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Research Article

An Empirical Study On Knowledge Sharing Behaviour Of Faculty And Its Effect On Their Academic Performance Among Arts And Science College In Trichy

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ABSTRACT

Knowledge sharing promotes a collaborative learning environment in higher education institutions where faculty members can exchange ideas, collaborate on research projects, and co-author publications. Knowledge-sharing behaviour of faculty members in Arts and Science colleges in Trichy and its effect on their academic performance, aims to identify key determinants and outcomes associated with knowledge-sharing behaviour, focusing on factors influencing faculty members' engagement in knowledge sharing activities and the impact of such activities on teaching effectiveness, research productivity, and scholarly contributions. The research methodology includes primary data collection through a structured questionnaire and statistical analysis using one-way ANOVA to assess the impact of respondents' age on academic performance. The findings reveal a significant relationship between knowledge-sharing behaviour and academic performance, highlighting the importance of creating a supportive environment and providing incentives to encourage faculty members to share knowledge effectively. The study provides actionable insights for academic institutions to optimize their knowledge management strategies and enhance faculty development initiatives.

Keywords: *knowledge-sharing behaviour, academic performance, faculty development.*

INTRODUCTION:

Knowledge sharing has received extensive consideration in numerous fields, including education. Because it not only serves as a mechanism for interaction and transfer of information among individuals as well as within groups, but also plays a very vital part in faculty professional development and educational reform. When faculty members engage in knowledge sharing activities, they often gain new insights, information, and perspectives from their peers. Faculty members who actively participate in knowledge sharing activities may adopt new teaching methods, incorporate innovative technologies, and implement best practices learned from their colleagues. Collaborative research also can enhance the quality and academic reputation of the faculty members and the institution. Knowledge sharing activities allows faculty members to expand their professional networks, connect with experts in their field, and build collaborative partnerships with other institutions or organizations.

The city of Trichy, known for its rich cultural heritage and diverse educational landscape, hosts numerous Arts and Science colleges that serve as hubs of knowledge creation and dissemination. Within these academic institutions, faculty members serve as key pillars, shaping the educational experiences of students and contributing to the intellectual capital of the region. Their engagement in knowledge sharing activities not only influences their professional development but also directly impacts the quality of education and research outcomes. Moreover, examining the effects of knowledge sharing on faculty's academic performance,

including teaching effectiveness, research productivity, and scholarly contributions, will provide actionable insights for academic institutions to optimize their knowledge management strategies and enhance faculty development initiatives.

The knowledge-sharing behaviour of faculty members plays a crucial role in enhancing academic performance and fostering a culture of continuous learning and innovation within educational institutions. However, there is a gap in understanding the specific factors influencing knowledge-sharing behaviour among faculty members in Arts and Science colleges in Trichy, as well as the direct impact of this behaviour on their academic performance. Therefore, this empirical study aims to investigate the knowledge-sharing behaviour of faculty members in Arts and Science colleges in Trichy and its effect on their academic performance, with a focus on identifying key determinants, and outcomes associated with knowledge-sharing in this context.

LITERATURE REVIEW:

• Knowledge Sharing Behaviour

Smith et al. (2018) defined knowledge sharing behaviour among faculty as the voluntary exchange of information, expertise, and experiences within academic communities. Their study emphasized the role of collaborative networks and communities of practice in fostering knowledge sharing culture among educators. According to Jones and Brown (2020), knowledge sharing behaviour in higher education institutions is influenced by factors such as perceived benefits, social norms, trust, and perceived organizational support. They highlighted the importance of creating a supportive environment to encourage faculty members to share knowledge effectively.

• Factors Influencing Knowledge Sharing

Research by Lee and Lee (2019) identified leadership support, organizational culture, and technological infrastructure as key factors influencing knowledge sharing among faculty members. Their study emphasized the need for proactive leadership and supportive policies to facilitate knowledge exchange. In a study by Chen et al. (2021), individual motivations, including intrinsic factors like altruism and extrinsic factors like recognition and rewards, were found to significantly impact knowledge sharing behaviour among faculty. They highlighted the importance of aligning incentives with knowledge sharing initiatives.

• Methods and Tools for Knowledge Sharing

Ahmed and Rahman (2017) explored the effectiveness of technology-enabled knowledge sharing platforms, such as online forums and collaborative software, in facilitating information exchange among faculty members. Their study highlighted the role of digital tools in overcoming geographical barriers and promoting continuous learning. An investigation by Li et al. (2019) compared traditional methods of knowledge sharing, such as seminars and workshops, with modern approaches like social media and virtual communities. They found that diversified channels and interactive platforms enhance engagement and knowledge dissemination among faculty.

• Role of Arts and Science Colleges

In Arts and Science colleges, knowledge sharing plays a crucial role in fostering interdisciplinary collaboration and enriching educational experiences for students. Studies by Patel and Singh (2018) highlighted the unique challenges and opportunities for knowledge sharing within these academic contexts. Research by Kumar et al. (2021) emphasized the role of Arts and Science colleges in promoting a culture of innovation and creativity through faculty knowledge sharing initiatives. Their study underscored the importance of cross-disciplinary exchanges in addressing complex societal challenges.

• Impact of Knowledge Sharing on Academic Performance

A meta-analysis by Wang et al. (2020) found a positive correlation between faculty knowledge sharing activities and academic performance indicators such as research productivity, teaching effectiveness, and student satisfaction. Their findings suggested that active knowledge sharing contributes to overall institutional success. Case studies by Gomez and Martinez (2019) demonstrated how collaborative knowledge sharing platforms and interdisciplinary collaborations among faculty led to improved academic outcomes, including higher student retention rates and enhanced learning experiences. Study by Chang, L., & Wang, Y. (2019) investigated the correlation between faculty knowledge sharing behaviour and student academic achievement in Arts and Science colleges. The findings indicated a positive relationship, suggesting that active knowledge sharing among faculty contributes to improved student outcomes.

Research by Rodriguez, M., et al. (2020) explored the role of interdisciplinary knowledge sharing initiatives in enhancing overall institutional academic performance. The study highlighted the importance of cross-departmental collaboration and knowledge exchange in promoting innovation and excellence. Case study by Lee, H., & Kim, S. (2018) analyzed the impact of faculty knowledge sharing on research productivity and publication outcomes. The results showed a significant positive effect, indicating that collaborative

knowledge sharing practices among faculty members lead to increased research output and quality. Meta-analysis by Wang, L., et al. (2021) synthesized findings from multiple studies on the relationship between knowledge sharing activities and academic performance indicators. The analysis revealed a consistent pattern of positive effects across diverse institutional contexts, supporting the notion that knowledge sharing contributes to overall academic success.

OBJECTIVES:

- Identify the factors influencing the knowledge-sharing behaviour of faculty in higher education institutions.
- Analyse the effect of knowledge sharing behaviour of faculty with their academic performance.

RESEARCH METHODOLOGY:

Methodology is one of the vital parts of every research. Primary data and secondary data have been engaged. A convenient sampling method was used to select 384 respondents. The primary data was collected with the help of a well-structured questionnaire. One-way ANOVA test and simple percentages have been used to analyses the data and interpretation of data is done with the help of data collected from the respondents.

ANALYSIS AND INTERPRETATION:

The data collected from primary sources is analyzed to identify the impact of respondents' age on their academic performance.

A chi-square test is done to achieve the research hypothesis between the two variables such as the gender of the respondents and number of days working from home per week.

One-way ANOVA, is a statistical test used to compare the means of three or more groups to determine if there are significant differences among them. It is commonly used in research and data analysis to assess the impact of one independent variable on a dependent variable.

Null Hypothesis: There is no significant difference in academic performance among respondents of different age groups.

Alternate Hypothesis: There is a significant difference in academic performance among respondents of different age groups.

One-way ANOVA test the effect of respondents' age on their academic performance

Age of the Respondents		*N*	*Mean*	*Std. Deviation*	*F Value*	*Sig.*
Academic Performance	Below 30 years	60	2.60	.588	4.732	.003* Significant
	31 to 40 years	196	2.34	.751		
	41 to 50 years	101	2.52	.609		
	Above 50 years	27	2.11	.751		
	Total	***384***	***2.41***	***.702***		

Source: Computed from Primary Data

The above table shows that the F value is 4.732. The p value has achieved the level of statistical significance ($p<0.05$), and it shows that there is a significant difference between the age and academic performance of the respondents. From the post hoc test, it is identified that there is a significant difference between the age of the respondents such as below 30 years (M=2.60,SD=.588),31 to 40 years(M=2.34,SD=.751),41 to 50 years (M=2.52, SD=.609) and above 50 years (M=2.11, SD=.751), on academic performance.

Black et al. (2018) found that because of experience and maturity people tend to have better time management skills, study habits, and coping mechanisms due to their accumulated life and work experiences. Kolb (2015) on experiential learning suggests that individuals of different age groups may have distinct learning preferences, such as active experimentation, reflective observation, abstract conceptualization, and concrete experience. These preferences can influence academic outcomes. It is inferred that younger individuals tend to demonstrate higher adaptability to change, which can positively impact their academic performance in modern educational settings.

FREQUENCY OF VARIOUS FACTORS INFLUENCING ACADEMIC PERFORMANCE OF THE RESPONDENTS

S. No.	Academic Performance	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	Knowledge sharing helps to update subject content and enrichment by providing additional resources to students.	**258**	120	6	0	0
		67.2%	31.3%	1.5%	0	0
2	Knowledge sharing results in the preparation of innovative pedagogy, lecture notes, teaching aids	**255**	111	18	0	0
		66.4%	28.9%	4.7%	0	0
3	Knowledge sharing helps in bettering my classroom management skill	**246**	120	18	0	0
		64.1%	31.3%	4.6%	0	0
4	Knowledge sharing helps me in publishing many research articles, papers, abstract in journals and periodicals	**237**	126	21	0	0
		61.7%	32.8%	5.5%	0	0
5	Knowledge sharing provides me with skills that are necessary for getting patents, research grants and consultancy projects.	**210**	141	30	3	0
		54.7%	36.7%	7.8%	0.8%	0
6	Knowledge Sharing improves quality of research guidance to my M. Phil, Ph. D scholars	**219**	147	15	3	0
		57%	38.3%	3.9%	0.8%	0
7	Knowledge sharing practices gets me included in many core committees in my institution	**213**	141	24	3	3
		55.5%	36.7%	6.2%	0.8%	0.8%
8	My knowledge sharing behaviour enables me to go to other institutions to give talks and special lectures	**210**	138	36	0	0
		54.7%	35.9%	9.4%	0	0
9	Knowledge sharing helps me to develop mentoring and academic advice skills	**219**	150	15	0	0
		57%	39.1%	3.9%	0	0
10	My knowledge sharing enables me to share my knowledge to industries	**171**	153	54	3	3
		44.5%	39.8%	14.1%	0.8%	0.8%
11	Knowledge sharing gives me the confidence to organize professional meetings	**201**	159	24	0	0
		52.3%	41.4%	6.3%	0	0
12	Knowledge sharing enables me to be on the editorial board of professional magazines in my domain area.	**183**	150	48	3	0
		47.7%	39.1%	12.4%	0.8%	0

Source: Primary Data

The above table describes the various factors influencing the Academic Performance of the respondents.

1. Faculty allows students to share resources and contribute resources that they know to be credible and relevant. They also refer professional journals, websites, and news articles to their students. Thus, knowledge sharing helps them to update their subject content by providing additional resources to their students. It was strongly agreed by 67.2 percent of the respondents, agreed by 31.3 percent of the respondents, 1.5 percent of the respondents had no opinion i.e., they have neither agreed nor disagreed, and none of the respondents disagreed and strongly disagreed with this.
2. The respondents feel that when they share knowledge it results in the preparation of innovative teaching pedagogies, lecture notes, and teaching aids. 66.4 percent of the respondents strongly agreed, 28.9 percent of the respondents agreed, 4.7 percent of the respondents neither agreed nor disagreed, and none of the respondents disagreed and strongly disagreed with this.
3. It's inferred that 64.1 percent of the respondents strongly agree, 31.3 percent of the respondents agree, 4.6 percent of the respondents neither agree nor disagree, and none of the respondents disagreed and strongly disagreed that knowledge sharing helped the respondents in betteringtheir classroom management skill with new teaching methods.
4. An effective knowledge-sharing culture encourages employees to share their expertise and connect with other team members who can learn from or build upon that expertise. So, the respondents feel that Knowledge sharing helps them in publishing many research articles, papers, and abstracts in journals and periodicals. 61.7 percent of the respondents strongly agreed, 32.8 percent of the respondents agreed, 5.5 percent of the respondents neither agreed nor disagreed, and none of the respondents disagreed and strongly disagreed this.
5. It's inferred that 54.7 percent of the respondents strongly agree, 36.7 percent of the respondents agree, 7.8 percent of the respondents neither agree nor disagree, 0.8 of the respondents disagreed and noneof them strongly disagreed. With the right knowledge at their fingertips, whether searched or sent, faculty make faster decisions based on relevant, verified, updated and often tried-and-true knowledge. So, the respondents feel that Knowledge sharing provides them the skills that are necessary for getting patents, research grants and consultancy projects.
6. The respondents believe that Knowledge Sharing improves the quality of research guidance in guiding their M. Phil. and Ph. D scholars.57 percent of the respondents strongly agreed, 38.3 percent of the

respondents agreed, 3.9 percent of the respondents neither agreed nor disagreed, 0.8 of the respondents disagreed and noneof them strongly disagreed.

7. It's inferred that 55.5 percent of the respondents strongly agree, 36.7 percent of the respondents agree, 6.2 percent of the respondents neither agree nor disagree, and each 0.8 percent of the respondent had disagreed and strongly disagreed that Knowledge sharing practices gets the respondents included in many core committees in their institution. By regularly engaging them and reducing redundancies, the institutions encourage faculty to contribute their knowledge.
8. The respondents said that knowledge sharing behaviour enable faculty to go to other institutions to give talks and special lectures. It is possible with a strong knowledge-sharing culture. Faculty can be easily identified to contribute their unique expertise to inspire their colleagues. So, 54.7 percent of the respondents strongly agreed, 35.9 percent of the respondents agreed, 9.4 percent of the respondents neither agreed nor disagreed, and none of the respondent had disagreed and strongly disagreed.
9. It's learnt that 57 percent of the respondents strongly agree, 39.1 percent of the respondents agree, 3.9 percent of the respondents neither agree nor disagree, and none of the respondent had disagreed and strongly disagreed that Knowledge sharing helps them to develop mentoring and academic advice skills. Faculty who feels engaged and valued only will be able to improve and advice others through right answers from their experiences.
10. The respondents feel that sharing knowledge about specific topics, can support each other in acquiring a new skill set. This makes knowledge sharing especially beneficial for the industries. So it is learnt that knowledge sharing is done with industries in order to update the employees working there. 4.5 percent of the respondents strongly agreed, 39.8 percent of the respondents agreed, 14.1 percent of the respondents neither agreed nor disagreed, and each 0.8 percent of the respondent had disagreed and strongly disagreed.
11. It's learnt that 52.3 percent of the respondents strongly agree, 41.4 percent of the respondents agree, 6.3 percent of the respondents neither agree nor disagree and none of the respondent had disagreed and strongly disagreed.Knowledge sharing is the ultimate form of learning, so they think that Knowledge sharing gives them the confidence to organize professional meetings.
12. Knowledge sharing enables faculty to be in the editorial board of professional magazines in their domain area. When they are expert in a specific field, they can answer the questions from colleagues, give presentation and thus they become the member in editorial board. 47.7 percent of the respondents strongly agreed, 39.1 percent of the respondents agreed, 12.4 percent of the respondents neither agreed nor disagreed, 0.8 percent of the respondents disagreed, and none of the respondent strongly disagreed the same.

DISCUSSION:

The findings underscore a widespread agreement among respondents regarding the positive impacts of knowledge sharing on academic and professional growth. A large majority strongly agreed or agreed that knowledge sharing facilitates the exchange of credible resources, leading to updated subject content for students. Moreover, it stimulates the development of innovative teaching methods, enhances classroom management skills, and boosts research productivity, evident in increased publications. Additionally, knowledge sharing was seen as instrumental in improving research guidance, facilitating involvement in core committees, enabling opportunities for talks and special lectures, and developing mentoring and academic advice skills. The overall findings underscore the significant benefits of a robust knowledge-sharing culture among faculty members in academia.

SUGGESTIONS:

Institutions by conducting knowledge-sharing seminars and training the faculty can realize the importance of knowledge-sharing. Continuous learning of faculty can contribute to professional development and improve their understanding of various subjects or research areas, which can positively impact their teaching and research quality. Networking opportunities can lead to new research collaborations, funding opportunities, and career advancement. A collaborative approach can lead to innovative research outcomes, increased productivity, and a stronger academic community within the institution. Knowledge sharing plays a crucial role in creating a dynamic and supportive academic environment, which leads to the professional growth and academic performance of faculty members.

RESEARCH QUESTIONS:

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Q1 Gender a. Male b. Female
Q2 Age Group a. Below 30 years b. 31 to 40 years c. 41 to 50 years d. 50 Years
Q3 Marital Status a. Single b. Married

Q4 Designation a. Assistant professor b. Associate professor
Q5 Educational qualification a. P. G b. M. Phil c. Ph. D

SA - Strongly Agree, A – Agree, N – Neutral, D – Disagree, SDA - Strongly disagree

Q No	Factors	SA	A	N	D	SDA
	Academic Performance					
AP6	Knowledge sharing helps to update subject content and Enrichment by providing additional resources to students.					
AP7	Knowledge sharing results in Preparation of innovative pedagogy, lecture notes, teaching aids					
AP8	Knowledge sharing helps in bettering my classroom management skill					
AP9	Knowledge sharing helps me in publishing many research articles, papers, abstract in journals and periodicals					
AP10	Knowledge sharing provides me with skills that are necessary for getting patents, research grants and consultancy projects.					
AP11	Knowledge Sharing improves quality of research guidance to my M.Phil, Ph.D scholars					
AP12	Knowledge sharing practices gets me included in many core committees of my institution					
AP13	My knowledge sharing behaviour enables me to go to other institutions to give talks and special lectures					
AP14	Knowledge sharing helps me to develop mentoring and academic advice skills					
AP15	My knowledge sharing enables me to share my knowledge to industries					
AP16	Knowledge sharing gives me the confidence to organize professional meetings					
AP17	Knowledge sharing enables me to be in the editorial board of professional magazines in my domain area.					

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