

Leadership and its relationship with outcome variables in a plastic packaging manufacturing company

Liderazgo y su relación con las variables de resultado en una empresa productora de envases de plástico

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Abstract

The objective of this research work was to identify leadership styles in middle management and directors of a company producing plastic packaging, based on the MLQ Model of Bass and Avolio, in order to establish its relationship with the outcome variables. The instrument was applied to a sample of $n = 236$ workers. The Cronbach's alpha = 0.828, allowed to validate and to trust the instrument. The results show that in the transformational style, the scale where higher score was obtained is in intellectual stimulation and less psychological tolerance; in the transactional, the highest score is in contingent reward and the lowest is in passive administration exception. The overall perception, according to the scale of Likert, the prevailing leadership scales denotes that transformational is presented the most, which is usually exercised. Regarding the outcome variables, a tie is presented in orientation to extra effort and effectiveness. The transformational style and Laissez Faire significantly influence the outcome variables, which does not occur with the transactional. Regarding to the perception "seen by oneself" of executives and middle managers and "seen by others" of subordinate staff, it was reaffirmed that there are significant differences in perceptions for leadership styles as for the outcome variables. Finally, it was confirmed that the scales of transformational leadership, obtaining higher index of correlation with the outcome variables in comparison with to other styles.

Lidership, Outcome variables, Correlation

Resumen

El objetivo de la presente investigación fue identificar los estilos de liderazgo en los mandos medios y directivos de una empresa productora de envases de plástico, con base en el Modelo MLQ de Bass y Avolio, con el fin de establecer su relación con las variables de resultado. El instrumento se aplicó a una muestra de $n=236$ trabajadores. El Alfa de Cronbach=0.828, permitió validar y confiabilizar el instrumento. Los resultados muestran, que en el estilo transformacional, la escala donde se obtuvo mayor puntaje es estimulación intelectual y la menor, tolerancia psicológica; en el transaccional, la de mayor puntuación es premio contingente y la de menor, es administración por excepción pasivo. La percepción global, de acuerdo con la escala de Likert, indica que predominan las escalas transformacionales, ejercidas normalmente. Respecto a las variables de resultado, se presenta igualdad en la orientación al esfuerzo extra y efectividad. El estilo transformacional y Laissez Faire influyen significativamente en las variables de resultado, no así el transaccional. En relación con la percepción "visto por uno mismo" de directivos y mandos medios y "visto por los demás" del personal subordinado, se reafirmó que existen diferencias significativas en las percepciones tanto para los estilos de liderazgo, como las variables de resultado. Finalmente se confirmó que las escalas del liderazgo transformacional, obtienen mayor índice de correlación con las variables de resultado en comparación con los otros estilos.

Liderazgo, Variables de resultado, Correlación

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Introduction

Nowadays, leadership has become another competitiveness tool for organizations, which have been forced to worry not only about the sales or production of a good or service, but also about the way in which they manage their personnel, since this will influence their success or failure and therefore their competitiveness.

Leadership style is of great importance for organizations (Daft, 2000; Lussier and Achua, 2005; Gómez, 2008; Mendoza et al., 2008; Mendoza et al., 2007; Mendoza and Torres, 2006) as it implies the way in which the leader directs and inspires collaborators to achieve the defined organizational objectives (Madrigal, 2000).

Although leadership has been studied in diverse and broad theoretical spectrums, and in different disciplines, several investigations have concluded that the most recently studied leadership styles are transactional leadership, transformational leadership and Laissez Faire or No leadership.

One of the most widely used models in various research studies is the transformational leadership model of Bass and Avolio (1994) adapted by Mendoza (2005), which has served as a useful tool to show the direct impact of the type of leadership in the organization (Mendoza et al., 2012; Contreras and Barbosa, 2012; Nader and Castro, 2007). These studies have proven that the transformational type of leadership is more effective than the others, since they are oriented to stimulate performance beyond ordinary expectations, transmit a sense of mission, stimulate learning experiences, awaken new ways of thinking, and motivate followers to do more than originally expected.

Transformational leaders have a positive impact on satisfaction, strongly influencing the organizational climate (Korkmaz, 2007), acting as a balance that promotes exchange and elevates ideas, which motivates followers to transcend their own interests and develop goals for the common good, in addition to promoting empowerment, which is obtained through participative leadership where decision making is shared (Anderson and Herr, 2007).

Based on the above and through the realization of considerable empirical studies on the subject of leadership, the need for leaders who become more transformational and less transactional arises as a result of such research if they seek to maintain effectiveness in organizations (Mendoza et al. 2007).

In this regard, the present research was developed in a plastic packaging manufacturing company located in the Altiplano Hidalgo, which arises as a result of the results of the report on Training Needs Detection (DNC), conducted the previous year, which shows deficiencies in the exercise of leadership, by managers and middle managers, who have staff under their charge. This has direct repercussions on the company's internal result variables such as satisfaction, which is related to the fact of generating well-being, pleasure and pleasure in work for both managers and subordinates; extra effort, which refers to the positive impact that orients the members of a company to give more than what is established; and finally, effectiveness, which defines the fulfillment of objectives and the optimization of resources.

As can be seen, the aspects described above are of great importance for the company, but it is also essential to emphasize that externally.

It is a generator of employment, not only regionally, but also nationally, besides being recognized in numerous production centers throughout the country and having a diversity of customers and markets, so the exercise of an effective leadership style will undoubtedly influence the aspects of satisfaction, effort, extra and effectiveness and therefore in the achievement of objectives and business competitiveness.

Derived from the above, the objective of this research was to identify the leadership styles in the middle and top management of this company, based on the MLQ Model of Bass and Avolio, in order to establish the relationship of leadership styles with the outcome variables (satisfaction, extra effort and effectiveness).

The specific objectives were:

1. To determine the leadership style exercised by middle managers and managers and the outcome variable with the highest mean score.
2. To identify the two most predominant scales in each leadership style.
3. To show the impact of leadership style on the outcome variables (satisfaction, extra effort and effectiveness).
4. To compare the difference in the perception of leadership and orientation towards outcome variables among middle managers, managers and subordinate personnel.

The hypotheses proposed for this research are:

H1: Transformational leadership scales score higher than transactional and Laissez Faire scales.

H2: The outcome variable that obtains the highest mean score is satisfaction.

H3: Transformational, transactional and Laissez Faire leadership styles significantly influence the outcome variables.

H4: There are significant differences in the perception of leadership styles among middle managers, managers and subordinate staff.

H5: There are significant differences in the perception of orientation towards outcome variables between middle and managerial managers and subordinate staff.

H6: Transformational leadership scales have a higher correlation with outcome variables than transactional or Laissez Faire scales.

Literature review

Leadership is defined as the process through which assertive communication that facilitates teamwork and the construction of a social dynamic characterized by understanding, a sense of helpfulness, commitment to the task and motivation towards the achievement of goals is emphasized (Gonzales and Gonzales, 2014).

It is considered as the ability exercised to influence people in such a way that they become consciously and committedly involved in achieving the objectives of a group (Aguirre et al., 2011; Sun and Leithwood, 2013; Ganga and Navarrete, 2014). The execution of an adequate leadership in the business environment is transcendental since the achievement of the same depends on it (Contreras and Barbosa, 2013).

In the administrative process, leadership is one of the most widely researched variables (Aldape et al., 2011) because it can be a competitive advantage for organizations by empowering followers with their capabilities (Mendoza et al., 2012).

Leadership styles

Among contemporary theories on leadership, transformational leadership stands out, coined by Burns in 1978, who proposed the conceptual bases of transactional and transformational leadership.

Transactional leadership involves an exchange of relationships between leaders and followers. Transformational leadership, on the other hand, involves motivating followers to achieve superior performance (Mendoza et al., 2012).

Transformational leadership

This style focuses on raising followers' interest, the development of self-awareness and acceptance of the organizational mission, and going beyond their self-interests, in the interest of the group's well-being (Ganga and Navarrete, 2014; Mendoza et al., 2012; Aguirre et al., 2011; Mendoza et al., 2008; Mendoza and Torres, 2006).

Transformational leaders broaden and elevate the interests of followers, generate knowledge and acceptance among followers in the purposes and mission of the group, as well as motivate them to go beyond for the welfare of the group, one of its fundamental characteristics is to promote the development of competencies in the organization (Contreras and Barbosa, 2013).

This style is capable of igniting the enthusiasm of the followers, making their interest go beyond obtaining an individual gain or their own profit for the benefit of a shared vision of the group, even introducing important modifications at the level of the hierarchy of needs and priorities of the follower, in addition to triggering substantial processes of change in the values, attitudes and beliefs of their followers, acquiring an enormous potential in their abilities to achieve an exceptional increase in their performance and in the real achievement of joint objectives, while giving the group an authentic sense of belonging and identity, developed on the basis of identification with the ideals of the group and the establishment of strong emotional ties between the members of the group and their leader (Espinoza, 2011).

As discussed above, the transformational leadership style, and not the transactional one, has an impact on flexibility and value congruence. Accordingly, in order to achieve better decisions, it is preferable for small and medium-sized companies to have transformational leaders; that is, it is advisable that the leader of the top management team communicates and shares the mission and vision with his followers, that the leader generates enthusiasm and adhesion among his followers, and that the leader is capable of generating a long-term vision that reconciles the interests of the organization with the interests of the team members (Rodriguez, 2007).

According to the Bass and Avolio Model (1997), it presents six transformational scales.

Idealized attribute influence. They distinguish the personal attributes of the leader's charisma, which make him/her respected.

Influence idealized behavior. Promotes a deep identification with his followers. Establishes high standards of moral and ethical conduct.

Motivational inspiration. The degree to which the leader energizes followers by providing a vision of the future, goals and purpose. Communicates high expectations, uses symbols to focus efforts, expresses important purposes with great simplicity.

Intellectual stimulation. Signals the leader's actions, awakening a new way of conceiving problems, thoughts and imagination, and a recognition of the followers' new beliefs and values.

Individual consideration. Advises and provides personalized support and feedback on performance so that each member accepts, understands and improves.

Psychological tolerance. The use of the leader's sense of humor allows resolving conflictive situations in aspects of human relationships.

Transactional leadership

Considers that there is an exchange of relationships between the leader and the followers, based on a series of transactions with a cost-benefit connotation (Mendoza et al., 2012). The general notion is that when the work and the environment of the followers do not provide the necessary motivation, direction and satisfaction; in order to be effective, the leader's behavior will compensate for these deficiencies. This style, which is capable of producing positive effects on the performance and satisfaction of subordinates, is not enough to explain why certain leaders produce radical changes in the attitudes, beliefs and values of their followers (Espinoza, 2011).

According to Bass and Avolio's (1995) model, three transactional scales are recognized.

Contingent reward. The leader identifies the needs of the followers and makes a transaction between the needs of the group and those of each person. He rewards followers for achieving specified levels of performance. The reward is dependent on the effort and performance level of achievement, being a function of the fulfillment of objectives.

Management by active exception. Controls and seeks to ensure that there are no deviations from the rules and standards, taking corrective measures. It is constantly supervising the performance of the followers.

Management by passive exception. Only appears in action when deviations and irregularities have occurred and when expected standards are not met.

Laissez Faire (Non-leadership)

This is an observed characteristic of transactional leadership. It represents the absence of transaction of any kind. The leader avoids making decisions, has no responsibility and does not use his authority. It is considered the most ineffective form of leadership and the most extreme form of passive or non-directive leadership (Aguirre et al., 2011). Normally this style has a negative correlation with the scale of leadership by active exception. Indecisive, non-committal, inhibited when needed.

Having described the leadership styles of the MLQ model and their respective scales, it is important to mention the study conducted by Mendoza et al. (2007) on the different research done over two decades.

They mention that transformational leadership is mostly related to outcome variables such as effectiveness and satisfaction, as opposed to contingent reward, while the contingent reward scale correlates more with outcome variables, as opposed to management by active exception, especially with management by passive exception. Laissez Faire leadership is almost negatively correlated with outcome variables.

Outcome variables

Leadership is related to three aspects to be considered, these are known as outcome variables. Three scales are included in the Bass and Avolio Model (1997).

Satisfaction. This is made up of the leader's actions, which provoke gratification in the work group. Followers feel very good about the leader's decisions. There is a healthy organizational climate for the good development of activities. Job satisfaction is important in any type of work, not only in terms of the desirable well-being of people wherever they work, but also in terms of productivity and quality (Chiang et al., 2014).

Extra effort. It is defined, by the leader's actions, which provoke greater participation of followers in terms of drive in their daily work. Followers are stimulated to actively participate, when the leader needs their collaboration.

Effectiveness. This is constituted by the leader's actions, which cause the followers to achieve their objectives and goals. The work teams participate together in a harmonious way to achieve the programmed goals.

Among the studies carried out to analyze the impact that transformational leadership has on the result variables (satisfaction, extra effort and effectiveness) is that of Mendoza and Torres (2006) carried out in a chemical-pharmaceutical company, who under the model of Bass and Avolio and the model of Kouzes and Posner, found that managers were oriented in terms of result variables in the following order: satisfaction, extra effort and effectiveness, and found that managers were oriented in terms of result variables in the following order: extra effort, effectiveness and satisfaction, also finding that the Bass and Avolio transformational subscales, obtained higher correlation and influence scores on outcome variables compared to the Kouzes and Posner model.

The above has been verified by Mendoza et al. (2014) who conducted a study on middle management personnel of an entertainment company, showing the influence of transformational and transactional leadership factors on outcome variables, finding significant direct correlation between leadership variables (transformational, transactional leadership) with outcome variables, and inverse correlation between all of them with non-leadership.

Similarly, Mendoza et al. (2012), when studying a public institution of higher secondary education, found that leadership styles significantly influence the satisfaction variable.

For their part, Mendoza and Ortiz (2006) point out that when subordinates generate a bond with leaders, and are motivated by a shared vision, they respond positively and therefore make a greater effort to achieve objectives.

Another study was conducted by Pedraja, Ponce and Rodriguez (2008) with the purpose of identifying the influence of leadership styles on organizational effectiveness.

The results indicate that transformational leadership is a positive and desirable style for leaders of small and medium-sized companies, as well as for managers of large companies, while transactional leadership is not a desirable style, since it negatively affects small and medium-sized companies and has no statistical significance in the case of large companies.

For their part, researchers such as López and Gallegos (2014) when analyzing leadership practices, the mediating role of collective efficacy and the effect that both variables have with teachers' job satisfaction found that school leadership practices such as: responsibility, ability and distribution of leadership explain a significant proportion of collective efficacy and teachers' job satisfaction.

In turn, Mendoza et al. (2008) during the organizational diagnosis, which they conducted in a Government Health Care System, resulted in the dominance of transformational leadership subscales in the managers investigated, obtaining higher correlation scores with organizational climate factors and outcome variables, and greater impact, in the latter, compared to the transactional ones. Managers are mainly oriented to extra effort, then to effectiveness, and finally to satisfaction.

Bass and Avolio's model

The Bass model of transformational leadership originated from the fundamental concepts of Burns in 1978, distinguishing two opposing types of leadership on a continuum, which he called: transactional and transformational.

This is conceptualized within contemporary models of organizational intervention, because it responds directly to new administrative approaches, such as: quality, organizational innovation, the need for rapid organizational change, technological innovation, creative strategic planning, and orientation towards training and organizational development processes, among others (Mendoza et al., 2006).

Measurement instrument MLQ (Adaptation to the Multifactor Leadership Questionnaire)

Based on the empirical findings, it was possible for Bass and Avolio in 1984 to operationalize their model by means of a questionnaire named M.L.Q. (Multifactor Leadership Questionnaire, currently one of the most widely used instruments to measure leadership in the organizational environment (Molero et al., 2010), both transactional leadership and transformational leadership.

Several modifications have been made to this questionnaire over the years, including the adaptation by Mendoza et al. (2008), which has been validated and standardized in the United States and other countries, in different languages and in all types of organizations, both public and private, demonstrating its reliability.

There are two versions of the same instrument, the one oriented to be answered by the boss or leader (self) and the one answered by the followers (seen by others).

The results obtained with the MLQ consistently support Bass' hypothesis: transformational leaders achieve higher performance and satisfaction from their subordinates than those leaders who use only the exchange of rewards. However, transactional leaders also achieve some positive effects, although always minor, on the satisfaction and performance of their followers (Espinoza, 2011). The leaders with the worst results are Laissez-Faire leaders.

Methodology

The following research was conducted in a plastic packaging manufacturing company located in the Altiplano Hidalgo. The total population of the company consisted of n=366 workers integrated in six functional areas, so a statistical sample was calculated with a confidence level of 95% with a 5% error, if the variability is $p=q=0.5$ and the result was 236 collaborators, of which 33 are leaders and 203 subordinates. 203 subordinates. The information from the surveys, once answered, was integrated into a database, processed and analyzed in the Statistical Package for the Social Sciences (SPSS), version 22.

Design

The research is quantitative, descriptive and correlational in scope, with a non-experimental design, with the purpose of showing the way in which the problem under study occurs.

The scope of the research is descriptive, specifying the characteristics of leadership, and the styles proposed by the model of Bass and Avolio (1994), it is also defined as a correlational research.

Because it analyzes the degree to which the leadership style influences the outcome variables.

Instrument

The measurement instrument was applied in its two versions: "seen by oneself" to the leaders made up of the company's managers and middle managers, and "seen by others" to the subordinate personnel, both surveys consisted of 52 items each, which evaluated three leadership styles and three outcome variables.

The dimensions were measured using a Likert scale as follows:

- 1 = never
- 2 = occasionally
- 3 = usually
- 4 = frequently
- 5 = always

The reliability of the instrument was determined by Cronbach's Alpha, which in the lowest dimension administration by active exception was 0.728 and in the highest 0.881 in psychological tolerance, while in the outcome variable the highest was for effectiveness with 0.869 and in general the coefficient was 0.828, which allows determining that the instrument is reliable and that the information obtained is consistent, the results are analyzed in Table 1.

Escala	Alfa de Cronbach	N elementos
Influencia Idealizada (atributos)	0.86	4
Influencia Idealizada (conducta)	0.85	4
Inspiración Motivacional	0.84	4
Estimulación Intelectual	0.82	4
Consideración Individual	0.83	4
Tolerancia Psicológica	0.88	4
Premio Contingente	0.80	4
Administración por Excepción Activo	0.73	4
Administración por Excepción Pasivo	0.78	4
<i>Laissez Faire</i>	0.79	4
Satisfacción	0.85	4
Esfuerzo Extra	0.86	4
Efectividad	0.87	4

Table 1 Reliability analysis

Variables of analysis

For the present research, the variables included in the MLQ model corresponding to leadership styles were used as independent variables and the outcome variables were used as dependent variables, as well as some sociodemographic variables necessary for processing the information.

Variables independientes
Liderazgo transformacional
1. Influencia idealizada (atributos)
2. Influencia idealizada (conducta)
3. Inspiración motivacional
4. Estimulación intelectual
5. Consideración individual
6. Tolerancia psicológica
Liderazgo transaccional
1. Premio contingente
2. Administración por excepción activo
3. Administración por excepción pasivo
Laissez Faire
1. Laissez Faire
Variables dependientes
1. Satisfacción
2. Esfuerzo extra
3. Efectividad
Variables demográficas
1. Género
2. Edad
3. Estado civil
4. Antigüedad
5. Escolaridad

Table 2 Analysis variables

Results

The total sample size consisted of n=236 workers, of which 86.0% are operational personnel and the remaining 14.0% are managers and middle managers, who are defined as leaders.

Of the total number of people surveyed, 54.2% were male and 45.8% female.

The ages were in the following order: the highest number was represented by the age range between 21 and 30 years, 36.0%; between 31-40 years, 29.2%; up to 20 years, 15.3%; from 41 to 50 years old, 11.4%; 51 to 60 years old, 7.2%; and finally, the lowest number was 61 years old or older, 0.8%.

The marital status of the respondents was identified in the following order: 41.1% were single, 39.0% were married, 11.4% were divorced, 6.8% were in a free union and finally 1.7% were widowed.

Another variable analyzed was length of service, the results were identified in the following order: 38.6% have been working between 1 and 5 years, 29.2% up to one year, 24.2% have been working between 6 and 10 years, 5.1% between 11 and 15 years, 2.1% between 16 and 20 years and finally, 0.4% have been working for more than 21 years.

Finally, the last sociodemographic variable was the schooling of the respondents, with the highest percentage concentrated in high school education, 39.0%; secondary education, 34.3%; higher education (bachelor's degree or engineering), 18.6%; elementary education, 5.1%; and specialty, 3.0%.

Next, we proceed to contrast the hypotheses described in this research:

Hypothesis 1: The transformational leadership scales have higher scores than the transactional and Laissez Faire scales.

Table 3 presents the scores obtained in the statistical mean, ordered hierarchically, as well as the standard deviation of each of the variables of the transformational, transactional and Laissez Faire leadership models.

It was observed that the scale with the highest score is intellectual stimulation, with an average score of 3.3538 and the scale with the lowest average score is administration by passive exception with 2.3400 corresponding to the transactional style.

As part of the global results of the perception of the managers, middle managers and the personnel under them with respect to the predominant scales of each leadership style, it was found that the dimensions corresponding to the transformational style have a higher average score, while the Laissez Faire style, even when it is exercised normally, obtained a lower score, considering that five of the six dimensions of the transformational style obtained a higher score, the transactional style is exercised occasionally according to the average described.

In relation to the data obtained, hypothesis 1 is accepted, since the transformational style scales are the ones that are most present in the leadership profile of middle managers and managers, both "seen by oneself" and "seen by others".

Escala	N	Media	Desviación estándar
Estimulación Intelectual	236	3.3538	1.05075
Premio Contingente	236	3.2521	0.94447
Influencia Idealizada (conducta)	236	3.2097	1.02701
Inspiración Motivacional	236	3.1811	1.01911
Consideración Individual	236	3.1706	1.05275
Influencia idealizada (atributos)	236	3.1059	1.05407
Laissez Faire	236	3.0138	0.96650
Administración por Excepción Activo	236	2.7839	0.92075
Tolerancia Psicológica	236	2.5191	1.17720
Administración por Excepción Pasivo	236	2.3400	0.90483

Table 3 Descriptive statistics of leadership scales

The results are similar to those obtained by Mendoza et al. (2014) who, as a result of the application of the MLQ in an entertainment company in Mexico, identified that the transformational style scales obtained higher scores in the statistical mean with respect to the transactional and Laissez Faire scales.

Hypothesis 2: The outcome variable that obtains the highest mean score is satisfaction.

To test this hypothesis we proceeded to calculate the mean and standard deviation of the three outcome variables, which are shown in Table 4, and indicate that the highest mean score with respect to these variables is equal for the variables of extra effort and effectiveness, so the hypothesis is rejected.

The results are similar to those obtained by Mendoza, García and Uribe (2014) who in their research defined that the variable to which the leaders were most oriented was extra effort.

Variable de resultado	N	Media	Desviación estándar
Satisfacción	236	3.1261	1.06454
Esfuerzo Extra	236	3.3432	1.01938
Efectividad	236	3.3432	1.01938

Table 4 Descriptive statistics, outcome variables

Hypothesis 3: Transformational, transactional and Laissez Faire leadership styles significantly influence outcome variables.

Table 5 shows the Multiple Regression model between the dependent variable: outcome variables as a whole and the independent variable: leadership styles:

Transformational, transactional and Laissez Faire, the results indicate an R of 0.887 and an R2 of 0.786, determining that 78.6% of the changes in the outcome variables are due to the exercise of leadership styles.

The F statistic was 284.741 and is significant at 0.00, indicating the existence of a significant linear relationship between the dependent variable outcome variables and the independent variable leadership styles.

The result of p=0.006 for the transactional leadership style defines that there is no statistically significant relationship with the outcome variables; on the contrary, the result of p=0.000 for the transformational style and Laissez Faire indicates that there is a statistically significant relationship with the outcome variables.

Resumen del modelo				
Modelo	R	R cuadrado	R cuadrado ajustado	Error estándar de la estimación
1	0.887 ^a	0.786	0.784	0.45375

Modelo	Suma de cuadrados	gl	Medio cuadrático	F	Sig.
1. Regresión	175.875	3	58.625	284.741	0.000 ^a
Residuo	47.766	232	0.206		
Total	223.641	235			

Modelo	Coeficientes no estandarizados		Coeficientes estandarizados		
	B	Error estándar	Beta	t	Sig.
(Constante)	-0.034	0.146		-0.231	.818
1. Liderazgo Transformacional	0.672	0.044	0.656	15.189	0.000
Liderazgo Transactional	0.143	0.052	0.092	2.764	0.006
Laissez Faire	0.275	0.043	0.272	6.337	0.000

Table 5 Multiple Regression Model, leadership styles and outcome variables

In relation to the above, Mendoza (2005), as a result of his research on sales managers of a pharmaceutical company, obtained a level of significance between leadership styles and outcome variables, which is consistent with those obtained in this research.

Hypothesis 4: There are significant differences in the perception of leadership styles among middle managers, managers and subordinate personnel.

To contrast the described hypothesis, we proceeded to perform the "t Student" statistical test, to analyze if there is a difference in the perception of "seen by oneself" and "seen by others", which is shown in Table 6.

As a result, it was obtained that there is a significant difference between the perception of both hierarchical levels, for the transformational and Laissez Faire styles, the managerial and middle management level is evaluated higher than the subordinates, while for the transactional style the highest perception is of the subordinates, in the three styles a p less than 0.05 is observed, indicating a significant difference in the perception.

Prueba de t de Student																		
Punto	N	Media	Desviación estándar	Medida error estándar	Prueba de t de Student													
					F	Sig.	t	gl	Sig. (bilateral)	Diferencia de medias	Diferencia de medias en absoluto	95% intervalo de confianza inferior	95% intervalo de confianza superior					
Liderazgo Transformacional	Directivos: medio superior	33	3.5366	0.47887														
	Subordinados	203	3.0174	0.93943														
Liderazgo Transactional	Directivos: medio superior	33	2.4633	0.43862														
	Subordinados	203	2.8231	0.65280														
Liderazgo Laissez Faire	Directivos: medio superior	33	3.5606	0.48474														
	Subordinados	203	2.9243	0.97757														

Table 6 "t Student" test for managers, middle management and subordinate personnel, with respect to leadership style

These results are similar to those obtained by Mendoza (2005) indicating in his results significant differences between the perceptions of managers and followers with respect to transformational and transactional leadership styles of managers, therefore the hypothesis is accepted.

Derived from the previous hypothesis, the importance of analyzing the difference in perception of managers, middle managers and subordinates with respect to the outcome variables arises.

Hypothesis 5: There are significant differences in the perception of orientation towards outcome variables between middle management and subordinate personnel.

To analyze the hypothesis, the "t student" statistical test was used to identify whether there is a difference in the perception of "seen by oneself" answered by managers and middle managers, and "seen by others" answered by subordinate personnel, with respect to the orientation to the outcome variables of satisfaction, extra effort and effectiveness.

Table 7 shows the results indicating that there is a significant difference in the perception of the three outcome variables, showing a significance level of p less than 0.05, in the three outcome variables, the highest mean with respect to the three variables is observed to be on the part of managers and middle managers, this result is observed in the three outcome variables.

The same results were obtained by Mendoza (2005) where the perception of managers regarding the outcome variable is oriented to extra effort and of followers to effectiveness, in this case there is a tie so the hypothesis is accepted.

Estadísticas de grupo						
	Punto	N	Media	Desviación estándar	Medio de error estándar	
Satisfacción	Directivo y mandos medios	33	3.2879	0.85723	0.14923	
	Subordinado	203	3.0998	1.09407	0.07679	
Esfuerzo extra	Directivo y mandos medios	33	3.8258	0.63886	0.11121	
	Subordinado	203	3.2648	1.04882	0.07348	
Efectividad	Directivo y mandos medios	33	3.8258	0.63886	0.11121	
	Subordinado	203	3.2648	1.04882	0.07348	

Prueba de Levene de homogeneidad de varianzas										
	F	Sig.	t	df	Sig. (bilateral)	99% Intervalo de confianza de la diferencia				
Satisfacción	Directivos mandos medios	4.351	0.038	0.941	234	0.348	0.18813	0.19986	-0.20562	0.58187
	Subordinados			1.121	50.628	0.268	0.18813	0.16782	-0.14885	0.52510
Esfuerzo extra	Directivos mandos medios	14.722	0.000	2.981	234	0.003	0.56008	0.18820	0.19019	0.93176
	Subordinados			4.206	64.240	0.000	0.56008	0.13337	0.29457	0.82739
Efectividad	Directivos mandos medios	14.722	0.000	2.981	234	0.003	0.56008	0.18820	0.19019	0.93176
	Subordinados			4.206	64.240	0.000	0.56008	0.13337	0.29457	0.82739

Table 7 "t student" test for managers, middle management and subordinate personnel with respect to the outcome variables

Finally, we proceeded to analyze the last hypothesis that it defines:

Hypothesis 6: Transformational leadership scales have a higher correlation with outcome variables than those of transactional or Laissez Faire.

To perform this analysis, a Pearson correlation model was developed between the leadership styles (transformational, transactional and Laissez Faire) and the outcome variables (satisfaction, extra effort and effectiveness).

The transformational leadership scales have the highest correlation indexes in relation to the three outcome variables (Table 8).

Regarding the transformational style and the satisfaction variable, the scale with the highest correlation is individual consideration with 0.809, while in extra effort and effectiveness the highest correlation is reflected with the intellectual stimulation scale with 0.747.

In general, a lower correlation was observed in the transactional and Laissez Faire styles, with lower correlation indexes.

Escala	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Influencia Idealizada (atributos)	1												
2. Influencia Idealizada (conducta)	.772**	1											
3. Inspiración Motivacional	.714**	.787**	1										
4. Estimulación Intelectual	.648**	.702**	.795**	1									
5. Consideración Individual	.000	.000	.000	.000	1								
6. Tolerancia Psicológica	.696**	.746**	.758**	.809**	.000	1							
7. Presión Contingente	.000	.000	.000	.000	.000	.000	1						
8. Administración por Excepción Activo	-.033	.013	-.051	.019	-.024	-.027	.142**	1					
9. Administración por Excepción Pasivo	.611	.843	.432	.773	.719	.682	.029	.000	1				
10. Laissez Faire	-.025	-.040	-.080	-.076	-.111	.085	-.034	.491**	.000	1			
11. Satisfacción	.708	.545	.222	.244	.088	.194	.602	.000	.000	.000	1		
12. Esfuerzo Extra	.580**	.569**	.572**	.642**	.643**	.567**	.612**	.092	.119	.000	.000	1	
13. Efectividad	.650**	.676**	.724**	.796**	.809**	.679**	.736**	.028	.001	.692**	.000	.000	1

Table 8 Pearson correlations of the leadership scales with the outcome variables

Similar results are described by Mendoza, Ortiz and Parker (2007) who point out that transformational leadership scales commonly have higher correlation with outcome variables, likewise, the results agree with those obtained by Mendoza, García and Uribe (2014) where they conclude that transformational scales have higher correlation with outcome variables.

Conclusions

During the present research, a literature review has been presented on the topic of leadership and the styles that are addressed from the MLQ model of Bass and Avolio, which are defined as transformational, transactional and Laissez Faire, likewise, the proposed objective was achieved and the contributions made by other researchers in this line of research are reaffirmed.

As a result of what has been described, the literature confirms that leadership is a process of great importance in organizations and that it has an important influence on the outcome variables addressed, which are: satisfaction, extra effort and effectiveness, which influences the achievement of objectives and therefore business competitiveness, something that all organizations seek.

As part of the hypotheses described, it is defined that the style most presented in the leaders studied is transformational, while the result variable to which they are most oriented is extra effort and effectiveness.

On the other hand, the assumption that changes in leadership style have a direct influence on the outcome variables was ratified, also because the research focused on analyzing the perception "seen by oneself" by managers and middle managers and "seen by others" by subordinates, it was also confirmed that there are significant differences in the perception of both study groups, while managers and middle managers evaluate themselves as more transformational and Laissez Faire, subordinates evaluate them as more transactional.

Regarding the outcome variables, the results were similar to others described above, defining that in both groups, managers and middle managers, as well as subordinates, are more oriented towards extra effort and effectiveness.

Finally, it is reaffirmed that the transformational leadership scales have the highest correlation indexes in relation to the three outcome variables, in comparison with the transactional style and Laissez Faire.

As can be seen, the results affirm the importance of effective leadership in organizations, since it will undoubtedly influence others and guide, stimulate and inspire them to achieve organizational objectives; the leadership exercised by managers will undoubtedly lead to results that will influence the company's competitiveness.

For future research, it is suggested to perform an integral analysis on leadership styles and outcome variables depending on the sector or activity of the company, in order to generate more information to define whether the type of company influences both leadership and outcome variables, since the present research only covers a specific company.

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