



Informal Communication in the Academic Digital Environment, a dialectical study of the trilogy (legalization, inhibition, activation)

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Abstract:

The current study, entitled Informal Communication in the Academic Digital Environment: A Dialectical Study of the Trilogy (regulation, activation, inhibition) aimed to determine the impact of digitization on informal communication in universities, or in other words, to discover whether digitization regulates, activates, or inhibits informal communication between academic groups. Based on researchers' studies and simulations of the academic reality, the following conclusions were reached:

- Digitization in the academic environment regulates informal communication between academic groups.
- Digitization in the academic environment does not activate informal communication between academic groups.
- Digitization in the academic environment inhibits informal communication between academic groups.

Keywords: *Informal communication; digitization; academic environment; academic groups*

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1. INTRODUCTION

In light of the digital revolution that the world is witnessing at various levels (economic, social, cultural, and political), various sectors have been forced to submit to the authority of digital transformation, such as academic institutions based on relational systems, in order to ensure the full performance of their internal (users and staff) and external (student training) responsibilities in serving the needs of the labor market and society. These relationships, in turn, control the directions of the actors, as they are a hierarchical structure whose base is subject to the authority of its summit. Since the university is subject to accelerating dynamics that require it to produce new research that provides the environment with more effective and innovative solutions to systemic and social problems,

This requires all academic parties to intensify the communication process, according to regular principles between work groups, to complete the tasks divided (division of labor) among all actors in the institution (managers, implementers, arbitrators). The purpose of the systematic basis is to follow certain types of organizational communication and adhere to clear directions (the direction of organizational communication followed) between work groups, to ensure the smooth flow of information and achieve its purpose.

In the same context, informal communication, through which information is conveyed without organizational approval, occurs between university groups (students, administrators, professors), especially since it is based on personal social relationships. not to mention the prevailing relational representations among individuals that precede official work in the institution, especially since informality is a necessary pillar of organizational formality, when it comes to the positives that informal communication brings to administrative processes in the academic environment, according to what is mentioned in human relations theory.

In light of the prevailing and coexisting digital transformation, the university has become a digital environment that responds quickly to the ongoing digital transformation, reducing the money and effort expended by academic groups to disclose their internal and external social responsibilities. Therefore, the scientific elite must correct their optimistic view regarding the digitization of the higher education sector and strive to make the most of the digitization experience to achieve a university return of leading scientific quality, especially since digitization restores some transgressions to their natural size (commitment to performance credibility, adherence to professional conscience in accomplishing tasks) for all users of the academic system. This requires us, as scientific research communities, to link the concept of informal communication among academic groups to the digital environment and answer the question posed in the current study:

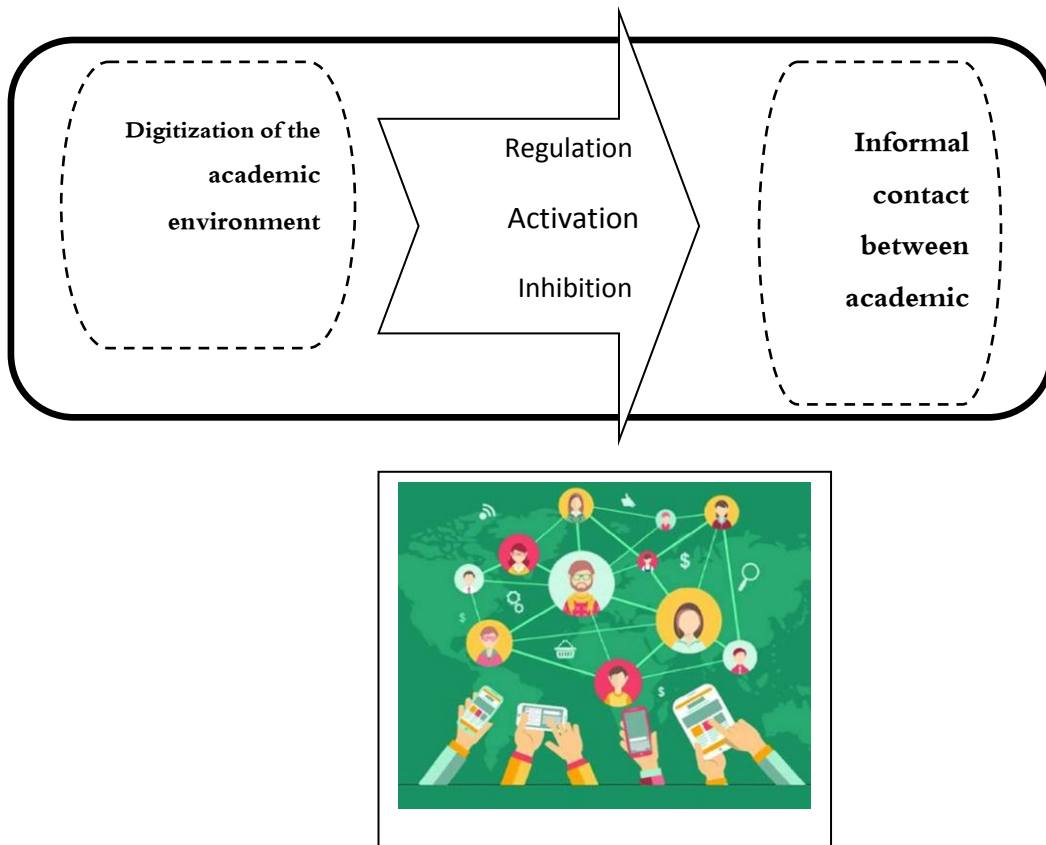
What is the impact of the digitization of the academic environment on informal communication among academic groups at Algerian universities?

This raises several questions, including:

- Does the digitization of the academic environment regulate informal communication between academic groups at Algerian universities?
- Does the digitization of the academic environment stimulate informal communication between academic groups at Algerian universities?
- Does the digitization of the academic environment inhibit informal communication between academic groups at Algerian universities?

2. Study question formulation model

The focus was on the impact of the academic environment on informal communication in a dialectical form without breaking down the study variables into dimensions, in an attempt to understand how the digitization of the academic environment, which researchers refer to as the university system, affects informal communication, i.e., the separation in the dialectic of codification, activation, and inhibition, which is an effect that the current study seeks to discover by analyzing the opinions of scientists and researchers in a dialectical manner and based on the researchers' experience of the academic reality.



3. Importance of the study:

The importance of the study entitled “Informal Communication in the Academic Digital Environment: A Dialectical Study of Three Factors (Regulation, Activation, and Inhibition)” lies in highlighting the importance of informal communication in feeding organizational processes, as it is necessary for the cohesion of formal work groups by contributing to the exchange of information on the performance of administrative and educational tasks in Algerian universities. In addition, the subject is of great importance in terms of defining digital processes at the level of higher education and their impact on informal communication processes. In terms of scientific importance, it can be said that the study is important in enriching the knowledge of specialists (media and communication, organizational sociology, and work), as it will contribute to expanding the scope of scientific information and Algerian and Arab university offices.

4. Study objectives:

. Scientifically, the current study (Informal Communication in the Academic Digital Environment: A Dialectical Study of Three Variables: Regulation, Activation, and Inhibition)

seeks to determine the impact of the digitization of the academic environment on informal communication among academic groups at Algerian universities.

❖ It attempts to reveal the type of impact between the study variables: regulation, activation, and inhibition. In an ongoing academic debate, it seeks to reach conclusions and recommendations that represent new horizons for scientific research in the field of organizational and work sociology.

❖ In practical terms, the current study sought to identify everything related to the variable of informal communication and the digital environment in Algerian universities.

5. Study methodology:

The dialectical approach was adopted, in accordance with the nature of the study, through the analysis of researchers' opinions on the first position, which is the dimension of the academic digital environment in Algeria, and then the opinions on the second position, which is the dimension of informal communication between academic groups of various types, students, faculty, and even university employees as a whole, in a dialectical enrichment of the understanding of the impact of digitization on formal communication. The dialectical approach is considered an important reference for the studies of early scholars such as Karl Marx in his book *The Dialectic of Capital*, in which he explains the dialectic between the social classes that own and those that lack the means of production and the causes of social conflict.

6. Study Concepts:

The concept serves as a gateway to defining the requirements of the study. Since we did not break down the dimensions of the study, as mentioned earlier in the section on the research question formulation model, we will suffice with knowing the impact according to the debate in the current study. We decided to adjust the study concepts that represented a focal point on which we focused our debate, but rather to know the type of impact (legalization, activation, inhibition) of the digitization of the academic environment on informal communication. Since knowledge is both cumulative and epistemological, there is a difference between scientists and researchers in giving a common definition of the concepts included in the current study, as the concept of regulation is defined as follows: The concept has been used in many different ways depending on the different disciplines and perspectives of scientists and researchers, so that the concept of legalization has been used in several fields, such as the field of law, where it originates from the original source of law, the field of education, such as the legalization of psychological tests, and the field of food consumption, etc. Therefore, the concept of standardization is defined as: subjecting something to a legal process and making it more formal in accordance with the rules and principles issued by higher authorities (Ibrahim, 1985, p. 60).

It can be defined procedurally and theoretically: researchers use the concept of legalization to refer to the formal procedures imposed by academic digitization, which subject the concept of informal communication between academic groups to legal and formal processes.

Activation is defined by its linguistic origin, which is taken from the verb "to activate" or "to activate," which means to move or to move from a state of rest to a state of movement and vitality.

In Ibn Manzur's dictionary, it means: to activate from a place, i.e., to leave. (Al-Afriqi, 1997, pp. 188-189)

Here, we focus on the scientific concept from the natural sciences and physics that relates to the activation of chemical solutions for plants and the activation of magnets for iron

filings, linking it to what happens in organizational sociology and work, so that it can be defined procedurally as: A stimulating, motivating, and driving process that occurs on the variable of informal communication between academic groups through the variable of digitization.

Inhibition, on the other hand, is defined as a scientific and physical term that means stopping the action of a chemical or physical element, such as slowing down the rate of metal corrosion or stopping the effect of an oxidizing element on iron. (Batash and Shahid, 2021/2022, p. 11)

In our theoretical procedural definition specific to the field of organizational sociology and work, we mean by the concept of inhibition the effect that the digitization of the academic environment has on the informal communication variable between academic groups, where the type of effect is the cessation or slowing down of informal communication by the variable of digitization of the academic environment.

7. Theoretical Framework:

The theory in scientific research is like a fortress under which the researcher works to control the results of his research. Therefore, since the current study relies on a philosophical analysis of early researchers' studies on digitization and informal communication in the academic environment, it is consistent with, first, congruence theory, in a partial microsociological analysis of those relationships that represent a dimension of informal communication. On the other hand, it relies on

- Reasons for adopting congruence theory
 - Balance of relationship patterns due to the existence of two opposing tendencies in hatred or love, agreement or disagreement
 - The theory addresses administrative topics that reflect the researchers' specialization.
 - The theory embodies the ideal of organizational behavior.
 - The theory seeks to create balance in the behaviors of individuals within a single organization. (Al-Alaq, 2009, p. 42)

With regard to the academic digital environment, research into theoretical heritage shows that technological determinism theory is more suited to its requirements, because the overwhelming digitization that society is currently experiencing is akin to inevitable submission to it and working with it (Mrabet and Badani, 2024, p. 194), especially since it is applied globally, nationally, and locally. In other words, this theory allows us to study the macro and micro sociology of group interactions within informal communication with academic digitization.

- Reasons for adopting the theory of technological determinism:
 - Harmony with the inevitability of current academic digitization.
 - Bringing management closer to academic users and shortening the distance of scientific interaction with what academic reality imposes on students, professors, and university administrators.
 - The theory's suitability for the dimensions of the current study.

8. the academic digital environment in Algeria:

Those who hold the first position believe that Algerian universities, like other Arab and international universities, have undergone comprehensive and rapid digitization and a remarkable transformation in their academic operations, whether in terms of student services or their external environment. University digitization is therefore embodied in distance learning, which was brought about by the recent pandemic (COVID-19), as well as e-learning, which had taken Algerian universities by storm years before the pandemic, particularly with

regard to electronic books and files, which were very popular among various scientific groups.

Digitization then gradually progressed, or more precisely, it rose to the top of the pyramid to become registration platforms, the Progras platform, ASjP, the national competition platform, the electronic portals of various ministerial bodies directly related to universities, the university services platform, student university housing, scientific clubs, etc.



It has even been generalized in various fields, not to mention the teaching of secondary scientific units through distance learning, whose content is published on the university platforms of virtual colleges, especially when it comes to distance learning, which has undergone remarkable dynamics, as teaching standards have become available to students registered on the platforms affiliated with their virtual specialization.

In 2006, the Algerian state collaborated with Microsoft to enrich technological education in national universities, not to mention teacher training to address their knowledge gaps, and comprehensive funding for professional development, through the design and implementation of programs that serve the academic pace between students and teachers. (Hamza and Zaiter, 2023, p. 60)

Based on this, the information network between various scientific research institutions, universities, institutes, schools, and research centers was strengthened. According to statistics from 2020, a total of 118 institutions benefited from the information network (Jlam, 2023). This indicates the expansion of the scientific and knowledge base and the benefit of Algerian universities from this virtual experience and knowledge of the research strategy in various centers and universities around the world. This serves as an incentive for local scientific innovation and an increase in the number of patents, as well as emulating the latest scientific publications that serve society and the environment, by following a strategy of connecting the university with its surroundings.

However, all of the above should not make us forget the barriers that hinder the process of digitization in Algeria, especially when it comes to the Algerian academic community, the majority of which has undergone internal training based on traditional methods (paper and pen) but at the same time built on solid scientific foundations, This has made it more adaptable to its structure and has led to attitudes or representations that reject digitization (adaptation to paper) or refuse change. This means that some, but not all, are not proficient in using virtual devices and platforms in terms of accessing them. - Poor network coverage also hinders university digitization as a result of social congestion on platforms and websites. Administrative bureaucracy in Algerian universities, which has slowed the expansion of digitization. Insufficient knowledge of how to use virtual platform software. Random confusion between digitization and paper-based systems, especially among students (students insist on using paper, perhaps due to their limited financial or even cognitive abilities).

Based on this and as a result of researchers' simulation of the digital academic environment, some solutions are proposed to make digitization more positive in Algerian universities. In other words, factors that contribute to the success of academic digital transformation are proposed, such as:

- Designing programs in a flexible manner that is compatible with the qualifications of academic human resources for ease of use of scientific platforms.
- Opening up areas of digital training for various scientific bodies to improve their technological and scientific level.
- Granting sufficient freedom to administrators (democracy) to express their digital views

in order to improve the output of Algerian universities.

- Work to accelerate network coverage in all university facilities, especially student housing, to ensure rapid communication between academic groups, not to mention Algeria's ranking as second to last among Arab countries in terms of internet speed.

In contrast, digitization has a direct relationship with economic, media, and pedagogical processes related to Algerian universities. We note in particular processes related to bibliography, from indexing and programming digital library equipment, with the aim of providing financial resources on the one hand, and on the other hand, organizing the university's knowledge base for intellectual investment and improving university output. It is therefore important to highlight the benefits of digitization in academia, such as improving services for both students and professors, increasing user satisfaction, and increasing scientific productivity in terms of both quantity and quality, as well as increasing scientific expertise while saving time and effort. However, these benefits must be accompanied by correct and effective implementation in order to achieve satisfactory results of consistent and widespread quality.

The digitization of the academic environment remains an inevitable necessity, imposed by the rapid pace of social change and the dynamics stimulated by astonishing technological developments. Every development launched by the information revolution is given a concept that fits it, considering that we coexist with every phenomenon produced by technology, which has turned into information, then digitization, then artificial intelligence, and has even become a standard by which the development of societies, such as academic institutions, is measured.

9. Informal communication in the academic environment:

Those who hold the second position tend to believe that informal communication between academic groups at Algerian universities is a reciprocal association that enables the coordination of administrative and organizational tasks in the service of both students and professors. Therefore, it takes several forms, most notably the spontaneous verbal expression of an individual's satisfaction with a particular phenomenon, which spreads quickly in the university because it is free and not governed by formal controls. It is dominated by horizontal rather than vertical relationships between students and professors, and sometimes between students and the top of the university hierarchy. In other words, it is not codified, and as soon as new information spreads in the university, informal communication expands and occupies a larger place in the pattern of personal relationships between academic actors. Therefore, it is very important in organizational structures as it facilitates communication between individuals and enhances the transfer of information. It does not require any means, as friendship and personal relationships are sources that nourish it, and sometimes coincidences between work groups.

Before the communication process can take place, it must go through several stages, the most important of which are: - The pre-communication stage: the period during which academic groups get to know each other when they are called to be appointed or to study (students). - The spontaneous communication planning stage: Through pleasantries and the unification of goals, the group finds itself in professional relationships with each other. - The implementation stage of informal communication to achieve the intended goals through the exchange of opinions and updates on management and work between all informal parties. (Murtada, 2019, p. 108)

Despite the negative effects of informal communication through (spreading rumors in the university environment and spreading professional animosity among colleagues in different

units and organizational levels, disrupting the balance of academic performance, leading to functional indifference among university work groups, misleading students and professors by believing false statements about their performance.

In the same context, the concept of “informal communication” should be viewed in a more positive light in order to achieve positive returns through easier access to information and faster coordination between various informal bodies. It is an effective means of achieving understanding between informal academic groups. - breaking the repetitive formal routine between academic bodies, - criticizing and discussing instructions to make them appropriate to the requirements of workers, which is an effective means of achieving understanding between various informal parties and, on the other hand, helps to vent workers' complaints about their material and moral needs; Therefore, informal communication is an inevitable necessity that occurs automatically, as stipulated in micro sociological theories (theories of studying parts or organizational interaction), especially in William Ouchi's Z theory, which considers the institution as a family and loyalty to it as loyalty to the family. (Awaaj, 2019, p. 84)

However, when it comes to universities, informal horizontal communication between groups of students is sufficient to achieve academic solidarity among them, as well as between professors and students, to enrich the academic capital of the various academic parties. Since informal communication is a concept governed by formal rules, as it derives its rules from official decrees, academic groups must adhere to the laws and customs prevailing within the university's organizational structure, and because the latter relies heavily on it; because most of the data transmitted through informal communication is accurate and can be relied upon by the university to ensure the flow of information, in addition to being a mechanism for motivating and stimulating individuals. However, one of its most significant drawbacks, as stated in researchers' theories, is that it does not last long compared to formal communication, because its groups dissolve and disintegrate due to personal issues between them, especially since it enables individuals to obtain information that is difficult for official bodies in the institution to obtain, which makes individuals take a personal interest in the institution and become a point of correction for their goals, encouraging workers to prioritize their organizational affiliation with the institution. On the other hand, academic groups must be cautious and wary of communication rumors due to the concealment of many facts from superiors in the absence of oversight

This leads us to conclude a set of proposals that the university can follow to benefit positively from informal communication:

- Supervision must be extended to all categories of academic actors (administration, students, professors).

- Care must be taken to review and discuss the content of informal communication.

- There must be hierarchical consultation on information transmitted between informal groups.

- Efforts must be made to find adequate solutions to everything that hinders informal communication.

10. Study Results:

The theoretical discussion of the variables of the current study, namely the digitization of the academic environment and informal communication, and the details therein, reveal that digitization is nothing more than the formal and systematic translation of the requirements of informal communication. If a university student wants to communicate informally with the university administration, they will be required to complete a written request and submit it on

the platform, without their academic problems or demands being heard. It is clear here that there is a restriction on what university students want. Similarly, when it comes to professors, communication between them and the top of the authority hierarchy is documented and deposited on the platform (scanning and sending documents electronically). Students can also study secondary units remotely by accessing the platform, which will make their knowledge uncontrolled and unclear, far from their informal interaction with their professors, from whom they can benefit more academically. Therefore, it can be objectively concluded that digitization is more useful and effective for formal communication than informal communication, as the latter relies more on documentation, seals, and formal relationships. As for informal communication, it is more prevalent and active among informal academic groups. From this, the study's questions can be answered as follows:

Does the digitization of the academic environment regulate informal communication between academic groups at Algerian universities?

Does the digitization of the academic environment stimulate informal communication between academic groups at Algerian universities?

Does the digitization of the academic environment inhibit informal communication between academic groups at Algerian universities?

11. Discussion of the study's findings in light of the theoretical framework:

With regard to the impact of the first question, "codification," , this is consistent with the compatibility theory in making communication between academic groups informal and codified, i.e., only remotely and with a legal document, meaning that the concept of informal automatically becomes formal according to the principles that stipulate communication as an administrative process. Thus, codification creates a balance in informal communication relationships as imposed by university administration laws.

As for the impact of the second question, which is "discouragement," it is more in line with what is mentioned in the theory of technological determinism. Informal relationships in informal communication among academic groups, with the imposition of the inevitability of digitization, become discouraging, i.e., slow, and sometimes tend to disappear.

We also find in the effect of the third question: "Not active" falls, like the second question, within the theory of technological determinism. Therefore, we can conclude that digitization automatically deals with the dimensions of informal communication without considering other aspects, such as personal relationships between academic actors or the completion of administrative tasks outside the legal framework of academic teams at Algerian universities.

12. Conclusion:

Based on the above regarding the variables of the study (digitization and informal communication) and the dialectical relationship between them, an objective judgment can be made, resulting from the theoretical insight of previous scholars and researchers, and what is academically experienced by the researchers of the current study at the University of Algiers from the experiences of digitization and informal communication. it can be said that digitization at the University of Algiers: regulates, does not activate, and inhibits the informal communication variable. This applies to the theoretical content of the approaches that framed our current study, but rather elevates the services of Algerian universities and makes them more regulated and standardized, away from the chaos of informal communication that occurs between informal groups in the academic system, which requires overwhelming formality to achieve the ideal of Algerian administration, as stipulated by the adopted consensus theory.

The conclusions reached in response to the questions posed in the current study could pave the way for recommendations relating to modern concepts (digitization and informal communication) in the academic environment, which are considered to be the main drivers of organizational processes: Encouraging scientific events on digitization and informal communication in Algerian and Arab universities; Exchanging agreements and experiences between Algerian and Arab universities on the advancement of university digital services; Seeking, among various formal and informal bodies, modern solutions that reconsider the form of informal communication in academic organizations, in the sense of reducing its gaps that serve the goals of informal groups away from their legalization; Providing the means to support the digitization of academic processes and reducing the extent of academic informality to ensure the smooth running of academic processes; Teaching digitization as a fundamental measure in universities, as is the case with information technology and media and communication technology, in order to disseminate student expertise within the university institution.

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