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### SOCIAL PROCESSES AND TECHNOLOGY IN AN ONLINE COMMUNITY OF PRACTICES

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# **SOCIAL PROCESSES AND TECHNOLOGY IN AN ONLINE COMMUNITY OF PRACTICES**

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## **ABSTRACT**

What is the role of technology in an on-line community of practices ? How is the technology used and perceived in the construction of a community ? In this paper we will try to answer these questions by means of the study of a self-help community. We choose a community that has no off-line counterpart – in fact the topic of the community is a mental health care problem known as social anxiety disorder (or social phobia). A person affected by social phobia has great difficulty in attending ordinary social events, but the participation in the on-line community is not seen as a problem by the members. This very peculiar kind of on-line community allows us to study interaction mediated only by technological tools, such as a web site, a forum, a chat. We describe in the paper the various dimensions of the practices in use within the community, focusing in particular on the learning process undergone by new members when they enter the community.

## **KEYWORDS**

Virtual communities, communities of practice, self-help.

## **1. INTRODUCTION**

In the creation of a community of practices, a relevant role is played by the construction of a shared culture in the community context. This process entails negotiation, exchange and sharing of meanings between the members of the community and is aimed at the definition of a common interpretation of the community context. Our interest is to study this phenomenon in the framework of a community having only the online context, without any face-to-face setting.

We focus our analysis on a self-help community for people affected by the social anxiety disorder (or social phobia). This disease causes the avoidance of social situations; as a consequence, the online dimension has a relevant and peculiar role in the life the community members. Most of them never meet offline, even if they live in relatively close locations. This context permits to investigate an online experience that is both quite important (for the impact of the phobia on participants' life) and exclusive (for the lack of an offline counterpart of the community).

A relevant dimension in our analysis is the technological practice within the community. We want to understand the role of the technology in the formation of the community and in the current exchanges between members. We give special attention to the learning process by which a newcomer becomes a community member. The technologies studied in our research are used by the community members without any special attention; the skills needed to participate in the forum are not an issue for the community members. In this case, the technology has a larger impact on the interaction between the community members (Mantovani, 1996).

## **2. ON-LINE COMMUNITIES OF PRACTICE**

According to Fernback (1999) the concept of community has been traditionally used in conjunction with a physical place, a location to which the community is connected. Usually, in an on-line community there is no physical location connecting the members – the set of web pages, document repositories, mailing lists, forums and other communication tools can be seen as the counterpart of the physical space. More appropriately, Fernback (1999) underlines that the existence of an on-line community is defined by a shared meaning to which all members subscribe. The structure, location and function of a community are less or not at all relevant. The on-line community is defined by its members, more precisely by the meaning that the members give to the community itself (Cohen, 1985).

In this paper we will prefer the term “on-line community” rather than “virtual community”, stressing that this kind of community has the same level of existence of a “real community”. For the members of the community its reality is not at all in question – they strongly assert their participation in a real community.

The definitions of on-line and off-line communities share a lot of dimensions: a stable group of members, several communication media, a shared language, a set of roles and norms, and a set of rituals that define the community border (who is in and who is out of the community). In both cases, a community is socially constructed by its members (Rheingold, 2000).

In a community of practices, the learning process is tightly coupled with the practice. The cognitive process of learning is not separated by the practical activity of doing, both are situated activities, defined and influenced by the context and by the situation (Brown et al., 1989). To learn the use of the tools of a discipline it is necessary to understand and to be part of its culture. In a community of practices, this learning process is often done by means of an apprenticeship process, where the apprentice learn by trial and error and by looking at the work of the expert from a peripheral location (Lave and Wenger, 1991). From this protected position the apprentice can observe how the experts’ discourse and recognize the sense of expertise in the conversation.

The narrative dimension of the discourse is the main tool for the creation of the community culture, which is built and transmitted by means of stories (Orr, 1990). These stories explain the world to the community members and to the newcomers, attributing a meaning to the topics of interest for the community. In this way, the stories provide members with identity and belonging, building a shared culture. In an on-line community, the exchange between the members is mainly (exclusively for the community studied here) based on textual narrations. Through the narrations a shared vision of the world is built by means of a continuous negotiation of meanings between the community members.

According to (Wenger, 1998), social learning is defined in terms of competence and experience. The competence is a social and historical construct in the community of practice, defined in terms of practical skills. The individual experience is enhanced by the community, which in turn grows with the participants. Individuals form communities that share cultural practices as a result of their collective learning. Knowing becomes an act of belonging, the object of knowledge is used to define the individual identity with respect to the community.

## **3. SOCIAL ANXIETY DISORDER**

The medical definition of social anxiety disorder (or social phobia) is a strong and persistent fear of one or more social situation, in which a performance is required and the person is exposed to strangers or can be subject to others’ judgment. The fundamental aspect in the definition is that fear is strong and persistent: this aspect differentiate social phobia from shyness and can greatly influence the life of a person.

According to a specialized web site (<http://www.socialphobia.org/>), social anxiety is the third largest mental health care problem in the world today. Data indicates that over 7% of the U.S. population suffers from this disorder.

The symptoms of social phobia appear during or even before the social situation and are characterized by a high level of anxiety. It’s even possible to arrive to a complete avoidance of social situations that cause anxiety to the person. The symptoms can be physical, cognitive or behavioral. Physical symptoms include accelerate heartbeat, trembling, sickness, sweating, suffocation, blush, dizziness. Cognitive symptoms are characterized by negative thinking about others’ judgment, fear of being humiliated, fear of feeling embarrassed, and fear of being evaluated negatively. Differently from paranoid subjects, a person affected by

social phobia recognizes these fears as irrational and dysfunctional. The main manifestation of behavioral symptoms is the absence of action, which could block utterance, motion and even memory. Social situations are avoided or hastily abandoned. In other cases, the person remains physically present in the social situation but disengages his or her mental presence (Marshall, 1995).

Social phobia generally develops during adolescence, sometime after a traumatic social episode but not necessarily. Several people affected by this disease don't recall a specific episode.

The treatment of social phobia is usually a psychotherapy to which can be coupled the use of appropriate drugs. The participation in self-help groups is generally advisable as an additional help. A self-help group is a group created to give reciprocal assistance between people sharing a common problem. The first group of this kind was the Alcoholics Anonymous (see <http://www.alcoholics-anonymous.org/>) but the range of application of this methodology is continuously growing.

Participants in a self-help group share their common experiences, the problems encountered and the possible ways to face them. When shared, an individual problem is taken in charge by the whole group. An important component of the experience in a self-help group is the emotional support that participants reciprocally give and receive: the attempt to help someone else became also a way to reason on one's own problems. In a self-help group the relationship is between peer and the communication is horizontal, with reciprocal respect. In some cases a therapist or a professional facilitator participates to the self-help group, acting as a moderator and a resource for information.

In the AFS community there is no therapist or facilitator, the group was started by a person affected by social phobia and the forum has only moderators taking care of usual netiquette rules. For a limited period of time, the forum had a participant with a sort of intermediate role between the participant and the therapist. A person affected by social phobia who recently graduated in psychology joined the group. Her advice were in great consideration by the other participants but at the same time the fact that she was also suffering of social phobia maintained the peer-to-peer relationship that would not be possible with a therapist. Her view was more precise and technical, but still with a perspective from inside the community.

## 4. RESEARCH METHODOLOGY

In order to describe the phenomena observed, a researcher has to choose between a quantitative or a qualitative approach. In the former, the goal is to search for regularities and structures, by means of mathematical and statistical methods. In this case, the researcher is an external observer, similar to the situation with an experiment in classical physics. The qualitative approach, on the other hand, has the goal of understanding the observed phenomena. The object is often a single case, rather than a statistically valid sample or population. The two approaches can be combined (Sudweeks and Simoff., 1999), using them in different phases of the research work.

In our research we followed a qualitative approach, which we believe more appropriate for the analysis of on-line phenomena. In the web, the language and the form of communication are continuously changing and this makes it difficult to reproduce an observation and to use statistical methods (Sudweeks and Simoff., 1999).

Given the specific topic of the community studied in this work, a special attention was given to the protection of anonymity of the participants. The real and on-line identities were masked in all the research material. The research was conducted by analyzing all the messages archived in the forum and by participatory observation of the forum itself. The analysis was done without the use of automatic tools, privileging a careful reading of all the 5500 messages archived in the forum, in order to catch all the possible clues.

Beside this activity, a participatory observation was performed. After a preliminary period of observation, one of the authors did register as a forum member, and participated in the forum activities for two months. The role, the goal, and the identity of the researcher was completely explicit, in order to guarantee the ethical value of the research. The participants were highly collaborative and had no issue with the research being done. Finally, several participants were interviewed and their responses were analyzed (see next paragraph).

## 5. THE COMMUNITY

The community studied in this paper is an on-line community for self-help, targeted to people affected by social phobia. The community is centered on an on-line forum, the AFS forum created and managed by a person affected by social phobia. The forum is used by people trying to face this problem as an information and meeting point.

The characteristics of social phobia are extreme shyness, fear of social contexts, sense of solitude and even depression. The intensity of the symptoms can vary from a simple embarrassment to a serious mental health problem. The main reason for starting the forum was the circulation of information, not for the doctors or the therapists but for people affected by the disease and their relatives. In other words, this is the center of a self-help community (Preece, 1999)

Prior to the current forum, there were two other attempts, truncated because of technical problems. The first forum had a limitation in the number of daily users, the second was extremely slow. Almost two thirds of the 150 users of the first forum quit the forum because of the slowness of the second one.

The forum is divided in three parts. The first is a public area for discussion and information on social phobia. This is the part where new members start interacting with the community. The second area, accessible to registered members only, is for self-help. Participants share their problems and anxieties, give advice to each other and describe their experiences. In order to become a registered member, a person has only to post a message in the public forum – the first act is then a self-presentation of the newcomer. The third area is for other topics, from jokes to discussions about books or other issues not strictly related to social phobia.

Almost all of the forum participants are affected by social phobia. They arrived to the AFS forum after doing network search aimed at finding other people sharing similar problems and experiences. Apparently (according to the self-presentations of the participants) there is no geographical, social or gender dominance. The average (declared) age is slightly less than 30 years old. (Note: these considerations are based only on the profiles provided in the forum by the participants.) Even from the first observations, it was apparent that the participants have a strong degree of emphatic cohesion. Newcomers are warmly welcomed, participants try to immediately respond to question or provide advice. There are also strong reactions when a member lefted the forum, several participants wanted to remark the important of the forum for them and for the community.

In the AFS community, the participants use almost exclusively their on-line identity, reducing to a minimum the use of other media. Direct communication is done with email rather than with telephone, and face to face encounters even if planned, did not happen. This situation is different from other on-line communities, where meeting between participants is part of the community life. In the case of AFS, the participants have only their on-line identity to share. In this situation, the individuals tend to continuously reinforce their stereotypical identities, confirming the expectations of other members (Berger and Luckmann, 1966; Walther, 1996).

In the reminder of this part, we describe the result of the analysis according to four dimensions: membership, social practices, cognitive practices, and communication practices.

### 5.1 Membership and Shared Identity

When asked of they feel part of a virtual community, participants gave positive responses. To remark the negative or weakening meaning attached to the term virtual, one participant underlined that he was “part of a real community”. Again, to the similar question (later in the interview) if they were part of a community, someone underlined that she “prefer to define AFS as a virtual community”. The only negative answer to these questions was from a participant feeling that AFS is “too dispersed to be defined as a community” – the person responding is not yet positioning him or herself inside the community. Most participants perceive a difference between a virtual community and a non-virtual one but there is also a relevant group that does not differentiate these two forms, focusing only on the community aspect.

Beside the sense of belonging to the community, there are several instances of temporary subgroups formed in a thread of discussion in the forum. These subgroups are not completely stable but tend to reappear when facing similar topics. The subgroups are a common phenomenon in online forums; in the AFS case, they tend to aggregate people sharing similar manifestations and symptoms of social phobia or sharing the same therapeutic approach. In other forums, typical drivers for subgroup aggregation are: age, gender, personality, political ideas, etc. These dimensions are not relevant in the AFS community: participants

aggregate or differentiate themselves according to their relationship to social phobia, neglecting other common dimensions.

In order to create a sense of belonging to the AFS community, the first period of the forum plays a relevant role. The forum was not reserved to social phobia but open to other issues (such as depression or panic attacks). With time, the participants affected by social phobia started to share information, experiences and also emotions, discovering that they were a group with a lot to share. Some started to post messages annoyed with off-topic threads, underlining the focus of the forum. From this moment, the community started to see itself as an entity, with a shared territory to defend from others. This “war metaphor” underlines the ritual moment that marked the birth of the community.

## 5.2 Social and Empathic Practices

An important dimension of our analysis is the social system of learning of the practices characterizing the community. The first research question to pose is which competences define a member of the AFS community as such. In this case, social and empathic competences have a central role. Communities similar to AFS are generally defined as “empathic communities” (Preece, 1998) to underline the relevance of mutual help and understanding. When approaching this kind of community, participants are not only looking for information, but also for an emotional support, a mutual understanding that can be given only by someone sharing the same experience.

To identify the competences that characterize AFS participants, our approach was to understand the differences between long term participants and newcomers. The latter learn how to be part of the community by observing the events from a “lateral position” (Lave and Wenger, 1991).

When a new member appears, all the participants seeing the first message of the newcomer reply with warm welcome messages. Newcomers often describe their interest in the AFS forum in terms of getting information. In these cases, besides responding with the information requested, long term members add warm invitation to remain member and to participate in the forum. They recognize in this kind of request a form of probing. Even if there is not a precise “welcome ritual” there is certainly a “welcome practice”, consisting in being warm, empathic, and in making the newcomer feel at home, trying to understand, without pushing, his or her expectations and situation. Also in the case of people leaving the forum there is a similar attempt to maintain the cohesion of the community, inviting the leaving person to remain.

Strong online arguments (flaming) are extremely rare in the AFS forum. This is another indication of the empathic climate of reciprocal understanding. All the participants are very careful in respecting each other opinions and ideas. Along the forum life, moderators’ interventions were only two, giving friendly advice that was immediately understood. The only relevant issue was related to the initial definition of the topics of the forum, described in the previous paragraph. While flaming would be a practice contrasting too much with the spirit of a self-help community, participants crisply differentiate between inside and outside, between social phobic and “normal” people or people affected by other psychological problems.

Empathic practices are an important part of the competences differentiating long term members from newcomers – this is the central issue in participants’ responses to questions related to the way new members are welcomed. When a recent member starts to welcome newcomers with a similar attitude and with similar advice as the other members he or she tends to stop presenting him or herself as a new member.

## 5.3 Knowledge and Cognitive Practices

The AFS community, have built across time both an identity and an external image. In addition, it has also developed a set of symbols representing the way participants perceive social phobia and an interpretation of its context. In this way the symbolic context provides the scheme for interpreting the world, thus guiding the practices of the participants. At the same time, the practices of the participants contribute to the continuous construction of the symbolic context – the identity of the community. This two-way process is described in the model presented in (Mantovani, 1996).

The participants bring in the community all their experiences and knowledge, which are then filtered and digested by the community itself, in order to modify the shared interpretations and symbols on social phobia. The practices of the participants are thus influenced by the cognitive schemas provided by the community, in order to interpret the world. Participants describe a “before AFS” and an “after AFS” situations, remarking

the importance of the shared schemas. Some write that they “read messages posted by others in order to better know themselves”.

The first and foremost cognitive practice of participants in the AFS community is the performative naming act of recognizing their disease by the act of giving it a name: social phobia. Because of their problem, most participants would not show or describe their condition in a face-to-face encounter, while the encounter with AFS community members is what helps them naming their disease, thus circumscribing and defining it.

Another relevant cognitive dimension is in relationship to the therapy. According to the participants, the approach giving better results is a combination of cognitive and behavioral therapies. The cognitive part brings the subject to reason on his or her cognitive process, taking to a distorted vision of his or her social presence. The behavioral part defines a set of actions and exercises designed to gradually expose the subject to progressively difficult social situation, with the goal of removing or reducing the phobia.

In the first days of the AFS forum, there was an attempt to structure the communication according to rules that would follow the one for off-line self-help groups. This attempt was not successful, the participants gradually moved back to a spontaneous organization of the communication, privileging the exchange of information, experiences, progresses, etc, without following a precise protocol. A similar attempt to structure a weekly chat meeting ended up in maintaining the habit of the weekly meeting but without following a precise rule (such as, discussing a unique and different theme each week).

A very peculiar practice of self-help is what the participants define as “cell therapy” (cell as in cellular phone). When a member of the community foresees a difficult situation, ask for the support from the community members. They will send short messages to his or her cellular phone, providing the person with the certainty that the community is there, supporting him or her in the difficult situation. This kind of interaction seems especially appropriate for the social phobic, which would have difficulties in having a direct encouragement, even by mean of a phone conversation (not to mention a face-to-face conversation).

A similar situation appears from the responses given by the participants when asked if the participation in the forum can be seen as a form of therapy or if a face-to-face community would have a similar impact. Most recognize a therapeutic role to the forum and they also prefer an online self-help to a more traditional face-to-face group. The social phobia plays a relevant role in this case: the avoidance of direct contact, the possibility of carefully preparing a communication, the irrelevance of symptoms like stammering or blushing, all factors contribute to create a communication context which would be impossible to achieve in a face-to-face encounter.

### 5.3 Technical and Communication Practices

In this paragraph, we describe the practices developed within the community in relationship to the use of technology rather than the ones previously described, related to the community focus. These could be described as meta-practices, being focused on facilitating sharing of community practices.

In order to understand how the technology is perceived and used by the members, the interviews touched topics such as the use of internet before and after the affiliation to the AFS forum. The forum participants are split in two groups. The first group is composed by people that were already using the internet before finding the AFS forum, for them this event marked the discovery that the web could offer resources helping with their situation. The second group is composed by members that started to use the web after hearing about the forum. The former are likely to offer help and technical guidance to the latter when they have technical difficulties.

Almost none of the forum participants are expert computer user – there are several cases of misuse or partial use of the technology. This is often related to the wide range of features offered by the software used. In some cases, the partial use of the tool features shows the need of greater flexibility in the system, with a phenomenon similar to what is usually described as technology drift (Ciborra, 1996). Several participants prefer to start new threads with the nickname of the participant to which they mainly address the communication. This practice is in contrast to the usual habit of giving to a thread a title related to the topic, but seems to be rather appropriate for the self-help dimension of the community.

When asked what are the plus or minuses of internet interactions, members replies underline the benefit of a communication without the social face-to-face interaction that would be difficult for their social phobia. As one member wrote “via internet there is no social phobia”. They also remark the contrasting aspects of being able to have a greater control of the communication (for the asynchronous nature of the forum) and, on the

other hand, of feeling more free and at ease. The latter aspect is, in this case, in contrast to the rigid and difficult communication in face-to-face situations, where social phobia appears.

Most members use the forum and the other available communication tools (group or private chat, email, phone) appropriately and in a similar way. The forum (the most used tool) is used for the exchange of information or when the group dimension is relevant, the chat when there is the need to know each other better, the email when they look for a personal communication. This is a common practice in online communities; the process of becoming member for the newcomers includes the competent usage of the different communication tools.

Direct telephone communication is used in situation similar to private chat; it is a way to get a better knowledge of other participants. Nevertheless it is not easy to have such a communication for two persons affected by social phobia. Some symptoms of the phobia appear also in this situation. Even more difficult is to have face-to-face meetings between the participants. This is a common practice in several on-line communities, but for the socio phobic while there were several attempts to have a group meeting; only small meeting of two or three people did actually happened.

The forum participants pay little attention to the graphical appearance of the forum (which is rather simple and essential). They all have a positive attitude towards the use of "emoticons", and they are rarely abused in the forum. A relevant phenomenon is the transformation of the language. In the forum, several terms related to social phobia are abbreviated with acronyms. While this phenomenon certainly creates a barrier for the new participants, it is a manifestation of the shared symbolic universe of the community members. They have a sort of secret language accessible only after being part of the community.

Anonymity has a great importance in the online life of the members of AFS forum. Rather than being a form of masquerading or disguise, as in other online experiences, the members of this community perceive the use of nicknames as a form of protection. They desire to control both the communication of their problems to people they meet in their ordinary life, and also the level of interaction with other members. The capability of controlling how and how much other members know of their identity is a relevant part of the comfort perceived by community members in their online encounters. The fact that anonymity is not a way to create a false identity is reflected by the answers of the participants, by the fact they several of them have reached a close level of interaction with a few other members, and also by the perceived influence of the community on their offline life.

## 6. CONCLUSIONS

In this paper we discussed the shared culture of an online community of practices. We investigated how in such a community practices are created and transmitted by mean of a social learning process. The case of the AFS community is characterized by the almost complete absence of offline interaction between the community members (there were only a few rare meeting of two or three members at a time). Several dimensions of the community's practices were analyzed in the paper.

The AFS community has only the online dimension, but they nevertheless created and still maintain a set of empathic practices for self-help that are peculiar to their community. This phenomenon is even more evident with respect to meta-practices, related to the use of the technology. The forum structure and practices were silently adapted to better suite the community needs (e.g. the naming of threads).

The learning process during which a newcomer became a member, recognized as such by self and others, is a situated process, taking part in the context of the community itself. Practices are transmitted in-use; new members learn their use by observing others' messages and the adjustment made to their own first attempts.

Our future research plans include the observation of the same community after a period of time, to confirm the results or to observe the modification in the community. We also plan to analyze another community, to better identify the peculiarities of the AFS community.

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