance (MANOVA) was used in this study with a significance level of α = .05 in the assessment of the relationship between the three types of employee commitment (i.e., affective, continuance, and the normative) and the transformational leadership style. Before conducting the MANOVA, a preliminary analysis carried out to test for the multivariate outliers, linearity, normality, and homogeneity of the variances. All preliminary tests have not violated their assumptions.

Results of the RJA's study show a significant relationship between the independent variable (transformational leadership style) and the dependent variables (affective, continuance, and normative commitments) as a whole. However, results show that affective and continuance commitments are significant, while normative commitment is insignificant.

Results of the RJA's study show that the transformational leadership style has a statistically significant effect on both Average Affective Commitment (15.473) and Average Continuance Commitment (3.43), but Average Normative Commitment (1.45) is insignificant since *the p value is less than .05*. The results indicate that there is a relationship between employee commitment (affective and continuance) and the perceived transformational leadership style at Royal Jordanian Airlines.

These results show that leadership in RJA has to focus on the strong areas that the workforce is satisfied with. It is clear that the affective commitment is extremely exposed and appreciated by the employees. This means that the leadership has to maintain this attitude in the future and make it a cornerstone of RJA. This emotional attachment means that employees have some comfort and feel they are part of this organization.

Simultaneously, through their focus on continuance commitment, employees have underscored their need for financial rewards and benefits. This need is derived from their low salaries and the bad economic situation in Jordan which has a very high inflation rate that makes their income insufficient. A solution for dealing with continuance commitment and reduce anxiety the fear of employees regarding the economy is to ensure the security of their jobs and increase salaries so that they are equal to the real inflation rate in the country.

The insignificant result of the normative commitment is a sign of lack of obligation among RJA employees this finding comes from their continuous fear of lack of job security and low income. Normative commitment needs much work in this organization since employees have expressed their disappointment and lack of confidence in being respected by the leadership. In order to stabilize and improve this kind of commitment, RJA leadership should train managers to ensure employees that this organization is responsible for their job security which will benefit all parties. This will increase employees' obligation to the organization and will result in a committed workforce it is important to underscore that there is an important difference between feeling part of the organization and have an obligation to the organization.

## 5. Conclusion

The current study showed a positive relationship between employee commitment (affective and continuance dimensions) and the perceived transformational leadership style dimensions at Royal Jordanian Airlines. The transformational leadership style has positive impact on the affective and continuance dimensions of employee commitment. The increase in the level of transformational leadership contributes to an increase in the level of employee commitment in the affective and continuance commitment dimensions.

The results of the study confirmed what was found in prior studies. Some studies in the literature indicated that there is a relationship between dimensions of transformational leadership and affective commitment; when tested, researchers found that the highest relationship existed with the charisma dimension of leadership and affective commitment. Moreover, the RJA's research supports prior research results, particularly with affective commitment, which has shown the same results as previous research results. In addition, this result supports Bass and Avolio (2000) who suggested that transformational leadership positively correlates with professional

attitudes and conduct, including organizational commitment, job satisfaction, job performance, reduced turnover, and trust.

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