



Sociodemographic factors and teaching method preferences among university academics: Implications for effective curriculum implementation

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Keywords

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teaching methods.

Abstract

This research examined sociodemographic factors and teaching methods preferences among university academics: implications for effective curriculum implementation. This study employed a quantitative survey design; 400 academics were sampled. A questionnaire was used to obtain data; descriptive statistics and chi square analysis were used to test research hypotheses. The percentage of academics who prefer various teaching techniques during lessons for efficient curriculum implementation differs significantly; there is no meaningful connection between gender, academic faculty, years of classroom instruction, and their preference for teaching methods. The project method, followed by experimentation and demonstration methods, which are more constructivist and allow students to participate in their classes actively, were recommended as tools for academics to use more frequently. Despite these outcomes, individual differences must be respected. Regardless of gender, it is recommended that institutions regularly hold professional development seminars and training sessions, encourage multidisciplinary collaboration among educators, and enhance mentoring programmes and platforms for less experienced educators. The intersection of variables, including gender, faculty type, and teaching experience, should be taken into account in a comprehensive approach to pedagogical enhancement. Institutions can be aware of the changing requirements and preferences of educators by establishing channels for academic feedback on teaching techniques and preferences.

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Introduction

Teaching is an art that transcends the passing of knowledge from one person to another. It embodies the moulding of the receivers' character, attitudes, knowledge, belief systems, and personalities. Academics teaching in higher institutions are called lecturers or professors. Amadioha (2017), Ambe and Agbor (2014) observed that teaching is a significant aspect of curriculum implementation. It is not done haphazardly but follows laid-down strategies and methods. This study sought to investigate sociodemographic considerations of university academics and teaching method preferences during lesson presentations for effective curriculum implementation.

This research draws from the *constructivist learning theory*, an educational philosophy emphasizing active and experiential learning, where learners construct their knowledge and understanding through meaningful interactions with their environment (Bada & Olusegun, 2015). Rooted in the works of Jean Piaget and Lev Vygotsky, constructivism suggests that learners actively participate in the learning process. In line with this theory, teaching methods aim to create engaging and collaborative learning experiences, such as problem-based, project-based, and inquiry-based instruction. These methods enable learners to investigate, question and gain understanding, fostering critical thinking, creativity, and the application of knowledge in real-world contexts. By promoting student agency, interaction, and reflection, constructivist teaching methods provide a learner-centred approach that empowers students to construct their understanding, leading to deeper and more meaningful learning outcomes (O'Neill, 2014).

In contemporary higher education, effectively implementing curricula ensures quality learning outcomes. As universities strive to provide comprehensive education, it is essential to consider the sociodemographic characteristics of university academics and their preferences for teaching methods. Understanding the influence of sociodemographic factors on teaching method preference is critical for designing inclusive and effective curricula that cater to the diverse needs of faculty members and students.

Currently, limited research examines the relationship between sociodemographic considerations of university academics and their teaching method preference for effective curriculum implementation. While there are numerous ways to teach, including lectures and conversations, group work, and technology-enhanced learning, it remains unclear how academics' sociodemographic factors, including age, gender, educational background, years of teaching experience, and cultural background, influence their preference for specific teaching approaches.

The lack of comprehensive investigation into sociodemographic considerations and teaching method preference presents a significant gap in our understanding of curriculum implementation in higher education. Moreover, the current literature must include comprehensive research on the relationship between sociodemographic considerations of university academics and their teaching methods' preference for effective curriculum implementation.

With this knowledge, curriculum developers and educators may be able to align instructional strategies with faculty members' characteristics and preferences, hindering the creation of an engaging learning environment. Rigorous empirical research is needed to address this gap and inform evidence-based decision-making processes in curriculum design and faculty development initiatives.

Additionally, this research can contribute to uncovering the underlying patterns and dynamics; such research can inform evidence-based decision-making processes in curriculum design and faculty development initiatives by enhancing the overall quality of higher education and promoting a deeper comprehension of the variables influencing effective curriculum implementation in diverse academic contexts. By conducting in-depth investigations in this area, educational stakeholders can foster an inclusive and learner-centred environment that maximizes the potential of both faculty members and students.

This study investigates sociodemographic factors and teaching method preferences among university academics: Implications for effective curriculum implementation. Specifically, the researchers seek to find out whether:

1. There is a difference in the proportion of academics preferring different teaching methods during lessons for effective curriculum implementation.
2. There is an association between gender and teaching methods' preference among academics during lessons for effective curriculum implementation.
3. There is an association between the academics' faculty and teaching method preference during lessons for effective curriculum implementation.
4. Any Association exists between the academics' years of teaching experience and teaching method preference during lessons for effective curriculum implementation.

Research hypotheses

1. The percentage of academics who prefer various teaching techniques during lessons for efficient curriculum implementation does not differ significantly.
2. No association exists between gender and teaching methods preference among academics during lessons for effective curriculum implementation.
3. There is no association between the academics' faculty and teaching method preference during lessons for effective curriculum implementation.
4. There is no association between the years of academic teaching experience and teaching method preference for effective curriculum implementation.

Literature review

Amadioha (2017) defined teaching as the impartation of unknown knowledge to the learner; it is a process of getting learners educated. Skills are not contagious; they are methodically transmitted from person to person in an organized setting, either formally or informally. Ambe and Agbor (2014) noted that a professionally competent teacher must be able to prepare for his lesson, plan the lesson and present the lesson systematically to achieve the stated objectives. Ephraim et al. (2022) noted that to attain goals in their respective disciplines for successful learning, teachers must create lesson plans and instructional materials and use the right teaching techniques.

As Ambe and Agbor (2014) noted, seasoned educators draw from a broader and more complex body of information than upcoming ones. Clotfelter et al. (2010) show that over 20 years of experience is more effective than no experience; nonetheless, they contrast in efficacy with teachers who have five years of experience. Earlier studies by Kim and Seo (2018) and Kim et al. (2019) discovered a strong correlation between teachers' professional effectiveness and their expertise. Moreover, the likelihood of an educator being productive increases with the length of service in a college. The Illinois State Board of Education (ISBE, 2002) and Emmanue and Ambe (2014) argued that a trained educator is skilled in all academic disciplines and exhibits subject-matter expertise.

An instructor's ability to effectively convey the substance of the course relies on their comprehension of that subject's structure (Ambe & Agbor, 2014). Also, an instructor's perspective of proper instruction follows from their ability to do so. Ambe and Agbor (2014) argued that a lecturer's ability to effectively convey the substance of a field rests on their comprehension of the dynamics of that field. This, in turn, leads to the impression of an instructor as having appropriate teaching abilities.

There are several categories of knowledge that seasoned teachers pick up, including knowledge of the subject's fundamental concepts, often known as subject area knowledge (Niemelä & Tirri, 2018; Mupa & Chinooneka, 2015). Knowing how to make a subject interesting and understandable is known as pedagogical content knowledge, among other things.

Nwogu and Esobhawan (2014) observed that teaching involves practical communication skills, abilities for handling classroom operations and effective instructional approaches. In a classroom situation, a teacher, a lecturer, or an academic utilizes various teaching methods while executing any lesson. Teaching methods refer to the variety of styles, techniques, and ways the teacher uses to expound a lesson to students. The University of Buffalo (2022) clarified that the more general approaches to assisting students in meeting their learning objectives are known as teaching strategies. These strategies could be student-centred, teacher-centred, or technology-centred.

Shah and Udgaonkar (2018), Ambe and Onnoghen (2018), and Bhat (2017) found that teachers' gender does not significantly influence teaching effectiveness. This means, therefore, that irrespective of the gender of the teacher, as long as they have the requisite professional competence, they are prepared to use appropriate teaching methods and adequately deliver the lesson, effective learning will take place. Amadioha (2017) highlights the importance of a recurrent teaching method, focusing on a major activity relevant to all disciplines in any teaching-learning setting. According to Al-Rawi (2013), a teacher uses a teaching style as a framework to arrange and carry out instructional strategies and tasks for the achievement of school or educational goals. Sikaleya (2022) observed that there are over fifty educational methodologies in practice, and the educator must use effective instructional strategies in the classroom to accomplish the teaching objective. Among the myriad of teaching methods available to any academic are the following, which these researchers purposely selected for this study.

Lecture method of teaching

Sikaleya (2022) and Al-Rawi (2013) see the lecture as an oral instructional technique. According to the authors, its advantage is that it gives the teacher total control of the lesson and makes them active participants, while the students are primarily passive; it saves time. Amadioha (2017) sees the lecture as a presentation method that involves chalk and talk, as the teacher is the primary participant; they explain points, express opinions, give students new ideas, and occasionally write on the board. According to the authors, its advantage is that a large class is taught relatively quickly.

Kapur (2020) sees the lecture as the most comprehensively used pedagogical method; it is the oldest teaching method, and academics use it extensively. Alaagib et al. (2019) observed that one of the most popular forms of instruction in medical education is the lecture. In an article, the researchers taught students using the problem-based method and the traditional lecture. In the end, the learners were distributed a test and a questionnaire. The students' attention ($P = 0.002$) and participation ($P = 0.003$) were higher in the problem-based lecture technique than in the traditional lecture (Alaagib et al., 2019). The awareness of the learning objectives did not significantly change between the problem-based lecture and conventional lectures.

In schools, the lecture is a common teaching strategy and a primary method (Bala et al., 2017; Noel et al., 2015). Abdalbaki et al. (2018a), while stressing the demerits of the lecture, noted that in any discipline of education, including nursing education, lecturing puts students in a receptive role rather than as active participants, thus hampering learning. In schools, the lecture is a common teaching strategy. The authors noted further that lectures are not successful at altering attitudes or values, teaching manual dexterity, or teaching higher-order cognitive abilities like application, analysis, synthesis, or evaluation (Abdalbaki et al., 2018a).

The present mode of instruction in medical schools is the lecture, yet lectures by themselves are inadequate for fostering cooperative learning and skill development (Dharmambal & Anavarathan, 2021). Viswanathan and Viswanathan (2017) noted that lectures are the instructional technology in a teacher's repertoire. According to Sadeghi et al. (2014), lectures are a quick, easy, and affordable way to introduce large topics to numerous populations of students. The authors researched two teaching methods and concluded that students preferred the mixed-learning approach over lectures. As a result, it is asserted that the lecture is teacher-centred, with the lecturer spending most of the lecture interacting with learners who may be listening passively.

Demonstration method

Demonstration as a teaching method requires the lecturer to practicalize whatever they are teaching the students. By using body language, gestures, postures, and facial expressions to illustrate a point during a lecture, this technique is known as a demonstration (Hussain, 2020). Mohammed et al. (2016) opined that demonstration generates interest, presents ideas and concepts more clearly, offers direct experiences, and reinforces learning. Learners can see, hear, and perhaps even experience an actual incident. Hajar et al. (2021) are of the view that the demonstration method is an approach for delivering learning information that involves showing pupils a particular procedure, circumstance, or object that is being examined, whether it be actual or made-up. This method is frequently combined with vocal comments.

Al-Rawi (2013) claims that the demonstrative teaching approach is successful at imparting scientific laboratory experimentation and tool use abilities. Omotayo and Adedeji (2020) posited that the demonstration teaching style entails demonstrating a special procedure or talent to the participants. While stressing the advantages of the demonstration method, Eze and Nwaukwa (2019) observed that it helps make links between facts and how they apply in real life, it may increase student attention and help them remember information better. A significant disadvantage of this method is that it is not child-centred; it may cause the slow students to be dragged at the speed of the fast learners. There is a limited activity for students; they merely observe the demonstrator (teacher) with little active participation. Time is usually challenging for the demonstration method (Hussain, 2020; Eze & Nwaukwa, 2019; Mohammed et al., 2016).

Discussion method

The discussion method is learner-centred, where the students are active discussion group members. The discussion method is a two-way communication between participants where ideas are shared between students with the moderation of the teacher or one of the students knowledgeable in the subject of discussion. Abdulbaki et al. (2018b) noted that the discussion process is not merely controlled by one individual presentation, as in the lecture. Ying (2020) observed that important learning outcomes for students are produced

through discussion methods. While the discussion method is important, it focuses more on student engagement and learning than teaching and improves self-confidence and eloquence among the learners (Ying, 2020). This method cannot be used for all topics. Extroverted students may take over the discussion at the expense of introverted ones.

Experimentation method

In an experimental teaching method, investigations are involved in which hypotheses are scientifically tested. A straightforward and entertaining framework for introducing students to quantitative social research is provided via experiments (Soares et al., 2016). According to Soares et al. (2016), this lesson plan could be used as a guide to teach students how to conduct more difficult research. The method is best used with advanced learners, of which higher institution students are a part. When the experimental teaching technique (ETM) and the teacher-centred traditional teaching method were compared for knowledge and understanding levels, it was found that the experimental teaching approach performed better (Chingala, 2020).

The website holah.karoo.net (n.d) records that the experimental method is the preferred mode of instruction. Moreover, the experiment is a form of causal analysis often performed in the laboratory. It allows precise control of variables, can be replicated, and yields quantitative data. Its disadvantage lies in the fact that behaviour in the laboratory is narrow and artificial. We may have field experiments or natural experiments.

Anderson and McLean (2018) noted that teaching experimentation is a series of lessons where researchers test their hypotheses in steps, and students learn and reason. Soares et al. (2016) lamented that regarding experimentation, the teaching of science in schools needed to be applied appropriately by teachers to carry the learners along. Although experimentation arouses students' interest in learning, experimentation is time-consuming. With many students in higher institutions, completing course outlines within semesters might be impossible if other teaching methods are not involved.

Project method

According to Knoll (2014), one of the common teaching strategies is the project method, which is frequently explored under the titles of project work, project strategy, and task-based learning. The project method is widely used in various educational fields, but regrettably, it still needs greater importance in regular education. In the words of Kolodziejki and Przybysz-Zaremba, (2017), the project technique is frequently employed when instructing college students. It helps students master their intellect, abilities, moral habits, and experimental abilities. Every level of development in education uses the project method extensively. Yet, for it to be applied, the instructor in charge of overseeing its execution must have the necessary skills and knowledge.

The project method enables new approaches because learners can ask questions that awaken their curiosity. The constructivist educational paradigm, which has the creative activity of the person or group as its cornerstone, is the bedrock upon which the project method is based. Prtljaga and Veselinov (2017) argued that the project method should be used in classrooms because it helps to improve student participation and reinforces understanding and mental activity in the classroom.

Methodology

In order to collect quantitative information on the sociodemographic features of the university academics (such as gender, faculty, years of teaching experience), as well as their preferences for different teaching styles, the researchers employed a quantitative survey research technique. This is in line with Loeb et al.'s (2017) argument that researchers use analytical and data visualization methods to transform raw data into useful findings for intended audiences.

The population of the study draws from the 2,867 academic staff of the University of Calabar, Calabar-Nigeria and the University of Cross River State (UNICROSS), all in South-South, Nigeria. The University of Calabar, from records of the Human Resources Directorate, has 2,410 academic staff, while UNICROSS, from records of the academic planning unit, has 457 academic staff. A multistage sampling procedure was adopted to obtain a sample of the study. In the first stage, the researchers sampled five faculties using the hat-and-draw method, three faculties (Education, Science, and medical sciences) were sampled from UNICAL out of 16, and two from UNICROSS (Social Science and Arts) out of eight faculties.

In the second stage, the researchers chose nine departments using a basic random selection technique (30% of 30) as sample departments for the study. Thirdly, the complete faculty in each sampled department was chosen using a purposive sampling technique. Questionnaires were administered to staff in their offices who agreed to participate in the study. 400 academics were sampled, making it 13.95% of the population.

Instrumentation

A four-item structured questionnaire that elicited information on gender, years of teaching experience, faculty of the respondents, and the lecturer's preference for six teaching methods was used to obtain data. Gender was categorized into male(1) and female (2). Years of teaching experience were categorized into three possible answers: 1-10 years (young academics) was scored one point, 11-20 years (intermediate academics) was scored two points, and 21 years and above (mature academics) was scored three points. The lecture approach received a score of one, demonstration two points, discussion three points, experimentation four points, project method five points, and a combination of at least two methods was scored six points. For the faculty of the respondents, education was scored one point, social science two points, arts three

points, science four points, and medical sciences five points. The data analysis used descriptive statistics like frequency counts, percentages, and the Chi-square technique of data analysis. Microsoft Excel was used. The ethics committee of the University of Calabar and the University of Cross River State gave written approval for this research study to be conducted. Findings were expressed in tables and bar charts.

Results

The results of the analyses are presented hypothesis by hypothesis. Table 1 shows the demographic characteristics of the participants.

Hypothesis 1: The percentage of academics who prefer various teaching techniques during lessons for efficient curriculum implementation does not differ significantly. Data from item 4 of the instrument was computed and subjected to descriptive analysis of simple percentages and the Chi-Square analysis technique to test hypothesis one, as shown in Figure 1.

In Figure 1, the observed preference count shows that 103 (25.8%) academics prefer using the lecture method during their lessons, while 39 academics (a mere 9.8%) prefer using the project teaching method. 74 academics (18.5%) preferred combining at least two teaching methods in their lessons. Whereas 73 (18.3%) of Academics make more use of the demonstration method of teaching, 55 (13.8%) and 56 (14%) prefer discussion and experimentation methods, respectively.

A further test was conducted for the difference in the proportion of teachers preferring six different commonly used teaching methods, Chi-Square χ^2 (5, N = 400) = 36.4, $p=7.755$. Since the calculated chi-square value of 36.4 is higher than the critical value of 11.07, the negative statement is rejected; therefore, it is concluded that the percentage of academics who prefer various teaching techniques during lessons for efficient curriculum implementation differ significantly. Looking at Figure 1, we see a high preference for the lecture method and the slightest preference for the project method. Here, there is a highly significant difference in the proportion of academics using different teaching methods during lessons.

Table 1: Demographic characteristics of the study participants. N=400.

S/N	VARIABLE	FREQUENCY	PERCENTAGE (%)
1	GENDER		
	Male	193	48.25
	Female	207	51.75
2	ACADEMICS FACULTY		
	Education	125	31.25
	Social science	129	32.25
	Arts	78	19.5
	Sciences	42	10.2
	Medical sciences	26	6.5
3	YEARS OF TEACHING EXPERIENCE		
	Young academics	169	42.25
	Intermediate academics	195	48.75
	Mature academics	36	9

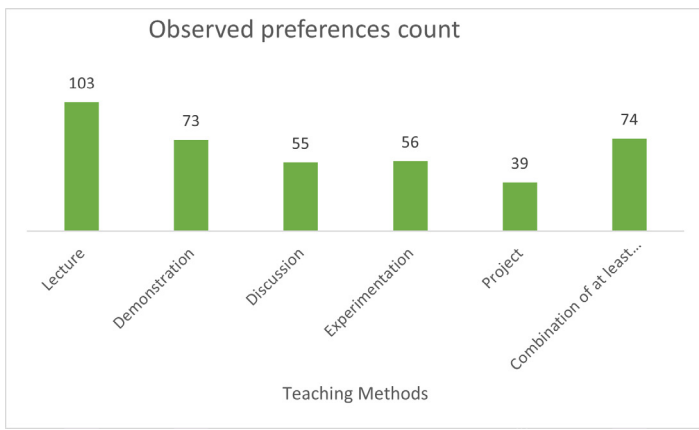


Figure 1: Bar chart showing observed teaching methods preference counts.

Hypothesis 2: No association exists between gender and teaching method preference among academics during lessons for effective curriculum implementation. Data from item 1 of the instrument were computed and subjected to the Chi-Square analysis technique to test hypothesis 2, as shown in Table 2.

A test of independence comparing the gender of Academics with their preference for teaching methods was performed. $\chi^2 (5, N = 400) = 6.89, p=.229$; at .05 level of significance; since the p-value is greater than 0.05, there is strong evidence to fail to reject the null hypothesis. The conclusion is that there is no quantitatively significant relationship between academic preference for teaching methods and gender.

It is evident from Table 2 that more male academics (57 or 14.25%) prefer lectures as compared to female academics (46 or 11.5%). More female academics from the study sample make use of a combination of at least two teaching methods (47 or 11.75%), the project (20 or 5%) and the demonstration method (40 or 10%). On the other hand, a slightly higher number of male academics prefer the discussion method (28 or 7%) and experimentation (29 or 7.25%) as against 27 (6.75%) and, again, 27 (6.75%) for female academics.

Table 2: Synopsis of chi-square study of the ratio of the association between gender and teaching method preference among academics during lessons for effective curriculum implementation; n=400.

Teaching method	Gender			χ^2 (p-value)
	Male (n = 193) n (%)	Female (n = 207) n (%)	Total (n = 400) n (%)	
Lecture	57 (14.25)	46 (11.5)	103 (25.8)	
Demonstration	33 (8.25)	40 (10)	73 (18.3)	
Discussion	28 (7)	27 (6.75)	55 (13.8)	11.07 (.229)
Experimentation	29 (7.25)	27 (6.75)	56 (14)	
Project	19 (4.75)	20 (5)	39 (9.8)	
Combination	27 (6.75)	47 (11.75)	74 (18.5)	
Total	193 (48.25)	207 (51.75)	400 (100)	

Not Significant at 0.05 α level; df = 5; χ^2 - Cal.=6.89; χ^2 -critical = 11.07; p-value= .229.

Hypothesis 3: There is no association between academics' faculty and teaching methods preference during lessons for effective curriculum implementation. Data from item 2 of the instrument were computed and subjected to the Chi-

Square analysis technique to test hypothesis 3, as shown in Table 3.

From Table 3, a test of independence was calculated comparing academics' faculty with their preference for various teaching methods. $\chi^2 (20, N = 400) = 24.7, p=.213$; $p > 0.05$; the alpha level is less than the calculated p-value, there is strong evidence to fail to reject the null hypothesis. We conclude that there is no relationship between academic faculty and their choice of different teaching approaches. It can be gleaned from Table 3 that most academics belonging to the social science faculty prefer to use the lecture method in their lessons. At the same time, arts and education faculty academics are next in that category.

A more significant number of the respondents from the faculty of education prefer the demonstration method followed by academics from social science, Arts, Science, and Medical in that decreasing order. Another category of teaching method with a high response pattern is the Combination of at least two teaching methods; here, out of a total of 74 academics who use this method, Education and Social Science Academics both tally with 25 Academics each showing their preference for this approach. Overall, the project method is the least preferred among academics, with 39 respondents out of 400 preferring this method. Closely following is the Experimentation method, with only 56 respondents out of 400 Academics sampled for the study.

Table 3: Synopsis of chi-square study of the ratio of the association between academics' faculty and teaching method preferences.

Teaching method	Academics' faculty						χ^2 (p-value)
	Education (n = 125) n (%)	Social Science (n = 129) n (%)	Arts (n = 78) n (%)	Sciences (n = 42) n (%)	Medical (n = 26) n (%)	Total (n = 400) n (%)	
Lecture	23(5.75)	45 (11.25)	23 (5.75)	5 (1.25)	7 (1.75)	103 (25.8)	
Demonstration	27(6.75)	21 (5.25)	14 (3.5)	7 (1.75)	4 (1)	73 (18.3)	
Discussion	22 (5.5)	11 (2.75)	12 (3)	7 (1.75)	3 (0.75)	55 (13.8)	31.41 (.213)
Experiments	15 (3.75)	17 (4.25)	11 (2.75)	6 (1.5)	7 (1.75)	56 (14)	
Project	13 (3.25)	10 (2.5)	8 (2)	6 (1.5)	2 (0.5)	39 (9.8)	
Combination	25 (6.25)	25 (6.25)	10 (2.5)	11 (2.75)	3 (0.75)	74 (18.5)	
Total	125 (31.25)	129 (32.25)	78 (19.5)	42 (10.5)	26 (6.5)	400 (100)	

Not Significant at 0.05 α level; df = 20; χ^2 - Cal.=24.7; χ^2 -critical = 11.07; p-value= .213.

Hypothesis 4: There is no association between years of academic teaching experience and teaching methods preference for effective curriculum implementation. Data from item 3 of the instrument were computed and analysed using the Chi-Square method to test this assumption, as shown in Table 4. For this research, young academics or early-career academics refer to individuals who have been teaching for one to ten years; intermediate academics or mid-career academics encompass those with teaching experience ranging from 11 to 20 years; and mature academics or seasoned academics include those who have engaged in teaching for 21 years or more.

As shown in Table 4, a test of independence was calculated by comparing academics' years of teaching experience with their preference for various teaching methods, $\chi^2 (10, N =$

400) = 7.91, $p=.638$; $p>0.05$. Since the alpha level is less than the calculated p-value, there is strong evidence to fail to reject the null hypothesis. It is inferred that academics' years of teaching experience and their preferences for different teaching approaches do not statistically correlate.

It is evident from the data that more intermediate academics (52 or 13%) prefer the lecture method of teaching, followed by young academics (40 or 10%). In the same vein, 37 (9.25%) of intermediate academics preferred the demonstration method of teaching, while young academics followed closely with 31 (7.75%). 39 (9.75%) of young academics prefer a combination of more than two teaching methods, followed by intermediate academics (27 or 6.75%). 31 intermediate academics (7.75%) preferred the discussion method, followed by young academics (20 or 5%). Only 4 (1%) of mature academics preferred the discussion method of teaching for their classes. Almost an equal number of young academics (25 or 6.25%) and intermediate academics (26 or 6.5%) preferred the experimentation method, while only 5 (1.25%) chose it. However, 22 (5.5%) intermediate academics preferred the project method, followed by 14 (3.50%) of young academics. These variations in choices by various shades of academics go to show that academics' years of teaching experience and their preferences for different teaching approaches do not statistically correlate.

Table 4: Synopsis of chi-square study of the ratio of the association between years of academics' teaching experience and teaching method preference.

Teaching method	Teaching experience				χ^2 (p-value)
	Young Academics (n = 169) n (%)	Intermediate Academics (n = 195) n (%)	Mature Academics (n = 36) n (%)	Total (n = 400) n (%)	
Lecture	40 (10)	52 (13)	11 (2.75)	103 (25.8)	18.31 (.638)
Demonstration	31 (7.75)	37 (9.25)	5 (1.25)	73 (18.3)	
Discussion	20 (5)	31 (7.75)	4 (1)	55 (13.8)	
Experimentation	25 (6.25)	26 (6.5)	5 (1.25)	56 (14)	
Project	14 (3.50)	22 (5.5)	3 (0.75)	39 (9.8)	
Combination	39 (9.75)	27 (6.75)	8 (2)	74 (18.5)	
Total	169 (42.25)	195 (48.75)	36 (9)	400 (100)	

Not Significant at 0.05 α level; $df = 10$; χ^2 - Cal.=7.91; χ^2 -critical = 18.31; p-Value= .638.

Discussion

The analysis of hypothesis 1 shows that the percentages of academics who prefer various teaching techniques during lessons for efficient curriculum implementation differ significantly. This might be because academics who participated in the study are professional teachers who have undergone some basic training in teaching methods. It is, therefore, easy for them to switch from one method to another. Academics prefer diverse teaching methods for efficient curriculum implementation, benefiting higher education by promoting student-centred approaches, engagement, comprehension, critical thinking, and creativity, fostering a dynamic learning environment and equipping students with necessary skills. This finding agrees with Nwogu and Esobhawan (2014), who observed that teaching involves practical communication skills, effective teaching strategies, and classroom management techniques. In a classroom situation, a teacher, a lecturer, or an academic utilizes various teaching methods while executing any lesson.

The finding of this study also agrees with the thoughts of Sikaleya (2022), who counted over fifty teaching methods in practice for teachers to use in education. The findings of this study, however, disagree with the observation of Dharmambal and Anavarathan (2021), who stated that the present mode of instruction in medical schools is the lecture, yet lectures by themselves are inadequate for fostering cooperative learning and skill development.

The results of hypothesis 2 reveal that there is no quantitatively significant relationship between academic preference for teaching methods and gender. A plausible explanation of the finding is that teaching itself is an art; it requires the teacher to apply the appropriate methods in the lesson, notwithstanding the teacher's gender. This finding agrees with the findings of Ambe and Onnoghen (2018), who, in their study, found that teachers' gender has no significant influence on teaching effectiveness. Therefore, regardless of the gender of the teacher, if they have the requisite professional competence and are prepared to use appropriate teaching methods and adequately deliver the lesson, effective learning will take place.

Positive results for teaching and learning in higher education can be seen in the lack of a quantitatively significant association between academic preference for teaching techniques and gender. It highlights the significance of fair and inclusive educational practices, supports creative teaching methods, and promotes an atmosphere in which all students can flourish and realise their full potential. Higher education institutions can provide a more engaging and encouraging learning environment for students of both genders by focusing on instructional effectiveness and personalised approaches.

The results of hypothesis 3 show no statistically significant association between academics' faculty and their preference for various teaching methods. This finding agrees with the Illinois State Board of Education (ISBE, 2002), which argued that a trained educator is skilled in all academic disciplines and exhibits subject-matter expertise. The finding also agrees with Ambe and Agbor (2014), who argued that a teacher needs to have a broad and liberal education, strong topic knowledge, sound teaching techniques, an understanding of child psychology, and knowledge of societal variables impacting students who attend school.

The analysis of hypothesis 4 shows no statistically significant association between academics' years of teaching experience and their preference for various teaching methods. This finding disagrees with Ambe and Agbor (2014), who noted that seasoned educators draw from a broader and more complex body of information than upcoming ones. The finding, however, agrees with Niemelä and Tirri (2018) and Mupa and Chinooneka (2015), who argued that there are several categories of knowledge that seasoned teachers pick up, including knowledge of the subject's fundamental concepts, often known as subject area knowledge. Knowing how to make a subject interesting and understandable is known as pedagogical content knowledge, among other things. This finding does not agree with Clotfelter et al. (2010), who show that over 20 years of experience is more effective than no experience; nonetheless, they contrast in

efficacy with teachers who have five years of experience.

Conclusions

The study examined sociodemographic factors and teaching method preferences among university academics, highlighting the significance of this information for effective curriculum implementation. The findings indicate notable variations in teaching technique preferences among academics, challenging the idea of uniform teaching approaches in higher education. The study found no significant correlation between gender and academic preference for teaching techniques, indicating that academics' preferred teaching approaches are not significantly influenced by their gender. Academic faculty type did not significantly influence their choice of teaching strategies, suggesting consistent preferences across positions and disciplines. Years of teaching experience did not significantly correlate with academics' preferences for different teaching methods. We must keep in mind, though, that the phrase 'no statistically significant relationship' does not imply that there is, in fact, no relationship at all; rather, it indicates that the study did not uncover enough evidence to establish a meaningful relationship based on the selected statistical criteria.

Recommendations

The adoption of teaching methods that promote constructivist learning, such as the project method, experimentation, and demonstration methods, is encouraged for academics to enhance student engagement and active participation in the classroom. Gender and faculty type do not significantly influence teaching method preferences, but it is crucial to recognize and respect individual differences. Offering professional development workshops and training sessions can enhance pedagogical skills, regardless of gender. Promoting interdisciplinary collaboration among educators can lead to innovative methods across disciplines. Mentoring programs and platforms for less experienced educators can contribute to a well-rounded teaching environment. A holistic approach to pedagogical enhancement should consider the intersection of factors like gender, faculty type, and teaching experience. Educational institutions should promote flexibility and adaptability in curriculum design and delivery, allowing educators to experiment with different techniques and adjust methods based on student feedback. Establishing mechanisms for academic feedback on teaching methods and preferences can help institutions stay attuned to educators' evolving needs and preferences. To ensure the effective implementation of these recommended teaching techniques, university authorities should implement monitoring mechanisms for instructional practices. One approach to achieving this is through the incorporation of ICT-based learning management systems, which can help track and assess the integration of prescribed and appropriate teaching methods into academics' lessons. This proactive approach to monitoring can support continuous improvement in teaching practices and contribute to a more enriching educational experience for students.

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