READERS’ KNOWLEDGE AND PURPOSE FOR SELF-ACTUALIZATION AFFECTING READING INTENTION FOR HOAX AMONG AVIATION SCHOOL ACADEMIA

Yune Andryani Pinem, Dyaz Varrel Effendi
Transportation Management/STTKD School of Aerospace Technology

Abstract

Prior studies on knowledge and or reader purpose have been proven to lead readers’ attitudes. Emerging hoax news circulating social networking sites (SNSs) including among scholars has become a research concern recently. To determine the extent of knowledge and reading purpose on hoax about air transport subject among academia is the purpose of this study. Furthermore, it also measures the effect of those variables on reading intention. Using questionnaires, data is collected from students, instructors, teachers, and staff (n=100) from aviation school. Multivariate regression is applied toward two independent variables (readers’ knowledge and purpose) and one dependent variable (reading intention). Results of this study depicts simultaneously significant impact of readers’ knowledge and purpose of reading to readers’ intention to click on certain news.

Keywords: hoax, level of knowledge, reading intention, reading purpose, self-actualization.

Introduction

Information widely spread using social networking sites (SNSs) is generally low credible. Initiated by some political purposes, the type of information which is considered propagate and deceptive known as false news has no/less reliable source. Studies to advance readers’ comprehension to detect, characterize and mitigate misleading information circulating social media platforms have become a recent concern among academia (Azlan et al., 2020; Cao et al., 2019; Kumar & Shah, 2018; Pierri & Ceri, 2019; Rodríguez et al., 2020). Flagging particular news with false news labels is one way to discourage readers from spreading it (Mena, 2020). Thus, it is required to continue educating the public with every possible technique of detecting false news so that its’ spreading can be stopped.

Being aware of a particular topic helps to determine personal attitude toward the information given on it. Thus, a campaign to widespread educating information is crucial to the public using every possible media (printed, electronic or online) to create a social attitude. Building awareness in a certain level of knowledge toward a topic may prevent mortality as in the comprehension of airborne and droplet infection of coronavirus among university students (White, 2020) and raises readiness among rescuer to operate Automated External Defibrillation (AED) to help to save the life of someone with cardiac arrest (Supriono & Imamah, 2018). Background knowledge has been proven to give an impact on reading comprehension among primary school-aged children with relatively different impact areas between stronger and weaker readers (Smith et al., 2021). On a teaching-learning basis, improving the level of knowledge is beneficial for teachers to encourage peer assessment which is considered less time-consuming (Zulkarnay et al., 2018).

The six stages of the learning model according to Bloom basically deals with the hierarchy of human’s cognitive domain. Started from knowledge of specific facts to comprehend, apply, analyze, synthesize, and finally evaluate, a person’s level of knowledge motivates his/her reaction toward a particular subject. Therefore, to build the appropriate joint social attitude toward false news spreading, our society must

Email Address: j.andryani@gmail.com
Received 10 Maret 2021, Available Online 1 Juli 2021
have an adequate level of knowledge related to the subject idea of information. By applying this level of knowledge toward every online information, everyone may have the self-confidence to evaluate whether the information is worth read/spread or not.

News headings such as title, subtitle, picture, caption, and/or headings play important role in encouraging reading. Reading skills of skimming basically utilizes these elements to provide as many details and comprehension to the readers (Asmawati, 2016). It is a time-saving reading skill (Duggan & Payne, 2009) and effective to be applied in selling product as part of marketing strategy (Spann et al., 2015). To a certain extent, those elements motivate readers as reading purpose to read the information for more detail.

In this study, the level of knowledge toward hoax about air transport subject is measured based on respondents’ identities. Besides, readers’ purpose is also being considered as the second independent variable. Finally, both readers’ level of knowledge and purpose of reading are measured toward readers’ intention to read particular news. Students, staff, instructors and teachers from aviation school (n=100) are given a set of questionnaires to collect their score on each variable. Then, using multivariate regression, all scores from each variable are measured to find the effect of readers’ level of knowledge and purpose of reading toward readers’ intention of reading hoax news.

**Literature Review**

**Background Knowledge and Comprehension**

In teaching reading, helping students activating and developing their background or prior knowledge to succeed comprehension skills is one of the teachers’ teaching techniques. Recent studies have been conducted highlighting the positive effect of this technique in strong agreement (Al-Jahwari & Al-Humaidi, 2015), partially and simultaneously in content, vocabulary, reading strategy, and text-structure knowledge of expository text (Kelly, 2014) and in increasing fluency and reading errors in young-age readers (Priebe et al., 2012). Further, background knowledge is also scientifically proven to give an effect on how readers select readings’ order consistently from semantic related to interesting based on previous reading in a series of hypertext sources of reading (Salmerón et al., 2006).

Overall, results show that readers with the proper amount of prior knowledge stand out to practice comprehension. However, the extent of knowledge level varies one from another. Level of knowledge results in the range of success in landslide mitigation (Suwaryo & Yuwono, 2017), dental care (Dharmawati, 2016), awareness of neonatal danger signs (Jemberia et al., 2018), and consumer-generated food waste (Fox et al., 2018). Findings of those studies mention dominant factors as indicators affecting this level of knowledge to be education, age, occupation (Notoatmodjo, 2012).

1. Educational Background. By education, knowledge can be attained higher in mean over an experimental group than in a controlled group (Komolafe et al., 2020), increased in a patient regarding particular treatment to a serious illness (Schwarzman et al., 2019) or merely in a simple tooth brushing demonstration for elementary school children (Anwar & Zulkifli, 2020). Results continuously show that middle and higher educated person tends to gain knowledge better.

2. Age. A variant in age affects knowledge item level across twelve domains on crystallized intelligence (Schroeders et al., 2021), knowledge of low-risk drinking and frequency (Islam, 2020), and innovation adoption in reproduction management on cattle (Waris et al., 2019). Significantly, age can give contribution toward personal knowledge. The older person is known to be better at absorbing knowledge than the younger ones.
3. Occupation. Job status or type of job influences personal knowledge in banking products to nearly 20 percent (Hasyim & Salam, 2016). This is the one-fifth chance for a working person to have adequate knowledge related to a particular matter.

**Reading Purpose for Self-Actualization**

Personal past behavior and habits in reading which is stored in web history are used by recommender system to suggest more similar contents. Generated by user profile, recommended information ready to read appears in personal’s online platforms. However, self-actualization plays an important role whether the user will read this type of information or read his/her preferences. Users can always choose and control reading topics based on their reading goals for self-actualization.

Two goals supporting self-actualization (Sullivan et al., 2019) are to broaden horizons and discover the unexplored. (i) Achieving a broadening of horizons means to provide articles, perspectives, and topics that are not normally read by the users but still considered interesting. By broadening the horizon, a recommended person can have second, third, or any other opinions or selections to eliminate polarization in particular news. (ii) Meanwhile, discovering the unexplored means to encounter unknown articles hidden in under-explored parts of users’ history that may bring users to completely new territories which possibly raises their new interests. In the context of academia in aviation school, related themes are including news circulating airports, airlines, aerospace manufacturing companies, and their supporting areas.

**Method**

Using multivariate regression is one way to find whether multiple independent variables affect one dependent variable. In this study, two independent variables of readers’ knowledge of news around air transport subject and the purpose for self-actualization are observed toward one dependent variable of reading intention on respondents (n=100), which are students, staff, instructors, and teachers in aviation school. Data is collected using questionnaires to measure both variables. Statements on questionnaires provided are limited by time to keep the spontaneous choice of the respondents (Ellis et al., 2009).

On how respondents explain their level of knowledge ($x_1$) over false news on the air transport topic is the first independent variable in this study. Divided into 5 level news accuracy from (1) true, (2) mostly true and few false, (3) mostly false and few true, (4) false, and (5) I don’t know, respondents pick what is best to describe their prior knowledge on the topic. Since all news on this study is taken from a false news collection, the true answer gets the highest point, I don’t know gets zero points and the false answer gets minus 1. The total score is determined as readers’ level of knowledge.

Coding is given to measure two categories of reading purposes for self-actualization as the second independent variable ($x_2$). Code (1) is for broadening the horizon and code (0) is for discovering the unexplored. Besides two options of reading purpose for self-actualization, one more blank space is given to writing the different possible answers. Eventually, coding is given to the last variable – reader intention ($y$) – which is provided with two options of YES (1) and NO (0).

**Result and Discussion**

Among 44 news in air transport recorded in turnbackhoax.com collection throughout 2017-2019, there is a significant difference by 7 times between the latter two years of 2018 and 2019 and the earlier year in 2017. It means that hoax in air transport in 2017 is underrated or unimportant compared to the latter two years. All news can be categorized into several groups which are (1) politics, (2) public figure, (3)
gossip, (4) accident, and (5) job vacancy which are later used in the questionnaire as news preference by readers.

![Fig.1 Numbers of Hoax-News on Aviation in Indonesia 2017-2019](image)

### Respondent Identities

**Table 1. Respondents’ Background and Reading Preferences**

<table>
<thead>
<tr>
<th>(% Education)</th>
<th>(% Year of Experience)</th>
<th>Type of News Media</th>
<th>Type of Favorite Reading Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation</td>
<td>1-3</td>
<td>Printed</td>
<td>False</td>
</tr>
<tr>
<td>Non-Aviation</td>
<td>4-6</td>
<td>Electronic</td>
<td>Mostly True, Few False</td>
</tr>
<tr>
<td></td>
<td>&gt;6</td>
<td>Online</td>
<td>Mostly False, Few True</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SNSs</td>
<td>Mostly True, Few False</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Politics</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public Figure</td>
<td>I don't know</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gossip</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accident</td>
<td>Mostly True, Few False</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Job Vacancy</td>
<td>Mostly True, Few False</td>
</tr>
</tbody>
</table>

| 83            | 17                      | 16                 | 79               | 4               | 251                | 325               | 352               | 380               | 294               | 313               | 252               | 303               | 293               |

Being familiar with online media as well as social networking sites (SNSs) is two sides of the coin which can be beneficial as well as destructive. Since hoax news is spread using these two media and barely spread using formal news media such as printed or electronic, those who prefer to obtain news using this kind of media tend to get affected easily. On the other hand, clarifying online is also possible to do to stop false news from spreading. Since the majority of respondents are young (17-20 n=72) followed by productive age (21-30 n=13), the number of respondents who use online combined with social media to attain news is 12 percent greater than printed combined with electronic media. Reading preference is dominated by public figures followed by accidents and job vacancies. Looking at the setting of the respondent’s background which is aviation school, of course, respondents are dominated by those who are from aviation backgrounds.

### Readers’ Knowledge

Prior knowledge of a passage topic in this case news title as well as supporting picture is possible to be used as an indicator for readers’ comprehension on a particular topic.

![Fig 2. Level of Knowledge on False News](image)
Regardless of being categorized as false news in *turnbackhoax.com* collection, respondents’ level of knowledge about real news stories is considered low. The level of knowledge for ‘False’ news story with slightly above 15 percent from total knowledge level is shown by the level of knowledge for ‘False’ news story. While the level of knowledge for ‘True’ reaches exactly 21 percent, the level of knowledge of ‘Mostly True, Few False’ skyrockets to 32 percent as the highest position. At last, the level of knowledge for ‘I don’t know’ is barely 20 percent.

Interestingly, the level of knowledge for ‘False’ and ‘Mostly False, Few True’ when combined can reach 28 percent making it second position after ‘Mostly True, Few False’. By considering these facts, even though respondents have a strong belief in false news, somehow, they also have a sense of possible false stories. Therefore, there is still the possibility of self-awareness from within for a reader to make verification. However, combining the level of knowledge for ‘True’ and “Mostly true, Few False’ which dominates with more than 50 percent, respondents of this study are still low in recognizing false news based on its title and picture (Arikunto, 2010).

Further, level of knowledge when is associated with age and years of experience significantly gives a positive effect simultaneously to 76 percent with a significance of F less than 0.05. It means that through age and years of experience, readers can identify whether certain news contains hoaxes or not. On average, respondents are 21 years old with 4 years and 5 months of experience in the aviation industry. This is a range of categories for age and years of experience to bring an effect toward the level of knowledge about real news stories as mentioned in earlier studies about associated factors affecting the level of knowledge (Dharmawati, 2016; Suwaryo & Yuwono, 2017).

**Reading Purpose for Self-Actualization**

Reading news with a purpose for self-actualization by Sullivan et al., (2019) which is divided into broadening the horizon and discovering the unexplored, has manifested into some additional expressions in this study. However, those expressions can still be categorized into these two purposes of self-actualization.

**Table 2. Additional Expressions of Self-Actualization in Reading Purpose**

<table>
<thead>
<tr>
<th>Reading Purpose for Self-Actualization</th>
<th>Readers’ expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broaden horizon</td>
<td>Melamar Pekerjaan, to apply for the job</td>
</tr>
<tr>
<td></td>
<td>Bekerja, to work (for the job)</td>
</tr>
<tr>
<td></td>
<td>Syarat lowongan kerja, requirement for the job</td>
</tr>
<tr>
<td></td>
<td>Ingin lebih tahu, to know more (detail)</td>
</tr>
<tr>
<td></td>
<td>Ingin memastikan, to verify (truth)</td>
</tr>
<tr>
<td>Discover the unexplored</td>
<td>Penasaran, curious</td>
</tr>
<tr>
<td></td>
<td>Penasaran dan ingin tahu, curious and wonder</td>
</tr>
<tr>
<td>Uncategorized</td>
<td>Kasihan, feel empathy</td>
</tr>
</tbody>
</table>

Readers’ purpose which is conveyed in broadening the horizon hits the highest score in two news about job vacancy (1) PT. Angkasa Pura and (2) PT. Garuda Indonesia. In accordance, additional expressions are given by respondents that also mention the intention to apply for a job. Driven by the longing of having a job in state-owned companies such as Angkasa Pura and Garuda Indonesia, readers have a strong urge to read the news with generated job vacancy titles. In concept, readers are considered to have a general idea of applying for a job. However, every job vacancy puts specific requirements according to the job position. Thus, the purpose of reading turns to be more specific which is finding details and verifying.
Readers’ purpose to discover the unexplored hits mostly in more various topics such as in revoler issue, disaster management, myth related to disaster and free flight ticket for a birthday celebration. All those topics are considered rare by looking at their one-time appearance from a total news collection. Additional expression of ‘penasaran’ or curiosity based on the definition in KBBI (The Great Dictionary of the Indonesian Language of the Language Center) gives extra emotion to the purpose for discovering the unexplored into the superlative level. It gives a semantic component of insisted, strong-willed, unsatisfied, and angry. (Hasil Pencarian - KBBI Daring, n.d.)

Emotion or feeling is also found on uncategorized additional expressions of ‘kasihan’ or being empathy in news entitled “Bayi selamat korban lion air jt 610 Kiriman dr teman d rsud kerawang”. This extra feeling is found in only one response which is derived from a news title mentioning a baby survivor from a plane accident. There is no further observation on how this emotion is later developed as the purpose of reading. Nevertheless, there is the possibility that this may cause curiosity to discover something outstanding such as the rare condition of an infant to survive a horrible plane crash.

**Readers’ Knowledge and Purpose Affecting Reading Intention**

Results from readers’ knowledge, the purpose for self-actualization, and reading intention (n=100) was processed using multivariate regression to find whether:

1. Readers’ knowledge and purpose for self-actualization respond simultaneously to change reading intention.
2. Readers’ knowledge responds partially to changing reading intentions.

<table>
<thead>
<tr>
<th>Table 3. Multivariate Regression</th>
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<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Readers’ Knowledge and Reading Intention</td>
</tr>
<tr>
<td>Readers’ Purpose for Self-Actualization and Reading Intention</td>
</tr>
<tr>
<td>Readers’ Knowledge, Purpose for Self-Actualization and Reading Intention</td>
</tr>
</tbody>
</table>

Slightly above 30 percent, both readers’ knowledge and purpose for self-actualization simultaneously give effect toward reading intention. By readers’ prior knowledge along with the purpose of knowing the topic content on the news more, respondents tend to click YES for the statement “read this news”. Looking at the value of F which is bigger than the F table, undoubtedly this hypothesis has been scientifically proven.

Surprisingly, what is considered as readers’ knowledge about certain news titles affects readers’ attention to read more about it in harmful ways. The reader who confidently puts trust in news titles based on his/her prior knowledge falls to hoax news easier. It is shown by t-value which is higher than t-table, yet in opposite has negative value. Certainly, reading the intention of clicking the news to open it is derived from readers’ knowledge. However, it leads them to the wrongly designed facts since all news provided in this study is hoaxes.

1. With a level of knowledge that is considered low (less than 56%), when clicking the news, readers will be negatively affected by the story. Since the purpose of hoax news is to mislead the reader, there
is a tendency that readers will fall for the story given after the reading process. Added to this fact, the level of knowledge for ‘I don’t know’, numbers of readers, who fall victim to this news will be greater. Without verifying it with other reliable sources, false news stories will affect readers’ perception and possibly lead to attitude.

2. One-sixth level of knowledge to sense fake stories in the news can be seen as a chance to keep readers consciously questioning the fact of a news story. By looking at the significance of the t-value that makes this level of knowledge affect readers’ intention to read news, this is a possibility to clarify the fact from other reliable sources. Since this study is conducted toward academia in aviation school with 80 percent respondents are from the aviation background and 79 percent with 4-6 years of experience, this low number of possibilities is still promising.

Quite the opposite, readers’ purpose of reading for self-actualization gives positive effect partially toward reading intention. Similar to readers’ knowledge which gives a higher t-value than t-table, readers’ purpose of reading for self-actualization does the same, yet in contrast, since it is positive in value. Even though readers tend to fall for exaggerated news titles, their willingness to read to broaden the horizon and discover something new at least shows some intention of clarifying their prior knowledge to the body of the news. It is also strengthened by the only appearance of additional expression of ‘*ingin memastikan*, to verify’ which is written by one reader when responding to a story about a flood in a newly built international airport in Jogjakarta.

1. Highlighting the topic hit the most by readers whose reading purpose is to broaden horizon, job vacancy on two big state-owned companies comes in the first and second position. The major purpose to read this type of topic is to find details of job requirements. By having prior knowledge in mind about applying for a job, readers want to know more about this requirement to apply. Motivated by this purpose, readers tend to click the news.

2. The highest score of reading purpose to discover the unexplored finds various unique criteria of news since all the news occurs only once throughout the whole news collection. Driven by curiosity to know about something rare (new) such as revolter who exploits plane facility to confront, disaster management using free air transport facility, myth on disaster-related to a flight, and free flight ticket to celebrate a birthday, readers will click to read the news.

Conclusion

Readers’ level of knowledge and purpose of reading motivate readers’ intention of reading particular news. In the case of hoax news around air transport subject, both readers’ knowledge and purpose for self-actualization spontaneously have been proven to give a significant impact on readers’ intention. However, since that all news provided in this study is proven to be false, this result is considered harmful. Readers’ prior knowledge about certain elements of news stories turns to be deceiving. Without verifying the news to a more reliable source, readers are easily lead to authors’ misleading intention. On the other hand, by having consciousness represented by readers’ purpose for self-actualization to broaden the horizon and discover something new, respondents agree to verify the information by intentionally click the news for further details.
References


