

Authentic Leadership, Teacher Autonomy and Educational innovation in Chinese Universities

Ming Ruixue

Lyceum of the Philippines University – Batangas

MingRuiXue@163.com

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Abstract – *This study examines the impact of authentic leadership, teacher autonomy, and educational innovation in Chinese universities, focusing on 4,000 faculty members from Hubei. It explores the relationship between these variables and proposes strategies to enhance educational innovation. Findings indicate a significant relationship between authentic leadership, teacher autonomy, and educational innovation, with emphasis on school management autonomy and innovative teaching methods. The study suggests fostering an inclusive management environment, encouraging heuristic teaching, and active academic participation to improve education quality. Future research could further refine these strategies for practical implementation.*

Keywords – *Teacher Autonomy; Authentic Leadership; Educational Innovation*

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INTRODUCTION

University authentic leadership, faculty autonomy and educational innovation in China are essential issues facing Chinese higher education. As Chinese higher education develops, university authentic leadership and faculty autonomy become increasingly important. In this context, educational innovation has also become more and more critical, as it can help university teachers utilize their authentic leadership and autonomy better, improve teaching quality, and enhance educational effectiveness [1].

Educational innovation is critical to addressing the challenges facing Chinese higher education, such as low student interest in learning and homogenous teaching methods. By adopting new teaching methods, technologies and curriculum design, teachers are better able to stimulate student interest and make teaching more responsive to modern needs. Therefore, improving university teachers' leadership, autonomy, and educational innovation is key to promoting educational quality and standards [2]. Teachers' autonomy not only

improves the quality of teaching, but also stimulates students' creativity, which is an important driving force for educational innovation. Encouraging teacher innovation and providing supportive resources are therefore critical to adapting to socio-economic changes and improving the quality of university education [3].

Authentic leadership is a key driver of innovation in Chinese university education. By demonstrating the qualities of authenticity, integrity, and motivation, university leaders are able to support faculty in exploring new educational methods and practices, provide the necessary resources, encourage experimentation with new teaching strategies, and promote collaboration and resource sharing with other institutions [4]. This type of leadership not only advances the development of educational reforms and innovations but also stimulates student creativity and strengthens collaboration within the educational system. Thus, authentic leadership by university leaders is decisive for activating the innovative spirit of teachers, improving the quality of education and promoting social development.

In addition, teacher autonomy can also promote the sharing and interaction of educational resources and the synergistic development of education and teaching. Teacher autonomy is an important prerequisite and foundation for educational innovation. Cultivating and improving teacher autonomy can promote the innovation and development of education and teaching, improve the quality of teaching, stimulate students' innovative spirit and innovative ability, and promote the progress and development of society [5]. Therefore, researchers should emphasize the cultivation and development of teacher autonomy to provide a more solid foundation and impetus for educational innovation.

Educational innovation is critical to improving the quality of education and nurturing innovative talent, with teacher autonomy and leadership authenticity as key factors. Teacher autonomy, i.e. the ability to think independently and innovate in teaching and learning, is crucial to improving the quality of teaching and inspiring students to innovate [6]. At the same time, authentic leadership, by demonstrating sincerity and motivation, can effectively support teacher innovation and enhance

their motivation and creativity [7]. Chinese colleges and universities are gradually recognizing the important role of both in educational innovation, and are striving to promote educational reform and innovation by enhancing teacher autonomy and strengthening authentic leadership, with the aim of improving the quality of education and promoting the progress and development of society.

The researcher has been interested in this study because there is a particular gap in the research on the impact of teachers' authentic leadership and autonomy on educational innovation in Chinese colleges and universities. There is a need to put forward a plan to promote the development of educational innovation and improve the quality of education because the development of educational innovation needs the active promotion of teachers. Educational innovation requires teachers to keep exploring, practicing, and innovating. Only when teachers have authentic leadership and autonomy can they give full play to their enthusiasm and creativity and promote the development of educational innovation [8]. There is a close relationship between teachers' authentic leadership, autonomy and educational innovation in Chinese colleges and universities, which is related to the development of higher education and the country's future.

The researcher also realized that stimulating teachers' creativity and motivation can promote the development of educational innovation, improve the quality of teaching in higher education, and cultivate more innovative talents to push China towards an innovative country [9]. Another factor in conducting this study is that the research on the impact of authentic leadership and autonomy on the educational innovation of teachers in Chinese universities needs to be clarified in Chinese studies. Some studies have focused on their relationship, and few have addressed the interrelationships between these three variables. The results of this study will influence university educational management to recognize and value teachers authentic leadership and autonomy, which will help to improve educational management and innovation [10].

OBJECTIVES OF THE STUDY

The study aimed to explore the relationship between authentic leadership, autonomy, and educational innovation among university teachers in China. It analyzed respondents' demographics; evaluated authentic leadership across five dimensions; assessed teacher autonomy in teaching, organization, and management; identified areas of educational

innovation; examined differences in perceptions based on demographics; investigated the relationships among authentic leadership, autonomy, and innovation; and proposed a teaching improvement plan based on the findings.

MATERIALS AND METHODS

Research Design

This study used descriptive research method, which is a scientific means of investigation designed to systematically collect, record, analyze and report on the current status of a particular phenomenon without the intention of interfering with or manipulating the subject of the study. A descriptive assessment of the relationship between autonomous authentic leadership and future educational innovations of Chinese university teachers enables a comprehensive understanding of the current situation and reveals the correlations between related variables. As descriptive research emphasizes observation in a natural state, it is suitable for exploratory research, which allows for an in-depth understanding of the phenomenon and its intrinsic patterns in this field without intervening in the research object. This approach provides a solid foundation for developing the theoretical framework and research hypotheses for subsequent in-depth studies, and helps to establish a more complete research design. Through the descriptive study, the researchers were able to provide a comprehensive and objective portrayal of the relationship between autonomous authentic leadership and the future educational innovations of college teachers, providing substantial references and suggestions for the future development of the field of education. Thus, the relationship between Autonomous Authentic Leadership and future educational innovation of Chinese college teachers was assessed.

Participants of the Study

In this study, the participants were established from 4,000 faculty members from three universities in Hubei, China, namely Hubei University of Automotive Technology, Hubei University, and Hubei University of Technology. A sample size of 381 was determined by a Raosoft calculator with a margin of error of 5% at the 95% confidence level but it was even extended for greater reliability, thus, a sample size of 423. The study used a stratified random sampling technique.

Stratification ensured the representation of different school types, grade levels and sex. The sample was later expanded to 400 teachers to broaden the scope of the study. The three schools were chosen because they were

all quality schools of different types in the area, which allowed for accurate and reliable data to be obtained after data collection.

Instrument

The questionnaires were distributed to selected faculty members of Hubei University of Automotive Technology in China. The consultant critiqued the questionnaires to ensure that they are correct. The questionnaire is divided into four parts: the first part is the profile of the respondents: sex, age, highest educational attainment, university level leadership and length of service.

The second part is authentic leadership, which includes self-awareness and emotion management, creativity and innovation, leadership and employee relations, teamwork and psychological safety, and motivation to learn and emotional states. Items were adapted from Authentic Leadership and Corporate Employee Creativity: a Multilevel Mediation Model Test.

The third part is teacher autonomy, which contains: teaching autonomy, teaching organization and creative autonomy, and autonomy in school management and Participation. Items were adapted from A study of teachers' professional autonomy in the context of the new curriculum.

The fourth section, Educational Innovation, contains the field of knowledge-seeking and academic research, teaching career and professional development area, innovative areas of teaching and impact adapted from the Educational Innovation Questionnaire.

The content of the instrument used in this study underwent a rigorous validation process to ensure its reliability. The instrument was first reviewed and validated by a panel of experts in the field to ensure that it adequately measured the intended constructs.

Subsequently, the tool was tested for reliability using Cronbach's Alpha, which is a recognized measure of internal consistency.

Table 1 shows that all components of the tool exhibit good to excellent reliability. These results indicate that the instrument consistently measures the intended components and provides accurate and consistent data. The high Cronbach's alpha values indicate that there is a strong correlation between the items in each component, which contributes to the valid measurement of the respective competencies. Thus, the reliability of the questionnaire enhances the credibility and validity of the findings and supports the use of the questionnaire as a powerful tool for assessing authentic leadership, faculty

autonomy, and educational innovation in Chinese universities.

Table 1
Reliability Result

Indicators	Cronbach Alpha	Remarks
Teaching autonomy	0.866	Good
Teaching organization and creative autonomy	0.756	Acceptable
Autonomy in school management and participation	0.860	Good
Self-awareness and emotion management	0.788	Acceptable
Creativity and Innovation	0.874	Good
Leader-employee relationships	0.887	Good
Teamwork and psychological safety	0.879	Good
Learning motivation and emotional states	0.832	Good
The field of knowledge seeking and academic research	0.865	Good
Teaching Career and Professional Development Area	0.884	Good
Innovative areas of teaching and impact	0.904	Excellent

Data Gathering Procedure

Before conducting the pilot test, the researcher wrote a communication letter to school leaders and obtained official permission from them to conduct the study in their schools. The researcher also sent invitations to the teachers in their school who would be participating in this study. Respondents were thus informed about the purpose of the study. Quantitative data were obtained through the production of questionnaires; qualitative data were obtained through in-depth interviews, and the three were analyzed comprehensively to explore in depth the relationship between the three.

Data Analysis

Once the data collection was completed, the attributes of each variable as well as the associations between the three variables were interpreted and investigated using frequency distributions, percentage distributions, weighted averages, multiple regressions and covariances. Weighted means and ranking were used to determine the values of the three variables. ANOVA was used to test the relationship between teacher

autonomy, authentic leadership and educational innovation. Regression analysis was also used in the statistical treatment. All the data collected were processed through the Statistical Package for Social Sciences (SPSS)23 statistical analysis tool.

The analysis focused on determining from the questionnaire data the extent to which participants disagreed or agreed with statements about innovation in education, the frequency of applying teacher autonomy and authentic leadership in education, and the use of competencies for innovation in education.

Ethical Considerations

The confidentiality of the study data and the anonymity of the participants were assured, and to facilitate statistical analysis of the collected questionnaire data, codes and numbers were used in the tabulation. Also, this study underwent checking and approval from the Ethics Review Committee of the University. The researcher made sure that during the data gathering, data were carefully handled, tallied and interpreted.

RESULTS AND DISCUSSION

Table 1
Authentic Leadership

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Self-awareness and emotion management	3.05	Agree	3.5
2. Creativity and Innovation	3.09	Agree	2
3. Leader-employee relationships	3.17	Agree	1
4. Teamwork and psychological safety	3.05	Agree	3.5
5. Learning motivation and emotional states	3.03	Agree	5
Composite Mean	3.08	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

In Table 1, the Authentic Leadership ratings of the respondents are presented, with a combined mean of

3.08, indicating that the respondents generally agreed. Leader-employee relationships ranked first, with a mean score of 3.17; Creativity and Innovation, with a mean score of 3.09; Teamwork and psychological safety and Self-awareness and emotion management, both with a mean score: 3.05;

However, the relatively low scores in teamwork and psychological safety and self-perception and emotion management may hint at some potential challenges. Xu [11] studied that in the area of teamwork and psychological safety, there may be a need to strengthen the culture of teamwork, reduce blaming, and encourage open communication and sharing of ideas. In terms of self-awareness and emotion management, leaders could provide more support and resources to help team members better understand and manage their emotions. Overall, the results of these ratings provide leaders with comprehensive feedback that emphasizes their success in building good leader-employee relationships and fostering creativity. Ye [12] argues that teamwork, psychological safety and self-awareness, and emotion management require more attention and effort from leaders. Through targeted improvements, leaders are expected to further improve overall team performance and member satisfaction.

Table 2
Teacher Professional Autonomy

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Teaching autonomy	3.13	Agree	2
2. Teaching organization and creative autonomy	3.09	Agree	3
3. Autonomy in school management and participation	3.15	Agree	1
Composite Mean	3.12	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

In Table 2, the respondents' ratings on Summary Table on Teacher Professional Autonomy are presented, with a combined mean of 3.12, indicating that the respondents generally agreed. Autonomy in school management and participation was ranked first with a mean score of 3.15, followed by Teaching autonomy with a mean score of 3.13, and finally, Teaching

organization and creative autonomy with a mean score: 3.09;

Zhang [13] suggests that education practitioners tend to be better able to utilize their personal creativity and passion for education in contexts where they give full play to their autonomy, which in turn provides students with a more insightful and inspiring educational experience. Therefore, the development of policies and mechanisms that support teachers' autonomy in these critical areas is not only expected to enhance the effectiveness and quality of the education system as a whole, but will also lay a solid foundation for the development of innovative and resilient students. The implementation of such policies and mechanisms will help to drive positive change in education and the continued progress of schools and education systems.

Table 3
Educational Innovation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. The field of knowledge seeking and academic research	3.16	Agree	1
2. Teaching Career and Professional Development Area	3.12	Agree	3
3. Innovative areas of teaching and impact	3.14	Agree	2
Composite Mean	3.14	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 3 presents the respondents' ratings of Summary Table on Educational Innovation, with a composite mean of 3.14, indicating that respondents generally agreed. Among them, The field of knowledge seeking and academic research was ranked first with an average score: 3.16; Next, Innovative areas of teaching and impact, mean score: 3.14; Finally, Teaching Career and Professional Development Area, with an average score: 3.12;

With regard to the area of teaching careers and professional development, this suggests that a certain percentage of respondents identified teaching careers

and professional development as an important aspect of educational innovation to focus on [14]. This may include a focus on professional development opportunities and career support for teachers to ensure that educators have access to ongoing professional development and support in the field of teaching.

Table 4
Difference of Responses on Authentic Leadership When Grouped According to Profile

Sex	F-value	p-value	Interpretation
Self-awareness and emotion management	0.289	0.591	Not Significant
Creativity and Innovation	0.001	0.981	Not Significant
Leader-employee relationships	1.851	0.174	Not Significant
Teamwork and psychological safety	0.003	0.959	Not Significant
Learning motivation and emotional states	2.918	0.088	Not Significant
Age			
Self-awareness and emotion management	1.536	0.204	Not Significant
Creativity and Innovation	2.594	0.052	Not Significant
Leader-employee relationships	0.561	0.641	Not Significant
Teamwork and psychological safety	1.056	0.368	Not Significant
Learning motivation and emotional states	0.039	0.990	Not Significant
Highest Educational Attainment			
Self-awareness and emotion management	3.245	0.040	Significant
Creativity and Innovation	4.430	0.012	Significant
Leader-employee relationships	5.869	0.003	Significant
Teamwork and psychological safety	2.587	0.076	Not Significant
Learning motivation and emotional states	0.163	0.850	Not Significant
University Level Leadership			
Self-awareness and emotion management	4.910	0.008	Significant
Creativity and Innovation	2.351	0.097	Not Significant
Leader-employee relationships	1.978	0.140	Not Significant
Teamwork and psychological safety	1.682	0.187	Not Significant
Learning motivation and emotional states	2.203	0.112	Not Significant
Length of Service			
Self-awareness and emotion management	0.827	0.531	Not Significant
Creativity and Innovation	3.134	0.009	Significant
Leader-employee relationships	0.681	0.638	Not Significant
Teamwork and psychological safety	0.496	0.779	Not Significant
Learning motivation and emotional states	0.406	0.845	Not Significant

Legend: Significant at p-value < 0.05

Table 4 shows the comparison of responses on authentic leadership when grouped according to profile. It was observed that there was significant difference on Self-awareness and emotion management ($p = 0.040$), Creativity and Innovation ($p = 0.012$) and Leader-employee relationships ($p = 0.003$) when grouped according to educational attainment; Self-awareness and emotion management ($p = 0.008$) when grouped according to university level leadership; and Creativity and Innovation ($p = 0.009$) when grouped according to length of service. This means that the responses differ statistically and from the post hoc test conducted, it was found out that those who obtained masters and above, principal and working for 21 years and more have better assessments than others.

The data provide organizations with insights that help to tailor more precise and targeted leadership development strategies. Zhou [15] noted that by targeting the specific needs of different populations, organizations can optimize leadership training programs and improve the overall effectiveness of their leadership teams. At the same time, for individuals, these statistical differences provide a clear direction for development and motivation to pursue higher levels of leadership, leading to more holistic and sustainable development over the course of their careers. Taken together, these statistics serve as a powerful guide for organizations and individuals to work together to achieve leadership excellence across the board.

Table 5 presents the comparison of responses on teacher professional autonomy when grouped according to profile. It was observed that there was significant difference on teaching autonomy when grouped according to age and length of service. This means that the responses differ statistically and from the post hoc test conducted, it was found out that those who are 47 years and above and working for more than 21 years have better evaluation than others.

Xie [16] suggested that helping teachers to grow in professional autonomy not only helps to improve the overall quality of teaching and learning, but also helps to build a more dynamic and innovative educational environment. This has far-reaching implications for the development of more influential and leading education professionals.

Table 5
Difference of Responses on Teacher Autonomy When Grouped According to Profile

Sex	F-value	p-value	Interpretation
Teaching autonomy	0.940	0.333	Not Significant
Teaching organization and creative autonomy	1.222	0.270	Not Significant
Autonomy in school management and participation	0.002	0.963	Not Significant
Age			
Teaching autonomy	3.736	0.011	Significant
Teaching organization and creative autonomy	2.335	0.073	Not Significant
Autonomy in school management and participation	1.347	0.259	Not Significant
Highest Educational Attainment			
Teaching autonomy	0.163	0.849	Not Significant
Teaching organization and creative autonomy	2.348	0.097	Not Significant
Autonomy in school management and participation	0.599	0.550	Not Significant
University Level Leadership			
Teaching autonomy	0.242	0.785	Not Significant
Teaching organization and creative autonomy	1.438	0.239	Not Significant
Autonomy in school management and participation	2.377	0.094	Not Significant
Length of Service			
Teaching autonomy	3.052	0.010	Significant
Teaching organization and creative autonomy	0.919	0.469	Not Significant
Autonomy in school management and participation	0.683	0.637	Not Significant

Legend: Significant at $p\text{-value} < 0.05$

Table 6 displays the comparison of responses on educational innovation when grouped according to profile. It was observed that there was significant difference on field of knowledge seeking and academic research and Innovative areas of teaching and impact

when grouped according to university level leadership. This means that the responses vary statistically and from the post hoc test conducted, it was found out that principal have better assessment on the above indicators.

Table 6
Difference of Responses on Educational Innovation When Grouped According to Profile

Sex	F-value	p-value	Interpretation
The field of knowledge-seeking and academic research	1.016	0.314	Not Significant
Teaching Career and Professional Development Area	0.001	0.977	Not Significant
Innovative areas of teaching and impact	0.193	0.661	Not Significant
Age			
The field of knowledge-seeking and academic research	0.553	0.647	Not Significant
Teaching Career and Professional Development Area	2.582	0.053	Not Significant
Innovative areas of teaching and impact	2.093	0.101	Not Significant
Highest Educational Attainment			
The field of knowledge-seeking and academic research	0.855	0.426	Not Significant
Teaching Career and Professional Development Area	0.830	0.437	Not Significant
Innovative areas of teaching and impact	0.909	0.404	Not Significant
University Level Leadership			
The field of knowledge-seeking and academic research	3.382	0.035	Significant
Teaching Career and Professional Development Area	1.434	0.239	Not Significant
Innovative areas of teaching and impact	4.473	0.012	Significant
Length of Service			
The field of knowledge-seeking and academic research	1.313	0.257	Not Significant
Teaching Career and Professional Development Area	1.361	0.238	Not Significant
Innovative areas of teaching and impact	1.361	0.238	Not Significant

Legend: Significant at p-value < 0.05

All in all, these differences provide useful guidance for university management to optimize leadership collaboration mechanisms and leverage their respective strengths to achieve a more holistic approach to educational innovation. Xia [17] argues that by facilitating experience-sharing and collaboration among

leaders, universities can build a more vibrant culture of educational innovation and improve the overall standard of education. In addition, the results of the study also provide a clear development direction for leadership members, encouraging them to continue to deepen their expertise in their own areas of specialization and to leverage their leadership strengths in teamwork to achieve more comprehensive leadership development. Taken together, this study provides insights for university management to develop more effective educational innovation strategies.

Table 7
Relationship Between Authentic Leadership and Teacher Autonomy

	r-value	p-value	Interpretation
Self-awareness and emotion management			
Teaching autonomy	-.459**	0.000	Highly Significant
Teaching organization and creative autonomy	-.401**	0.000	Highly Significant
Autonomy in school management and participation	-.414**	0.000	Highly Significant
Creativity and Innovation			
Teaching autonomy	-.418**	0.000	Highly Significant
Teaching organization and creative autonomy	-.337**	0.000	Highly Significant
Autonomy in school management and participation	-.382**	0.000	Highly Significant
Leader-employee relationships			
Teaching autonomy	-.335**	0.000	Highly Significant
Teaching organization and creative autonomy	-.371**	0.000	Highly Significant
Autonomy in school management and participation	-.343**	0.000	Highly Significant
Teamwork and psychological safety			
Teaching autonomy	-.278**	0.000	Highly Significant
Teaching organization and creative autonomy	-.261**	0.000	Highly Significant
Autonomy in school management and participation	-.318**	0.000	Highly Significant
Learning motivation and emotional states			
Teaching autonomy	-.192**	0.000	Highly Significant
Teaching organization and creative autonomy	-.217**	0.000	Highly Significant
Autonomy in school management and participation	-.346**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 7 displays the association between authentic leadership and professional autonomy. It was observed

that the computed r-values indicates a moderate indirect correlation and the resulted p-values were less than the alpha level. Result reveals that there was significant relationship exists and shows that the lesser the assessment on authentic leadership, the better is the professional autonomy.

In summary, the results of the study reveal a complex relationship between authentic leadership and professional autonomy. Individuals are more likely to demonstrate strong professional autonomy when leadership ratings are low. This provides insights for

organizations and leaders, with arguing that increasing levels of authentic leadership may help to reduce excessive professional autonomy in employees and promote more coordinated and effective teamwork. Therefore, organizations and leaders should focus on portraying authentic and effective leaders when developing leadership skills in order to motivate employees to better integrate into their teams and achieve more productive collaborative work.

Table 8
Relationship Between Authentic Leadership and Educational Innovation

Self-awareness and emotion management	r-value	p-value	Interpretation
The field of knowledge seeking and academic research	-.476**	0.000	Highly Significant
Teaching Career and Professional Development Area	-.399**	0.000	Highly Significant
Innovative areas of teaching and impact	-.435**	0.000	Highly Significant
Creativity and Innovation			
The field of knowledge seeking and academic research	-.370**	0.000	Highly Significant
Teaching Career and Professional Development Area	-.249**	0.000	Highly Significant
Innovative areas of teaching and impact	-.353**	0.000	Highly Significant
Leader-employee relationships			
The field of knowledge seeking and academic research	-.448**	0.000	Highly Significant
Teaching Career and Professional Development Area	-.349**	0.000	Highly Significant
Innovative areas of teaching and impact	-.323**	0.000	Highly Significant
Teamwork and psychological safety			
The field of knowledge seeking and academic research	-.277**	0.000	Highly Significant
Teaching Career and Professional Development Area	-.261**	0.000	Highly Significant
Innovative areas of teaching and impact	-.225**	0.000	Highly Significant
Learning motivation and emotional states			
The field of knowledge seeking and academic research	-.219**	0.000	Highly Significant
Teaching Career and Professional Development Area	-.223**	0.000	Highly Significant
Innovative areas of teaching and impact	-.249**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 8 shows the association between authentic leadership and educational innovation. It was observed that the computed r-values indicates a moderate indirect correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and implies that the lesser the

assessment on authentic leadership, the more innovative in education.

Overall, the results of this study emphasize the relationship between authentic leadership and educational innovation. The results suggest that individuals are more likely to demonstrate greater educational innovation in the presence of lower leadership ratings. This is instructive for educational

institutions and leaders, suggesting that increasing the level of authentic leadership may help to stimulate the potential for educational innovation in organizations, thereby contributing to the continued development of the educational system.

Table 9 presents the association between teacher professional autonomy and educational innovation. It was observed that the computed r-values indicates a moderate direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and implies that the better is the teacher professional autonomy, the more innovative in education.

Table 9
Relationship Between Teacher Autonomy and Educational Innovation

Teaching autonomy	r-value	p-value	Interpretation
The field of knowledge seeking and academic research	.330**	0.000	Highly Significant
Teaching Career and Professional Development Area	.378**	0.000	Highly Significant
Innovative areas of teaching and impact	.331**	0.000	Highly Significant
Teaching organization and creative autonomy			
The field of knowledge seeking and academic research	.326**	0.000	Highly Significant
Teaching Career and Professional Development Area	.343**	0.000	Highly Significant
Innovative areas of teaching and impact	.313**	0.000	Highly Significant
Autonomy in school management and participation			
The field of knowledge seeking and academic research	.326**	0.000	Highly Significant
Teaching Career and Professional Development Area	.343**	0.000	Highly Significant
Innovative areas of teaching and impact	.313**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Overall, this study provides practical guidance for building a more dynamic and innovative education system, emphasises the importance of teachers' professional autonomy, and provides useful lessons for future education policy and practice.

CONCLUSIONS AND RECOMMENDATIONS

Most of them are women, between 26 and 41 years of age, with a bachelor's degree as their highest level of education, hold teaching positions at universities, with less than one year of service. The majority of respondents felt that leaders scored highest on the Authentic Leadership dimension when it came to building good relationships with their employees. In terms of Teachers' Professional Autonomy, respondents generally considered autonomy in terms of school management and participation to be the most important. Respondents generally agreed that educational innovations have led to significant achievements in the field of knowledge and academic research. Majority of the respondents are grouped by years of experience, master's degrees and above, headmasters, and those with more than 21 years of experience performed significantly better on the assessment than the others. Other demographic factors, such as age, gender, and highest level of education, showed less variation in the impact on school leaders. There is a significant relationship between authentic leadership and educational innovation, and teacher professional autonomy and educational innovation. This relationship means that authentic leadership and teacher professional autonomy work together to build an educational environment that fosters innovative thinking and practice, thereby contributing to the continued progress and development of the field of education. A teaching improvement plan was proposed based on the results of the study.

Schooadministrators may believe that the autonomy of school management and participation is of paramount importance to the teaching profession, and that school administrators can pay more attention to teachers' participation and autonomy when formulating management policies, which can help improve the quality of education and staff satisfaction. Teachers may participate in academic groups and seminars through heuristic methods and practical learning experiences in the teaching process, so as to continuously update teaching methods and curriculum design, and maintain the novelty and forward-looking nature of educational content. The proposed teaching improvement plan may be reviewed, implemented and evaluated after piloting

to schools. Future researchers may conduct further in-depth studies of these associations are needed to provide more concrete, actionable recommendations to help school administrators and teachers better promote educational innovation and improved schools as a whole.

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