Theory of Planned Behaviour: Accounting Pre-Service Teacher's Intention in Knowledge Sharing

Sri Sumaryati[1], Wulan Romadhoni[2], Binti Muchsini[3]

[1] Accounting Education Study Program, Faculty Teacher Training dan Education, Sebelas Maret University, Surakarta, Indonesia; srisumaryati@staff.uns.ac.id

[2] Accounting Education Study Program, Faculty Teacher Training dan Education, Sebelas Maret University, Surakarta, Indonesia; wulan.romadhoni99@gmail.com

[3] Accounting Education Study Program, Faculty Teacher Training dan Education, Sebelas Maret University, Surakarta, Indonesia; bintimuchsini@staff.uns.ac.id

ARTICLE INFO

ABSTRACT

This study aimed to determine the level of knowledge sharing of students of Accounting Education at one of the universities in Central Java. This research is a quantitative survey research with descriptive statistical data analysis techniques. The populations in this study were all active students of the Accounting Education Study Program in the 2018-2020 class, totalling 247 students. The sampling technique used is proportional random sampling with a sample of 149 students. The data collection technique used is a questionnaire. This study measures the level of knowledge sharing using the Knowledge Sharing Behavior Scale (KSBS) instrument from Yi with indicators of written contribution, organizational communication, personal interaction, and community practice. This study concludes that the level of knowledge sharing of students of Accounting Education can be categorized as inferior. This refers to the TCR result of 63.49%. Lecturers in the learning process can support all students and create a classroom atmosphere that supports knowledge-sharing behaviour. Students must also be aware of the importance of knowledge-sharing behaviour to achieve learning objectives.

Corresponding Author:
Sri Sumaryati
Accounting Education Study Program, Faculty Teacher Training dan Education, Sebelas Maret University, Surakarta, Indonesia; srisumaryati@staff.uns.ac.id

1. INTRODUCTION

The success of the learning process is strongly influenced by the quality of two-way communication between educators and students (Bosio & Origo, 2020). An individual's learning environment is deliberately managed, and the individual participates in producing a response to a particular situation (Widayati, Arijanto, Helen, Magito, & Anggraini, 2021). The term learning is also

influenced by the development of technology results utilized for learning needs; students are positioned as teach subjects that play a significant role so that learners are required to be fully active in the arrangement of the learning process. Learning can be interpreted as a combination of individual elements, facilities, equipment, and procedures that influence each other to achieve their goals. This research aims to describe the knowledge, abilities, skills, and attitudes that learners must possess due to the learning results expressed in the form of behaviour and can be observed or measured (Rolland Sobral, 2021). Learning must be able to improve the learning ability of learners. One of the skills that students must possess after doing learning activities is the ability of knowledge sharing.

According to Al-Kurdi, El-Haddadeh, & Eldabi (2018), knowledge sharing can be considered a domain for individuals and organizations and generate a competitive advantage. Therefore, an individual is believed to increase their advantage in competing with other individuals through the process of learning, giving knowledge, and mind in an organization or association (Nguyen, Nham, Froese, & Malik., 2019). According to (Farooq, 2018), knowledge sharing refers to collective beliefs or behavioural routines related to exchanging knowledge, experience, and skills that each individual has. This is in accordance with the opinion of Nokkala, Aarnikoivu, & Kiili, 2021) that Knowledge Sharing is one of the methods used to allow members of an organization, agency, or company to share their knowledge, techniques, experiences, and ideas with other members. Knowledge Sharing can only be done if each member has a vast opportunity to express opinions, ideas, criticisms, and comments to other members.

Referring to some of these studies, knowledge sharing must be understood by every member of an organization, including students. Preliminary study results conducted on students of Accounting Education of 2018-2020 years showed that students' ability of knowledge sharing belongs to the category of less good. The average knowledge-sharing ability of students is 3.13, so the value falls into the category of less good (Creswell, 2013). Result 3.28 for social interaction, students feels a lack of interaction during the knowledge sharing process. The data showed 2.93 for experience sharing; students were less involved in experience sharing in the process. Other relationships in the process of knowledge sharing are still formal (3.03). Students can quickly find sources of information but cannot communicate it properly (2.94). In addition, the sense of trust in his friend has been good; the data shows 3.48 and falls into the excellent category.

From various studies, the ability of knowledge sharing students is influenced by multiple factors (Al Rushud, 2021). The first factor is the individual factor. Individual factors greatly influence the occurrence of differences in knowledge sharing. This is because the individual is a subject who shares knowledge, so the factors that arise from within him will affect the process and ability to share knowledge. Individuals who have intentions, courage to express opinions and science, believe in the interlocutor, are happy when doing knowledge sharing, and realize that he needs to share knowledge, and then their knowledge-sharing ability will be good.

The second factor is the organizational factor. Other individuals and the surrounding environment can also influence the student knowledge-sharing process. As informed by Islamy, Yuniarsih, Ahman, & Kusnendi (2020a), the knowledge-sharing process occurs in two or more individuals. The quality of partner sharing and the environment can affect the success of the process. The third factor is the technology factor. Technology serves as a facilitator in knowledge sharing and is one of the elements used to facilitate the spread of explicit knowledge. The availability of technology is one of the aspects that support the knowledge-sharing process. However, if the various technological facilities available are not utilized optimally, the knowledge-sharing process will also be disrupted (Razzaque, 2020). Based on this explanation, how is the level of knowledge sharing of Accounting Education students at a university in Central Java?

2.   METHODS

This study uses a quantitative approach with a survey design. A quantitative approach with survey design is used to reveal the level of knowledge sharing of students using KSBS instruments (Yi, 2009) with indicators of contributions in writing, organizational communication, personal interaction, and community practice. This research is expected to know the level of knowledge sharing of Accounting Education students in 2018-2020. The subject in this study was conducted on 247 students of Accounting Education. Data processing using descriptive statistics, because the data collected using questionnaire dissemination is processed using SPSS and Microsoft excel is then interpreted. The sampling technique used is proportional random sampling with a total of 149 students consist of 109 female and 40 male. Data collection techniques using questionnaires compiled based on knowledge sharing behavior scale instruments (Yi 2009) with Likert scale.

The research instrument adopted the instrument from Yi (2009). The tool has been tested for validity and reliability so that it can be used to measure such variables (loading factor > 0.60, Cronbach alpha > 0.70, and fit model index > 0.90). It categorizes respondents' achievements using the classifications presented by Sudjana (2009), as in Table 3 below.

Table 1. Category range of respondents' achievement rate

Percentage Range	Category
90% - 100%	Excellent
80% - 89%	Good
65% - 79%	Good Enough
55% - 65%	Less Good
0% - 54%	Not Good

This section explains how long the research was conducted, population and sample (research targets), data collecting techniques and instrument development, and data analysis. For research using tools and materials, please write down the specifications for the equipment and materials. For qualitative research such as classroom activities, case studies, etc., there should be an increase in the existence of the research, research subjects, informants that support the data of research, location and duration of the research, and details regarding the validity of the research.

3.   FINDINGS AND DISCUSSION

The research has been conducted on 149 students of Accounting Education obtained the following results.

Table 2. Knowledge sharing level in organizational communication components

No.	Indicator	TCR	level
1	Willingness to come up with ideas and thoughts	74,63%	Good Enough
2	Participate fully during brainstorming in class	53,83%	Less Good
3	Willingness to solve problems	72,89%	Good Enough
4	Willingness to answer other students' questions	67,79%	Good Enough
5	Asking questions that provoke the knowledge sharing process	64,30%	Less Good
6	Willingness to share positive experiences	49,66%	Not Good
7	Willingness to help others avoid failure	70,87%	Good Enough
		65,08 %	Good Enough

Table 3. Knowledge sharing level on the personal interaction component

No.	Indicator	TCR	level
1	Willingness to support friends who are not active in the KS process	51,54%	Not Good
2	Not getting used to engaging in social activities	59,60%	Less Good
3	Willingness to build private conversations with others	70,13%	Good Enough
4	Willingness to provide important information personally	68,25%	Good Enough
5	Willingness to share interests and play with others.	71,63%	Good Enough
6	Willingness to share personal experiences that can help others avoid risks and problems	71,88%	Good Enough
7	Willingness to chat online with other students to help them	69,25%	Good Enough
		64,13%	Less Good

Table 4. Knowledge sharing level in the practice community component

No.	Indicator	TCR	level
1	Willingness to communicate with discussion members to create innovative solutions	73,83%	Good Enough
2	Willingness to gather with other students to share experience and practice.	73,83%	Good Enough
3	Willingness to discuss failure or success	73,56%	Good Enough
4	Willingness to compete with other groups	77,72%	Good Enough
5	Willingness to support the personal development of discussion group members	42,15%	Not Good
6	Willingness to send information related to the topic of the problem to the discussion group	41,21%	Not Good
7	Willingness to share ideas and thoughts on the topic of accounting issues through the support of the university's online portal	63,76%	Less Good
		58,98%	Less Good

Table 5. Knowledge sharing level in written contributions component

No.	Indicator	TCR	level
1	Ability to express ideas in writing	74,50%	Good Enough
2	Ability to write scientific articles, storybooks, magazines/journals	60,81%	Less Good
3	Willingness to share information when solving group problems	64,43%	Less Good
4	Willingness to share ideas and thoughts when discussing groups	85,37%	Good
5	Willingness to share information that is considered important	43,75%	Not Good
		65,77%	Less Good

Table 6. Hypothesis test results summary

Indicator	TCR	Level
Written Contributions	65,77%	Good Enough
Organisation communication	65,08%	Good Enough
Personal Interactions	64,13%	Less Good
Communication Practices	58,98%	Less Good
Level of students' Knowledge Sharing	63,49%	Less Good

3.1. Written Contributions

Students' condition of knowledge sharing on written contribution indicators is classified at a reasonably good level (65.77%). Although, in general, students are quite good at channeling ideas through writing and contributing to discussions (TCR 74.50%), this is not balanced with students' ability to write ideas in the form of articles, storybooks, or journals (60.81%). Similarly, students' willingness to share personal files related to accounting issues (TCR 64.43%) and sharing important information on accounting topics with other students from TCR results showed bad categories (43.76%).

Seeing this condition can be understood that students still have to be helped in the knowledge sharing process. The low level of knowledge sharing in students is well understood. Judging from the Theory of Planned Behaviour, a person will generally perform a specific behavior if they believe they have a positive result (favourable attitude) compared to doing an action that negatively impacts (unfavorable attitude). The underlying belief of a person's perspective to behavior is called behavioral beliefs (Bagais, Aljaaidi, & Al-moataz., 2020; Alsharo, Gregg, & Ramirez, 2017; Ajzen, 2020)

Based on the results of this study, students of the Accounting Education do not have a habit of sharing knowledge, ideas and expertise in writing such as writing artel, publishing magazines, writing ideas on social media, writing information on madding or discussion boards, and sending reports that benefit students, universities, and society at large still need to be improved. Through these activities, students can expand their knowledge or ideas into a document. In short, written contributions are the publication of scientific knowledge gathered and transferred in a collection of scientific works or other forms of documents. There are many benefits that are obtained from writing, including trying to learn, think, and reason about something that nets information, connects and draws conclusions as a source of topics to be written so that they can easily structure ideas in a way that they can understand information (Huber, Leach-López, Lee, & Mafi, 2020).

3.2. Organizational Communications

In general, the score of organizational communication indicators is 65.08%, so that it can be interpreted as quite reasonable. This can be seen from the ability to express ideas (74.63% - good enough); ability to participate fully in the discussion is not good (53.83%); suggested suggestions on the discussion forum quite well (72.89%); things always answer questions on the forum quite well (67.79%); always ask good questions (64.30% - less good); students were unable to share their positive experiences (not good - 49.66%); we're unable to express negative experiences despite their goal of helping others (66.71% - good enough); and the category was good enough (70.87%) in terms of always making presentation media.

Based on the framework of the theory of planned behavior Ajzen and combined with previous research, it can be seen that the factor of trust is very influential. Trusts, defined as a tendency to believe in others, greatly influence a person's sharing of knowledge. If individuals have the mutual trust to share knowledge, then they will develop a more positive attitude toward knowledge sharing (Ganguly, Talukdar, & Chatterjee., 2019)(Kim & Park, 2020)(Ajzen, 2020). The communication

dimension of an organization refers to the behavior of knowledge sharing through formal social interaction from an individual to the group. An example of organizational communication in this research context is lecturers dividing students into study groups or participating in brainstorming activities to generate thoughts, ideas, and solutions between students. This type of knowledge-sharing behavior occurs informal relationships such as meetings or workshops, discussions in seminars, or presentations. Such behavior is easy to remember and noticed by superiors. In this context is the lecturer.

3.3. Personal Interactions

The personal interaction indicator consists of 8 statements and produces an average TCR value of 64.13%, so it can be interpreted as less good. TCR score of 51.54% belongs to the category of not good for statements providing positive support to other students, students are not involved in coaching at the sister level (59.60%), the category is quite good (70.13%) in terms of time to build conversations in person, and students tend to provide information in person (68.25%). The category was good enough for a statement of shared interest and excitement (71.63%), as well as sharing experiences in person (71.88%). Statements about always chatting to help solve other people's problems fall into the category quite well (69.25%), but communicating ideas via email results in bad categories (50.74%).

Enjoying helping others is a benefit derived from the concept of altruism. Altruism will arise when one gains pleasure or satisfaction gained by helping others without expecting any reward. The knowledge-sharing process will happen well when based on altruism to help others (Ateş, 2020). Altruism refers to the extent to which a person is willing to help others without expecting feedback. If individuals believe that they can gain satisfaction from helping others by sharing knowledge, then they will develop a more positive attitude toward knowledge sharing (Alsharo et al., 2017; Yang, Nguyen, & Le, 2018)

Personal interaction involves informal social interaction between individuals. This personal interaction is included in the type of tacit knowledge, for example, students chatting while eating, on the phone, or helping other students who approach them while chatting. Sharing knowledge in this context is usually done voluntarily. The goal is to help other students who are having learning problems or outside the defense, minimize risks, avoid problems, provide encouragement and sincere support.

3.4. Communication Practices

The results of the study with the practice community indicator consisted of 7 statements. TCR value of 40.67% for communication statements in discussions to create innovative solutions, category good enough (73.83%) for reports gathered with other students to share the waiver, and TCR 73.56% on the statement disputing the story of failure and success about accounting learning. Bad category (42.15%) on the argument supporting the personal development of discussion members and competing for statements to be superior to other discussion members resulted in a TCR value of 77.72%. TCR value of 41.21% for statements submitting information related to accounting issues and categories is not good (63.76%). The statement shares ideas and thoughts on accounting issues through the university's learning portal. The average TCR value for the practice community indicator is 58.98%, so it can be interpreted that the indicator is not good.

In line with the opinion Islamy et al. (2020) that individual limitations in terms of time, energy, and knowledge possessed can be an obstacle for a person to do knowledge sharing. Although a person has a positive attitude towards behavior and believes that others approve of his behavior, it is not easy for an individual to think that they do not have the resources or opportunity. Resource availability refers to the extent to which resource availability and options support knowledge sharing. With enough time, sufficient energy, communication skills, or opportunities, a person may contribute more knowledge. *Knowledge sharing* Occurs in communities or groups consisting of students who

communicate about the same problem or topic. Interactions that occur in a practice community are informal relationships from individual to a group, not individual to other individuals. Individuals share knowledge by expecting reciprocity on the basis of the belief that other individuals will also share their knowledge.

4. CONCLUSION

The level of knowledge sharing of Students of Accounting Education is categorized as a less good level. This refers to the average TCR result of 63.49%. The level of knowledge sharing that is classified as inferior can affect the ability of the affective realm. The affective domain is one of the behavior changes obtained from the learning process. Therefore, cooperation between students, lecturers, and universities is needed to pay more attention to the knowledge-sharing process. Lecturers in the learning process can provide more support to all students to be active and willing to share their knowledge. Students should also be aware of the importance of knowledge-sharing behavior to achieve learning objectives.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4), 314–324. https://doi.org/10.1002/hbe2.195

Al-Kurdi, O., El-Haddadeh, R., & Eldabi, T. (2018). Knowledge sharing in higher education institutions: a systematic review. *Journal of Enterprise Information Management*, *31*(2), 226–246. https://doi.org/10.1108/JEIM-09-2017-0129

Al Rushud, A. R. (2021). Exploring Factors that Influence Academics' Knowledge Sharing Behaviour in Higher Education Institutions. *International Business Research*, *14*(5). https://doi.org/10.5539/ibr.v14n5p40

Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information and Management*, *54*(4), 479–490. https://doi.org/10.1016/j.im.2016.10.005

Ateş, H. (2020). Merging Theory of Planned Behavior and Value Identity Personal norm model to explain pro-environmental behaviors. *Sustainable Production and Consumption*, *24*, 169–180. https://doi.org/10.1016/j.spc.2020.07.006

Bagais, O. A., Aljaaidi, K. S., & Al-moataz, E. S. (2020). Knowledge Sharing Among Accounting Students: An Exploratory Study*. *Journal of Asian Finance, Economics and Business*, *7*(11). https://doi.org/10.13106/jafeb.2020.vol7.no11.557

Bosio, G., & Origo, F. (2020). Who gains from active learning in higher education? *Education Economics*, *28*(3), 311–331. https://doi.org/10.1080/09645292.2020.1761298

Creswell, J. W. (2013). *Research design: Qualitative, quantitative and mixed methods* (p. 273). p. 273. New York: Sage Publication.

Farooq, R. (2018). A conceptual model of knowledge sharing. *International Journal of Innovation Science*, *10*(2), 238–260. https://doi.org/10.1108/IJIS-09-2017-0087

Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. In *Journal of Knowledge Management* (Vol. 23). https://doi.org/10.1108/JKM-03-2018-0190

Huber, M. M., Leach-López, M. A., Lee, E., & Mafi, S. L. (2020). Improving accounting student writing skills using writing circles. *Journal of Accounting Education*, *53*, 100694. https://doi.org/10.1016/j.jaccedu.2020.100694

Islamy, F. J., Yuniarsih, T., Ahman, E., & Kusnendi, K. (2020). The role of organizational culture,

knowledge sharing and job satisfaction in higher education. *Management Science Letters*, *10*(16). https://doi.org/10.5267/j.msl.2020.7.014

Kim, E. J., & Park, S. (2020). Transformational leadership, knowledge sharing, organizational climate and learning: an empirical study. *Leadership and Organization Development Journal*, *41*(6), 761–775. https://doi.org/10.1108/LODJ-12-2018-0455

Nguyen, T. M., Nham, T. P., Froese, F. J., & Malik, A. (2019). Motivation and knowledge sharing: a meta-analysis of main and moderating effects. *Journal of Knowledge Management*, *23*(5), 998–1016. https://doi.org/10.1108/JKM-01-2019-0029

Nokkala, T., Aarnikoivu, M., & Kiili, J. (2021). Multidisciplinary Peer-Mentoring Groups Supporting Knowledge Sharing in Doctoral Education. *Scandinavian Journal of Educational Research*. https://doi.org/10.1080/00313831.2021.1939142

Razzaque, A. (2020). M-Learning Improves Knowledge Sharing Over e-Learning Platforms to Build Higher Education Students' Social Capital. *SAGE Open*, *10*(2). https://doi.org/10.1177/2158244020926575

Rolland Sobral, S. (2021). Bloom's taxonomy to improve teaching-learning in introduction to programming. *International Journal of Information and Education Technology*, *11*(3), 148–153. https://doi.org/10.18178/ijiet.2021.11.3.1504

Widayati, C. C., Arijanto, A., Helen Widjaja, P., Magito, M., & Anggraini, W. (2021). The Effect of Training Education, Motivation and Knowledge Sharing on Employee Performance. *International Journal of Business and Applied Social Science*. https://doi.org/10.33642/ijbass.v7n5p4

Yang, Z., Nguyen, V. T., & Le, P. B. (2018). Knowledge sharing serves as a mediator between collaborative culture and innovation capability: an empirical research. *Journal of Business and Industrial Marketing*, *33*(7), 958–969. https://doi.org/10.1108/JBIM-10-2017-0245

Yi, J. (2009). A measure of knowledge sharing behavior: Scale development and validation. *Knowledge Management Research and Practice*, *7*(1), 65–81. https://doi.org/10.1057/kmrp.2008.36