



Understanding Online Power Dynamics in Higher Education: Teachers' Conceptual Realization and Students' Perceptions of Teaching Effectiveness

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Author's contribution

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ABSTRACT

Teachers and students worldwide have embarked on vigorous knowledge-discovering adventures post-COVID-19, transitioning from conventional teaching approaches to reimagined virtual pedagogical trends. Educators drastically shifted from traditional teaching environments to a new virtual teaching realm to minimize learning disruptions, leading to a new way of approaching educational research. Teachers' power has become more transformative in this context, and learners' perceptions have shifted toward collaborative and participatory approaches. The use of power by teachers influences students' learning experiences and the achievement of learning goals. The type of communication employed in educational settings drives power dynamics, shapes students' behavior, and fosters the necessary motivation. This integrative literature review addresses the impact of teacher power and students' evolved

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perceptions of online learning. It answers the questions: To what extent does understanding the teacher's power and students' perception impact online learning performance? And what type of teacher's power fosters students' engagement in an online environment? Data reveal that prosocial power, such as reference, rewards, and experts, positively impact learning outcomes. However, coercive powers are found powerless. The article highlights the importance of consistent communication and enforcing rules and expectations in online teaching. It presents the power dynamics model in an online environment with related pedagogical strategies. Additionally, it reports an effective data collection instrument enabling educators and administrators to identify the type of power that significantly shapes their interactions. To this end, teachers are encouraged to reflect critically on their power practices to create a more conducive online learning environment for students. Based on these findings, implications, limitations, and recommendations were presented.

Keywords: *Virtual classroom; online learning; teacher-student relation; students' perception; teaching effectiveness.*

1. INTRODUCTION

Education is the most progressive area of growth worldwide since its primary goal is human advancement. A wide range of external factors has directly impacted the institutional experiences of students, teachers, and administrators regarding power dynamics. Understanding power dynamics in any education shapes how education functions and is conducted. It has become increasingly challenging for college administrators to ensure that colleges are efficiently administered due to numerous changes and reforms around the world designed to make educational systems suitable for their function in an increasingly virtual global context. Therefore, college accountability and scrutiny have affected the decision-making procedures used by leaders worldwide. Decision-making depends on a leader's capacity to recognize and control their emotions. The emotions that leaders successfully and efficiently control inform and affect their cognitive processes. Consequently, a leader's capacity for emotional self-control may influence their behavior and decision-making abilities.

Over the past few years, the educational realm has experienced significant transformations and advancements in methods, techniques, and strategies to address the new challenges for learning. The COVID-19 experience presented new ways to manipulate learning, paving the way for unprecedented changes in online classrooms. For example, teachers' adaptation to available virtual platforms such as Zoom, Google Meet, and Microsoft Teams shaped teaching and learning effectiveness and accentuated the urgent need to equip educators and students with the required skills to ensure their success in the new learning environments. The shift from

conventional to virtual teaching introduced the teaching community to power dynamics among all related constituents. This power dynamic recognition shaped the teaching and learning aftermath of COVID-19.

Power is defined as the ability to influence the opinions, values, and behaviors of others. The realization of the curriculum aims depends on establishing institutional power understanding mechanisms. For decades, research has focused on teacher-student power relations. In the traditional classroom environment model, it is assumed that the teacher's communication of power is necessary for learning. Students should submit to their teachers to ensure that learning occurs [40]. Educational discourse ingrained this belief that shapes teachers' understanding of power dynamics as teaching for more sustainable relations with all educational constituents, including students [10,27,47]. Many researchers focus on the teacher's power and its impact on learning outcomes. The focus of this research is to examine the extent of teachers' power potential benefits on students' performance, as well as strategies for sharing in-class power to foster participation and increase motivation to sustain students' academic growth.

This report highlights students' perceptions of teacher power in online classrooms. It addresses the teacher's ability to use power and the effect of that power on students' learning attitudes and academic performance. This integrative literature review answers the following questions:

RQ1: To what extent does understanding the teacher's power and students' perception impact the learning performance in online environments?

RQ 2: What type of teacher's power fosters students' engagement in an online environment?

2. METHODOLOGY

An integrative literature review was conducted, which focused on describing the topic from theoretical and conceptual viewpoints to answer the research questions. The data collection passed three stages: First, an initial search for appropriate sources was conducted using Google Scholar and electronic databases from several academic fields, such as education and psychology, to identify articles related to power dynamics in virtual environments, students' perceptions, and engagement in virtual classrooms. Various research terms were used, including different variations and combinations of the following terms: Power typology, virtual teaching and learning, and Students' perception regarding their engagement in online learning. Second, the abstracts were read to screen the initial list of articles for the three main topics. These three research areas were used to form the report's conceptual framework. Third, the conceptual framework was designed to summarize the key findings from the report and answer the research questions. This integrative literature review focused on the peer-reviewed theoretical and empirical studies on virtual power dynamic understanding of teaching and learning in higher education settings.

3. TEACHER'S POWER AND STUDENTS' PERCEPTIONS IN ONLINE ENVIRONMENTS (R Q 1)

Online Power Dynamics: Power is the means to control others (Merriam-Webster Dictionary). It is the relationship among people where the possessor occupies a superior position, compelling the inferior party to do something the latter would not otherwise want to do [8]. French and Raven (1959) defined power as social influence with the ultimate goal of causing psychological change along five dimensions: Coercive, reward, reference, legitimate, and expert powers. Therefore, power implies a social relationship in which the party owning the power uses it to cause changes in the way others think, behave, or act.

The implementation of power differs across various disciplines and settings. French and Raven's (1959) typology of power relationships suggests that teachers and students in educational settings influence each other by

communicating from six power bases [14]. Hurt and colleagues (1978) emphasized the teachers' ability to shape their students' well-being in the classroom. This assumption recommends that teachers use power to direct their students toward their welfare while students willingly submit to the teachers' authority. In this context, students' behavior is influenced by the resources utilized by their teachers. However, compliance with teacher directives varies depending on students' willingness and interpretation of desired behavioral or attitudinal changes during societal rapid changes [29,64]. Power is contingent on individual perceptions. For instance, students submit their assignments to their teachers because they believe teachers can impose penalties or assign low grades for non-compliance. Prosocial power bases (reward, reference, and expert) enhance attraction towards expected outcomes. Conversely, antisocial bases (coercive and legitimate) discourage rule violations or unexpected behaviors [24].

3.1 French and Raven (1959) Outlined the Power Constructs as Follows

1-Reward power is possessed by individuals who own rewards. It results from the person's ability to compensate another for compliance. Reward manifestations might include tangible benefits such as bonus points or extra credits, psychological rewards such as receiving affirmation from the teacher, and relational rewards such as being complimented by teachers or administrators. The challenge with this power is that it may not be as strong as it first appears. For example, supervisors rarely have absolute control over salary increases; managers often cannot control promotions by themselves; and even the CEO needs the permission of the board of directors for some actions in college. In a class setting, teachers can provide rewards such as bonus points, praises, homework passes, positive notes, and teacher gifts. Teachers can increase, decrease, or remove these rewards online. In other words, expected behavior or conformities to orders are likely to increase incentives, while nonconformities might result in the opposite. The reward power is used to draw positive responses. However, the desired effect might not be required or planned if students are not interested in getting these rewards.

2-Coercive power is the administrative punishment toward undesirable behaviors or

responses to prevent them from happening. It comes from the belief that a person can punish others for noncompliance. Threats and punishment are common coercive tools. Individuals use coercive power when they threaten, demote, or deny privileges. Extra homework, loss of privileges, warning letters, and detention could be examples of classroom life. The threat of sanction might cause individuals to comply with the requirements. Reward and coercive power are like “carrot and stick” as rewards increase attraction, and punishment/coercive power refrains individuals from violating rules or having undesirable behavior.

3-Legitimate power is the legalized authority to influence others. It comes from the belief that individuals have the formal right to make demands and expect others to comply accordingly. This power can be unpredictable and unstable. Teachers have the authority to make decisions and enforce regulations in classrooms. Institutions assign teachers to ensure students learn and progress by deciding the materials to read, assignments, learning methods, and interaction methods, among other things.

4-Reference power is drawn based on the student's identification with the teacher. It results

from a person's perceived attractiveness, worthiness, and right to others' respect. It comes from one person liking and respecting another. It can be a big responsibility because individuals do not necessarily have to do anything to earn money. In this context, students are perceived as less powerful, and teachers have a more powerful impact. Students are attracted to their teachers and want to act, behave, or believe in the way the teacher does by emulating those teachers.

5-Expert power is grounded in the teacher's experience and skills in the given area. Students are ready to be influenced by teachers they deem experts in their field. In this context, teachers use their expertise to legitimize what they want to accomplish in their teaching environments. Teachers become trusted as they have superior ability or competence in an area that enables them to explain, teach, and transfer that competence to their students.

6—Informational Power: Informational power is the power individuals obtain by controlling the flow of information. The power derives not from the information itself but from having access to it due to a specific dominant position. For example, having access to confidential financial reports that might change the relationship dynamics in the organization is informational power.

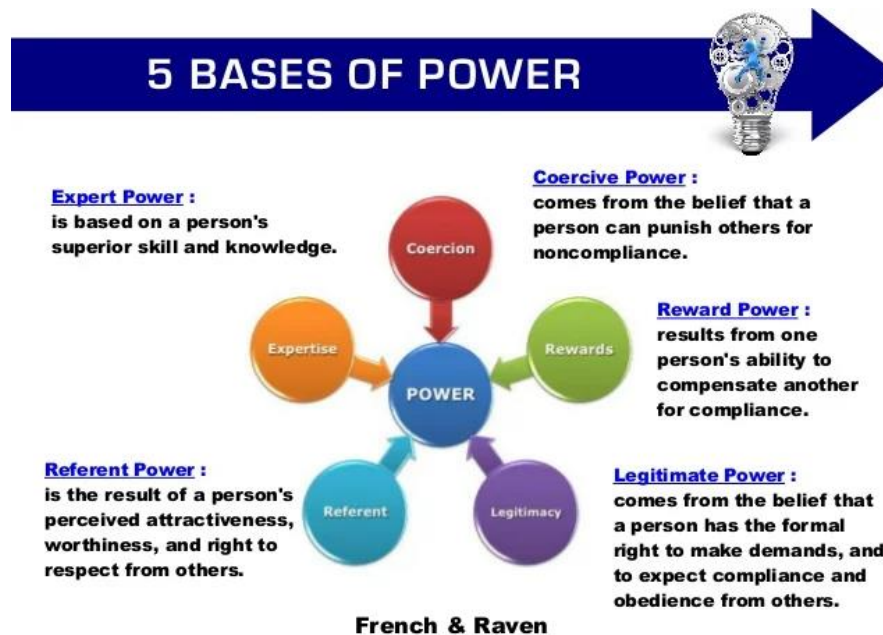


Fig. 1. The forms of Power [68]

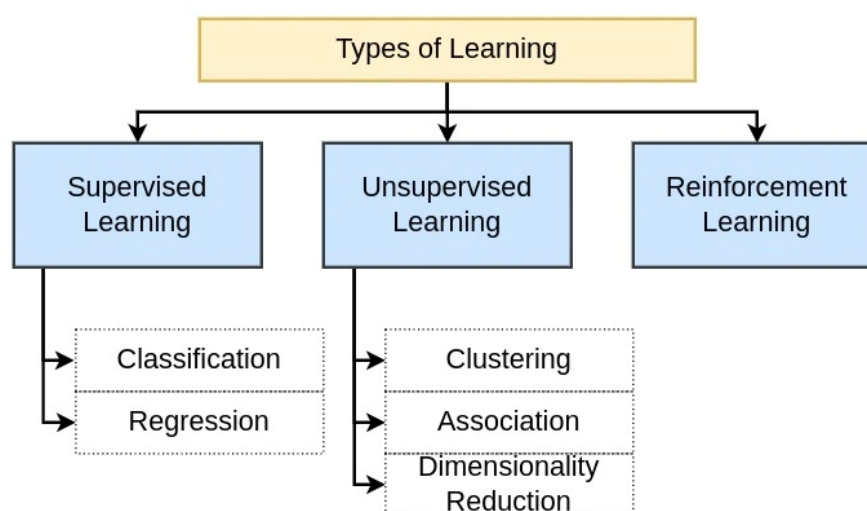


Fig. 2. Type of learning [26,75]

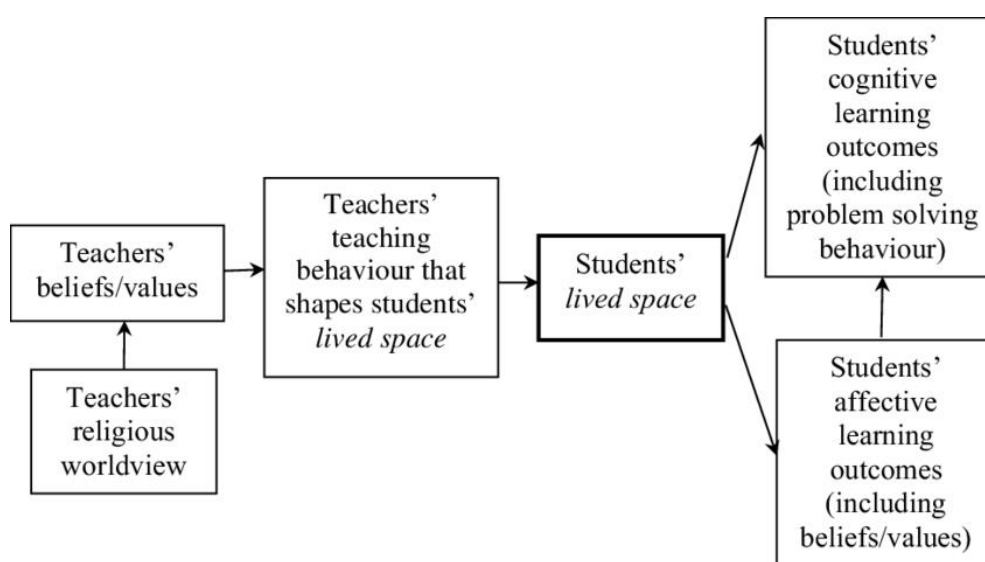


Fig. 3. Teacher's beliefs/ values and students' perceptions in the learning space [42,44,58]

The power typology provides institutions with the tools to understand the power dynamics among the various institutional constituents. It leads to several important conclusions regarding teacher power and compliance-gaining behavior [24]. For example, prosocial forms of power (referent, expert, reward) are associated with cognitive and affective learning and learner motivation. Antisocial forms of power (legitimate and coercive) are related negatively to the same learning outcomes [29,38,68]. The prosocial forms of power are positively associated with perceived teacher confirmation behaviors, such as responding to students' questions, demonstrating an interest in helping and using

various teaching methods to foster learning. Prosocial and antisocial forms of power drive students' perceptions regarding justice and a sense of belonging. Prosocial forms, though, are related to teachers' credibility [65]. To this point, all power forms are associated with student affect and teacher evaluations (See Fig. 1).

Teacher Power: Established power relationships in classrooms shape the realization of instructional goals. The dominance of the regulative instructional discourse theory asserts that didactic discourse is a part of the regulative one. Therefore, power negotiation is an inherent

part of the educational process. In educational settings, the teacher's role shapes the power dynamics among all constituents. Research shows that teachers have the dominant position in guiding the learning process. They actively provide roles and create a conducive learning environment [7]. Teachers are associated with authority, goal-setters, planners, test-givers, and progress indicators [57]. Additionally, their roles of mentoring, guiding, leading, facilitating learning, and transmitting knowledge are vital contributions [26]. To this point, the most effective learning unfolds under the guidance and supervision of teachers when complemented by proper teaching tactics and subtle learning content [75] (See Fig. 2)

Education is one of the influential tools to direct human behavior, foster good values, and develop abilities and knowledge. Educators aim to help learners experience individual academic and personal growth at the end of a particular educational cycle [41]. Teachers act as mentors of knowledge and moral values construction in classrooms. Therefore, students depend on their teachers for guidance and support in content selection, decision-making, and time and effort management [34,44,48]. Trinh and Mai (2018) reported high expectations of teachers' responsibilities in motivating, directing, explaining, informing, and raising awareness in online classroom environments. The way teachers wield power online has attracted many researchers during and after COVID-19. Teachers strategically communicate their power to gain student compliance but view themselves as one of many power sources. They utilize student-centered approaches to influence behavior change directly [30,67,76].

Research shows that teachers tend to rely on prosocial rather than antisocial power to change behavior in teaching environments [27,71]. Teachers have different ways to communicate their power to their students: Direct and Indirect. Teachers use coercion and consent to manifest their in-class power through direct methods. For the indirect method, students perceive their teachers as ultimate figures and comply with their instructions without needing explicit verbal statements [58]. In this context, the teacher's power is based on student perception. Therefore, teachers might not achieve the desired results from their power communication if students do not perceive the required type of power that influences their cognitive and psychomotor abilities (See Fig. 3).

Overall, higher education communities should consider that the harsh reality of everyday online classrooms, either synchronously or asynchronously, is the imbalanced use of in-class power between teachers and learners. This misunderstanding of the power dynamic and its mechanisms causes many teachers to withdraw from their positions. Therefore, focusing on online power dynamics is paramount to effective teaching and learning in the midst of rapid technological innovations and the rising impact of artificial intelligence applications (Gen-AI) on teaching and learning.

4. TEACHER'S POWER AND STUDENTS' ENGAGEMENT (RQ 2)

Learner Empowerment: Teachers and students negotiate power and exercise social influence to facilitate learning. The communication mechanism, though, is shaped by many factors that constantly alter the effect of teacher power on instructional outcomes in online classrooms. Therefore, empowering learners in the new learning and teaching arenas secures a power balance for more instructional effectiveness. That balance is positively associated with student interest, teacher immediacy, and learning behaviors [15,23,66,72]. In this context, faculty secures the conditions that sustain student commitments to produce high-quality work.

Empowering is the humanistic approach to enlighten self-interest to align personal and organizational goals that promote growth [35]. Students have control over their tasks and are motivated to complete them. The added dimension of control and self-efficacy distinguishes learners' empowerment from motivation-based constructs such as affective learning. Affective learning encompasses positive internalized attitudes toward the content. In contrast, learners' empowerment is the positive internalized attitudes, including cognitive belief and self-efficacy, to heighten the personal sense of individual effectiveness [30,74].

Empowerment is a motivation-based construct experienced at the task level (state) or global level (train). Empowerment is grounded in the work of Block (1987) while investigating manager-employer relationships. It focuses on creating intrinsic motivation by providing the proper environment and tasks, which increase one's self-efficacy and energy [5,8,54]. To this point, empowering teachers creates conditions that sustain student commitment to producing

high-quality work. Thomas and Velthouse (1990) define empowerment as consisting of four dimensions: Meaningfulness considers the value of the task to one's beliefs and standards. Competence means that the person feels qualified and capable of performing the necessary activities to achieve the goals. Impact means that the accomplishments of a task are perceived to make a difference in the scheme of things. Choice refers to the degree to which a person self-determines their task goals or methods for accomplishing them [15,60,66,73].

Empowering faculty directly impacts students' academic performance. It creates conditions that build and sustain students' commitment to producing high-quality work [16,35,40]. Frymier and colleagues (1994) developed the Learner's Empowerment Scale (LES) to capture the various constructs raised by Thomas and Velthous regarding their model: Impact, meaningfulness, and Competence. The scale assesses students' perceptions regarding the power dimensions [15] (See Table 1). Frymier and colleagues accentuated the importance of empowerment variation in terms of relational communication, including behaviors, open communication, constructive feedback, and immediacy. The modified scale is an effective

data collection instrument for students, teachers, and administrators to identify the power dimension controlling the online communicative environment. They reported that learner empowerment is associated with teacher immediacy. Hence, online teacher interactions empower students' engagement throughout the learning experience. To this point, educators' awareness of the power dynamics in their online environment might drive their attention to the proper pedagogical strategies to foster students' engagement and self-regulatory learning [15,69,72,78].

Negotiation effectiveness shapes classroom learning. Teachers and their students are in constant negotiations over power. Therefore, the teacher's power to influence students' satisfaction by providing instruction would be fully mediated by the extent to which those teachers might empower or disempower their students. In this context, learner empowerment may partially mediate the impact of teacher power on students' evaluation and their feelings regarding the instructional approaches [54,55,64]. To this end, the total or partial mediation in the learning environment shapes the power dynamics among teachers and their students in combination with the power base (See Fig. 4).

Table 1. Learner's empowerment scale- LES Scale [15, 28,62,72]

Impact	Never	Sometimes	Often	Very Often
I have the power to make a difference in how things are done in this class.				
I have a choice in the methods I can use to perform my work.				
My participation is essential for the success of this class.				
I have the freedom to choose among options in this class.				
I can make an impact on the way things are run in this class.				
Alternative approaches to learning are encouraged in this class.				
I have the opportunity to contribute to the learning of others in this class.				
I have the opportunity to make crucial decisions in this class.				
I cannot influence what happens in this class.				
I have the power to create a supportive learning environment in this class.				
My contributions to this class make no difference.				
I can determine how tasks are performed.				
I contribute to the learning process in this class.				
I have no freedom to choose in this class.				

Impact	Never	Sometimes	Often	Very Often
I can influence the instructor.				
I feel appreciated in this class.				
Meaningfulness				
The tasks required of me in this class are personally meaningful.				
I look forward to going to this class.				
This class is exciting.				
This class is boring.				
This class is interesting.				
The tasks required of me in this class are valuable to me.				
The information in this class is useful.				
This course will help me achieve my future goals.				
The tasks required in this course are a waste of my time.				
This class is not essential to me.				
Competence				
I feel confident that I can adequately perform my duties.				
I feel intimidated by what is required of me in this class.				
I possess the necessary skills to perform successfully in class.				
I feel unable to do the work in this class.				
I believe that I am capable of achieving my goals in this class.				
I have faith in my ability to do well in this class.				
I have the qualifications to succeed in this class.				
I lack confidence in my ability to perform the tasks in this class.				
I feel very competent in this class.				

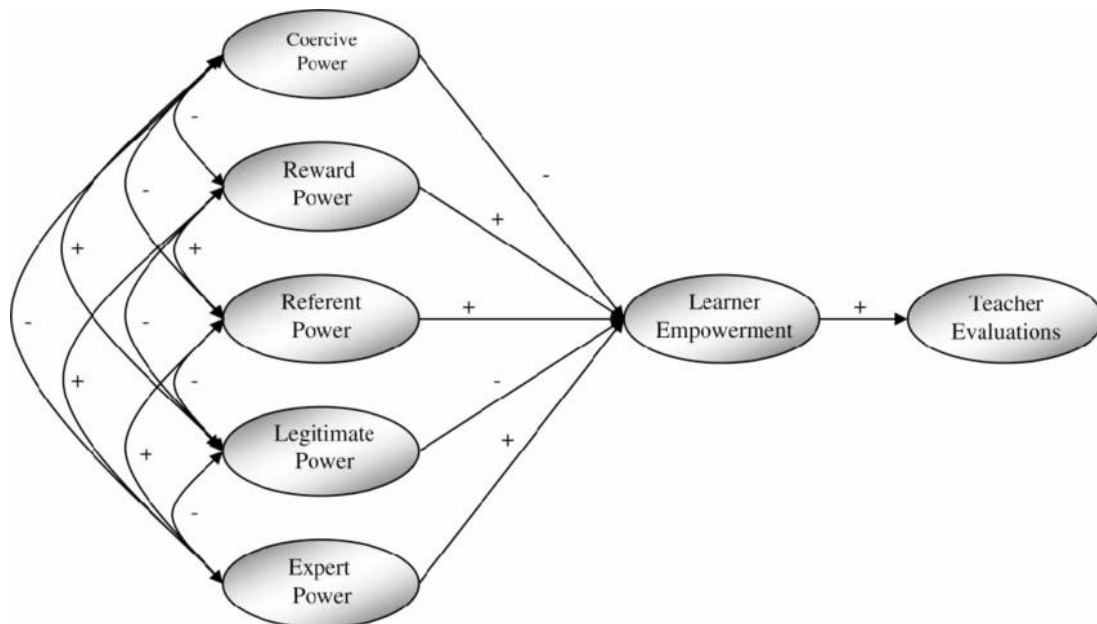


Fig. 4. Full mediation model of learner empowerment [55]

Developing power awareness in an educational setting fosters students' learning experience and teachers' pedagogical practices. From a teacher's perspective, gaining insights and receiving feedback on how communication and behavior impact students' learning and interactions in online environments is challenging [18,56,63]. Understanding teachers' power secures many opportunities to properly manipulate various educational variables, such as students' tendencies, authority, and communication methods. It is beneficial to identify the type of power dominating the educational environment. The Teacher Power Use Scale (TPUS), developed by Schrodtt and colleagues in 2007, provides a potent tool to measure students' perceptions of power in the classroom. The instrument includes 30 items answered on a Likert scale to evaluate the extent to which teachers use the five types of power in their classrooms. All questionnaire items are framed from students' perspectives. All the instrumental items are self-reflective statements for teachers, allowing them to formulate their feedback appropriately. It also equips students with the tools to identify the type of power they bring to their peer feedback and peer assessment practices [54,55] (See Table 2).

Course Design: In the evolving scene of higher education institutions, online teaching modes

have become pivotal during the recent global shifts toward digital platforms—course design and implementation, though, shape students' understanding of power dynamics. According to Singleton and colleagues (2021), better models and processes could increase the acceptability of online learning—efficiency and convenience drive student satisfaction in online classrooms [1,59]. Instructional design, adequate delivery support, participation, and contingency plans are high-impact principles for online education. Additionally, the efficient use of technology and teacher interaction positively impacts students' evaluation of online learning. The successful learner-teacher dynamic shapes the level of students' satisfaction and meeting the course expectations. The quality of online resources, faculty interactions, student-friendly software, multimedia elements, and a conducive home environment are essential for successful online learning [9,21,31]. For balanced online dynamic relationships, a well-structured course, knowledgeable instructors, proper technology, and prompt feedback are the keys to success. Constructive feedback strengthens teacher-student bonds, improving learning outcomes [7,50,62,70]. To this end, the teachers' content knowledge, instructional approaches, and used platforms drive the extent of course implementation success and effectiveness.

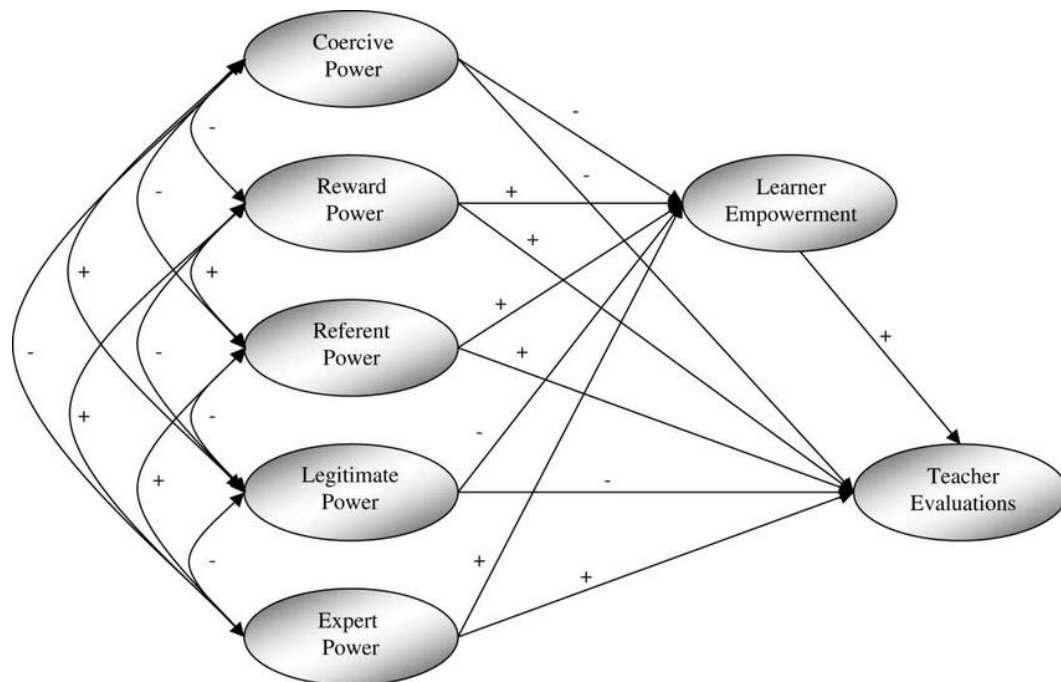


Fig. 5. Partial mediation model of learner empowerment [55]

Table 2. The R-TPUS can be used for teacher self-reflection on behaviors and communication strategies associated with the five bases of power that shape relationships [19,33, 55,65]

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
Referent Power					
I build rapport by relating to students in an open and approachable manner.					
I check in to ensure students understand what is expected of them.					
I work to see the learning experience from my students' perspective.					
I am genuine and authentic when interacting with students.					
I am genuine and authentic when interacting with students.					
I identify commonalities shared with students.					
Reward Power					
I publicly recognize students who exceed expectations in course performance.					
I negotiate details such as assignment deadlines with high-performing students.					
I commend students when they demonstrate mastery of course material.					
I give compliments or praise to students who follow instructions.					
I reward students for complying with requests.					
Expert Power					
I ensure lessons and assignments are organized and well-delivered.					
I demonstrate advanced knowledge/expertise in course content areas.					
I design courses in a way that is best for student learning.					
I discuss current theories and research in courses.					
Legitimate Power					
I communicate to students to never disobey instructions or ignore requests.					
I emphasize that the administration will support decisions and policies.					
I communicate to students that the teacher needs to take priority over theirs. I encourage					
I communicate to students that the teacher needs to take priority over theirs. I encourage					
Students who question course policies should drop the class.					
I maintain formal and distant relationships with students.					
I maintain complete and total control of the classroom.					

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
Coercive Power					
I draw attention to students if they do not perform up to expectations.					
I assert my authority if students question or challenge course policy.					
I put students on guilt trips if they hand in assignments late.					
I put students on guilt trips if they hand in assignments late.					
I discipline students for not following instructions.					
I glare at students who are disruptive in class.					

Table 3. Synchronous and Asynchronous Learning Environments [12,25,52,38]

	Asynchronous	Synchronous
Studying pressure	Asynchronous learning reduces study pressure and enables students to respond creatively and quickly to the learning tasks.	Students are prone to various studying pressures due to the time and space required for the tasks.
Learning Modes	Asynchronous learning modes, such as computer-mediated communications (CMC), present a teaching and learning discourse that connects questions with the instructional approach. They encourage students to think deeply and provide more lengthy responses and clarifications.	Synchronous teaching requires brief responses due to time constraints.
Academic Obligations	Asynchronous learning allows students to balance their academic responsibilities with those of their families, jobs, and studies.	Synchronous learning provides students with practical experience that enhances their academic responsibilities.
Students' Engagement	The interaction among students is sporadic due to differences in time spent studying. The sender does not expect an immediate answer. This type of interaction negatively affects students' academic collaboration during study.	Synchronous meetings foster students' relationships and participation. They provide real-time feedback that encourages students to define areas for improvement and plan their work accordingly.
Community Development	In asynchronous learning environments, community development is negatively impacted by time and space.	Synchronous learning environments provide students with real-time interactions and active communication channels, enhancing community development accordingly.

Online Teaching Modality and Power: Online teaching modalities such as asynchronous, synchronous, and hybrid provide teachers and learners with various opportunities to discover their power and shape their actions. Synchronous sessions are characterized by real-time cooperation and instructor-led activities with simultaneous attendance. The asynchronous modality offers a self-paced learning experience using recorded lectures and shared content. On the other hand, a hybrid combines synchronous

and asynchronous learning to balance flexibility and real-time contact [49,53]. Asynchronous learning creates a student-centered environment, providing students with a self-directed learning experience [43]. It promotes critical thinking and in-depth learning through peer discussions, introducing new concepts to the existing knowledge base [3,20,33]. Factors such as study pressure, interactions in the learning process, academic obligations, and student engagement play crucial roles in teaching effectiveness,

whether asynchronous or synchronous (See Table 3; Fig. 6).

Student Engagement and Online Learning:

Engagement in online learning is a cohesive concept that includes behavioral, cognitive, and affective dimensions. The cognitive level correlates with students' intellectual efforts to wrap their mental capacities around the offered content. The behavioral dimension is the level of students' embodiment that is correlated with students' deeds in the classroom, which follow generally accepted behavior patterns. The affective dimension encompasses the emotional efforts, which are mainly positive and connected [16,22,38,41,46].

The power dynamics in online environments entail students' interaction with each other, students' interaction with instructors, and students' interaction with the content. An active community, therefore, could foster students' collaborative activities, and virtual discussions can inspire students to discover new dimensions of learning. Keeping the line of communication between teachers and students. Therefore, it provides a channel of interactions necessary to motivate students to put more effort into learning and for teachers to identify effective methods for instruction [39,49,52].

The online teaching modality shapes students' engagement: Synchronous, Asynchronous, or blended models. Each modality represents specific benefits and challenges for teachers and students in understanding the power dynamics and the nature of class interactions [11].

Research highlights some of the factors driving students' engagement in online environments: First, feeling disconnected from peers in online instructional environments is a challenge most online students experience due to communication inconsistency. Students, therefore, work hard to create a sense of belonging without face-to-face communication. Technological challenges such as inadequate internet connection hinder students from getting the required instructions promptly [17,32,51]. The complex and nuanced understanding of the relational dynamics of these factors is critical to improving online instructional approaches [22,36].

Self-regulation and Power Dynamics in Online Teaching:

Students' academic engagement is the amount of time, energy, and available resources that learners invest in educationally purposeful activities offered by teachers [37]. The effectiveness of their self-regulation impact directs students' academic engagement. It is a pivotal factor in students' academic performance online. It enables students to adequately interact with their colleagues and deepen their understanding of the power dynamic with their professors [70]. All in all, students' engagement in online tasks during the study has a fundamental role in improving those students' academic performance. It is characterized by three-dimensional relationships: Cognitive, behavioral, and affective, which are indispensable drivers of educational achievement [6,45].

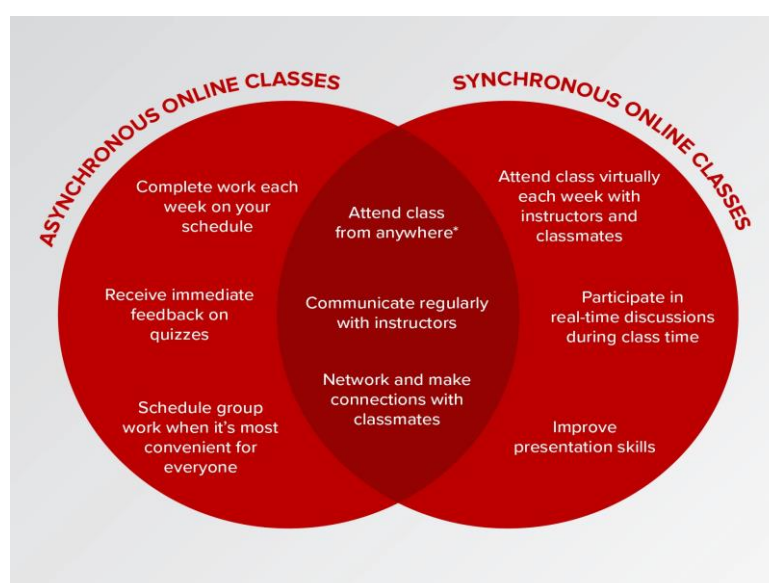


Fig. 6. Synchronous and Synchronous Learning Environments and Activities [2,43,45,51,53,61]

Understanding the impact of self-regulation on learning in an online environment becomes increasingly important. Research shows that students should be more accountable for their educational success, which reflects a radical change in power dynamics in online teaching and learning between students and teachers. In this context, self-regulation is a self-disciplined management of learning processes. It includes a variety of cognitive and metacognitive strategies that students follow to achieve their learning objectives, including task selection, organization, task execution, learners' planning, monitoring, and evaluation of the learning processes. Additionally, accurate self-regulation learning includes a variety of resource management strategies such as learning environment organization, time management, and seeking assistance when needed. These tendencies drive learners-teachers power dynamics in online classrooms [13,58,62].

In this context, the learner's autonomy in online learning plays an effective role in shaping these students' manipulation of power over their learning. Cognitive strategies refer to how one approaches a task, whereas metacognitive strategies refer to setting goals and self-assessment. Resource management strategies refer to learners' ability to prioritize the effectiveness of the available source in achieving their learning objectives. All these strategies enable learners to self-regulate specific learning factors such as attention, emotions, motivation, and environmental-related factors. Research shows that positive self-regulation behavior and strong motivational beliefs are critical predictors of success in online courses. For example, the role of motivational values suggests that intrinsic and extrinsic motivation are markers of learner autonomy that form a foundation for further educational innovation [29,32,77]. Therefore, educators must create a flexible online learning environment with adaptive learning activities and responsive feedback to support and develop learners' self-regulation skills.

Course design and delivery methods are two crucial areas that shape online teaching effectiveness. For example, the course structure that includes video lectures and mini-recorded lectures, accessible discussions, and engaging content enhances students' learning experiences [19,50]. Students' interactions with the content and their responses to professor communication regularly show proactive, informative, and highly responsive perspectives of students'

understanding of the power dynamics in online settings [31], [45], [77]. Additionally, students' continuous reflections on the shared educational content and the easy navigation to the course components deepen those students' understanding of the nature of the content and the methods to avoid future frustration [69]. To this point, students' realization of classroom nature and the power dynamics among all related constituents significantly affect those students' overall perceptions concerning the merits of online learning.

5. DISCUSSION

The current integrative literature gives teachers and college administrators more significant insights into how teachers employ power in online college classrooms. The findings highlight that teachers could use various powers in online environments: Expert, reward, reference, informational, legitimate, and coercive. Research revealed that teachers utilize expert, reward, and reference power while less likely to use legitimate and coercive powers [12,55,71]. Kaufmann and Buckner (2019) reported that the primary use of expert, reference, and reward powers in online undergraduate classes positively impacts their learning outcomes [4,27].

Moving toward a student-centered approach fosters learning and provides many opportunities to differentiate instructions. Institutional interests in collaborative learning, though, are accelerated and growing. However, the benefits of collaborative learning in an online environment are the subject of extensive research due to the discrepancy in the findings regarding digitally mediated contexts and the factors influencing their formulations. Research reveals that institutional participatory culture is possible due to the variety of available Learning Management Systems platforms to participate in online culture, develop professionally, learn through the offered tabs, and shape the academic and professional mindset to foster the required competencies. To this point, collaborative learning occurs frequently in discussions of digital media shaping the entire community's perspectives and decisions.

To this end, institutional power dynamics realization and choosing the proper instructional approaches to sustain teaching and learning effectiveness in online environments and rewarding exemplary performance, building strong rapport, and demonstrating unwavering

commitment secure a productive classroom environment in which students' sense of belonging is sustained. Learners, therefore, are more engaged, motivated, and willing to improve upon explicit instruction and supportive teaching environments.

6. PEDAGOGICAL PRACTICE

Educators' awareness of the power dynamics in an online environment fosters in-class teaching effectiveness and student engagement. Consequently, educators could use the following research-based strategies:

Clear Instructions and Understanding the Power Dynamics: Research suggested clear instructional procedures in teaching. Clear communication of rules in an online setting fosters learners' engagement and motivates them. It is recommended that when teaching online, teachers must be intentional and strategic to create the correct perception toward a power being used to affect students' learning attitudes and foster their engagement in the learning processes [27,74,46]. Therefore, using tools like chat and discussion boards allows students to text their teachers and adds to instructional clarity, allowing those students to engage in conversations regarding the content and the assignment's procedural implementation.

Social media channels: Communicate weekly assignments and instructions using the available social media channels. These media outlets could be incorporated into the Learning Management System (LMS), providing more opportunities for effective communication and instructional clarity. Active participation with students via social media outlets is perceived as a dedicated, helpful, and committed instructional practice [51,76].

Students' perceptions and teachers' credibility: To positively influence online classroom credibility, teachers need to know their students' names to indicate that they care (referent power), write recommendation letters to students if they require (reward power), or share current information about the subject matter (expert power).

Learning through ideological becoming: Bakhtin (1986) reported that learners build meaning through language and linguistic confrontation with others to make their words their own rather than merely parroting or

unconsciously absorbing another's discourse. Therefore, Bakhtin accentuated the dialogism and response, arguing that people shape their communications at the point of utterance. To this point, meaning occurs as a series of linguistic or semiotic exchanges [3,13]. Through the dialogic process, listeners and speakers, through the argumentative process and honest negotiations, gradually make the words of others their own. This theory provides helpful points for online collaboration space and tools as it addresses the complexity and richness to be revealed by examining the included layers with the tool use. Institutions, therefore, could benefit from the power and identity demands of analytic attention to ideological challenges. Being in a socialized new community, with its distinctive belief systems, values, and ways of using language, one must respond and orchestrate new ways of thinking. Bakhtin employs the terms "Internally Persuasive Discourse" and "Ideological Becoming" to articulate the struggle individuals might experience to cope with the outside discourse and attempt to bridge the owned discourse [20,60].

7. CONCLUSION

Online teachers face a challenge in managing the classroom environment to motivate their students to actively participate and excel academically intrinsically. Therefore, communication is the cornerstone that fulfills three essential functions: inform, relate, and influence. These three functions necessitate interpersonal skills as teachers connect with their students to persuade them to participate and complete course objectives. In this context, power is communicatively negotiated between teachers and students [78]. This integrative literature review addresses the power mechanism in online environments for practice change by identifying the participants' powers, coordinating the various practices, reflecting on possible interactions, and transforming the current practice to keep harmony among the learning environment participants.

Understanding the power dynamics in online teaching environments is essential for creating a positive, prosocial learning space. This report provides research-based findings to help teachers understand classroom power dynamics. Due to technology mediation and spatial distances, teachers' and students' experiences of online learning environments can significantly differ. Prosocial power bases in online teaching

are predominant in driving teacher-student relationships. Building rapport between teachers and students can be achieved through social media platforms, showcasing strong expertise and encouraging students to follow their teacher's instructions that might be delivered using digital platforms or media outlets. The report highlights that reward applications are directly connected with engaging learning. It addresses the effectiveness of prosocial power bases and directs teachers' attention to the active use of social media outlets in online communication and instructional approaches. Online learning is a complex teaching environment [6]; therefore, many unseen variables might shape teaching and learning during specific times under various technological constraints. Hence, research in this area must be progressive due to the rapid changes in social and technological dimensions.

To this end, this integrative literature review investigated the power dynamics in online teaching in terms of its nature, related typologies, students' perceptions, teachers' realizations, and related learning and teaching factors such as course design and instructional approaches. The theory was presented, and the factors were addressed in various related contexts to create a healthy teaching and learning environment. The report reveals that understanding the power dynamics in the learning environment plays a vital role in increasing students' engagement and fostering their self-regulatory learning and autonomy. Based on this report's analyses, future research can be devoted to improving institutional understanding of the impact of the type of power on learning and teaching effectiveness in online environments.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

The author hereby declares that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

COMPETING INTERESTS

The author has declared that no competing interests exist.

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