Learning Online: 
The Role of Attitudes Towards Online Communication

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Abstract – In educating students to professionally deal with remote collaboration, educators are faced with attitudinal structures – both their own and their students – with might have an influence on their actual online behavior. In an exploratory factor analysis three factors which represent different attitudes found towards online communication were identified. In this paper these three dimensions are presented and future research based on these findings is outlined.

Keywords: attitudes, factor analysis, online collaboration, computer-mediated communication

1 Introduction

Attitudes towards online communication can influence the approach a person takes towards working and learning online. For educators, this is relevant from several perspectives: (1) most learning today involves some extent of online communication, (2) preparing the students to effectively communicate online is a key competence students have to acquire, (3) students' attitudes might be homogeneous or they might differ from one another in their approaches and this is relevant for the approach taking to teaching them, (4) teachers' own attitudes need to be reflected and might be similar or dissimilar to their students' attitudes.

Thus researching the attitudinal structure people have towards online communication can help to improve learning and preparing students for communicating in their future work environment. Yet only few studies have focused on attitudes towards online communication and learning (Hammoud, Love & Brinkman, 2008; Korkmaz, 2012; Ku, Tseng & Akarasriworn, 2013). One reason to consider attitudes is that although the relationship between attitudes and actions is difficult, there is a connection and attitudes and resulting actions may lead to self-fulfilling prophecies (cf. Walther & Bazarova, 2007) – as a result one could argue that in understanding choice of media, mode of communication, preferences in collaboration platforms etc. attitudes should be taken into consideration.

Attitudes towards online communication reflect the approaches taken by scientific theories to a certain extend (Götz & Marsden, 2010). In an exploratory factor analysis (Marsden, 2013) three different approaches were identified based on Walther and Parks (2002): The first factor represents a focus on deficits of online communication, the second one a focus on social cues in online communication, and the third one a focus on the hyperpersonal options of online communication.

2 Attitudinal Structure Regarding Online Communication

The factors identified as dimensions of attitudes towards online communication (Marsden, 2013) can be described as follows:

Deficit Approach

People who take this approach focus on deficits of online communication and the necessity to make the right choice of media. The loss of (social) information is considered crucial and face to face has a decisive lead over online communication that can not be replicated. Thus it is important to choose an appropriate mode of communication for the task at hand and watch out for different things online and face to face.

Looking at scientific theories which are based on this approach on finds the notion that there has to be a match between information richness and media richness (Daft &
The basic assumption is that people choose a medium according to the cues they need. Some types of messages might be conveyed more efficiently in one medium than in another – thus it is important to match the message and the medium. A cue system or bandwidth is taken as a causal property: As bandwidth gets lower, certain aspects of communication are assumed to change. These differences include a decline in civility, coordination, empathy, and friendliness. There is assumed to be an optimal match between the message equivocality or uncertainty and the chosen media such that efficiency and effectiveness is optimal.

**Social Cues Approach**

Individuals taking this approach focus on relationships to others. The basic assumption is that – online or offline – people will find appropriate ways to socialize, and that online communication offers many options to build up positive relationships with others – the idea that communication via mail or online has many disadvantages is rejected.

Scientific theories based on this approach focus on the fact that online communication brings in new cues which are not available in face to face communication – thus offering more or other ways to communicate. For example, communicators can exchange social information through timing (e.g. night versus day time) or style (spelling, signature, emoticons etc.) of verbal messages online. This line of research has shown that the absence of certain cues can enhance communication arguing that cues present in face to face interaction might actually have negative effects: Physical appearance can lead to the attribution of a multitude of qualities via the halo effect, markers of taste, age, habitus, signs of out-group-membership etc can lead to a biased perception. Thus the absence of cues in online communication can, under certain circumstances, forge stronger group identities than face to face interaction (Spears and Lea, 1992, 1994). Based on the theories of social identity and self-categorization (e.g., Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) individuals are conceptualized to have multiple layers of self that become relevant depending on which social identity is salient. When personal identities are salient, the person behaves according to the norms, beliefs and standards which correspond to his or her unique identity. When social identities are salient, the behavior is based on the norms of the group with which one is identified. This process is enhanced by online communication that lacks multimedia cues and renders the partners visually anonymous: Under conditions of visual anonymity, people act in ways more normative to the salient group (Postmes, Spears, & Lea, 1998; Spears & Lea, 1992). When pictures or videos are added, these effects diminish: Individuating information conveyed through physical appearance leads to the individuals being evaluated independently and with less group bias (Lea & Spears, 1995; Lea, Spears, & de Groot, 2001). Based on this approach, online communication makes group memberships and social identity more salient and promotes greater group identification.

**Cues Bent and Twisted Approach**

People with this approach hold attitudes which focus on the new chances and advantages of online communication: Face to face communication is considered as something that can actually be negative and online communication is taken to offer possibilities for communication which are even better than face to face communication and can actually improve communication.

A related scientific theory to this approach is Walther's (1996) hyperpersonal theory. It argues that online communication can be even more personal that face to face communication ("hyperpersonal"), because in an asynchronous online setting, sender, receiver, channel, and feedback can work together to promote more socially desirable levels of interaction than face to face communication (Walther, 1996): In online communication, individualizing cues such as appearance, which are necessarily available in face to face interaction are not readily available. The cues available can be manipulated by the sender to customize his or her self-presentation. In asynchronous interactions, the sender can mindfully compose the message, edit and review the content before sending it to the receiver. The focus of all cognitive resources can be on the message construction and the cognitive load can be divided over a longer time than in face to face communication. In combination with these identity optimizing effects, the receiver tends to formulate idealized perceptions of the sender, interpreting the information available in terms of a common identity with the sender. Thus a positive feedback loop can lead to an interaction which is more positive than a face to face interaction might have been.

**3 Future Research**

Based on the finding that these different approaches have been identified as dimensions in an exploratory factor analysis future research should a.) confirm the attitudinal structure and b.) study the practical implications this attitudes have for learning and working online. Therefore, the development of a scale is planned which allows for an objective, valid, and reliable measure of the three approaches. Then hypotheses regarding affective, cognitive and behavioral components of these attitudes will be derived and tested.

**4 References**


