

# Text Mining Ability, Pedagogical Decision Making and Knowledge Sharing Attitude as Indicators of Knowledge Management Skill of Prospective Teachers

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**Abstract** - The present study is aimed at achieving some objectives i.e. to investigate the text mining ability, pedagogical decision making ability, knowledge sharing attitude and knowledge management skills of prospective teachers having Language, Social Science and Science stream, to correlate knowledge management skill with text mining ability, pedagogical decision making ability, knowledge sharing attitude and knowledge management skills and to predict knowledge management skill in reference to text mining ability, pedagogical decision making and knowledge sharing attitude of prospective teachers. The researchers have used descriptive survey research method to achieve these objectives. The sample of 210 Prospective teachers (70 from language, 70 from social science and 70 from science stream) have been selected by using simple random sampling technique. The self-developed research tools have been used to collect the data regarding independent and dependent variables. By applying Mean, Standard Deviation, Product-Moment Correlation and Multiple Regression, researchers have been analysed the data. The research findings reveal that prospective teachers of Science stream have high text mining ability, pedagogical decision-making ability, and knowledge management skills and prospective teachers from Social Science Stream have high knowledge sharing ability. Low positive correlation has been calculated between knowledge management skills and text mining ability and knowledge management skills and knowledge sharing attitude. Knowledge management skill and pedagogical decisions making ability are correlated with each other on very low positive level. Text mining ability and knowledge sharing attitude best fits in model which predicts knowledge management skills of prospective teachers and the effect of pedagogical decision-making ability have been excluded due to its negligible effect.

**Keywords** - Text Mining Ability, Pedagogical Decision Making, Knowledge Sharing Attitude, Knowledge Management Skill, Prospective Teachers

## I. INTRODUCTION

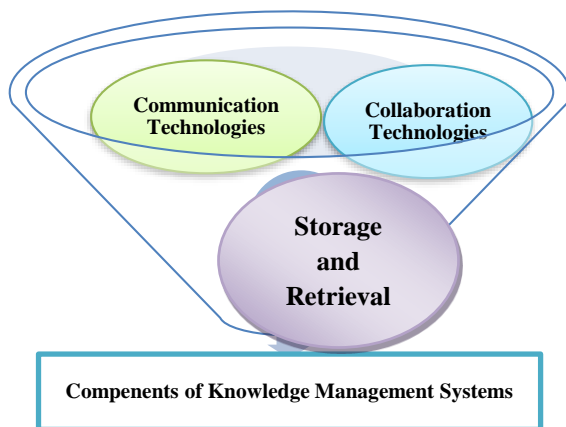
Huge amount of new information and data are created everyday through financial, academic and societal activities, with substantial potential economic and societal value. To exploit this potential there is a need to apply some effective technique like to strengthen knowledge management ability of person connected to them. Knowledge management brings together three important institutional resources such as people, processes and technologies to enable the institution to use and share information more effectively. People teamwork, sharing, active engagement, exchange of information create a shared repertoire institutional tools and practices that can support the future learning. Various processes of institutions such as administrative procedures, information sharing system, salary, bonuses, curriculum development process, future plans also affect the knowledge management system. Technology plays a vital role in effective working of the institution. The effective technologies are helpful in enhancing the sense of teachers for managing the knowledge.

### A. Knowledge Management and Information Technology

Knowledge management in education is a concept that includes a group of perfect intuition, practical knowledge and an emotion for what can be best explained as a set of growing theories and principles which throw light on effective management of knowledge. Knowledge management is more than a technology, it is learning methodology applied to learning practices. However, information technology is crucial to the success of knowledge management systems.

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**Figure 1: Components of Knowledge Management systems**



In terms of information technology, the components of Knowledge Management Systems are communication technologies, collaboration technologies and storage and retrieval technologies which help the users to exchange the ideas, information, to collect more information and enhance the knowledge in every perspective. The main components of Knowledge management skill of prospective teachers can be affected by various factors. As the information can be available in various forms and in unstructured manner so the prospective teacher's text mining ability can be an indicator of their knowledge management skill.

### B. Text Mining and Information Technology

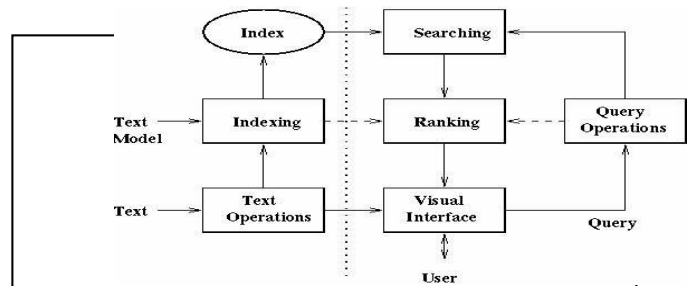
Text mining is the set of processes required to convert unstructured text documents or resources into valuable structured information. It is based on Natural Language Processing (NLP) which is "ability of machines to comprehend and take to mean human language the way it is written or spoken". The goal of NLP is to build computer/machines as intelligent as human beings in understanding language. Natural language generation is the process of robotically producing text from ordered data in a legible format with significant phrases and sentences. Natural language generation divided into three proposed stages. The first stage is Text Planning in which Ordering of the basic content in structured data is done. In second stage Sentence Planning is done by combining sentences from structured data to characterize the flow of information. In last stage of Realization sentences are corrected grammatically for finally representing the text.

Natural Language Processing (NLP) and Text Mining are Artificial Intelligence (AI) technologies that allow users to quickly convert the key matter in text documents into quantitative, actionable insights. NLP plays a significant role in enhancing Artificial Intelligence systems. Without NLP,

artificial intelligence can only comprehend the meaning of language and reply trouble-free questions. Thus, NLP in AI allows client to speak with a computer in their natural language.

Applied to a body of information, text mining can be used to make big amount of unstructured data accessible and beneficial by extracting useful information and knowledge hidden in text content and revealing patterns, trends and insight in large amounts of information.

**Figure 2. Technology Foundation and Text Mining**

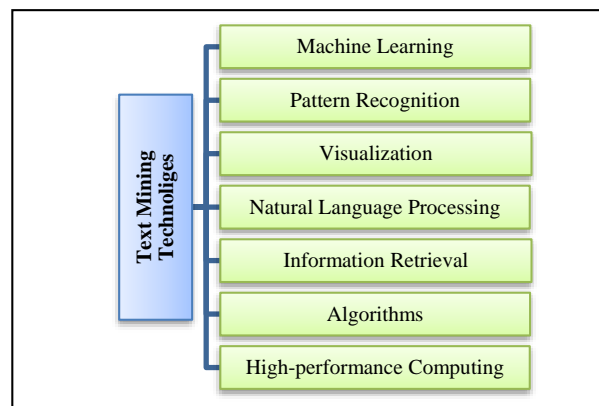


The field of natural language processing has created technologies that impart computers natural language so that they can analyse, comprehend, and even generate text. Some of the technologies that have been developed and can be used in the text mining process are information extraction, topic tracking, summarization, categorization, clustering, concept linkage, information visualization, and question answering.

### C. Text Mining Technologies

Text mining is a technology to convert text into knowledge. If the users can do text mining efficiently, they can retrieve the information for long time. Their cognitive skills i.e. knowledge, understanding, application, analysis, synthesis and evaluation can be developed and they can have exploratory attitude in perspective of knowledge development.

**Figure 3: Text Mining Technologies**



### D. Pedagogical Decision Making Ability

In teaching profession teacher has to take various decisions related to teaching learning process, students and their evaluation. Teachers' pedagogical decision making is a multifaceted process as it involves spontaneous, investigative and deliberative decisions. Prospective teacher's Pedagogical decision making ability is the essence of teachers' professional exercise. It indicates towards the process of thinking and reasoning that constitutes the basis and justification for choosing among available alternative, based on considerations, that is hoped will bring about effective and meaningful learning for the learners (Rajendran, et al., 2006). Pedagogical decision making can be viewed through a prism of theoretical understanding of teacher knowledge or a more practice oriented conception of knowledge that evolves through a growing understanding of the epistemology of practice (Munby, Russell, & Martin, 2001). Teachers need to be able to make pedagogical decisions on their own. They have to be thinking individuals who are flexible, creative, accommodating and are willing to accept students' active, and event dominant, role in the teaching and learning processes in their classrooms. So these decisions of pupil teachers can also affect their knowledge management skill.

### ***E. Knowledge Sharing Attitude***

Pupil teacher's knowledge management skill can also be affected by their knowledge sharing attitude. It is an important psychological variable, which can be explained as individual's decision to share or hold their knowledge. Teachers possess different degree of knowledge sharing attitude.

## **II. EMERGENCE AND JUSTIFICATION**

An effective management of knowledge is required in all the fields including education. When we see it in reference of prospective teachers it becomes more important because after turning in their profession they have to teach and make self-study. It will require a good knowledge management skill in them. Some of the studies on the variables of the study are given below: **Funmilola O. O. (2015)** conducted study to see the role of knowledge management in Organizational field. He concluded that knowledge management is a key driver of organisational performance and a critical tool for organisational, survival, competitiveness and profitability. Therefore creating, managing, sharing and utilizing knowledge effectively is vital for organisations to take full advantage of the value of knowledge.

**Kai W. C., Wang, M. & Allan, H.K.(2011)** suggested that Knowledge Management (KM) can be used as an alternative strategy by schools to help teachers equipped with relevant skills to face the challenges to improve performance as it uses in commercial sectors. Most interviewees might accept that KM can

help improve their practice but it needs the support of various dimensions such as people, culture, IT and management.

**Bassam Hasan. (2013)** focussed on Knowledge Sharing attitude (KS) as a concept with cognitive, affective, and behavioural components. The results provide strong support for the tertiary structure of KS attitude and demonstrate three conceptually and empirically distinguishable components of KS attitudinal. The results also showed that the cognitive and affective components of KS attitude have significant effects on behavioural attitude to share knowledge.

**Yuejin X. & Noah R.(2012)** described the use of IBM SPSS Text Analytics for Surveys to analyze students' written responses to a teacher leadership dilemma. Findings from the correlation analyses indicate that a significant interrater reliability existed between the text mining method from IBM SPSS Text Analytics for Surveys and human ratings.

**Wangpipatwong (2009)** used **(Riege, 2005)**'s categorization of associated factors to knowledge sharing behavior and investigated the influence of individual factors (ability to share and willingness to share), classroom factors (instructor support and degree of competition with the classmates), and technological factors (technology availability and technology support) on students' knowledge sharing behavior. Results showed that technology support is the main first variable significantly affecting knowledge sharing of students followed by student's ability to share and degree of competition with the classmates. However, student's willingness to share, instructor support, and technology availability had no influence on knowledge sharing of students.

**Maarit T. (2004)** investigated the pedagogical thinking and decision-making processes of teacher educators from the perspective of reasons and aims and goals that the educators set for themselves for their research and teaching practices in pedagogical contexts. Data of this study show that for some teacher educators, research seems to be integrated into teaching quite intensively but some of them need more encouragement in finding different ways of successfully getting their important work published. For indeed, even if one teaches on the basis of that knowledge, which he/she has found in his/her latest research work, it is almost solely on the basis of the written publications that other teachers can acquire the information derived from the research-based findings of their colleagues.

From the above literature review, it can be concluded that there are many factors which can be related to the knowledge management skills of an individual such as organizational performance, teachers' competency, culture, information

technology, thinking etc. Text mining ability, Pedagogical decision making and knowledge sharing behavior are also found related with cognitive, affective, and behavioural components, teacher leadership dilemma, individual, classroom factors and technological factors, planned behavior, perceived behavioral control of knowledge sharing, pedagogical thinking etc. In the reviewed researches no research has been found to see the knowledge management skill of prospective teachers in reference to Text mining ability, Pedagogical decision making and knowledge sharing behavior. So the question arose-

1. Does the prospective teachers having different stream possesses different level of Knowledge management skill, Text mining ability, Pedagogical decision making and knowledge sharing behavior?
2. Is there any relationship between knowledge management skill of prospective teachers with their Text mining ability, Pedagogical decision making and Knowledge sharing behavior?
3. Is there any effect of Text mining ability, Pedagogical decision making and Knowledge sharing behaviour on the knowledge management skill of prospective teachers?

For finding the answers of the above said questions researchers decided to work on the topic entitled “**Text Mining Ability, Pedagogical Decision Making And Knowledge Sharing Attitude As An Indicators of Knowledge Management Skill of Prospective Teachers**”

### III. OBJECTIVES OF THE STUDY

- To investigate the Text mining ability of prospective teachers having Language, Social Science and Science stream.
- To investigate the Pedagogical decision making ability of prospective teachers having Language, Social Science and Science stream.
- To investigate the Knowledge Sharing attitude of prospective teachers having Language, Social Science and Science stream.
- To investigate the Knowledge Management Skill of prospective teachers having Language, Social Science and Science stream.
- To correlate the Knowledge Management Skill with Text Mining Ability of prospective teachers.
- To correlate Knowledge Management Skill with Pedagogical Decision Making of prospective teachers.
- To correlate the Knowledge Management Skill with Knowledge Sharing Attitude of prospective teachers.

- To predict the Knowledge Management Skill in reference to Text Mining Ability, Pedagogical decision making and Knowledge sharing attitude of prospective teachers.

### IV. HYPOTHESES OF THE STUDY

- There is no significant relationship between Knowledge Management Skill and Text Mining Ability of prospective teachers.
- There is no significant relationship between Knowledge Management Skill and Pedagogical Decision Making of prospective teachers.
- There is no significant relationship between Knowledge Management Skill and Knowledge Sharing Attitude of prospective teachers.
- There is no significant effect of Text Mining Ability, Pedagogical decision making and Knowledge sharing attitude on the knowledge management skill of prospective teachers.

### V. RESEARCH METHODOLOGY

#### A. Research Method

Descriptive survey research method has been followed by the researchers to collect the information regarding the variables of the study.

#### B. Population

A population is any group of individuals that have one or more characteristics in common that are of the interest to the investigator. It may be all the individuals of a particular type or a restricted part of that group (Best, 1977). The population for the present study is the prospective teachers receiving training in Dayalbagh Educational Institute Deemed University Dayalbagh Agra, Uttar Pradesh, India.

#### C. Sampling

The researchers have selected the sample from Dayalbagh Educational Institute Deemed University Dayalbagh Agra, Uttar Pradesh, India. The sample consists of pupil teachers studying under two years' teachers training course. Researchers have used simple random sampling technique to select the sample for the study. There are total 210 pupil teachers selected for the final sample in which 70 from language, 70 from social science and 70 from science stream.

#### D. Research Instruments

The researchers have developed all research tools to collect the information regarding the variables of the present study. The brief description of the tools is as follows:

### ***Knowledge Management Skill Test***

Self-developed KMS has been used to study the Knowledge management skill of prospective teachers. There are total 36 items in this test which are related to three dimensions i.e. people, processes and information technology. There are five response options to each statement: Absolutely right, right, neither right nor wrong, wrong, absolutely wrong. A score of 5 is given to those responses showing maximum knowledge management skill while 1 is given to those showing lowest knowledge management level. The content validity of this tool is measured 0.82 and K-Reliability coefficient is found 0.87.

### ***Text Mining Ability Test***

Self-developed TMAT has been used to study the Text Mining Ability of Prospective teachers. There are 30 items in this test which are developed on the basis of its dimension. There are five response options to each statement: Absolutely right, right, neither right nor wrong, wrong, absolutely wrong. A score of 5 is given to those responses showing maximum text mining ability while 1 is given to those showing lowest text mining ability. These items have been selected on the basis of experts' opinion and item analysis. The content validity of this tool is measured 0.79 and Split half Reliability coefficient is found 0.86.

### ***Pedagogical Decision Making Test***

Self-developed PDMT has been used to study the Pedagogical Decision-Making of prospective teachers. There are 34 items in this test which are developed on the basis of its dimension. There are five response options to each statement: Absolutely right, right, neither right nor wrong, wrong, absolutely wrong. A score of 5 is given to those responses showing maximum Pedagogical Decision-Making while 1 is given to those showing lowest Pedagogical Decision-Making. These items have been selected on the basis of experts' opinion. The content validity of this tool is measured 0.87 and Split half Reliability coefficient is found 0.76.

### ***Knowledge Sharing Attitude Scale***

Self-developed KSA Scale has been used to study the knowledge sharing attitude of prospective teachers. There are 27 items in this test which are developed on the basis of its dimension. There are five response options to each statement: Absolutely right, right, neither right nor wrong, wrong, absolutely wrong. A score of 5 is given to those responses showing maximum Knowledge Sharing Attitude while 1 is given to those showing lowest Knowledge Sharing Attitude. These items have been selected on the basis of experts' opinion. The content validity of this tool is

measured 0.83 and Cronbach-alpha reliability coefficient is found 0.74.

### ***E. Statistical Techniques***

Mean, Standard Deviation, Product-Moment Correlation and Multiple Regression have been used by the researchers to analyse the data.

## **VI. ANALYSIS AND INTERPRETATION OF DATA**

The researchers have analysed data by using SPSS 20.0. Researchers have given objective wise data analysis and its interpretation and then presented the results of the study.

### **Objective 1. To investigate the Text Mining Ability of prospective teachers having Language, Social Science and Science stream.**

For achieving this objective, researchers have calculated Mean and Standard Deviation. This analysis has been given in following table:

**Table 1: Exhibiting the Text Mining Ability of prospective teachers having Language, Social Science and Science stream**

Students From Different Background	N	Mean	S.D.
Language	70	89.6	13.57
Social Science	70	103.71	20.91
Science	70	122.15	16.14

The table 1.1 presents the Text Mining Ability of prospective teachers from Language, Social Science and Science streams. The mean value of Text Mining Ability has been found 89.6, 103.71, and 122.15 for prospective teachers from Language, Social Science and Science stream respectively. The standard deviation is calculated for prospective teachers of Language Stream is 13.57, 20.91 is for Social science and 16.14 in for Science Stream. On the basis of Mean value, it can be said that Prospective teachers of Science stream possess high Text Mining Ability than Social Science and Language. The prospective teachers from Language Stream possess low Text Mining Ability. The reason behind it may be the systematic work is required mainly in Science studies. Science is the subject which focuses on systematic knowledge, the prospective teachers\learners organize the text and information from an unstructured form to structured form and make it systematic. However follow the theories, principles and laws and work on it. Therefore the prospective teachers of Science Stream have high Text Mining Ability.

**Objective 2. To investigate the Pedagogical Decision-Making Ability of prospective teachers having language, social science and science stream.**

Researchers have considered Mean and Standard Deviation for achieving this objective. The analysis of this objective is shown in following table:

**Table 2: Exhibiting Pedagogical Decision-Making Ability of prospective teachers having Language, Social Science and Science stream**

Students from Different Background	N	Mean	S.D.
Language	70	119.7	21.95
Social Science	70	124.17	25.63
Science	70	133.38	22.37

The table 1.2 exhibits the pedagogical decision-making ability of prospective teachers from Language, Social Science and Science streams. The mean value and standard deviation of pedagogical decision-making ability for Prospective teacher from Language stream have been obtained 119.7 and 21.95 respectively. For the prospective teachers from Social Science, extents of mean and standard deviation have been calculated 124.17 and 25.63 respectively. The value of mean and standard deviation is found 133.38 and 22.37 for prospective teachers of Science stream. It is shown from the mean values that prospective teachers from Science Stream possess high Pedagogical Decision-Making Ability and prospective teachers from language and Social Science have less Pedagogical Decision Making Ability.

**Objective 3. To investigate the Knowledge Sharing Attitude of prospective teachers having Language, Social Science and Science stream.**

To achieve this objective, researchers have calculated Mean and Standard Deviation. This analysis of this objective is shown in following table:

**Table 3: Exhibiting Knowledge Sharing Attitude of prospective teachers having Language, Social Science and Science stream**

Students from Different Background	N	Mean	S.D.
Language	70	90.5	20.35
Social Science	70	99.58	16.78
Science	70	91.27	19.00

The table 1.3 exhibits the Knowledge Sharing Attitude of prospective teachers from Language, Social Science and Science streams. The mean value and standard deviation of Knowledge Sharing Attitude for Prospective teacher from Language stream have been found 90.5 and 20.35 respectively. The mean and standard deviation for prospective teachers from Social Science have been calculated 99.58 and 16.78 respectively. The value of mean and standard deviation is obtained 91.27 and 19.00 for prospective teachers of Science stream. Hence the mean values shows that prospective teachers from Social Science Stream have high knowledge sharing ability and prospective teachers from language and Science have less knowledge sharing ability. The reason of it may be that the Social Science is the subject which focus on social issues, social environment and social awareness, the knowledge regarding this subject can be gained effectively by discussing and sharing from people. Therefore prospective teachers from Social science stream have high Knowledge Sharing Attitude.

**Objective 4. To investigate the Knowledge Management Skill of prospective teachers having Language, Social Science and Science stream.**

Mean and Standard Deviation have been calculated for achieving this objective. This analysis of this objective is shown in following table:

**Table 4: Exhibiting Knowledge Management Skill of prospective teachers having Language, Social Science and Science stream**

Students from Different Background	N	Mean	S.D.
Language	70	112.77	20.02
Social Science	70	117.64	23.83
Science	70	134.78	22.46

Table 1.4 presents the Knowledge Management Skill of prospective teachers from language, social science and science stream. The mean value of Knowledge Management Skill has been found 112.77, 117.64 and 134.78 for the prospective teachers having language social science and science stream respectively. The extent of standard deviation is obtained 20.02, 23.83 and 22.46 for the prospective teachers having language social science and science stream respectively. Hence it can be said that the prospective teachers from science stream possess high Knowledge Management Skills and the prospective teachers from language and social science stream have less Knowledge Management Skills. The reason of it may be that the learners from science background do their work systematically and manage their knowledge to explore new as well as advance

information. Therefore, the Knowledge Management Skill is possessed by science stream's prospective teachers.

**Objective 5. To correlate the Knowledge Management Skill with Text Mining Ability of prospective teachers.**

Product-moment correlation has been used to reveal relation between Knowledge Management Skill and Text Mining Ability of prospective teachers. The researchers have been presented this correlation in following table:

**Table 5: Exhibiting relationship between Knowledge Management Skill and Text Mining Ability**

Variables	N	Mean	S.D.	r
Knowledge Management Skill	210	121.73	24.00	0.282
Text Mining Ability	210	105.15	21.67	

\*Significant at 0.05 level.

Table 1.5 presents the correlation between Knowledge Management Skill and Text Mining Ability of prospective teachers. The extent of correlation coefficient is found 0.282 which is significant at 0.05 level of significance. It shows low positive correlation between Knowledge Management Skill and Text Mining Ability of prospective teachers. It means that if Knowledge Management Skill is found more in prospective teachers, their Text Mining Ability will also be increased equally.

**Objective 6. To correlate the Knowledge Management Skill with Pedagogical Decision-Making Ability of prospective teachers.**

Product-moment correlation has been calculated to study the relationship between Knowledge Management Skill and Pedagogical Decision-Making Ability of prospective teachers which is shown in following table:

**Table 6: Exhibiting relationship between Knowledge Management Skill and Pedagogical Decision-Making Ability of prospective teachers**

Variables	N	Mean	S.D.	r
Knowledge Management Skill	210	121.73	24.00	0.121
Pedagogical Decision-Making Ability	210	125.75	23.95	

\*Significant at 0.05 level.

The table 1.6 presents relationship between Knowledge Management Skill and Pedagogical Decision-Making Ability of prospective teachers. The coefficient of correlation is found 0.121 which is significant at 0.05 level of significance. It is showing very low positive correlation between both these variables. Therefore, it can be said that if prospective teachers possess high Knowledge Management Skills then their pedagogical decisions making ability will also be slightly high in same direction.

**Objective 7. To correlate the Knowledge Management Skill with Knowledge Sharing Attitude of prospective teachers.**

To study the relationship between Knowledge Management Skill and Knowledge Sharing Attitude of prospective teachers, Product-moment correlation has been calculated which is given in following table:

**Table 7: Exhibiting relationship between Knowledge Management Skill and Knowledge Sharing Attitude of prospective teachers**

Variables	N	Mean	S.D.	R
Knowledge Management Skill	210	121.73	24.00	0.222
Knowledge Sharing Attitude	210	93.78	19.13	

\*Significant at 0.05 level.

The table 1.7 presents relationship of Knowledge Management Skill and Knowledge Sharing Attitude for prospective teachers. For this correlation, the magnitude of correlation is found 0.222 which is significant at 0.05 level of significance. It is revealed from the correlation coefficient that Knowledge Management Skill and Knowledge Sharing Attitude are correlated at low positive level. It means that if prospective teachers possess high and effective skills to manage their knowledge, they will also share their knowledge with their peers, teachers, society members etc. at the same level.

**Objective 8. To predict the Knowledge Management Skill in reference to Text Mining Ability, Pedagogical decision making, and Knowledge Sharing Attitude of prospective teachers.**

Researchers have applied Multiple Regression to find out the prediction of Text Mining Ability, Pedagogical decision making, and Knowledge Sharing Attitude of prospective teachers on of Knowledge Management Skill. The analysis of this objective has been presented in following table:

**Table 8: Exhibiting Descriptive Statistics**

Variables	N	Mean	S.D.
Knowledge Management Skill	210	121.73	24.00
Text Mining Ability	210	105.15	21.67
Pedagogical Decision-Making Ability	210	125.75	23.95
Knowledge Sharing Attitude	210	93.78	19.13

Table 1.8 is presenting descriptive statistics for the predictor and dependent variables. For the dependent variable (Knowledge Management Skill), the value of mean and standard deviation is found 121.73 and 24.00. In case of Text Mining Ability, the magnitude of mean and standard deviation is obtained 105.15 and 21.67 respectively.

The mean and standard deviation value is found 125.75 and 23.95 for Pedagogical Decision-Making Ability. The mean and standard deviation for Knowledge Sharing Attitude is found 93.78 and 19.13 respectively.

**Table 9: Exhibiting Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	R <sup>2</sup> Change	F	Sig.
Text Mining Ability	0.28	0.079	0.075	23.08	0.079	17.93	0.00
Text Mining Ability, Knowledge Sharing Attitude	0.36	0.131	0.122	22.78	0.051	15.45	0.00

**Dependent variable:** Knowledge Management Skill

The table 1.9 exhibits the model summary for predictors and dependent variables. For the first model having only one variable i.e. Text Mining Ability, the R value is found 0.282, R square is 0.079 which is significant at 0.000 level of significance. It shows that Text Mining Ability of prospective teachers explains 7.9% of variation in Knowledge Management Skill.

In the second model, Knowledge Sharing Attitude is added with Text Mining Ability and its effect is shown. For this model, R value is found 0.361, R square is 0.131 and R Square Change value is 0.051 which is significant at 0.000 level of significance. It means that both these variable explains 13.1% of variation in Knowledge Management Skill of prospective teachers and Knowledge Sharing Attitude explains 5.1% of variation in Knowledge Management Skill of prospective teachers separately.

**Table 10: Exhibiting Coefficients**

Model	Unstandardized coefficients	Standardized coefficients	t	Sig.
	B	Std. Error	Beta	
Constant	88.93	7.908		11.24
Text Mining Ability	0.312	0.074	0.282	4.235
Constant	61.85	10.93		5.660
Text Mining Ability	0.316	0.072	0.286	4.405
Knowledge Sharing Attitude	0.284	0.081	0.226	3.492

**Dependent variable:** Knowledge Management Skill

Table 1.10 presents the coefficients values with Unstandardized coefficients and Standardized coefficients. It is found that magnitude of beta is 0.282 for Text Mining Ability and for Knowledge Sharing Attitude it is calculated 0.226. The t value for Text Mining Ability is 4.235 and for Knowledge Sharing Attitude is 3.492 which is significant at 0.000 level of significance.

**Table 11: Exhibiting Excluded Variables**

Model	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
1. Pedagogical Decision Making Ability	0.057	0.837	0.40	0.058	0.944
Knowledge Sharing Attitude	0.226	3.492	0.00	0.236	1.000
2. Pedagogical Decision Making Ability	0.042	0.628	0.53	0.044	0.939

**Predictors in model:**(Constant),Text Mining Ability

**Predictors in model:**(Constant),Text Mining Ability,Knowledge Sharing Attitude

**Dependent variable:** Knowledge Management Skill

The table 1.11 shows excluded variable which does not affect or predicts the Knowledge Management Skill of prospective teachers. It found that the value of Beta In, t, partial correlation are 0.057, 0.837, 0.058 which is significant at 0.403 level of significance in case of pedagogical decision making. For Knowledge Sharing Attitude these value are found 0.226, 3.492, and 0.044 respectively which is significant at 0.001 level of significance. For the next variable Pedagogical Decision Making Ability, these values are 0.042, 0.628 and 0.044 which is significant at 0.531 level of significance. It shows that prediction of Pedagogical Decision Making Ability is as less as its effect can be discarded or excluded. Hence only in the present study only two variables i.e. Text Mining Ability and Knowledge



Sharing Attitude predicts the Knowledge Management Skill of prospective teachers.

Therefore, it can be said that if prospective teachers have Text Mining Ability and Knowledge Sharing Attitude, they can manage their knowledge positively. The reason behind it may be that prospective teachers organize the text and arrange it systematically and also share their information with their peer group, teachers, friends and others then they can also be able to manage their learning skills, knowledge management and make their teaching effective.

## VII. CONCLUSION

Text mining is the process of developing high-quality information from text. High-quality information is typically derived through the devising of patterns and trends through means such as statistical pattern learning. The unstructured knowledge or information can be modified and managed through text mining technology. Hence new knowledge can be developed and explored more information in this way. Similarly, knowledge is as shared as it adopts more information and clears the concepts of learners. Knowledge sharing is an activity by which knowledge in terms of information, skills, or expertise is exchanged among people, friends, families, communities or organizations. Hence knowledge sharing helps in understanding deeply about any concepts by sharing the learning experiences. Prospective teachers have Text Mining Ability and positive attitude for sharing knowledge they can make their concept knowledge more effective and easy to understand as well as their Knowledge Management Skills will also be more improved by using Text Mining Ability and knowledge sharing. However, they make teaching learning process more effective by doing these activities and make the classroom learning activities more interactive and systematic.

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