

Motivation and Behavior in Identified and Anonymous Users of Online Communities

Christopher Poynton

DePaul University

Author Note

Christopher Poynton, HCI Master's Student, Depaul University

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Correspondence concerning this article should be addressed to Christopher Poynton, 1540 N. Greenview Ave Unit I, Chicago, IL 60642.

Contact: iamchrispoynton@gmail.com

Abstract

This paper explores nine published articles that report on results from research conducted about what motivates people to interact with and contribute to online communities, their resulting behavior in these communities, and if personal identification (being identified as opposed to posting anonymously) contributes to this behavior. The research was conducted in a variety of ways that included personal interviews/surveys, large-scale website profile examination, and algorithmic analysis of websites and profiles. Each study focused on a slightly different aspect of online contribution, but many of their results overlapped.

The results from these studies can be grouped into two main motivators, which include sense of community, and the exchange of content. Each of these categories has both positive and negative elements, often times showing a juxtaposition between motivations for selfless and selfish reasons. Many of the takeaways from these studies can also be applied to both identified and anonymous behavior in terms of goals and motivations.

That said, anonymous behavior was found to be mostly platform dependent, and more recent studies indicated that users were more likely to contribute in identified communities where they could receive personal recognition, while continuing to grow their real-life social networks. This paper examines a variety of resources to suggest that more platforms and user types should be examined as the popularity and variety of these platforms grows to provide a better picture of the changing landscape of online communities.

Keywords: online forum interaction, social media interaction, online forum contribution, social media contribution

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As technology becomes more integrated with everyday life, people use online communities (forums, social media, and entertainment platforms) to connect to each other in a digital world. This can be seen as an extension of the relationships people form in the real world, often going as far as to replace every day interactions for digital interactions (Ma and Chan, 2014, p. 56). It is important to study why people interact with each other online, and how they do so to provide insight into the changing digital/personal relationship.

This paper examines the research of nine different studies, which was then used to create a categorization around the motivations for online interaction. This research shows that there are two main categories of motivations for online community interaction; sense of community and content consumption and exchange. Each motivation has aspects that can apply to both identified and anonymous users, and correlates directly to specific patterns of behavior, which include a variety of both selfish and selfless actions.

Sense of Community

The idea of an online community is similar to that of a real life community. It is a network of relationships that bring people together for various reasons. Pendry and Salvatore (2015) note that the sense of “community is meaningfully connected to the self (i.e., forum identification) that creates the dual benefits of individual well-being and offline civic engagement” (p. 213). With this in mind, one of the main reasons behind joining and participating in a community is building and maintaining relationships. However, the reasons for building and maintaining relationships differ per use case and community type.

Community Building and Support

The idea of support focuses on finding people with similar hardships to build a community. Pendry and Salvatore (2015) refer to these communities as stigmatized forums, which can be defined as having some sort of negative, personal differentiator, for example a physical condition or mental health problem, that may also have a social impact (p. 213) .

Pendry and Salvatore's interview-based study on individual and social benefits of online discussion forums found that many users reported joining stigmatized forums for social reasons, largely "because there were no opportunities to meet like minded people nearby" (Pendry & Salvatore, 2015, p. 216). Anonymous lurking was found to provide the support and advice these users needed without having to identify themselves outright (Pendry & Salvatore, 2015, p. 218). Regardless of whether or not these users ended up personally contributing to the community in an anonymous or identified manner, many reported a higher satisfaction with their individual lives due to the support this community provided (Pendry & Salvatore, 2015, p. 217).

Additionally, Whiting and Williams (2013) briefly mentioned the idea of community and support in their interview-based study of why people use social media, noting that 88% of participants in their study mentioned social interaction, of which meeting new friends online was also included (p. 365). While the importance of support should be noted, there was less research on this topic, and more of a focus on using a community to maintain relationships.

Maintaining Relationships

The idea of maintaining relationships is something that has changed with the emergence of identified social media platforms like Facebook. Ma and Chan (2014) noted in their questionnaire-based study on knowledge sharing and social media that the students they interviewed "...form communities that are based on the physical world in which the users

already know each other and only extend their networks to the Facebook world” (p. 56).

Essentially, people want to keep their real world connections and relationships strong, and these online platforms provide an avenue to do so in multiple ways.

Direct Interaction. By considering online communities as an extension of the real world, people were able to keep up with friends, family, and acquaintances through direct contact and communication. Whiting & Williams (2013) noted that 88% of the respondents to their survey on why people use social media mentioned social interaction, and that these communities provided an additional place for users to come together to interact and socialize with people that they may not see on a regular basis (p. 365). In doing so, people are able to facilitate relationships that otherwise may have been disregarded. Krasnova, Spiekermann, Koroleva, & Hildebrand (2010) likens this to “...functional tools, similar to enhanced address-books” in their study on why users disclose information on social networks (p. 123).

A large part of this motivation is the ease in which these interactions can occur when compared to real world interactions. Users have large scale and essentially instant access to their network, which allows them to easily update a larger network of people at one time (Krasnova et al., 2010, p. 122). The wider reach of the network allows for people to have increased interactions, the extent of this was noted in Whiting & Williams’s (2013) study, where one respondent noted that they "have more contact with people via social media than face to face (p. 365). The ease of maintaining these relationships also directly plays into the desire and necessity for users to disclose their identity (Krasnova et al., 2010, p.13).

Indirect Interaction. While many users directly interact with each other, there is also value in indirect interactions as motivation to use an online community. These indirect

interactions are done through platforms that may allow identified users to act anonymously. This means that users with an identified profile may be able to complete certain tasks, for example monitoring other users, without other users knowing what they are doing. This is similar to the idea of extending real world relationships, but rather than communicating directly, people used the platforms to keep a watchful eye on friends and family that they might not have constant contact with (Whiting & Williams, 2013, p. 366). This allows for insight into the lives and activities of other people without having to actually interact with them all the time (Whiting & Williams, 2013, p. 366).

Content Consumption and Exchange

The idea of content exchange involves both the creation and distribution of information and media, without the notion of building relationships with the individual members of the community, but at times with the community as a whole. This concept was mentioned in the research of 6 out of 9 articles. This affects both those seeking information and those sharing information.

Content Seeking

The concept of seeking content can include traditional information in the form of educational resources, and consumption of content for entertainment purposes. Both areas of this are generally done for self-centered reasons, offering little to the community in return.

Education. The concept of information-seeking falls under the more traditional definition of learning, and can include aspects of learning a skill, how to complete a task, or finding new facts on a subject (Whiting & Williams, 2013, p. 366). The concept of information seeking can also be focused on finding information on products, services, events, businesses, and

more) in attempt to become more informed when making a excision (Whiting & Williams, 2013, p. 366). Acquiring this information can come from generally searching and reading forums and posts, but Kahn (2016) noted in his study on YouTube contribution that others may ask questions directly to a community to find the specific information they need (p. 243). However, the larger takeaway from this is that people do not necessarily care as much about the community itself, but rather “are more interested in its instrumental value as a site of information transfer between members” (Pendry & Salvatore, 2015, p. 216).

Entertainment and Boredom. Entertainment and boredom encompasses the idea that users are looking for specific content to consume in their free time. This idea was very popular in the study done by Whiting & Williams (2013), where they found that 76% of participants mentioned passing time, 64% entertainment, and 60% relaxation (p.365). This entertainment came in the form of images, videos, games, and music (Whiting & Williams, 2013, p. 365).

Kahn (2016) found additional insights into the idea of entertainment that were previously not expressed in the research community in his study on YouTube contribution. He found that reading comments and liking/disliking content could also provided an important source of entertainment (p. 244). He also noted that this varied from the reasons for contributing comments in that a “typical YouTube user who has the information-seeking motive is likely to engage in participatory acts of liking or disliking videos, and commenting on them, [but] would not typically share videos or upload them” (Khan, 2016, p. 243). This mirrors the point above made by Pendry & Salvatore (2015) that users care less about the community itself, and more about what the user can get out of it (p. 216).

Content Sharing

As mentioned by Pendry & Salvatore (2015), the users are most interested in the transfer of information, which also includes sharing information (p. 216). Research has shown that information sharing, while an integral aspect of the community, can be done for both selfish and selfless reasons.

Attention. Attention in the form of rewards are mentioned prominently in the results of Jin, Li, Zhong, & Zhai's (2015) profile examination study. While this particular study did not interview real people (but rather examined profiles with a computer program) and cannot account for all behavior trends, the results of their study found some interesting observations on why users contribute knowledge to online communities. Jin et al. (2015) note that there is no monetary compensation in online forum contribution, so attention in the form of approval, status, and respect can act as a replacement reward (p. 847). Attention can be both positive and negative, which in the case of Jin et al.'s Q&A community study equates to giving and receiving feedback in the form of likes and comments (Jin et al., 2015, p. 847).

Reputation. The impact of attention can directly affect one's reputation, as noted by Jin et al. (2015) that "...others members' feedback will positively affect members' contribution behaviors" (p. 847), and that "...negative word of mouth from followers will greatly decrease one's reputation" (p. 847), which means that those who contribute want to help but also do not want their reputation to suffer. The opportunity cost for this interaction changes as users gain more followers, and contribute less content in order to preserve their good reputations (Jin et al., 2015, p. 847). In contrast, reputation can also be discussed in terms of blatant self promotion. Whiting and Williams (2013) found that many users like to share things like pictures, personal information, or to push a cause (for example a business) (p.336). This is content that benefits the

reputation of the user posting the content, rather than the community as a whole.

Altruistic Beliefs. While a majority of the research focuses on self-centered reasoning for forum contribution, the research found by Ma & Chan (2014) in their study of knowledge sharing and social media among college bound students found that altruistic people are more likely to be engaged in forums and contribute information (p. 56). The research from Ma & Chan (2014) supports previous research in reaching the conclusion that selfless behavior helps to end conflict and facilitates knowledge sharing and discussion, which is the basis for what makes online content sharing possible (p.56). Kahn (2015) mentions this idea as well, noting that “the information-giving motive proved to be a common predictor for all sorts of participatory acts on YouTube”, including likes, shares, comments, and posting videos (Khan, 2016, p. 243). While the user who is contributing through a voting system may get value out of an experience, the separate experience of producing feedback on a comment or producing content itself can help provide other users with important information to help fulfill their needs.

Social Learning. Social learning is the idea of learning through observation of an environment and its outcomes, rather than direct learning (for example, through reading a book) (Jin et al., 2015, p. 843). Jin et al. (2015) notes that members of an online community can learn from other members, and that “...other members’ knowledge-contribution behaviors reinforces members’ knowledge-contribution intentions” (p. 847). This indicates that the more users observe a community and the more they get out of that community, the more they will positively respond to the community and give back in return.

Identity Disclosure

While the research discussed in this paper covered both anonymous and identified

platforms, it is important to discuss the idea of choice in the matter of identity disclosure, and the impacts of that disclosure. A key takeaway of concept was discussed by Bronstein et al. (2016), who noted the choice to identify oneself was largely depends on the platform itself, rather than the needs of the user (p. 801).

There were multiple studies that discussed user identification as a positive element, noting that it lead to more contribution and engagement. Bronstein et al. (2016) found that the level of participation was generally higher when users were identified (p. 805). Jin et al. (2015) had a similar finding, reporting that people who “disclose more personal information are likely to maintain a long-term relationship with the community and consistently contribute content” (p. 847). Kahn (2016), adds to this idea by stating that users “upload video for self-status seeking, and social interaction...are more likely to do so with their real names” (p.244). This means that that lack of choice in disclosing their identity did not prevent users from participating in their online community, and that getting personal rewards and recognition can account for increased participation.

Part of this has to do with trust in both the platform and the community. Jin et al. (2015) found that “...people who disclose more personal information reflect a higher level of trust in the website” (p. 847). This was echoed by Krasnova et al. (2010), who found that users will disclose less if they find their privacy to be a threat (specifically more so from the platform itself than the users of the platform), and also noted that this risk of abuse is lower than the benefits of participating (p. 123). However, there is still a frequent threat of abuse, which Whittaker & Kowalski (2015) found can come from both peer to peer and unknown sources (20-21). While these remain a risk, certain platform controls like privacy settings, moderation, and identification

may help to limit this (Kahn, 2017, p. 244; Lowry et al., 2016, p. 980).

Discussion

Implications to HCI

The research points to a number of possible implications to HCI, many of which focus on the creation of new platforms and the expansion of existing platforms. This includes using the research on identification and rewards to build better experiences, while actively working to limit the negative aspects of interaction.

Building Communities. Given that identity disclosure is platform dependent and identification can help grow a community, making more platforms require the use of a user's real identity could help grow these platforms in the long run, and create stronger communities in terms of both user engagement and created content. Creating content and interactions that play off of the user's desire for self-recognition and a positive status will also help to increase the growth of a community. Adding elements like microinteractions (likes, comments, or ratings, for example) work in a similar way, providing an entertaining experience for those contributing. Aspects of positive reinforcement, like encouraging microcopy or awards for certain behaviors, can increase engagement and conversion. Combining all of these takeaways can help create a more positive and successful platform in general.

Outside Forums. The use of using one's real identity may not require person to person communication, and can come in the form of something like a general account or profile in a non-forum platform. Offering rewards, positive reinforcement, and fun interactions can help keep users motivated and engaged at their tasks, possibly without a social element. However, many platforms do offer the option to share things that may not generally be part of a social

platform to a social platform. For example, sharing the trip you just booked or sharing the completion of an online course. There is an opportunity to continue to bridge the gap between platforms, which can increase engagement where it might not have been possible before.

Preventing a Negative Experience. While the idea of identified behavior could potentially be a driving force behind a community, privacy and protection still need to be taken into account. Anonymous forums, or a feature that will allow for anonymous interaction will be helpful for people who have certain disabilities or need to breach some sort of comfort level to start interacting more and building their community. Not everyone will feel comfortable participating openly, especially considering the implications of negative behavior. With negative comments being common place in both identified and anonymous platforms, better moderation and increased privacy controls will be crucial to providing users with a safe environment to interact, which in return can drive forum building.

Limitations of These Studies

In doing research on the topic as a whole, it was clear that most studies involved social media or incredibly specific platforms and behaviors, and were somewhat limited study/user criteria. What follows is a further discussion of these limitations.

Methodological Limitations. While many of the studies discussed in this work used larger sample sizes and direct interview methods, other studies used a self-reporting questionnaire or an observational approach that involved using a computer program to examine profiles, which may have been even more prone to biases than those who went through a more direct interview or observation process. Additionally, some of these studies chose to gather feedback in terms of a rating scale, rather than direct user feedback. The rating of the scale itself

may be somewhat subjective, and may also result in user bias.

Analysis Limitations. One area that every study lacked was going more in-depth in what benefits the users received from their participation. For example, it would be helpful to look at rewards such as likes or upvotes and how different users experience that gratification. More in-depth research on not just the motivations and high level behaviors, but also the specifics of actions and resulting gratification would be useful to add more pinpointed insight to this field of study, which could be more directly applied to the field of HCI.

Platform Limitations. This paper examines a variety of resources to suggest that more platforms and user types should be examined to provide a better picture of the changing landscape of online communities. Multiple sources discussed social media channels, but these channels are rapidly changing in terms of popularity and feature set. It may be interesting to see how changes in political discourse have affected some of these studies, especially in reference to direct/indirect aggressive behavior online towards users or the frequency of use of these platforms. There is also a gap in non-identified, non-specific forums as well. Considering one of these, Reddit, has been one of the most visited sites on the internet in the last few years and has a wide variety of content and use cases, more research on the influences of these communities would add to the larger body of work (Top Sites in United States - Alexa).

Conclusion

This paper discusses research that explores the motivation behind online forum interaction, and a user's resulting behavior. Research shows that the main motivations include aspects of community building and content exchange. The specific behavior that results from these motivations was shown to be largely tied to the motivation itself and the platform being

used. It was largely seen that identification leads to more contribution, and thus more reward for participation, with the exception of stigmatized communities. The outcome of the examination of the resources discussed in this paper leads to the suggestion that more platforms and user types should be examined as the popularity of these platforms changes to provide a better picture of the changing landscape of online communities.

References

- Bronstein, J., Gazit, T., Perez, O., Bar-Ilan, J., & Aharony, N. (2016). An examination of the factors contributing to participation in online social platforms. *Aslib Journal of Information Management*, 68(6), 793–818. <https://doi.org/10.1108/AJIM-05-2016-0059>
- Jin, J., Li, Y., Zhong, X., & Zhai, L. (2015). Why users contribute knowledge to online communities: An empirical study of an online social Q&A community. *Information & Management*, 52(7), 840–849. <https://doi.org/10.1016/j.im.2015.07.005>
- Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*, 66, 236–247. <https://doi.org/10.1016/j.chb.2016.09.024>
- Krasnova, H., Spiekermann, S., Koroleva, K., & Hildebrand, T. (2010). Online social networks: why we disclose. *Journal of Information Technology*; Basingstoke, 25(2), 109–125. <http://dx.doi.org.ezproxy.depaul.edu/10.1057/jit.2010.6>
- Lowry, P. B., Zhang, J., Wang, C., & Siponen, M. (2016). Why Do Adults Engage in Cyberbullying on Social Media? An Integration of Online Disinhibition and Deindividuation Effects with the Social Structure and Social Learning Model. *Information Systems Research*, 27(4), 962–986. <https://doi.org/10.1287/isre.2016.0671>

- Ma, W. W. K., & Chan, A. (2014). Knowledge sharing and social media: Altruism, perceived online attachment motivation, and perceived online relationship commitment. *Computers in Human Behavior*, 39, 51–58. <https://doi.org/10.1016/j.chb.2014.06.015>
- Pendry, L. F., & Salvatore, J. (2015). Individual and social benefits of online discussion forums. *Computers in Human Behavior*, 50, 211–220. <https://doi.org/10.1016/j.chb.2015.03.067>
- Top Sites in United States - Alexa. (n.d.). Retrieved September 26, 2018, from <https://www.alexa.com/topsites/countries/US>
- Whiting, A., & Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative Market Research; Bradford*, 16(4), 362–369. <http://dx.doi.org.ezproxy.depaul.edu/10.1108/QMR-06-2013-0041>
- Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying Via Social Media. *Journal of School Violence*, 14(1), 11–29. <https://doi.org/10.1080/15388220.2014.949377>