CONTENT ANALYSIS OF TEACHERS' VIEWS ON THEIR PROFESSIONAL ENGAGEMENT

Payal M. Mahida and Dr. Manish V. Sidhpuria

ABSTRACT

This article is an attempt to listen the voice of teachers who teach in university or Under Graduate /Post Graduate colleges. A research was conducted through survey to understand the teachers' professional engagement from South Gujarat Region. Open ended question was included in the survey for the researcher's doctoral research work. The main goal to ask the open ended question was to discuss the problems or positive aspects of university- the step towards the betterment of University. This paper covers the qualitative content of the responses. The responses of the teachers were analyzed with the help of content analysis. The data were taken from more than 119 teachers across South Gujarat Region. The study employed text analytics to see the pattern of the speeches by observing the number of words, characters, sentiment analysis for various findings. Visualization technique was used to capture the salient aspects of the teachers' responses. The research paper talks about various emotional, sentiment and linguistic aspects of teachers which could be the input towards future studies in academic wellbeing and so to the society too.

Keywords: Content Analysis, Qualitative Approach, Employee Engagement, Teacher's Professional Engagement, Sentiment Analysis

I. INTRODUCTION

The content analysis is the systematic examination of communicative material which is actually brought from mass media. The analysis is all about any communicative material: musical, textual, pictorial, etc. Nowadays content analysis plays a vital role in scientific and managerial domains. The basic idea of content analysis is to do qualitative analysis without other technical matters.

The content analysis was firstly developed in the beginning of twentieth century (most probably in the 1920s) in US. The major idea and focus was the systematic analysis of large amount of textual data from growing mass media. Then slowly and gradually the content analysis grew up with frequency analysis, analysis of valence and intensity, contingency analysis, etc. The trustworthiness of content

analysis results depends on the availability of rich, appropriate, and well-saturated data.(Elo et al., 2014)

Content analysis can be used for variety of purposes. One of them is for coding and analyzing open ended survey. (R. P. Weber, 1990)

(Holsti, 1969) gave a broad definition of content analysis as, any technique for making inferences by objectively and systematically identifying specified characteristics of messages. (R. Weber, 2016) described content analysis as "a research method that uses a set of procedures to make valid inferences from text."

A central idea of quantitative content analysis is that a lot of words in a text can be classified into much fewer content groups or categories. The methodology of extracting content categories from the text, counting their occurrences in the sampled text blocks, and analyzing associations between categories using the frequency matrix was developed by the mid-20th century, primarily by a group of Harvard researchers and argued that the process of reducing large volumes of text to quantitative data "does not provide a complete picture of meaning and contextual codes, since texts may contain many other forms of emphasis besides sheer repetition." Actually, this analysis assumes that "what an author says is what he means".

The content analysis in this research includes

> 1) Text analysis
>
> 2) Sentiment Analysis
>
> 3) Data Visualization

Text analysis is a procedure that includes getting language, images, or potentially pictures present in writings to pick up data with respect to how individuals understand and impart life and beneficial encounters. Visual, composed, or spoken messages give prompts to courses through which correspondence might be comprehended. Sentiment analysis is contextual mining of text which identifies and extracts subjective information in source material, and helping a business to understand the social sentiment of their brand, product or service while monitoring online conversations. In the current research, sentiment analysis talks about positive and negative sentiments with emotional analysis.

Teachers' Professional Engagement:

Holding talented teachers in our countries' schools and colleges is a test for national, state, and administrators. In spite of the fact that the pace of educator

turnover is practically identical to that of cops it is higher than the turnover rate in other profoundly viewed callings, for example, nursing, law, design, building, and the scholarly world(Durham, 1957). While sufficient quantities of educators are being created and procured, a significantly bigger number empty the calling each year for reasons other than retirement. Ongoing research shows that 41 percent of starting educators leave the calling inside five years of starting their vocations (Riggs, 2014). Attempts by states and locale to hold these new educators have just made pockets of progress as amateur teachers for the most part leave the calling inside three to five years. These teachers regularly leave employments in low performing schools looking for occupations in higher-performing schools or leaving the calling out and out . Teaching is an undermining jobs (Riggs, 2014). The foundation of teachers' disappointments originates from not having a voice in choices inside the earth, which thinks about their study hall guidance. A solid connection exists between teachers' capacities to settle on choices and staying or leaving the jobs. In the 2012-2013 school year, 57.4% of educators who left the jobs said they discovered more independence and control in their present employments. What's more, 52.2% of instructors who took another vocation way said they found higher expert notoriety. The most noteworthy discoveries with 60.8% of instructors leaving the training calling said they discovered to a greater extent a harmony among expert and individual life (U.S. Branch of Education, 2014), which recommends that different occupations don't have work prerequisites outside of the workplace.

All these problems and dimensions talk about Teachers' Professional Engagement and it's importance in education system. There are very less studies witnessed in past which talk about the sentiments and emotions of teachers. By studying such content the education institutes can understand , maintain and manage the psychological wellbeing of employees which is a need of an hour to survive nowadays.

II.   OBJECTIVES OF THE STUDY

1. To examine the sentiment aspect of the responses of teachers.
2. To explore the positive and negative words the teachers mostly say while talking about their professional engagement.
3. To explore emotions of responses using sentiment analysis.

    4.   To understand the quantitative aspects of responses using text analysis.

III.   RESEARCH METHODOLOGY

Research Design: Descriptive Research Design

Population: Teachers teaching in Colleges and University

Sample frame: University Directory

Sample Size: 119

Sampling Technique: Non Probability Convenience Technique

Analysis Tools: As the study is purely qualitative in nature, the qualitative analysis tools are used like:

        (a) Theysay for Sentiment analysis

        (b) Textanalyser.net for text analysis

        (c) online-utility.org/text analyzer for text analysis

        (d) Tagcrowd for data visualization

IV.   DATA AND EMPIRICAL RESULTS

(a) Results and interpretation of Visualization:

<Figure: 1>

(b) Results and interpretation of Sentiment Analysis

Sentiment analysis the qualitative study which is a conceptual approach to measure the sentences and check about posititve, neutral and negative sentiments in the text. Table 1 shows the overall sentiments of the document. It is very clear from the table that the positive sentiments are visibly more than neutral and negative sentiments. This indicates that the teachers are positive in terms of their response towards their engagement towards their profession and university.

Table 2 discusses about the variety of emotions through analysis. The result indicates that the teachers are having skewed pattern emotions. The negative emotions like Anger, Hear, Shame and surprising are near to zero. While the positive emotions like Calmness, Happiness, liking and certain are comparatively more, and that is a very affirmative result.

Table 3 discusses the entities which are highly discussed during their responses. We can observe that the teachers have majorly talked about people (students, staff), organization (Good Organization, Institute, administration)

(c) Results and Interpretation of Text Analysis

<Table 4>

<Figure 2>

<Table 5>

We can see that among all 125 sentences, the most repeated sentences are very positive and affirmative which is the good engagement indicator.

V. Conclusion

The study concludes that the teachers teaching in South Gujarat Region are highly motivated and conscientious about their Profession and organizations. They are more concerned about students, institute and society. The teachers are having very positive sentiments and emotions about their profession which is a good indicator of Professional Engagement. The negative content and sentiments are very few and they are very obvious about few factors affecting their engagement and burn out. The academic institutions can take this into consideration and make future decisions to manage the teachers' professional engagement which may lead to high performing institute in a long run.

VI.   Limitations and future scope of study

The study covers only limited geographical boundary as well as the samples are also based on non probability convenience sampling. This may cause few research errors and the future researcher can work on this limitation. The study can be further extended to the school teachers (Private and public) or the principals or heads too. The researchers generally talk about quantitative analysis but the tools used in this study can be extended for many managerial problems.

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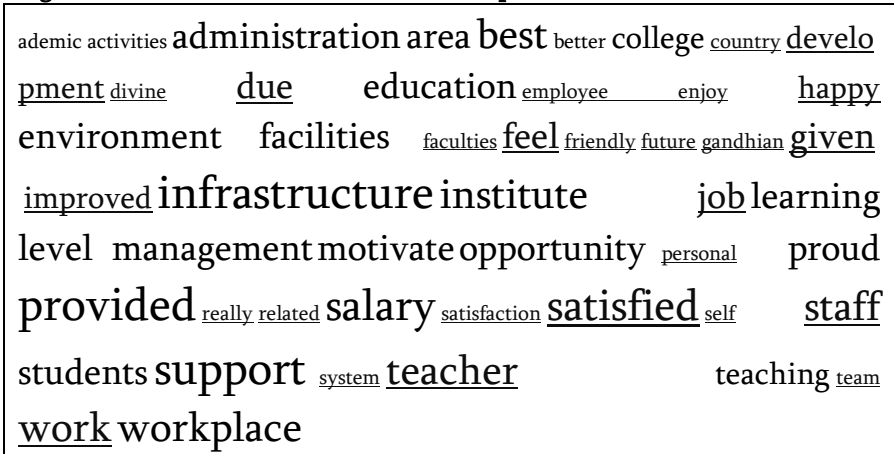**Figure 1 Data Visualization of Teachers' Responses**

Figure: 2 Few Top Words/lines:

is world's top ten teacher's	best place to
best place to work	to work for
i am proud to	i am proud
great place to work	am proud to
place to work	with my job
to work here	world's top ten teacher's
such a great institute	

List of Tables

Table 1. Overall Sentiment of the Documents

Overall Sentiments	Positive	Negative	Neutral	Topic Confidence	Interpretation
	0.765	0.180	0.055	0.807	Positive sentiments are more than negative.

Table 2. Analysis of Emotions

Anger	Calmness	Fear	Happiness	Liking	Shame	Certain	Surprising
0	19.527	0.220	19.568	21.965	0	0.221	0

Table 3. Entities

People	Organization	Entity	Location	Time Date	Others
student mature more staff Frozen senior staff self financed course we loyal citizen together team self teacher Satisfactory management i employee management everyone	Good organization Institute administration My b.ed institute gandhian institute world 's top ten teacher 's training institute department	staff/ faculties department profitable business Gandhi historical academy. social former 's center Satisfactory	rural area courses located area world here healthy atmosphere home	today Late future historical former after working hours	Country Education Money

Table 5. Summary of response text

Number of characters (including spaces) :	23767
Number of characters (without spaces) :	7183
Number of words :	1469
Number of sentences :	125

Table 6. Frequency and rank of word length

Word Length (characters)	Word count	Frequency	Rank
institute	35	8.6%	1
teaching	16	3.9%	2
students	13	3.2%	3
workplace	9	2.2%	4
teacher	9	2.2%	4
college	8	2%	5
environment	8	2%	5
education	8	2%	5
infrastructure	7	1.7%	6
working	7	1.7%	6
support	6	1.5%	7

Word Length (characters)	Word count	Frequency	Rank
student	6	1.5%	7
facilities	5	1.2%	8
development	5	1.2%	8

ABOUT AUTHOR

Ms. Payal Mahida is a dedicated research fellow with 10 years experience in teaching. She has extensively published 10 research papers in various reputed journal and presented research papers in National and International Conferences. One of them was awarded with "Best Research Paper" in International Conference. She is a University recognized Post Graduation Teacher, VNSGU since 2018. She has authored five books with various co-others like "Human Resource Management", "Information System", "Organization Behavior", etc. Apart from teaching, she is actively participating in enrichment courses offered by SWAYAM and NPTEL. Among those, she has secured Topper with Elite Certificate in "Human Resource Development" Course and FDP by IIT, Kharagpur. She has secured A+ grade in UGC Sponsored 43rd Orientation Programme at Vallabh Vidyanagar in 2019.

Dr. Sidhpuria has a mix of teaching and industry experience of more than 28 years. He was associated for about 8 years with the healthcare sector before joining the academics. For the last more than 20 years, he has been involved in postgraduate management teaching, research and consultancy. He has published more than 40 research papers in the journals of repute. The management cases written by him have been acclaimed and awarded prizes at various Conventions organized by the Association of Indian Management Schools (First Prize in the year 2000 and Third Prize in the year 2005).

He has authored a book titled "Retail Franchising" published by Tata McGraw-Hill in India and by McGraw-Hill International in Phillipines. He has also done an adaptation work with a book titled "Effective Business Communication" again published by Tata McGraw-Hill. He has completed the Management Teachers' Programme offered by the Strategic Management Forum of India in May 2005.

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