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Survey of Developing of Assistance Unit for Research Processing

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Abstract

Higher education institutions play a vital role in cultivating skilled professionals through activities like research and publications. Lecturers and students are expected to engage in these endeavors, with lecturer performance often gauged by regular publications. However, the demanding nature of research and publication activities can strain some universities and cause them to need more support. This survey aims to gain the answer why students and lecturers need a research-assisted unit and the necessity for a Publication and Research Assistance Unit in higher education, anticipating that such a unit would enhance the quality and quantity of research and publications by providing essential support to lecturers and students. This study uses a qualitative research method to process data using NVivo with four steps: Gathering information, coding, running queries, and reporting. The results show why the assisted research unit is essential.

Keywords: research, assisted unit, journal, quantitative, qualitative

I. Introduction

Higher education is one institution that produces superior human resources through the tri-dharma activities of higher education (1). Lecturers and students must carry out research and publications; one proof of lecturers' performance is to carry out publications every semester. High demands in conducting research and publications sometimes mean that not all universities have adequate supporting capacity.

This survey was conducted with the aim of obtaining information on the need for a Publication and Research Assistance Unit in higher education. The existence of this unit will help improve the quality and quantity of research and publications by lecturers and students.

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A. Research

Research processing is a multifaceted and critical scientific inquiry and knowledge generation component (2). This stage involves systematically gathering, organizing, and analyzing information to draw meaningful conclusions and contribute to the existing body of knowledge. Initially, researchers identify their research questions or hypotheses, defining the scope and objectives of their study. They then embark on literature reviews to survey existing scholarship and identify gaps in knowledge. Once the research framework is established, data collection methods are chosen through experiments, surveys, interviews, or other means. The collected data is processed and organized, often involving statistical analyses to uncover patterns or relationships. Advanced technologies and computational tools play an increasingly crucial role in this phase, enabling researchers to handle large datasets and conduct complex analyses. Ultimately, processing re-

search data serves as the foundation for drawing conclusions, forming theories, and contributing to the broader understanding of a given subject.

1. Survey

A survey is a research method widely used to collect data from a sample of individuals to gather insights, opinions, or information about a particular topic (3). Surveys typically involve the systematic distribution of questions, either through written forms, interviews, telephone calls, or online platforms, to a representative sample of a target population. This method is versatile and can be applied in various fields, including social sciences, marketing, and public opinion research. The survey design carefully considers question wording, order, and response options to ensure clarity and unbiased responses. Survey data is then analyzed to identify patterns, trends, or correlations, providing researchers with valuable information to make informed decisions or draw conclusions about the studied phenomena. Surveys are beneficial for studying large populations, gauging public opinion, and exploring attitudes and behaviors across diverse demographic groups.

Furthermore, research processing is about data manipulation and maintaining ethical standards and rigor in the scientific method. Researchers must ensure the reliability and validity of their findings by implementing robust methodologies, transparent documentation, and appropriate statistical techniques. Peer review is a fundamental aspect of the research processing stage, where experts in the field critically evaluate a study's methodology, results, and interpretation. This ensures that the research adheres to high-quality standards and contributes valid insights to the academic community. Additionally, open science practices, such as sharing data and methodologies, enhance the transparency and reproducibility of research, fostering a collaborative and cumulative approach to knowledge building. In summary, research processing encompasses a dynamic and interconnected set of activities that transform raw data into meaningful insights while upholding the integrity and ethics of the scientific endeavor.

2. Research Output

Research output refers to the tangible and communicable results generated from the research process, representing the culmination of scholarly efforts and investigations. This can take various forms, including academic publications, conference presentations, reports, patents, prototypes, datasets, or any other tangible outcomes that contribute to the expansion of knowledge in a particular field (4). Academic publications, such as journal articles and books, are often considered the primary research output as they disseminate findings to the broader academic community. However, in a broader context, research output encompasses any deliverable that contributes to the understanding, developing, or applying new knowledge. The impact of research output is measured not only by the quantity but also by the quality and significance of the contributions, influencing subsequent studies, policies, or advancements in the relevant field.

II. Method

In this investigation, we employ a qualitative research approach (5), employing NVivo for data processing. Qualitative research, defined herein as an iterative process, enhances comprehension within the scientific community by delineating significant distinctions emerging from closer examination of the studied phenomenon. This conceptualization serves not only as a mechanism for refining research designs but also proves instrumental in facilitating teaching, fostering communication among researchers, bridging gaps within the research community, addressing qualitative method critiques, and establishing a standard for evaluating qualitative research. NVivo, a software application designed by QSR International, is a robust qualitative and mixed-methods research tool. Specifically tailored for analyzing unstructured text, audio, video, and image data from various sources such as interviews, focus groups, surveys, social media, and journal articles, NVivo is compatible with both Windows and Macintosh operating systems, making it a versatile asset in the realm of research analysis since July 2014. (6)

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A. Data Processing

Phase 1 involves the accumulation of information, where all comments and feedback slated for analysis are gathered. These data may exist in diverse formats, ranging from traditional paper and post-it notes to online forums and survey responses. It is imperative to consolidate all this content into a unified repository for streamlined analysis. Phase 2 revolves around coding, a pivotal step that entails organizing comments and, notably, comprehensively reviewing each to determine its categorization. Following the coding process, Phase 3 entails running queries to extract insights from the coded data. The nature and scope of these queries are contingent upon the reporting requirements. Finally, Phase 4 involves reporting on the findings, a crucial element that enables the narrative of insights gained from the consultation. This step is paramount, as a failure to execute it effectively may erode community trust in the process and potentially incite community outrage. Timely and transparent reporting serves as the most effective strategy for mitigating such risks.

III. Discussion

A. Coding

Conducting a survey analysis in NVivo involves a systematic process encompassing multiple stages, each contributing to a comprehensive understanding of the gathered data. The initial step is importing data, where sources or information, such as results from a Google Forms survey, can be seamlessly integrated from an Excel worksheet. In this particular case, there are 64 respondents. Following the importation stage, the next crucial step is coding. NVivo offers various code types, with theme nodes representing codes aligned with the themes or topics identified in the data. These themes are established based on the survey questions in the Excel worksheet, as illustrated in Figure 1. This systematic coding process lays the groundwork for subsequent analytical phases in NVivo, providing a structured approach to analyze and derive insights from survey da comprehensively.

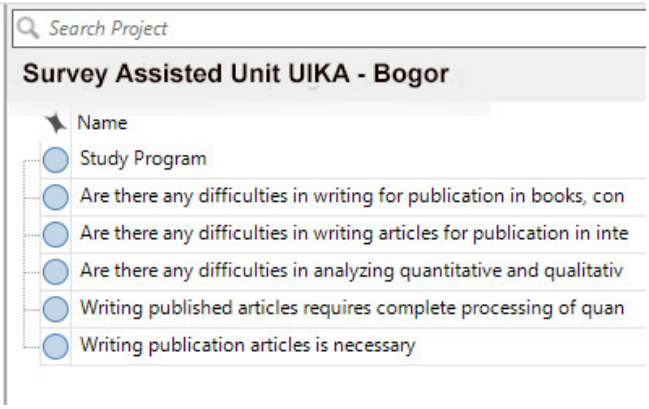


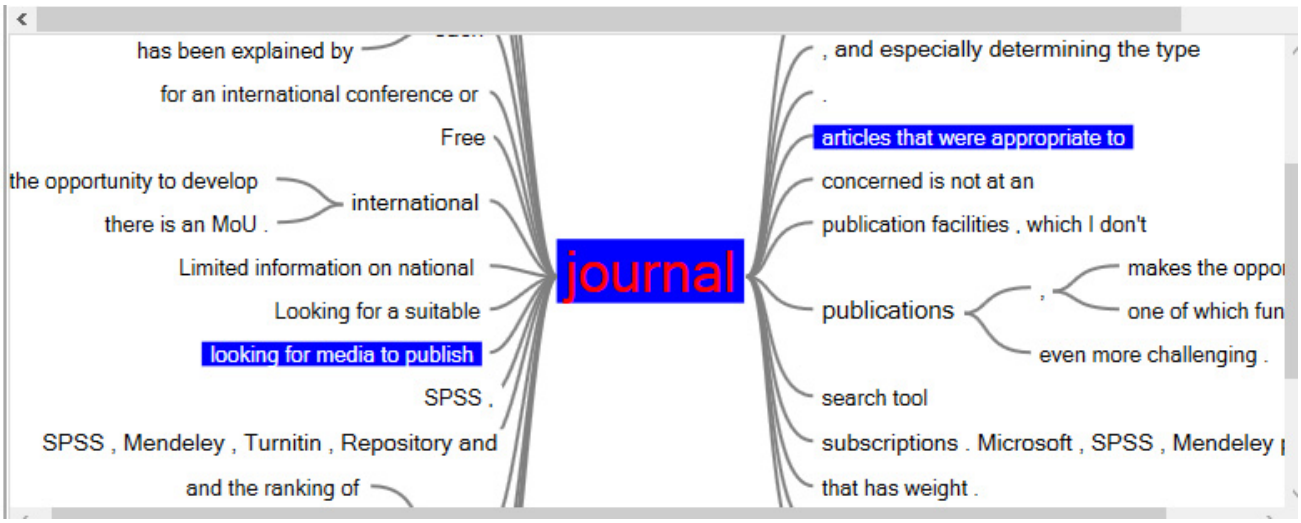
Figure 1 Nodes

B. Run query

Word Frequency Query allows us to find out the number of times the selected item appears. Seeing how many words appear can help us identify themes and concepts (7). Word Frequency Query can be run for specific sources, such as files, folders, and externals, as can be seen in Figure 2.

Figure 2 Word Cloud of Word Frequency Query

The Word Cloud, the most frequent word that appears, is collectible comparing journals, articles, publications, difficulties, analysis, processing, time, and international ' it means that writing articles for international journals is important for their attention because of the difficulties and need much time to do. Data processing has difficulties, too. At the same time writing books and articles for national journals are not in their attention.



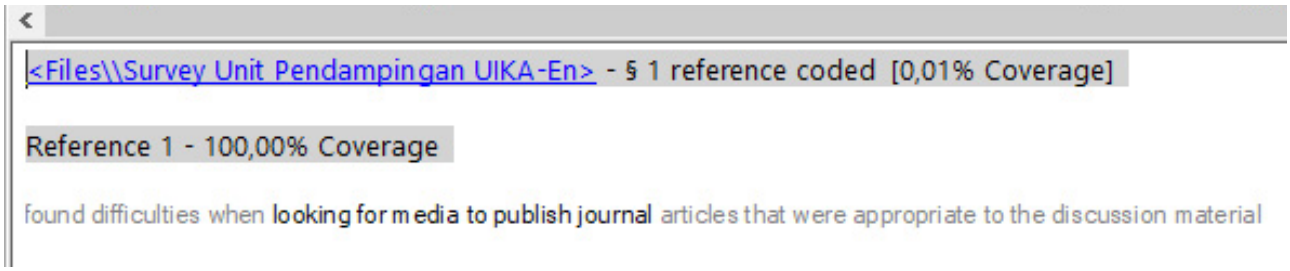
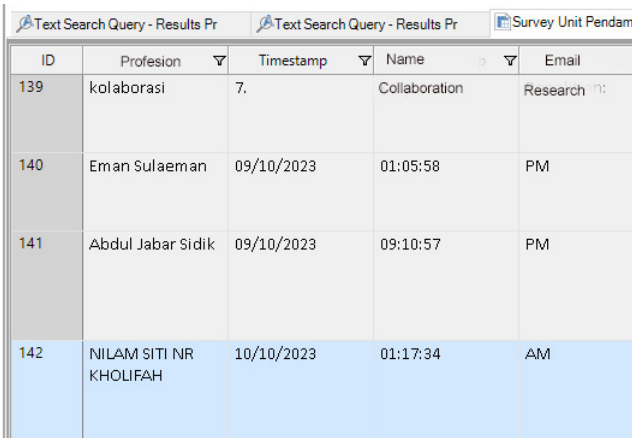


Figure 3 (above) Word Tree of Text Search Query, and Figure 4 (below) Reference of Word Tree



Text Search Query - Results Pr | Text Search Query - Results Pr | Survey Unit Pendam

ID	Profesion	Timestamp	Name	Email
139	kolaborasi	7.	Collaboration	Research
140	Eman Sulaeman	09/10/2023	01:05:58	PM
141	Abdul Jabar Sidik	09/10/2023	09:10:57	PM
142	NILAM SITI NR KHOLIFAH	10/10/2023	01:17:34	AM

Figure 5 Participant related the statement

Text search queries can find the details of who said some statements. Figure 3 shows if the input text is "**journal,"** the relation between the words left and right to "**journal**." In the Word Tree, click "**looking for media to publish**" on the left side of the word "**journal**", and "**articles that were appropiate to"** on the right side, which means the phrases are essential. Double-click "**looking for media to publish**" so the reference appears, as shown in Figure 4. The complete phrase is "**found difficulties when looking for media to publish journal articles that were appropriate to the discussion material**." If the sentence **"<Files\\ Survey Unit Pendampingan UIKA-En> - § 1 reference coded [0,01% Coverage]**" is clicked, then the name of the participant who said that appears as shown in Figure 5.

IV. Conclusion

This study examines the to find the most popular topic type using qualitative methods. The research findings show that answers why the assisted research unit is essential. Also, qualitative and quantitative processing should be improved.

Future research is suggested to collect the data from interviews and open-ended surveys to know the effectiveness of the assisted research unit.

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