International Journal of Arts and Humanities Studies
ISSN: 2754-4311
DOI: 10.32996/ijahs
Journal Homepage: www.al-kindipublisher.com/index.php/Ijahs

IJAHS
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

Leaders and the Effect of Leadership Styles on Employee Productivity and Work Quality in Moroccan Public Universities

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| ABSTRACT

This article presents the results of a study that was undertaken to observe the effect of styles of leadership on employee productivity and quality of work, mostly the impact of commanding, participative, affiliative, pacesetting, coaching and visionary styles. In addition, Statistical population of the study consists of 1242 employees. A sample size of 302 was drawn from the different faculties and national schools of Ibn Tofail University, Kenitra, Morocco, using a simple random sampling technique. A quantitative approach, explanatory research design and a structured questionnaire, which consists of close-ended questions, were used for this study. The questionnaire was analyzed using Statistical Package for Social Sciences (SPSS) version 21.0. The leadership styles were measured through the multi-factor leadership questionnaire. Employee productivity and quality of work were measured using Khalid (2014) scale. Regression, and reliability test, (Cronbach's Alpha) were presented. For data analysis, descriptive and inferential techniques were used. Regression coefficient and ANOVA test were adopted to assess the influence of styles of leadership on the employee productivity and quality of work, and test the hypothesizes that are structured by the researcher for the study.

| KEYWORDS

Leadership styles; Employee productivity; Quality of work; Quantitative research; Regression analysis; SPSS; Higher education institution; Morocco

| ARTICLE INFORMATION

ACCEPTED: 02 February 2026 **PUBLISHED:** 16 March 2026 **DOI:** 10.32996/Ijahs.2026.6.2.1

Introduction

1. Research problem

Today, one of the internal challenges that so many leaders face is the choice of the right leadership style that meets the needs of the organization at the present moment and in the long-term. This kind of challenge would have a negative impact on both employees and the organization. The chosen leadership style makes the employee either work at ease and be more productive, or leave the workplace unsatisfied. The fear of failure to choose a suitable leadership style that satisfies both sides, employees and the organization, would be a potential roadblock to leadership success. Thus, there is always a need to have a clear understanding of the impact of different leadership styles on employee productivity and quality of work. The existing literature does not yet

provide a thorough understanding of the different effects associated with different leadership styles, including commanding, participative, affiliative, pacesetting, coaching and visionary leadership, on the employee productivity and quality of work.

How an organization manages and impacts the productivity of employees is much wanted for the achievement of the organizational objectives. If this is not accurately carried out, along with the unfitting leadership style, the employee general productivity is negatively affected. Good leadership is necessary to boost the productivity of the employee. This latter general performance, within this analysis, does depend on the quality of productivity and work. The outcome of leadership must be apparent to check out the result of the style as well as the approach implemented by leaders. precise leadership strategies are also needed for certain functionality issues in realizing departmental objectives. This certainly will result in efficiency, specialization in addition to excellent organizational relationships as specified by Armstrong (2005).

2. Research questions

To achieve the aim of this study, it needs to address the main research question which states "how does the leadership style of the management affect the employee productivity and quality of work?". Specifically,

1. What type of leaders exist in this chosen organization?
2. What are the leadership styles used by leaders?
3. What is the effect of these leadership styles on the employee productivity and quality of work?
4. What is the most used leadership style, and its effect on the employee productivity and quality of work?
5. Which leadership style is rarely used, and rarely effective? and what is its impact on the employee productivity and quality of work?

3. Research hypotheses

H1: This university has more constructive leaders than destructive ones.

H2: Participative, commanding, coaching, and pacesetting are the leadership styles used by leaders of the university.

H3: Participative leadership style has a positive impact on employee productivity and quality of work.

H4: Coaching leadership style has a positive impact on employee productivity and quality of work.

H5: Commanding leadership style has both a negative and positive effect employee productivity and quality of work.

H6: pacesetting leadership style has a negative influence on employee productivity and quality of work.

H7: participative leadership style is the most used style and has a good impact on the employee productivity and quality of work.

H8: commanding leadership style is the rarely used style and it is of a negative impact on the employee productivity and quality of work.

4. Research objective

The main objective of this study was to examine the effect of the different leadership styles in question on employee productivity and quality of work in this chosen public organization (Ibn Tofail University, Kenitra, Morocco).

5. Significance of the Study

This study and its findings would be fruitful to future researchers and students to better understand the significance and impact of different leadership styles on the employee productivity and quality of work. This research will for sure be an added value to individuals who find themselves in a leadership role, to better employ the right leadership style at the right situation for increased productivity and good quality of work. Examining the relationship between the different leadership styles and the employee productivity and quality of work, the chosen organization for this study will be able to take into account the results of this study to improve its leadership strategies for better organizational achievement at the level of employee productivity and quality of work.

Literature review

1. Leadership

Generally, all organizations are founded with the aim of achieving certain identified goals. To reach these objectives, the human capital is very significant. The leader is seen as the most important human component. The members of the organization are directly affected by the leader's character and his leadership style. Accordingly, leadership is to begin with the potential to touch entities into implementing responsibilities over some time using mainly motivational tactics (Kotter, 1996; Yammarino & Dubinsky, 1994).

Today, uncountable individuals are selected or maybe put in power to undertake the everyday jobs. Coping with current unstable organizational atmosphere has positioned a few organizations in circumstances where they are struggling for survival in the heat of competition. The driver of these planned regulations in the direction of persisting the competitors is the type of leadership given by managers which are likely to have a consequence on others in identifying administrative goals along with enlightening employee's productivity. Shafie et al. (2013) defines that the most important advantage that organizations have are their employees. This latter is the most important reserve of any organization, since they are the key drivers and give life to organizations and propose solutions and objectives.

Leadership does focus on the development, potentials and capability building of subordinates (Klein et al., 2013). Concentrating on the evolution of staff's system of standards, their degree of drive and decent with the progress of their flairs is vital for managers in leadership sites (Sougui, 2015). Since they work in the corporate atmosphere, this approach can eventually help groups attain their goalmouths.

It goes without saying that Leadership has a direct cause-effect relationship on organizations and their productivity. It's Leaders that regulate values, culture, acceptance for change, and inspiration for staffs. They outline organizational lines, together with their effectiveness and application. It has to be highlighted that leaders could be perceived at any administrative level and aren't limited only to management (Igbaekemen, 2015). Thus, leaders have an influence on one and all to help realize team and corporate purposes. It is detected, still, at a given point in time the use of appropriate style of leadership is a medium for organizational productivity and success. A leadership style is the technique that officials use to exercise their leadership role (Sofi 2015). It is mainly seen as the manner in which a director or boss wishes to behave with his staff or colleagues, and the way in which they practice the leadership title role (Xenikou, 2017).

Leaders should be aware of being skilled enough to know whether their leadership skills really touch their subordinates or not (Saleem, 2015). This may have a direct consequence on the activities of personnel to follow their leaders. Followers who do not respect leaders may be liable to discontent, which may give rise to a member of staff aim of departure. Some scholars have determined that styles of leadership can impact the level of job fulfilment of a worker and job gratification is a role of leadership style (Iqbal, 2015). Style of leadership has a direct result on job satisfaction and the readiness of a member of staff to resign from an organization or not. It is worth noting that the right leadership style used in a given situation at a specific, regardless of low pay, could still stimulate an employee to give his / her best in the establishment.

2. Styles of leadership

2.1. Commanding Style

Briker et al. (2021) stated that authoritarian leadership is regarded as a type of leadership when the leader in charge has absolute power over his subordinates and complete decision-making authority inside the organization (Bass and Bass, 2009). This type of leader is classic and dominant by nature. Such kind of leaders force their followers to work according to them. Naturally, they maintain the decision -making rights with them (Obiwuru, et al., 2011). The commanding style is mainly about exerting force on subordinates to execute the services and strategies designed by their leader without asking any question. It is severe style and does not pave the way for any suggestions but absolute obedience (Goleman, Boyatzis & McKee 2009). This kind of leadership style leads to conflicts and clashes that touch destructively the total production process of the organization (Iqbal, et al., 2015). Autocratic leaders value submission (Harms et al., 2018), expecting firm devotion to guidelines. The autocratic leaders never value their subordinates' ideas (Khudhair et al., 2022); which hampers the problem-solving process and sets back the organization capability to cope with the changing circumstances of the world as a whole.

2.2. Participative Style

Participative style is all about engaging the subordinates in any ongoing activity by asking them to take a part in the decision-making process. Employees feel free to debate issues with their leaders. The leader's main task is to create a link between the organization and workers. He also shares decision-making rights with subordinates, and inspires them to take certain responsibilities (Kahai et al, 1997). Decisions are no longer only in the hands of executives (Fenwick & Gayles, 2008). Participative leaders value their subordinates' knowledge, ideas and opinions (Chen & Tjosvold, 2006; Rana et al. 2019; Khassawneh and Abaker 2022). Due to the increasing dependence on team working as a strategic means of boosting the effectiveness and competitiveness of the organization, so many leaders have become to favor group interactions rather than one-on-one contexts (Gavin & Hofmann, 2002). Furthermore, leaders, adopting the participative style, inspire and motivate their employees to develop learning skills through information acquisition, sharing and connections and looking for new opportunities (Benoliel and Barth 2017; Mohammad and Khassawneh 2022). If employee participation is very important to success, changing the rules is inevitable to be up to date.

2.3. Coaching Style

Ellinger and Bostrom (1999) stated that first researchers explained the coaching style as a management drill and training that helps staff develop the learning capability and professional skills. The coach is defined as that professional who is hired by an organization to enhance its own individuals' leadership skills and professional conduct. Based on the individual's position within the organization, the coach main task is to train him/her to make a balance between the personal development and the organization main objectives. Coaching leaders encourage employees to solve problems and conflicts themselves for more understanding of the work environment they operate in. This is all to have more professional development to get more chances at the work place (Ryan and Deci ,2010). Nowadays, all organizations are more interested in developing the quality of their leaders by implementing the coaching style in their work agenda as an effective strategy to boost the human capital development (Hawkins, 2008).

2.4. Affiliative Style

Affiliative style is all about promoting and stimulating harmony among the members of the team. Goleman in Johnson (2017) stated that affiliative leadership style is mainly about promoting harmony within the team and focusing on emotional construction and joining. It is very effective when the leader wants to repair the broken trust that has developed in a team. Affiliative leadership involves learning how to create trust with others in a particular context (Heckscher & Adler, 2006; Jameson, Ferrell, Kelly, Walker, & Ryan, 2006; Vangen & Huxham, 2003). It is no doubt that this leadership style puts emphasis on the prominence of team work, and creates coherence in a group by joining people to one another for growing job contentment. However, this style should not be used alone since it may permit poor performance to go uncorrected. Following Cunliffe (2009), Crevani et al. (2010), and Raelin (2006), developing leadership that is affiliative needs constructing a capability to get multiple understandings and future potentials—to have an openness to various viewpoints. An affiliative leader gives frequent positive feedback to try to help everyone to be on the right track. This type of leadership style is able to effectively create coherence among employees. This means the joining of synergies within the organization is also recognized. With regards to the leader, he must possess the abilities that can aid with being followed, where he has to give a lot of commendations to resolve clashes and issues regarding the management of the whole organizational system (Onyechi, 2009).

2.5. Visionary Style

Since the last decade of the previous century, visionary leadership style arose as a matter of interest for scholars in different fields such as education (Montgomery and Gowe 2003; Fehlis 2005), political science (Stazesky 2000), and management (Harper 1991; Fechter and Horowitz 1991; Champlin and Champlin 1993). Visionary leadership is defined as the capacity to build and articulate pure and original visions that give meaning and determination to the work of an organization (Nanus, 1992; Sashkin, 1992). Zhu et al., (2005) stated that this kind of leadership produces high levels of unity, vow, trust, motivation, and enhances performance in organizations. Visionary leadership is very significant in today's changing environment for the success of organizations and their survival. This kind of style has, in fact, a clear constructive effect on employees' outputs. Followers have absolute trust in leaders and much devotion to them (Grady and LeSord,1989; Lesourd et al., 1992); Taylor et al.,2014); Valenzuela,2007).

Ahmad and Chopra (2004, pp. 51-54) stated that the main good quality of visionary leaders is that they have the ability to express, communicate, share the missions and objectives of the organization in an easy vision statement. Tellis and Golder (1996,2000) confirmed that visionary leadership and drive of the leaders to implement their vision can contribute to fast positive technological change. Senge (1991) detected that the success of the leader depends on his strong will and capacity to deploy the organism in a way that the span and gap between the present reality and strong vision is clearly decreased and dropped off. Leaders believe in the identification of the days to come, not only in the time being (Smylie et al.,1999). Tellis (2006) said that the corporate culture, especially the kind of leadership style adopted by the leader, plays a major role in the success or failure of the organization. As stated by Bass (1996) visionary leadership, as a form of transformational leadership, provides opportunities to boost the capacity of the organization to freely meet its needs. This is achieved by setting people free to invent and innovate. Many studies stated that much appreciated leaders were the ones that have the capability to outline visions or assign tasks to their followers, then inspire and allow them to engage in the organizational function and growth. The organizational effectiveness is based on the leader's efficiency (Hogan and Kaiser, 2005).

2.6. Pacesetting Style

Pacesetting style is all about setting high-performance standards for leaders themselves and their followers (Goleman et.al, 2013). Being an example in the eye of the follower is what leaders like to achieve, demonstrating distinction and quality and expecting their followers to meet those same criteria. According to Northouse (2013), pacesetting leaders naturally have a strong determination for achievement and struggle for constant enhancement. The most significant part of this leadership style is in achieving excellence within the place of work (Goleman & Boyatzis 2008). Even though this leadership style makes things done fast and effectively by pushing people to work hard and achieve the maximum during a period of time; It also has potential downsides (Goleman, Boyatzis &McKee 2008). Pacesetting leaders usually don't consult or accept feedback. They just believe in

"just get it done." Regularly struggling to meet high-performance potentials can generate a stressed and challenging work atmosphere, actually spoiling the morale and leading to low job contentment (Northhouse, 2013).

3. The Impact of Leadership Style on the Organization and Employees.

The good leader is the one that is fully aware of the significant role employees play in achieving the objectives of the organization. So, motivating employees is the only key to achieving this. Leadership styles practiced by the leader at the level of organization bring about different consequences that affect the organization and employees either positively or in a negative way. It goes without saying that leadership style does affect the organizational performance. It influences the culture of the organization which, in turn, has an impact on the organization success or failure. This reality was proved by Klein et al (2013) using four factor theory of leadership along with the data collected from 2,662 employees working in 311 organizations. The culture of the organization and its performance are related to the type of leadership style. For instance, a productive and active worker could become ineffective if the style of leadership adopted by the leader is in conflict with the task role of the subordinates. However, unproductive employee would get more active and operative if the style used meets the needs and objectives of the task. Most of 21st century researches on leadership have confirmed that there is a strong connection between transformational leadership and employees' productivity at different levels (e.g., Dumdum et al. 2002; Dvir et al. 2002; Howell et al. 2005). On the contrary, transactional leadership is seen to boost career contentment (Epitropaki & Martin, 2005; LePine, Zhang, Crawford, & Rich, 2015).

A research conducted by Booysen and Van Wyk (1994) found that great leaders, in terms of success, are seen to adopt the democratic and participative leadership style, and are agents of change who are able to increase management quality. The democratic leadership style is known for its motivation of employees to perform better, and giving value to their knowledge, skills and opinions. Elenkov (2002) confirmed that the democratic leadership style has a direct good impact on the success and performance of the organization. The charismatic leadership style is considered to invite creativity and motivate employees. But, one of the downsides of this style is that subordinates are completely dependent on their leader. Whenever the leader is absent, he leaves a hole and employees become aimless and scattered. This style does not prepare future leaders even though it makes them happy at the moment. Germano (2010) said that this leadership style has an everlasting negative impact on the productivity of the organization due to the absolute dependence of employees on their leaders. Obiwuru, et al., (2011) stated that leaders adopting the commanding style keep the decision-making rights always with them. The research, undertaken by Anwar and Haider in 2015, confirmed the idea that this style is not innovative and boosts only one-sided conversation. This leads radically to a severe change in employees' psychology. The result is always conflicts at the level of the organisation (Iqbal, et al., 2015). Authocratic style works best only when the task should be done within a given deadline (Bhargavi and Yaseen, 2016).

Methodology

1. Population Sample

This research targeted administrative staff and professors working for Ibn Tofail University, Kenitra, Morocco, for feedback and data collection. They all work in the different departments from the human resources department to the education department. This category of employees was chosen by the researcher because it was believed to be key element in the daily running process of this public organization. The number of the population the researcher had to study was **1242** employees at the time of research.

2. Sample Size

Sample size is the number of people that is chosen for examination in the research study. It is also determined by the nature of study and the envisioned application of the findings (Kumar, 2016). It would be very difficult task to conduct research using the whole population working for this organization. The sampling frame consists of a total of **1242** employees working for this public organization. It's very necessary to choose a sample size because huge samples are inefficient while small samples lead to wrong results. The sample size was determined using the formula by Slovin.

$$n = N / (1 + Ne^2)$$

where: n= Sample size; N= Population size; e= Margin of error; e= 5/100 or 0.05. Therefore, a sample size of **302** employees/ respondents were entitled to participate in this survey.

3. Sampling Technique

Concerning the sampling technique, there are two well-known sampling techniques: non-probability sampling and probability sampling. The first technique is all about choosing the sampling units consciously by the researcher; whereas probability sampling each sample unit in the target population has an equal chance to take a part in the sample (Bryman and Bell, 2013). Non-probability sampling does depend on the decision and explanation of the researcher and it is more subjective. Probability sampling is mainly about random (equal chance). In other words, giving a chance to anyone to take a part in the study. The selection of a sample of **302** respondents out of the target population, the researcher adopted the probability sampling technique known as simple random

sampling technique. It was more appropriate and practical. The researcher sent the survey to a sample **of 302** respondents, drawn randomly from a pool of **1242** staff working for the organization. This took place through the different human resources departments of the different faculties and national schools of this chosen public organization.

4. Research Approach

As stated by Creswell (2009), there are three approaches of research; quantitative, qualitative and mixed. The main characteristics of the three approaches are presented briefly in the following lines: Quantitative research is a means for investigating and exploring objective theories by examining the correlation and affinity between variables. Otherwise, qualitative research approach is all about understanding the intent an individual attributes to a social or human challenge or an issue with the aim of unfolding a theory or pattern inductively. Mixed approach makes use of both quantitative and qualitative approaches. Because the aim of this study was to test the effect of leadership style on the employee productivity and quality of work, the research approach adopted for this study was, thus, the quantitative research approach. Quantitative data is expected to offer statistical figures based on numerical findings derived from participants' responses.

5. Research Design

As a matter of fact, there are three main categories of research design: descriptive, exploratory, and explanatory research (Saunders, Lewis and Thornhill, 2014). The purpose of exploratory research is to find out ideas and perceptions; descriptive research is usually concerned with define and depict a population regarding important variables. Explanatory research is employed to prove and demonstrate cause-and-effect relationships between variables. It is concerned with the study of how one or more variables influence changes in another variable. Thus, it is an inquiry of functional relationships existing between two or more variables (Kothari, 2014). In a way to understand the topic being under investigation, the researcher adopted explanatory research design on account of aiming to test the relationship among leadership style, and employee productivity and quality of work. Explanatory research design is in fact used to show and prove the cause-and-effect correlation between variables.

6. Source of Data Collection

Primary data was the dominant source of data for this study. Primary data are those which are collected for the first time and are original in character Kothari (2014). The data used for the investigation of this study were collected from the primary source; individual employees (administrative staff and professors) working for this chosen organization in the public sector, located in Kenitra, Morocco. No dependence on any secondary data for analysis in this research.

7. Variables

The independent variable: leadership styles

The dependent variable: employee productivity and quality of work

8. Data Collection Method

There are different primary data collection instruments. Among them, self-administered questionnaire was used to collect the primary data in order to obtain opportunity to ask questions, control the respondent response through designing the questions well properly, increase the reliability and credibility of the research data, and makes a judgment of what most people think through asking the sample respondent. This questionnaire was adopted from the questionnaire developed by Khalid (2014). It was divided into 3 parts: Part **A** was about data collection on demographic variables, Part **B** was about the research independent variable (leadership style) measured by six dimensions namely **commanding** (5 statements), **participative** (5 statements), **pacesetting** (5 statements) **coaching** (5 statements) **affiliative** (5 statements) **visionary** (5 statements) leadership styles; a series of statements aimed at capturing the perception of employees (administrative staff and professors) with respect to leadership style. This part also includes the dependent variable **(employee productivity and quality of work).** It is subjectively measured by change in employee's behavior (1**), learning and development capability** (2), **employee commitment** (3), **enhancement in skills** (4) and **competencies** (5). The variables were measured using a Likert scale with five response categories: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). The Likert scale method was preferred to make questions interesting to respondents and thereby enhance their cooperation, ultimately to ensure maximum response rate (Robson, 2012). Part **C** was about the types of leaders exist in this organization. Preliminary draft of the questionnaire was pre-tested to improve upon the clarity of the question items and pretested for reliability of the adopted measuring scale with 5-point Likert scale. The reliability test of Khalid's (2014) data collection instrument was found reliable the fact that the results scored above the threshold (Cronbach's Alpha > .70). The research questionnaire was sent to the target population through their professional emails in the form of a link to a webpage that allows the study population to easily fill out the questionnaires in a stress free and timely manner. Collection of the data did not last longer because the researcher did not want the responses gotten from each administrative staff of professor to be affected by other employees' opinions. The data collected from the study population was primary data.

9. Regression

Regression helps the researcher analyze how independent variables influence a dependent variable in a study. The regression analysis also helps the researcher recognize the impact of the different leadership styles on employee productivity and quality of work. What is more, it contributes to testing the hypothesizes that are structured by the researcher for the study.

Results and Discussion

1. Assessment of Leadership Styles at Ibn Tofail University

1.1. Evaluation of the Weight of the Components of Leadership Style

1.1.1. Commanding Style Evaluation

The results presented in **Table 1** indicate a moderate perception of decision-making centralization, with average scores ranging from 2.99 to 3.32 on a scale of 1 to 5. The highest average score (3.32) mirrors a prominent tendency toward hierarchy, while the high standard deviation (~1.2) highlights different opinions among respondents. This variability suggests that authoritarian leadership is seen in a different way depending on departments or roles—possibly more accepted in administrative units than in academic ones. To increase effectiveness, it would be worthwhile to balance this style with participative approaches, particularly with professors and cross-functional teams who esteem autonomy.

Table 1: Commanding style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
Decisions are always made by supervisors for subordinates	302	1	5	3,06	1,173
Supervisors are determined to push projects forward to get results	302	1	5	3,32	1,175
My duties are limited by the managements	302	1	5	2,99	1,206
The management sets high standards expecting others to do the same	302	1	5	3,15	1,250
Often, performance requirements are designed as per the leaders need	302	1	5	3,02	1,233
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

1.1.2. Participative Style Evaluation

The average scores, ranging from 2.95 to 3.34 on a scale of 1 to 5, signifies a modest perception of contribution in decision-making (Table 2). The highest value (3.34) suggests some appreciation of efforts toward consensus, but the high standard deviations (1.187 to 1.352) bring to light significant divergences among respondents. This probably reflects uneven managerial practices across departments or teams. Even though the participative style is in part integrated, it would benefit from being reinforced, especially in areas where centralization persists (as indicated by previous scores for the "commanding" style). To enhance engagement, balancing participative practices—mainly through organized consultation mechanisms—would be useful, especially for professors and cross-functional units.

Table 2: Participative style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
My supervisor forges consensus through participation	302	1	5	2,95	1,187
My supervisor usually asks "What do you think?	302	1	5	3,09	1,345
My supervisor employs collaboration	302	1	5	3,34	1,268
My supervisor believes in team leadership	302	1	5	3,14	1,316
My supervisor employs effective communication	302	1	5	3,04	1,352
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

1.1.3. Pacesetting Style Evaluation

As shown in Table 3, the average scores, ranging from 2.81 to 3.30 on a scale of 1 to 5, reflect a moderate emphasis on performance, with a propensity to appreciate high standards (peaking at 3.30). Though, the important standard deviations (1.081 to 1.287) show opposing perceptions, signifying that performance prospects are unequally shared or applied across departments or individuals. This leadership style, often associated with a pursuit of excellence, may be seen as inspiring in results-driven units (e.g., finance, IT), but possibly tense in more creative or academic departments. To offset the impact, it would be wise to pair this demanding leadership with increased team backing and obvious goal-setting, in order to bypass exhaustion while keeping a high standard of quality. A cross-analysis by department or superiority would provide more nuanced perceptions.

Table 3: Pacesetting style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
My supervisor sets high standards for performance	302	1	5	3,11	1,188
My supervisor instruction is "do as I do now	302	1	5	2,81	1,081
My supervisor employs Conscientiousness	302	1	5	3,25	1,238
My supervisor characterized by the drive to achieve results	302	1	5	3,30	1,202
My supervisor uses the initiative	302	1	5	2,94	1,287
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

1.1.4. Coaching Style Evaluation

The results in Table 4 show a moderate level of supervisor engagement in skill expansion, with average scores ranging from 3.01 to 3.58 on a 5-point scale. The upward trend in averages, peaking at 3.58, communicates an inspiring practice of personalized support (e.g., "try this"). However, the high standard deviations (1.172 to 1.316) indicate important differences in how this style is executed, possibly reflecting dissimilar access to guidance or cultural differences between departments. In the university context—where professors and administrators value autonomy and professional development—strengthening this coaching approach, particularly through targeted training for managers, would boost both innovation and talent retaining.

Table 4: Coaching style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
My supervisor develops his subordinates for the future	302	1	5	3,07	1,266
My supervisor facilitates learning by suggesting "try this	302	1	5	3,08	1,316
My supervisor main interest is to improve his subordinates' skills	302	1	5	3,01	1,228
My supervisor employs empathy	302	1	5	3,30	1,208
For my supervisor, performance is expected to improve	302	1	5	3,58	1,172
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

1.1.5. Evaluation of the Affiliative Leadership Style.

The results in Table 5 indicate a moderate practice of affiliative leadership, with average scores to some extent increasing from 2.92 to 3.22 out of 5, signifying a growing effort by supervisors to indorse harmony and a positive team atmosphere. Yet, the high standard deviations (1.201 to 1.349) mirror extremely variable perceptions, likely due to cultural differences between departments or inconsistent managerial practices. In a university atmosphere where academic and administrative profiles coexist, this style—while useful for cohesion—would benefit from being strengthened through targeted actions (such as team-building or mediation) to alleviate pressures and support teamwork, mostly in multidisciplinary units.

Table 5 : Affiliative style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
My supervisor creates harmony	302	1	5	2,92	1,201
My supervisor builds emotional bonds	302	1	5	3,03	1,207
My supervisor believes "people come first	302	1	5	3,10	1,349
My supervisor employs empathy	302	1	5	3,14	1,330
For my supervisor, building relationships make it work	302	1	5	3,22	1,234
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

1.1.6. Evaluation of the Visionary Leadership Style

Table 6 displays that the average scores, ranging from 2.99 to 3.27 on a 5-point scale, reflect a moderate alignment with supervisors' vision, with a tendency toward shared engagement ("taking people with him"). However, the slight falling trend in scores (from 3.27 to 2.99) and the high standard deviations (1.216 to 1.387) highlight difficulties in communication or strategic orientation, possibly made worse in departments with multifaceted objectives (e.g., multidisciplinary units). To reinforce the influence of this leadership style, clarifying departmental visions and better integrating the "Other" teams (24.8%) would be crucial. Cross-referencing this data with seniority or status could disclose perception gaps between professors and administrators, thus guiding targeted engagement policies.

Table 6: Visionary style evaluation

	N	Minimum	Maximum	Mean	Std. Deviation
My supervisor believes in taking people with him, not just telling them what to do	302	1	5	3,18	1,294
My supervisor likes to set out a clear vision for the future	302	1	5	3,27	1,276
My supervisor likes to make sure that everyone understands where the company is going	302	1	5	3,09	1,387
My supervisor is good at helping people to change direction	302	1	5	3,05	1,216
My supervisor likes to be involved in setting the direction of travel	302	1	5	2,99	1,284
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

After presenting the evaluation of each leadership style by its components, it is now suitable to compare the implementation of the different styles and measure their internal reliability based on their components. Indeed, the prior investigation of the internal consistency of the scales using Cronbach's alpha (Table 7) approves the pleasing reliability of all the styles, with coefficients generally exceeding the recommended threshold of 0.70 found in methodological literature (Nunnally, 1978; Fornell & Larcker, 1981). These results validate the consistency of the items selected to measure each style.

Table 7: Overall Assessment of Management Styles and Measurement of Consistency

Styles	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**	**α-Cronbach**
Commanding Style	302	1,20	4,80	3,1086	,90938	0,809
Participative Style	302	1,00	5,00	3,1119	1,15396	0,935
Pacesetting Style	302	1,00	5,00	3,0828	,93178	0,834
Coaching Style	302	1,00	5,00	3,2073	1,10406	0,934
Affiliative Style	302	1,00	5,00	3,0828	1,13870	0,941
Visionary Style	302	1,00	5,00	3,1159	1,18381	0,952
Valid N (listwise)	302					

Source: Compiled from survey questionnaire data using SPSS v.21.

Moreover, the average scores range between 3.08 and 3.20 (Table 7), indicating a moderate perception of the numerous managerial practices. The Coaching style receives the highest average score (M = 3.20), suggesting an encouraging tendency toward skill development. The Affiliative and Pacesetting styles are seen as slightly less dominant (M = 3.08), while the other styles (Visionary, Participative, Commanding) fall within a similar range (~3.11–3.12). The low variance among the averages shows that no style clearly dominates, highlighting the need for an adaptive leadership approach depending on the context and teams.

1.2. Comparative Analysis of Leadership Styles by Mean Rank (Friedman Test)

The assessment of the six management styles by 302 respondents underlines important differences in average scores (Table 8). The Coaching style received the highest average (3.88), suggesting it is regarded as the most effective and most commonly used style by respondents. It is closely followed by the Commanding (3.62) and Participative (3.58) styles, which hold intermediate positions. The Visionary style also ranks at a praiseworthy level (3.52), while the Affiliative (3.26) and Pacesetting (3.14) styles received the lowest averages, signifying a lower perceived effectiveness.

Table 8: Means Ranks style of Management

	Mean Rank
Commanding Style Mean	3,62
Participative Style Mean	3,58
Pacesetting Style Mean	3,14
Coaching Style Mean	3,88
Affiliative Style Mean	3,26
Visionary Style Mean	3,52

Source: Compiled from survey questionnaire data using SPSS v.21.

To prove the significance of these differences, the non-parametric Friedman test was used (Table 9). The results display a Chi-square value of 34.904 with 5 degrees of freedom, and an asymptotic significance of 0.000 ($p < 0.05$). These results show the presence of statistically significant differences between the six leadership styles studied.

Table 9: Friedman test statistic for leadership styles.

N	302
Chi-Square	34,904
df	5
Asymp. Sig.	,000

a. Friedman Test

Source: Compiled from survey questionnaire data using SPSS v.21.

Thus, the analysis approves that not all styles are seen similarly by the respondents: some, such as the Coaching style, appear to be mostly esteemed, while others, like the Pacesetting style, seem to be less used in the detected managerial practices.

2. Measurement of the Relationship Between Leadership Style and Employee Productivity.

2.1. Descriptive Statistics of Employee Productivity and Quality of Work.

The descriptive analysis of the items associated with employee productivity and work quality (Table 10) indicates averages ranging between 3.52 and 3.99, revealing an overall promising measurement of these dimensions by the respondents. The highest-rated item concerns punctuality in delivering the required work ($M = 3.99$; $\sigma = 1.168$), while the lowest-rated item has an average of 3.52 ($\sigma = 1.241$). The standard deviations, ranging from 1.069 to 1.303, indicate a modest to relatively high spreading of responses, reflecting some heterogeneity in the respondents' insights.

Moreover, the evaluation of the internal consistency of the scale using Cronbach's alpha tells a value of 0.926, well above the recommended threshold of 0.70 (Nunnally, 1978). This result proves a very high reliability of the six items used to test productivity and work quality, certifying their capability to constantly grasp the dimension studied.

Table 10: Descriptive statistics of employee productivity and quality of work.

	N	Minimum	Maximum	Mean	Std. Deviation
I am always punctual in delivering the required output	302	1	5	3,73	1,069
I understand the vision/mission of the organization very well	302	1	5	3,52	1,241
I am always motivated to deliver quality work	302	1	5	3,79	1,237
I could manage change in my job very well whenever the situation demands	302	1	5	3,59	1,303
I believe that mutual understanding can lead to a viable solution in organization	302	1	5	3,99	1,168
Valid N (listwise)	302				

Source: Compiled from survey questionnaire data using SPSS v.21.

2.2. Correlation Between Management Styles and Employee Productivity and Quality of Work.

To study the preliminary relationships between leadership styles and work productivity, a Pearson correlation analysis was conducted (Table 11). The results show that productivity is definitely and significantly correlated with all leadership styles, with coefficients ranging from r = 0.306 ($p < 0.001$) for the Commanding style to r = 0.626 ($p < 0.001$) for the Coaching style. These results suggest that, even if all leadership styles are associated with productivity, some employ a stronger impact than others.

Particularly, the Coaching (r = 0.626), Affiliative (r = 0.443), and Visionary (r = 0.416) styles demonstrate relatively strong correlations with productivity, highlighting their vital role in boosting employee achievement. The Participative (r = 0.361) and Pacesetting (r = 0.471) styles present moderate but notable relationships, while the Commanding style (r = 0.306) appears to be the least correlated with productivity, even though its impact continues to be statistically important.

These results confirm, at a preliminary stage, the hypotheses signifying the existence of positive links between each leadership style and work productivity. However, since correlation does not establish a causal relationship, a subsequent regression analysis will be conducted to measure the relative effect of each style and identify their specific contribution to clarifying productivity.

Table 11: Correlation between management styles and productivity

		Scores_m_Commanding	Scores_m_Participative	Scores_m_Pacesetting	Scores_m_Coaching	Scores_m_Affiliative	Scores_m_Visionary	Scores_m_Pvté
Scores_m_Commanding	Pearson Correlation	1	,325**	,364**	,375**	,337**	,306**	,626**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000
	N	302	302	302	302	302	302	302
Scores_m_Participative	Pearson Correlation	,325**	1	,761**	,791**	,709**	,710**	,361**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000
	N	302	302	302	302	302	302	302
Scores_m_Pacesetting	Pearson Correlation	,364**	,761**	1	,812**	,724**	,584**	,471**
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000
	N	302	302	302	302	302	302	302
Scores_m_Coaching	Pearson Correlation	,375**	,791**	,812**	1	,898**	,790**	,483**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000
	N	302	302	302	302	302	302	302
Scores_m_Affiliative	Pearson Correlation	,337**	,709**	,724**	,898**	1	,851**	,443**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000
	N	302	302	302	302	302	302	302
Scores_m_Visionary	Pearson Correlation	,306**	,710**	,584**	,790**	,851**	1	,416**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000
	N	302	302	302	302	302	302	302
Scores_m_Pvté	Pearson Correlation	,626**	,361**	,471**	,483**	,443**	,416**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	
	N	302	302	302	302	302	302	302

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

Source: Compiled from survey questionnaire data using SPSS v.21.

2.3. Testing of Research Hypotheses Using ANOVA Test and Regression.

The effect of management style on employee productivity in the context of Ibn Tofail University in Kenitra can be evaluated in two dissimilar ways, namely the F-ANOVA test and linear regression. The first approach is less robust than the second, as the test can only draw attention to the effect of a single style at a time, without explaining interactions between styles or potential multicollinearity among them. It should be noted that this approach is adequate enough to confirm our research hypotheses regarding the interaction between different styles and employee productivity. The results presented here concentrate on mean comparisons and the strength of the relationship for the management style being tested.

3.1.1. Testing the Links Between Management Styles and Productivity Using the ANOVA Test.

a. Commanding Style and Productivity.

The results of the test, summarized in Table 12 below, disclose an important influence of this style on productivity ($F = 18.348$; $p < .001$). The analysis of linearity ($F = 233.883$; $p < .001$) approves the robustness of this relationship. The association measures (Appendix No. 1) display a correlation of $R = .626$ and an explained variance of 39.2% (R^2). The eta squared is 0.523, demonstrating a strong effect.

Table 12: The Relationship between the Commanding Leadership Style and Employee Productivity at Kenitra University

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Commanding_style	Between Groups	(Combined)	176,623	17	10,390	18,348	,000
		Linearity	132,434	1	132,434	233,883	,000
		Deviation from Linearity	44,189	16	2,762	4,877	,000
	Within Groups		160,812	284	,566		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

b. Participative Style and Productivity.

The ANOVA analysis (Table 13) shows a significant effect ($F = 8.679$; $p < .001$), although less pronounced than for the commanding style. The $R = .361$ and $R^2 = .130$ reflect a moderate correlation. The eta squared = .369 proposes a medium effect.

Table 13: The Relationship between the participative Leadership Style and Employee Productivity at Kenitra University

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Participatif_Style	Between Groups	(Combined)	124,510	19	6,553	8,679	,000
		Linearity	43,868	1	43,868	58,099	,000
		Deviation from Linearity	80,642	18	4,480	5,934	,000
	Within Groups		212,925	282	,755		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

c. Pacesetting Style and Productivity.

The statistical analysis tells a significant impact of the pacesetting management style on employee productivity. The ANOVA test (Table 14) indeed shows highly substantial differences in average productivity between groups ($F = 11.339$; $p < 0.001$). Though, the examination of association measures (Appendix No. 1) offers a vital nuance. While the strength of the relationship ($\eta = 0.647$) is considered high, the coefficient of determination ($R^2 = 0.222$) shows that only 22.2% of the variance in productivity is linearly explained by this management style. This combination of results proposes that the influence of the pacesetting style is statistically confirmed but complex. It does affect performance, but nearly 80% of productivity is subject to on other aspects (individual motivation, work environment, etc.). A management approach entirely focused on this style may consequently have limits in optimizing general performance.

Table 14: The Relationship between the Pacesetting Leadership Style and Employee Productivity at Kenitra University

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Pacesetting_style	Between Groups	(Combined)	141,391	18	7,855	11,339	,000
		Linearity	74,866	1	74,866	108,072	,000
		Deviation from Linearity	66,525	17	3,913	5,649	,000
	Within Groups		196,045	283	,693		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

d. Coaching Style and Productivity.

The analysis of variance was conducted to evaluate the hypothesis that the average employee productivity differs meaningly depending on the pacesetting management style. The results in Table 15 show the presence of a highly noteworthy statistical difference in the average productivity levels among the groups defined by the coaching management style ($F = 18.372$; $p < .001$), with $R = .483$, $R^2 = .234$, and eta squared = .539. In other words, the management style has a significant and constructive impact on employee productivity. This result powerfully recommends that the way managers lead their teams—precisely through a coaching approach focused on individual development—plays a critical role in workplace productivity and performance. Applying training programs striving for improving coaching skills among managers could hence serve as a strategic pedal to enhance overall productivity within the university.

Table 15: The Relationship between the Coaching Leadership Style and Employee Productivity at Kenitra University

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Coaching_style	Between Groups	(Combined)	181,828	18	10,102	18,372	,000
		Linearity	78,815	1	78,815	143,340	,000
		Deviation from Linearity	103,013	17	6,060	11,020	,000
	Within Groups		155,607	283	,550		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

The study of variance (ANOVA) shows that the affiliative management style has a significant effect on employee productivity at the University of Kenitra ($F = 15.870$; $p < .001$). This result implies that the observed differences in productivity levels are statistically linked to the use of this management style, with a very low probability that these findings are due to chance.

E. Affiliative Style and Productivity.

The analysis of the ANOVA test results (Table 16) reveals that the affiliative management style has a significant influence on employee productivity at the University of Kenitra ($F = 15.870$; $p < .001$), with $R = .443$, $R^2 = .197$, and eta squared = .487. This result shows that the observed changes in productivity levels are statistically related to the use of this management style, with a very low probability that the findings are as a result of chance.

The affiliative style is known for its focus on human relationships, group cohesion, and emotional climate. Affiliative managers give precedence to harmony, active listening, appreciation, and unity. This style consequently appears to promote a healthy and inspiring work environment in which employees feel appreciated and supported, leading to increased productivity.

The inference is that the affiliative style has an important and considerable influence on employee productivity. It stands out as one of the most effective styles among the six studied, highlighting the magnitude of emotional intelligence, recognition, and relational well-being in university management dynamic forces.

Table 16: The Relationship between the Affiliative Leadership Style and Employee Productivity at Kenitra University

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Affiliative_styl	Between Groups	(Combined)	164,390	17	9,670	15,870	,000
		Linearity	66,343	1	66,343	108,882	,000
		Deviation from Linearity	98,047	16	6,128	10,057	,000
	Within Groups		173,046	284	,609		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

F. Visionary Style and Productivity.

The analysis findings of table 17 reveals that the Visionary style of management has a statistically significant impact on employee productivity at Kenitra University. The ANOVA test results display an extremely vital difference between groups ($F = 19.775$, $p < .001$). The strength of this relationship is very strong, as indicated by an Eta (η) value of 0.746 **(appendix A).** Most prominently, the Eta-squared (η^2) value of 0.557 proves that the Visionary management style explains 55.7% of the variance in productivity scores. This means that over half of the differences in employee performance can be attributed to this leadership approach. Hence, the Visionary style is a deeply influential aspect in boosting productivity within the university.

Table 17: The Relationship between the Visionary Leadership Style and Employee Productivity at Kenitra University

			Sum of Squares	df	Mean Square	F	Sig.
Employee_productivity_and_quality_of_work5 * Visionary_style	Between Groups	(Combined)	187,982	18	10,443	19,775	,000
		Linearity	58,327	1	58,327	110,445	,000
		Deviation from Linearity	129,655	17	7,627	14,442	,000
	Within Groups		149,454	283	,528		
	Total		337,436	301			

Source: Compiled from survey questionnaire data using SPSS v.21.

Based on the findings of the ANOVA tests for mean comparisons, all the initially proposed research hypotheses have been confirmed. Moreover, the nature of the observed relationships corresponds to that described by management theory. Though, this validation is temporary, pending approval by a regression analysis that accounts for connections between the diverse managerial styles, as well as potential multicollinearity issues. The following table reviews these results.

Table 18: Summary of the research hypotheses testing.

Hypothesis	Signes (+) attends	Results
H1: Commanding leadership style has a positive impact on employee productivity and quality of work	**Valid**	**Valid**
H2: Participative leadership style has a positive impact on employee productivity and quality of work	**Valid**	**Valid**
H3: pacesetting leadership style has a negative influence on employee productivity and quality of work.	**Valid**	**Valid**
H4: Coaching leadership style has a positive impact on employee productivity and quality of work.	**Valid**	**Valid**
H5: Affiliative leadership style has a positive influence on employee productivity and quality of work.	**Valid**	**Valid**
H6: visionary leadership style has a positive influence on employee productivity and quality of work.	**Valid**	**Valid**

Source: Compiled from survey questionnaire data.

3.1.2. Testing the Links Between Management Styles and Productivity Through Linear Regression.

The study of the relationship between different management styles and employee productivity at the Kenitra university campus continues with the application of a multiple linear regression. The model specifies productivity as the endogenous variable and the six management styles as exogenous variables. The hypothesis of a non-zero conditional mean productivity, no matter the style used, is assumed to confirm proper model specification, particularly by including a constant.

Before presenting the regression results—which will be explained based on the importance of the coefficients along with the marginal and overall descriptive power—we present a collinearity test based on tolerance and the Variance Inflation Factor (VIF). This initial step is crucial to verify compliance with the assumption of no severe multicollinearity between the independent variables.

a. <u>Test of Multicollinearity Between Management Styles.</u>

The multicollinearity analysis, carried out using tolerance and the Variance Inflation Factor (VIF), is presented in the tables below.

Table 19: Initial multicollinearity test (including all styles).

Model		Collinearity Statistics	
		Tolerance	VIF
1	Commanding_style	,848	1,180
	Participatif_Style	,292	3,425
	Pacesetting_style	,275	3,642
	Coaching_style	,123	8,112
	Affiliative_styl	,134	7,459
	Visionary_style	,231	4,328

Source: Compiled from survey questionnaire data using SPSS v.21.

The collinearity test (Table 19) reveals that the Coaching_style and Affiliative_style variables exhibit signs of problematic multicollinearity, with low tolerance values (0.123 and 0.134, respectively) and VIFs exceeding the threshold value of 5 (8.112 and 7.459). This indicates that these variables share a high degree of common variance with other explanatory variables, which could bias the estimation of the regression coefficients.

After removing the Coaching_style and Affiliative_style variables, the multicollinearity test (Table No. 31) shows significant improvement. Tolerance values are all above 0.2, and VIFs are below 5, thus confirming the absence of severe multicollinearity among the remaining independent variables. This correction ensures the reliability and validity of the multiple linear regression model estimates.

Table 20: Multicollinearity test after exclusion of problematic styles.

Model		Collinearity Statistics	
		Tolerance	VIF
1	Commanding_style	,854	1,171
	Participatif_Style	,314	3,181
	Pacesetting_style	,404	2,476
	Visionary_style	,487	2,052

Source: Compiled from survey questionnaire data using SPSS v.21.

b. Multiple Regression Analysis and Testing of Research Hypotheses.

As part of this study, a multiple linear regression was conducted to detect the management styles that most meaningfully impact employee productivity and work quality at the University of Kenitra. The specification of the multiple linear regression model, in the absence of any collinearity issues, confirms the assumption of unbiased and consistent coefficient estimates.

To confirm the strength of the model, the Stepwise selection method was used to optimize the parsimony of the explanatory variables and avoid redundancy issues among the management styles. This method led to the selection of an optimal model, the estimation results of which are presented in Table 21:

Table 21: Estimated coefficient results of the specified model.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
4	(Constant)	,746	,187		3,993	,000	,379	1,114		
	Commanding_style	,596	,052	,512	11,355	,000	,492	,699	,854	1,171
	Pacesetting_style	,344	,074	,303	4,620	,000	,197	,490	,404	2,476
	Visionary_style	,195	,053	,217	3,646	,000	,090	,300	,487	2,052
	Participatif_Style	-,174	,068	-,190	-2,560	,011	-,309	-,040	,314	3,181

a. Dependent Variable: Employee_productivity_and_quality_of_work5

Source: Compiled from survey questionnaire data using SPSS v.21.

The final model retains four management styles as being significantly related to employee productivity and work quality. The results are interpreted as follows:
Since all the model's coefficients are statistically significant ($|t| > 1.96$; $p < 0.05$), we conclude that:

- Commanding Style: With a standardized coefficient Beta = 0.512, this style emerges as the main predictor of productivity. It has a very strong positive impact, which is statistically highly significant ($p < .001$).
- Pacesetting Style: This style also shows a positive and significant effect, with Beta = 0.303. It contributes substantially to employee performance by setting high standards and enforcing a rigorous work discipline.
- Visionary Style: Focused on a clear and inspiring vision, this style has a moderately positive effect (Beta = 0.217), indicating that a manager's ability to give meaning to work is an important driver of productivity.
- Participative Style: Unlike the others, this style shows a significantly positive effect (Beta = 0.190; $p = .011$). This may be explained by a potential loss of efficiency due to overly diluted decision-making, lack of clarity in directives, or difficulty asserting authority in a structured academic environment.

In summary, this model highlights that not all management styles contribute equally to productivity. The Commanding Style clearly stands out as the most effective, followed by the Pacesetting and Visionary styles, which also offer optimistic contributions. Moreover, while a highly participative approach may still boost productivity, it recommends the need for a sense of balance between inclusion and clear direction.

Based on these results, the research hypotheses we submitted for testing produced the following outcomes:

Table 22: Testing of research hypotheses based on the regression analysis.

Hypothesis	**Expected(+)signs"**	**Results**
H1: Commanding leadership style has a positive impact on employee productivity and quality of work	**Valid**	**Valid**
H2: Participative leadership style has a positive impact on employee productivity and quality of work	**valid**	**Invalid**
H3: pacesetting leadership style has a negative influence on employee productivity and quality of work.	**Valid**	**Valid**
H4: Coaching leadership style has a positive impact on employee productivity and quality of work.	**Valid**	**invalid**
H5: Affiliative leadership style has a positive influence on employee productivity and quality of work.	**Valid**	**Invalid**
H6: Visionary leadership style has a positive influence on employee productivity and quality of work.	**Valid**	**Valid**

Source: Compiled from survey questionnaire data.

Although the results of the ANOVA test led to the confirmation of all the hypotheses, the regression analysis exposed that two management styles could not be studied due to multicollinearity—namely, the affiliative and coaching styles—while three styles were found to be determinants of productivity.

In order to test research hypothesis H7, which states that the organization (the university) has more constructive leaders than destructive leaders, we formulate a standard statistical test for comparing proportions as follows:

The null hypothesis H0 states that the proportion of constructive leaders is equal to the proportion of destructive leaders (including destructive, toxic, and abusive), versus the alternative hypothesis H1, which states that the proportion of constructive leaders is greater than that of destructive leaders.

Since the proportion comparison test is not pre-programmed in SPSS, we resort to an alternative test, the Goodness-of-Fit test, which is implemented in SPSS. The test results are as follows:

Table 23: Test of Goodness-of-Fit

	compare_style
Chi-Square	95,695[a]
df	1
Asymp. Sig.	,000

Source: Compiled from survey questionnaire data using SPSS v.21.

The chi-square (χ^2) goodness-of-fit test showed that the observed distribution (78.1% constructive leaders, 21.9% destructive leaders) significantly deviated from an expected equal distribution (50/50), $\chi^2(1, N = 302) = 95.70$, $p < .001$. Consequently, we reject the null hypothesis (H_0) and confirm hypothesis H1. The university has significantly more constructive leaders than destructive leaders.

Regarding the final research hypothesis H8, which states that the participative leadership style is the most commonly used style and has a positive impact on employee productivity and quality of work, confirming this hypothesis requires the use of the Repeated Measures ANOVA statistical test, which is more appropriate in situations where the mean scores of several variables are compared simultaneously.

Contrary to the initially proposed hypothesis H8, the results of the Repeated Measures ANOVA (Appendix B) indicate no significant difference between the mean scores of the six leadership styles. After applying the Greenhouse-Geisser correction, which was necessary due to the violation of sphericity, the main effect of leadership style was not statistically significant ($F(3.15, 948.89) = 1.504$, $p = 0.210$). The effect size, although small ($\eta^2 = 0.005$), further confirms the absence of a notable difference between the styles. Therefore, the participative style does not appear to be significantly more used than the other management approaches. The analysis instead suggests a perceived balanced use of the different leadership styles within the university. Consequently, hypothesis H8 is not supported by the data.

References

[1]. Yammarino, F. J., & Dubinsky, A. J. (1994). Transformational leadership theory: Using levels of analysis to determine boundary conditions. *Personnel psychology*, 47(4), 787-811.

[2]. Shafie, B., Baghersalimi, S., & Barghi, V. (2013). The relationship between leadership style and employee performance: Case study of real estate registration organization of Tehran Province. *Singaporean Journal of Business, Economics and Management Studies*, 51(1119), 1-9.

[3]. Sougui, A. O., Bon, A. T. & Hassan, H. M. H. (2015). The impact of leadership styles on employees' performance in telecom engineering companies. *Australian Journal of Basic and Applied Sciences,* 8(4).

[4]. Igbaekemen, G. O. & Odirvwri, J. E. (2015). Impact of leadership style on organization performance: A critical literature review. *Arabian Journal of Business and Management Review*, 5(5), 1-7.

[5]. Xenikou, A. (2017). Transformational leadership, transactional contingent reward, and organizational identification: The mediating effect of perceived innovation and goal culture orientations. *Frontiers in Psychology*, doi:10.3389/fpsyg.2017.01754. 8, 1754.

[6]. Saleem, H. (2015). The impact of leadership styles on job satisfaction and mediating role of perceived organizational politics. *Procedia-Social and Behavioral Sciences*, 172, 563-569.

[7]. Iqbal, N., Anwar, S. & Haider, N. (2015). Effect of leadership style on employee performance. *Arabian Journal of Business and Management Review, 5(5), 1-6.*

[8]. Briker, R.; Walter, F.; Cole, M.S., (2021). Hurry up! The role of supervisors' time urgency and self-perceived status for autocratic leadership and subordinates' well-being. *Personnel Psychol., 74*(1): 55-76 (22 pages).

[9]. Bass, B.M.; Bass, R., (2009*). The Bass handbook of leadership: Theory, research, and managerial applications.* New York: Simon Schuster.

[10]. Obiwuru, T. C., Okwu, A. T., Akpa, V. O. & Nwankwere, I. A., 2011. Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research, 1*(7), pp. 100-111.

[11]. Harms, P.D.; Wood, D.; Landay, K.; Lester, P.B.; Vogelgesang Lester, G., (2018). Autocratic leaders and authoritarian followers revisited: A review and agenda for the future. *The Leadership Quart., 29*(1): 105-122 (18 pages).

[12]. Khudhair, F.S.; Rahman, R.A.; Adnan, A.A.B.Z.; Khudhair, A.A., (2022). Impact of leadership style on employee performance (A case study on a private organization in Iraq). Texas J. Multidisciplinary Stud., 13: 15-32 (18 pages).

[13]. Kahai, S., Sosik, J., & Avolio, B. J. (1997). Effects of leadership style and problem structure on work group process and outcomes in an electronic meeting system environment. *psychology, 50*(1), 121-146.

[14]. Fenwick, F. J, & Gayle, C. A. (2008). Missing Links in understanding the relationship between leadership and organisation performance. *In International Business and Economics Research Journal. 7*(5), 67-78.

[15]. Gavin, M. B., & Hofmann, D. A. (2002). Using hierarchical linear modeling to investigate the moderating influence of leadership climate. *The Leadership Quarterly, 13*, 15-33. https://doi.org/10.1016/S1048 9843(01)00102-3

[16]. Ellinger A D, Bostrom R P. Managerial coaching behaviors in learning organizations[J]. *Journal of Management Development, 1999, 18*(9):752-771.

[17]. Ryan, RM; Deci, EL. Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being[J]. *The American psychologist,2010, 55*(1). 68-78.

[18]. Hawkins, P. (2008). The coaching profession: Some key challenges. Coaching: *An International Journal of Theory, Research and Practice, 1*(1), 28-38.

[19]. Onyechi, J. (2009). Correlates of job satisfaction. *Journal of Contemporary Issue. 2*(4) 13-26.

[20]. Stazesky, R.C. (2000), "*George Washington, Genius in Leadership*", httpv/gwpapers.virginia.edu/articles/ stazesky. html, pp. 1-2.

[21]. Zhu, W., Chew, I.K.H. and Spangler, W.D. (2005), "CEO transformational leadership and organizational outcomes: the mediating role of human-capital-enhancing human resource management", *The Leadership Quarterly, Vol. 16* No. 1, pp. 39-52

[22]. Senge, Peter, M. (1991), *The Fifth Discipline: The Art and Practice of the Learning' Organization*, New York, Currency Doubleday, pp. 150-53.

[23]. Smylie, M. A., & Hart, A. W. (1999). School leadership for teacher learning and change: A human and social capital development perspective. *Handbook of research on educational administration, 2,* 421-441.

[24]. Tellis, GJ. (2006), "Disruptive Technology or Visionary Leadership?", *Journal of Product Innovation Management, 23*, pp. 34-38.

[25]. Bass, B.M. (1996), *A New Paradigm of Leadership: An Inquiry into Transformational Leadership*, US Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

[26]. Hogan, R. and Kaiser, R.B. (2005), "What we know about leadership", Review of General *Psychology, Vol. 9* No. 2, pp. 169-180.

[27]. D. Goleman., R. Boyatzis, and A. McKee, Primal Leadership: Unleashing the Power of Emotional Intelligence. *Harvard Business Review Press,* 2013.

[28]. Klein, A. S., Cooke, R. A. & Wallis, J., 2013. The impact of leadership styles on organizational culture and firm effectiveness: An empirical study. *Journal of Management & Organization, 19*(3), pp. 241-254.

[29]. Elenkov, D. S., 2002. Effects of leadership on organizational performance in Russian companies. *Journal of Business Research, 55*(6), pp. 467-480.

[30]. Germano, M. A., 2010. *Leadership Style and Organizational Available at: Impact*. [Online] http://ala apa.org/newsletter/2010/06/08/spotlight/

[31]. Obiwuru, T. C., Okwu, A. T., Akpa, V. O. & Nwankwere, I. A., 2011. Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research, 1*(7), pp. 100-111.

[32]. Iqbal, N., Anwar, S. & Haider, N. (2015). Effect of leadership style on employee performance. *Arabian Journal of Business and Management Review, 5(5), 1-6.*

[33]. Bhargavi, S. & Yaseen, A., 2016. Leadership Styles and Organizational Performance. *Strategic Quarterly, 4*(1), pp. 87-117. Management.

[34]. D. Goleman., R. Boyatzis, and A. McKee, Primal Leadership: *Unleashing the Power of Emotional Intelligence.* Harvard Business Review Press, 2013.

[35]. Goleman, D., Boyatzis, R., & McKee, A. (2002). *The new leaders*. London: Little Brown.

[36]. Goleman, D. (2013). The focused leader. *Harvard Business Review, 91*(12), 50-60.

[37]. Chen, Y. F., & Tjosvold, D. (2006). Participative leadership by American and Chinese managers in China: *The role of relationships. Journal of Management Studies, 43* (8), 1727-1752.

[38]. Rana, Rozmina, George K'aol, and Michael Kirubi. 2019. Influence of Supportive and Participative Path-Goal Leadership Styles and the Moderating Role of Task Structure on Employee Performance. Available online: http://erepo.usiu.ac.ke/11732/5046 (accessed on 1November 2022).

[39]. Khassawneh, Osama, and Mohamed-Osman Shereif Mahdi Abaker. (2022). *Human Resource Management in the United Arab Emirates: Towards a Better Understanding*. In HRM in the Global South. Cham: Palgrave Macmillan, pp. 103–28.

[40]. Benoliel, Pascale, and Anat Barth. (2017). The implications of the school's cultural attributes in the relationships between participative leadership and teacher job satisfaction and burnout. *Journal of Educational Administration 55*: 640–56. [CrossRef]

[41]. Mohammad,Tamara, and Osama Khassawneh. 2022. The impact of humor on work efficiency at workplace: An empirical examination in tourism and hospitality sector in The United Arab Emirates. *Journal of Business Strategy Finance and Management 4*: 91–110.

[42]. Heckscher, C., & Adler, P. (2006). *The firm as a collaborative community: Reconstructing trust in the knowledge economy.* Oxford, UK: Oxford University Press.

[43]. Jameson, J., Ferrell, G., Kelly, J., Walker, S., & Ryan, M. (2006). Building trust and shared knowledge in communities of e-learning practice: Collaborative leadership in the JISC eLISA and CAMEL lifelong learning projects. *British journal of educational technology, 37*, 949-967.
[44]. Vangen, S., & Huxham, C. (2003). Nurturing collaborative relations: Building trust in interorga nizational collaboration. *Journal of Applied Behavioral Science, 39*(1), 5.
[45]. Cunliffe, A. L. (2009). The philosopher leader: On relationalism, ethics and reflexivity—A criti cal perspective to teaching leadership. *Management Learning, 40*(1), 87.
[46]. Crevani, L., Lindgren, M., & Packendorff, J. (2010). Leadership, not leaders: On the study of leadership as practices and interactions. *Scandinavian Journal of Management, 26*, 77-86
[47]. Raelin, J. (2006). Does action learning promote collaborative leadership? *Academy of Manage ment Learning and Education, 5*, 152.
[48]. Montgomery, P.S. and Growe, R. (2003), "*Visionary Leaders by Design*", http://www.advancingwomen.com/ spring2003/montgo-l.html, pp. 1-10.
[49]. Fehlis, C.P. (2005), 'A Call for Visionary Leadership", *Journal 0*.[Extension, 43, (1), pp. 1-4.
[50]. Harper, S.C. (1991), "Visionary Leadership: Preparing Today for Tomorrow's Tomorrow", *Industrial Management, 33*, (2), March-April, pp. 13-18.
[51]. Fechter, W.F. and Horowitz, R.B. (1991), "Visionary Leadership Needed by All Managers", *Industrial Management, 33*, (4), July-August, pp. 2-3.
[52]. Champlin, J.M. and Champlin, C. (1993), *Visionary Leadership: HOlV Everyone Can Learn to Lead Better,* Los Angeles, California, Crossroad Publishing Co.
[53]. Nanus, B. (1992), *Visionary Leadership: Creating a Compelling Sense of Direction for Your Organisation,* Jossey-Bass Publishers, San Francisco, CA.
[54]. Sashkin, M. (1992), "Strategic leadership competencies: what are they? How do they operate? What can be done to develop them?", in Phillips, R.L. and Hunts, J.G. (Eds), *Strategic Leadership: A Multiorganizational-Level Perspective*, Quorum Books, Westport, CT, pp. 139-160.
[55]. Lesourd, S. J., Tracz, S., & Grady, M. L. (1992). Attitude Tpward Visionary Leadership. *Journal of School Leadership, 2*(1), 34-44.
[56]. M. Taylor, C., J. Cornelius, C., & Colvin, K. (2014). Visionary leadership and its relationship to organizational effectiveness. *Leadership & Organization Development Journal, 35*(6), 566-583.
[57]. Valenzuela, K. (2007). *Leadership Definitions*. NY: Prentice Hall.
[58]. Tellis, GJ. and Golder, P.N. (1996), "First to Market, First to Fail? The Real Cause of Enduring Market Leadership", *Sloan Management Review, 37*, (2), pp. 65-75.
[59]. Ahmad, Abad and Chopra, O.P. (2004), *Passion to Win*, New Delhi, Excel Books.
[60]. Dumdum U. R, Lowe K. B, Avolio B. J (2002), "*A Meta Analysis of Transformational and Transactional Leadership Correlates of Effectiveness and Satisfaction: An Update and Extension,*" In: Avolio B. J, Yammarino F. J (eds)
[61]. Dvir, T.M., Eden, D., Avolio, B. J. & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: a field experiment. *Academy of Management Journal, 45*(5), 735-744
[62]. Howell, J. M., Neufeld, D.J. & Avolio, B.J. (2005). Examining the relationship of leadership and physical distance with business unit performance. *The Leadership Quarterly, 16*, 273-285
[63]. Epitropaki, O., & Martin, R. (2005). The moderating role of individual differences in the relation between transformational/transactional leadership perceptions and organizational identification. *The Leadership Quarterly, 16*, 569–589.
[64]. LePine, M. A., Zhang, Y., Crawford, E. R., & Rich, B. L. (2015). Turning their pain to gain: Charismatic leader influence on follower stress appraisal and job performance. *Academy of Management Journal*.
[65]. Elenkov, D. S., 2002. Effects of leadership on organizational performance in Russian companies. *Journal of Business Research, 55*(6), pp. 467-480.
[66]. Germano, M. A., 2010. *Leadership Style and Organizational Available at: Impact*. [Online] http://ala apa.org/newsletter/2010/06/08/spotlight/

Appendices

Appendix A: Measures of Association Between Employee Productivity and Management Styles.

➔ **Commanding_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle1	,626	,392	,723	,523

➔ **Participative_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle2	,361	,130	,607	,369

➔ **Pacesetting_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle3	,471	,222	,647	,419

➔ **Coaching_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle4	,483	,234	,734	,539

➔ **Affiliative_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle5	,443	,197	,698	,487

➔ **Visionary_style**

Mesures d'association

	R	R-deux	Eta	Eta carré
PVTE * mstyle6	,416	,173	,746	,557

Appendix B: Results of the Repeated Measures ANOVA Test.

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Style	Pillai's Trace	,087	5,665[b]	5,000	297,000	,000	,087
	Wilks' Lambda	,913	5,665[b]	5,000	297,000	,000	,087
	Hotelling's Trace	,095	5,665[b]	5,000	297,000	,000	,087
	Roy's Largest Root	,095	5,665[b]	5,000	297,000	,000	,087

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Style	,199	482,942	14	,000	,630	,638	,200

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Style	Sphericity Assumed	3,196	5	,639	1,504	,185	,005
	Greenhouse-Geisser	3,196	3,152	1,014	1,504	,210	,005
	Huynh-Feldt	3,196	3,190	1,002	1,504	,209	,005
	Lower-bound	3,196	1,000	3,196	1,504	,221	,005
Error(Style)	Sphericity Assumed	639,464	1505	,425			
	Greenhouse-Geisser	639,464	948,888	,674			
	Huynh-Feldt	639,464	960,096	,666			
	Lower-bound	639,464	301,000	2,124			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Style	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Style	Linear	,023	1	,023	,029	,864	,000
	Quadratic	,194	1	,194	,371	,543	,001
	Cubic	,111	1	,111	,293	,588	,001
	Order 4	,525	1	,525	2,340	,127	,008
	Order 5	2,342	1	2,342	11,807	,001	,038
Error(Style)	Linear	240,271	301	,798			
	Quadratic	157,807	301	,524			
	Cubic	114,203	301	,379			
	Order 4	67,474	301	,224			
	Order 5	59,709	301	,198			

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	17618,521	1	17618,521	3655,801	,000	,924
Error	1450,619	301	4,819			

Questionnaire

a. Demographic Profile of Respondents

Direction: The following statements are about your personal information. Please write the necessary information on the blank space provided and, in the optional items, indicate your answer by putting a tick mark (x) in the box.

1. Sex: Male ( ) Female ( )

2. Age: 21 – 30 ( ) 31 – 40 ( ) 41 – 50 ( ) 51 – 60 ( )

3. Education: Diploma ( ) Degree ( ) Masters ( ) Ph.d ( )

4. Department: Human Resources Department ( ) Financial and Accounting Department ( ) Information Technology Department ( ) Communication Department ( ) General Services and Logistics Department ( ) Planning and Strategy

Department ( ) Training and Development Department ( ) Public Relations Office ( ) Quality and Performance Department ( ) Other ( )

5. Position: Technician ( ) Specialized Technician ( ) Administrator ( ) Engineer ( ) Professor ( )

6. Service year: 1- 5 ( ) 6 - 10 ( ) Above 10 ( )

7. Origin: Local ( ) Other ( )

b. Leadership Style and Employee Productivity and Quality of Work

Kindly rate the following statements below as to the extent to which you agree or disagree with the statements described under each attribute based on your perception. Using the scale of 1 up to 5, tick in the appropriate box as to the extent of your agreement or disagreement with the statements given. Where: Scale 1= strongly disagree; 2= disagree; 3= Neither agree nor disagree; 4= agree; 5= strongly agree.

1. Leadership Style	**Likert Scale**				
1.1. Commanding style	**1**	**2**	**3**	**4**	**5**
Decisions are always made by managers for subordinates.					
Managers are determined to push projects forward to get results					
My duties are limited by the managements.					
Managements set high standards expecting others to do the same					
Often, performance requirements are designed as per the leaders needs					
1.2. Participative style	**1**	**2**	**3**	**4**	**5**
My manager forges consensus through participation					
My manager usually asks "What do you think?"					
My manager employs collaboration					
My manager believes in team leadership					
My manager employs effective communication					
1.3. Pacesetting style	**1**	**2**	**3**	**4**	**5**
My manager sets high standards for performance					
My manager instruction is "do as I do now"					
My manager employs Conscientiousness					
My manager characterized by the drive to achieve results					
My manager uses the initiative					
1.4. Coaching style	**1**	**2**	**3**	**4**	**5**
My manager develops his subordinates for the future					
My manager facilitates learning by suggesting "try this"					

My manager main interest is to improve his subordinates' skills					
My manager employs empathy					
For my manager, performance is expected to improve					
1.5. Affiliative style	**1**	**2**	**3**	**4**	**5**
My manager creates harmony					
My manager builds emotional bonds					
My manager believes "people come first"					
My manager employs empathy					
For my manager, building relationships make it work					
1.6. Visionary style	**1**	**2**	**3**	**4**	**5**
My manager believes in taking people with him, not just telling them what to do.					
My manager likes to set out a clear vision for the future.					
My manager likes to make sure that everyone understands where the company is going.					
My manager is good at helping people to change direction.					
My manager likes to be involved in setting the direction of travel.					
2. Employee productivity and quality of work	**1**	**2**	**3**	**4**	**5**
I am always punctual in delivering the required output.					
I understand the vision/mission of the organization very well					
I am always motivated to deliver quality work					
I could manage change in my job very well whenever the situation demands.					
I believe that mutual understanding can lead to a viable solution in organization.					

c. Types of Leaders

How would you describe your leader?

Constructive ( ) Destructive ( ) Toxic ( ) Abusive ( )