World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:8, No:4, 2014

A Study of Lurking Behavior: The Desire Perspective

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***Abstract*—**Lurking behavior is common in information-seeking oriented communities. Transferring users with lurking behavior to be contributors can assist virtual communities to obtain competitive advantages. Based on the ecological cognition framework, this study proposes a model to examine the antecedents of lurking behavior in information-seeking oriented virtual communities. This study argues desire for emotional support, desire for information support, desire for performance-approach, desire for performance -avoidance, desire for mastery-approach, desire for mastery-avoidance, desire for ability trust, desire for benevolence trust, and desire for integrity trust effect on lurking behavior. This study offers an approach to understanding the determinants of lurking behavior in online contexts.

***Keywords*—**Lurking behavior, the ecological cognition framework, Information-seeking oriented virtual communities, Desire.

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I. Introduction

AS virtual communities rapidly develop, lurking behavior, which is common in virtual communities, attracts much scholarly attention [17]. Lurkers are reported to make up over 90% of several virtual communities [12]. Reference [15] indicated that lurkers made up 45.5% of health support communities and 82% of software support communities. Different virtual communities have different proportions of lurkers, but lurking is prevalent in all types of virtual communities.

Academic researches on lurkers remain relatively few. Studies [16], [17] recently proposed factors such as selfish, free-ride, just reading, and social support to examine why people perform lurking behavior. Desire is a sense of motivation, making people to act towards a goal [2]. In other words, desire is an important factor influencing behavior.

Reference [4] introduced the ecological cognition framework, which is made up with the levels of desires, to explore participation and lurking of virtual community members. The ecological cognition framework is an integrative and whole frame of illustrating lurking behavior. Thus, this study focuses on the relationships between desire and lurking behavior based on the ecological cognition framework.

II. Literature

A. Lurking

Current definitions of lurkers are quite vague. Reference [15] regarded Internet users who have never post during the past 3 months as lurkers. Reference [19] defined lurkers as people who only read articles and search for information on Internet, but never post. Reference [17] said members who never post any article in their virtual communities are lurkers. Lurking and knowledge sharing can be seen as two aspects of one piece [8].

Reference [17] indicated there are five reasons for lurking: didn't need to post, needed to find out about the group, thought I was being helpful, couldn't make the software work, and didn't like the group. Reference [13] studied why students do not post on online forums. Reference [13] offered five major reasons for students' lurking behavior: they feel no need to post, have no capability to use the software, do not like the forum, believe not posting any content can also help other forum members, and think they need to gain more understanding of the forum to post.

B. The Ecological Cognition Framework

Reference [4] proposed the ecological cognition framework to explain why members choose to participate in or lurk in virtual communities. The desires of the framework are participants' desires, which contain social, order, existential, vengeance, and creative. Social desire means virtual communities are socially interactive space, where people post articles and respond to others' postings. Order desire means some users want to have more power over others in order to manage the communities and deal with any emergent situation, such as forum leader. Existential desire means people perform some existential behaviors in virtual communities, such as eating and drinking, which are also performed in real life. Even though virtual communities are a computer-mediated interactive space, people here still have to fulfill a few indispensable desires. Vengeance desire means conflicts are unavoidable when people are communicating with other members in virtual communities, and mutual attacks and disputes happen occasionally. At last, creative desire means it is often observed that members display performing behaviors in virtual communities, like helping other members solve problems and creating new contents.

III. Method

A. Model

In the ecological cognition framework, the level of desire is composed of 5 categories: social, order, existential, vengeance, and creative. Social, existential, and creative are adopted to develop the model of this research while vengeance and order are excluded. Reference [4] indicated that conflicts are inevitable in human interaction and people have the desire to seek revenge. Reference [22] also pointed out that people have conflicting opinions in both real life and in a virtual environment, which lead to a vindictive mentality. In countries with freedom of speech, the freedom is not unlimited even in virtual environments. People have to follow the relevant laws,

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such as laws protecting privacy and governing defamation and harassment [22]. Most virtual communities have rules preventing their members from posting articles to seek revenge. Therefore, this research does not consider the element of vengeance. According to [4], order refers to the desire to arrange and sort articles or to be a distinguished member, like a leader, in a virtual community. Reference [7] indicated over half of all call centers have not promoted any supervisors in the previous year. The proportion of such promotions is low because of the absence of a clear and structured promotion policy [3]. On most virtual communities, the promotion policy and the tenure of office for forum leader who can arrange and sort articles are lack. In other words, even though a member posts articles to demonstrate he can be a forum leader, these websites may not promote any members. Therefore, this research does not consider the element of order.

This study draws upon social desire, creative desire, and existential desire from the ecological cognition framework [4] to propose 9 independent variables: desire for emotional support, desire for information support, desire for performance-approach, desire for performance-avoidance, desire for mastery-approach, desire for mastery-avoidance, desire for ability trust, desire for benevolence trust, and desire for integrity trust and to explore the relationships among 9 desires and lurking behavior.

B. Hypotheses

Reference [4] indicated that virtual communities are a social space, where members can post and reply articles to interact with other members. Reference [20] pointed out that people gain social support via interacting with other people. Reference [9] stated that virtual communities allow an individual to know people with same interests and share experiences. In the process of sharing and interacting, people can gain social support from others, which significantly reduce pressure and negative emotions [10].

When people encounter unpleasant experiences or dilemmas, negative emotion are generated. At this moment, social interaction between people can produce social support or emotional support [10], [20]. Emotional support can diminish negative emotion [10]. Thus, when virtual community members have much desire for emotional support, they can post or reply articles to interact with other people in the virtual community so as to fulfill their desire for emotional support and then placate their negative feelings. In contrast, when virtual community members have less desire for emotional support, they are prone to lurking. This study thus proposes hypothesis 1:

H1. Desire for emotional support is negatively related to lurking behavior.

Reference [4] indicated the creative category in the ecological cognition framework refers to an individual assist others to solve problems or create contents. Reference [9] explained that one of the reasons why members attend a virtual community is that they are interested in the issues discussed in the community. When people have questions regarding the issues, they can create contents (posting) to discuss with other members to obtain useful information (information support). In contrast, if the members have a lower desire for information support, they are more likely to lurk. This study thus proposes hypothesis 2:

H2. Desire for information support is negatively related to lurking behavior.

Performance-approach oriented people like to receive approval and compliments from other people to prove that they have better performances [5], [6]. Members with a high performance-approach desire would post new articles and reply to create contents, which earn compliments and approval as evidence of their better performance. In contrast, if members have a low performance-approach desire, they are more likely to lurk. This study thus proposes hypothesis 3:

H3. Desire for performance-approach is negatively related to lurking behavior.

Performance-avoidance goal can be seen in people who always avoid being considered incapable or weak by other people [5], [6]. Performance-avoidance members would not or less likely to post articles (do not create) and tend to browse articles in the virtual community to avoid being considered incapable by other people. This meets their goal of performance-avoidance. Therefore, if members have a high desire for performance-avoidance, they are more likely to lurk. This study thus proposes hypothesis 4:

H4. Desire for performance-avoidance is positively related to lurking behavior.

Mastery-approach oriented people try their best to improve their ability and master their skills or tasks [5], [6]. Members with a high master-approach desire would answer difficult questions or participate in complicated discussions and issues to create articles to improve ability. They integrate their knowledge and increase their ability to satisfy their mastery-approach goal. When members have a low mastery-approach desire, they are likely to lurk. This study thus proposes hypothesis 5:

H5. Desire for mastery-approach is negatively related to lurking behavior.

Mastery-avoidance oriented people avoid anything they are not learning and avoid forgetting any skills or knowledge [5], [6]. Members with a high desire for mastery-avoidance would answer questions and join in discussions as a means of creation so as to prevent themselves from forgetting skills they have learned. This fulfills their goal of mastery-avoidance. If members have a low desire for mastery-avoidance, they are more likely to lurk. This study thus proposes hypothesis 6:

H6. Desire for mastery-avoidance is negatively related to lurking behavior.

The concept of existential desire in reference [4] originally refers to physical needs (eating and drinking). Based on ERG theory, this study extends that in addition to physical part, need for safety is also included [1]. What this study refers to as the concept of existential is the desire for safety. Human beings are group animals. People survive by relying on each other. And this mutual reliance is established on a mutual trust [18], that is to say, we believe people around us would not harm to us. People by instinct have a desire for mutual trust [11]. Previous

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study indicated trust is a human desire [11].

Previous study evinced that trust is made up with ability, benevolence, and integrity [21]. If a community member wants to be trusted by others (desire for trust), he has to demonstrate his ability, benevolence, and integrity. In a virtual environment, member can post or reply articles with professional quality to prove he has the ability and makes other members trust his ability. This is trust in ability. A member can also post articles to prove his integrity and make others believe in his integrity. This is trust in integrity. Moreover, a member can post or reply articles to express his care and benevolence for other members, making other members believe that he thinks of others and not just himself. This is trust in benevolence. In conclusion, when the desires for ability, benevolence, and integrity trust of a person are satisfied, the trustee will be trusted not to commit any harm to the trustor [14]. If members have a lower desire for trust, they are more likely to lurk. This study thus proposes hypotheses 7-9.

H7. Desire for ability trust is negatively related to lurking behavior.

H8. Desire for benevolence trust is negatively related to lurking behavior.

H9. Desire for integrity trust is negatively related to lurking behavior.

The research model is shown in Fig. 1.

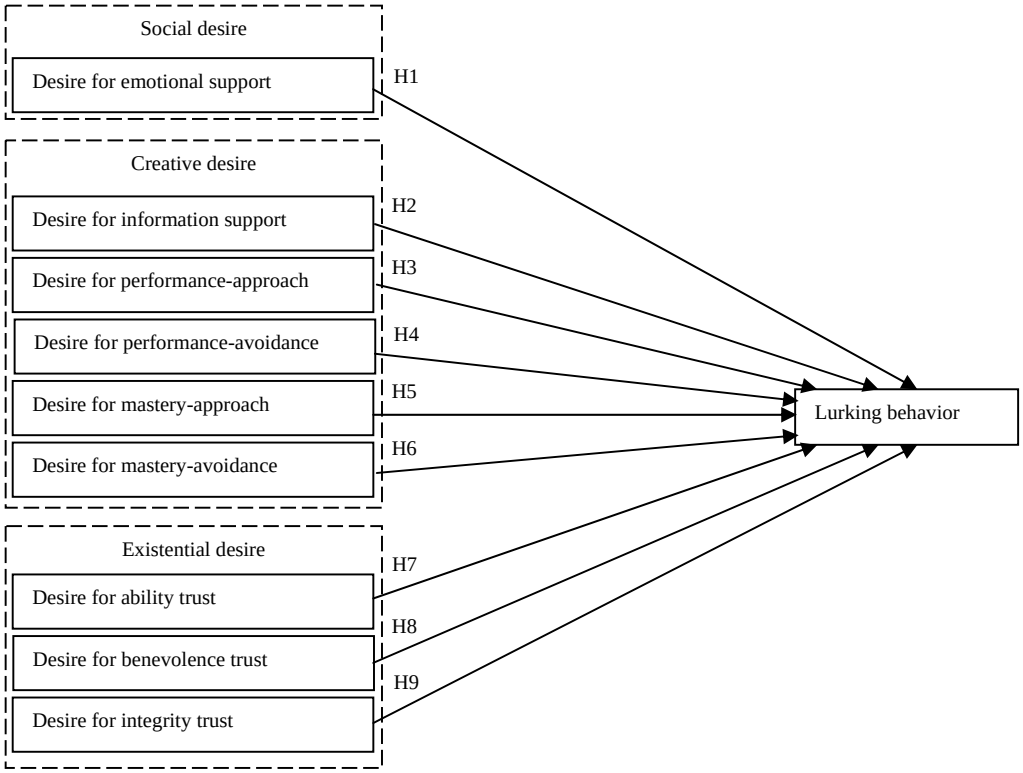


Fig. 1 Research model

IV. Conclusions

This study adopts the ecological cognition framework to further discuss lurking behavior on the Internet. In academics, this study proposes 9 antecedent variables shaping lurking behavior. No past studies have adopted same theory to explore lurking behavior. In practical level, this study attempts to offer references for virtual communities, seeing if lurking problems in their communities could be improved. This study, however, only proposes research model. In the future, testing this model is necessary.

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