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# **The influence of interaction goal on sex category salience in text based computer mediated communication**

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### **Abstract**

This project examines how the interaction goal influences the salience of sex category and the uncertainty reduction process during text based computer-mediated communication (CMC). A between-subjects experiment was conducted with 132 participants randomly assigned to either a social or task-oriented goal for a text-based computer mediated interaction. Participants with a social goal reported that their partners' sex category was more salient and relevant than those with a task goal. Further, contrary to what might be predicted by Media Richness, those with a social goal reported their partners to be more credible and they reported more communication satisfaction, and less uncertainty than those with a task goal. These results show that people can and do alter their communication behaviors to fulfill the goals of their interactions in CMC. The results also partially support the utopian promise and confirm the continued centrality of the uncertainty reduction process for interactions in computer mediated communication. Implications of these results for the utopian predictions of CMC and for several CMC theories are discussed.

It is possible that the utopian promise of computer mediated communication (CMC) has been partially realized, at least in some contexts. The utopian promise of CMC originated with claims from cyber-enthusiasts that when the offline body was not visible, as in text based CMC, the social categories (gender, race) would neither be salient nor important. This, they predicted, would mean that CMC could provide a venue for equality of participation where people would be judged by the quality of their comments and not by their gender, race, or social status. (Hert, 1997; Lea and Spears 1992; Rice and Love 1987; Sproull & Kiesler, 1986; Siegel, Dubrovsky, Kiesler, & McGuier,

1986). In this way, the utopian promise predicted a positive influence of interacting with cue lean media (Walther, 1996).

In what may be interpreted to contradict these utopian predictions, attributions of gender continue to be made in CMC, whether or not the body is visible (Spender, 1996; Witmer and Katzman, 1998; Yates, 1997). Content analyses of social interactions in CMC reveal that sex category is among the first questions people ask in interactions, and further, social classification schemes such as sex category have held both their salience and their meaning (Dietrich, 1997; Spender, 1996; Skitka and Maslach, 1996; Turkle, 1995; Waskul, and Douglass, 1997).

Based on these studies, one might be tempted to conclude that the question of the utopian promise has not been realized and that sex category has retained its salience online. However, the question of relative salience across contexts has not been addressed. While it might always be relevant, or of interest, we argue that it is likely more to influence the interaction in some contexts than in others and this is likely true regardless of whether the interaction is face to face, or online. We predict that the goals of the interaction will strongly influence the salience of sex category and that sex category will be more salient in social interactions than in task based interactions.

If this is true, it would provide support for the utopian promise. Essentially, if sex category is not as salient in task interactions, this could be taken to mean that people perceive it to be less important in that context. This would imply that people are focusing more attention on the content and quality of their partner's contribution to the interaction than on their sex category when they are focusing on completing a task with that person. With that in mind, this project examines the extent to which the goal of the interaction (task or social) influences the salience of sex category, and feelings of uncertainty, credibility and communication satisfaction following a synchronous text based interaction.

### **Media Richness and the influence of goals on interactions in CMC.**

Initially, CMC researchers predicted that media without traditional nonverbal cues, such as voice or eye gaze, called 'lean' media, would always provide less satisfying interactions than 'rich' media (see for discussion, Barnes, 2003; Walter, 1996). Media richness theory is an efficiency theory, which argues that the best way to select a medium is to match the media cues and the goals of interaction. This perspective generally assumed that lean media, also known as 'cues-filtered-out' media, would provide 'less rich' interactions (Siegel et al., 1986; Kayany, Wotring & Forrest, 1996). Essentially, followers of media richness theory argued that tasks requiring more coordination, consensus, or discussions of beliefs would require more cues (audio, pictures, video) and be better suited for rich media, while tasks that were more routine or structured would be best suited for lean media (Rice and Love 1987; Straus & McGrath, 1994; Savicki, Kelley, & Lingenfelter, 1996; Shirani, Tafti, & Affisco, 1999).

Following the media richness paradigm, researchers have examined the influence of the interaction goal, or type of task, on performance using a variety of media systems (Straus & McGrath, 1994; Savicki et. al., 1996; Shirani et. al., 1999; Murthy & Kerr, 2003). Many of these studies rely on McGrath's (1984) typology, which classified tasks into categories based on the amount of coordination they require. According to McGrath's (1984) typology, judgment tasks (problems with a subjective solution) require more coordination than intellectual tasks (problems with a known solution), which require more coordination than creative tasks (information sharing). Also, tasks that are ill structured or ambiguous would require more coordination between the group members and would be best suited for a rich media with more cues. Structured tasks, on the other hand would not need as much coordination, which would make them more appropriate for lean media (Shirani et. al., 1999).

While there has been a lot of research done in this area, much of it has focused on the comparison of media to face to face interactions in workplace contexts. Also, as Straus and McGrath (1994) argued, most of the work in this domain has been atheoretical and difficult to integrate conceptually. Few media richness advocates even considered social goals and McGrath's typology does not include them. Kayany, et al., (1996) projected that rich media were more likely to sustain social goals and relational communication, whereas lean media would be more appropriate for routing unambiguous communication tasks.

These predictions have influenced researchers and designers of these systems, but they have not influenced how people used these systems. For example, people generally choose email, an asynchronous text based system that would be categorized among the leanest of media, for social interactions (Tidwell & Walther, 2002) and the Pew Internet and American life project reported that the most popular usage of computers and the Internet is email for social interactions (Madden, 2004). In addition, people are satisfied with interactions that are mediated by lean media, such as text based systems.

Walther (1996) went so far as to argue that interactions mediated by cue lean media could be more engaging or 'hyperpersonal' because they allow people to better control the information others have about them. Mediated interactions are different from non-mediated, face to face interactions, and one medium will provide a different type of connection and a different experience from another but the characteristics of media do not predict outcome success (Nowak, Watt & Walther, 2005).

All communication interactions are performed to reach a goal of some type; whether that goal is stated and specific, as with most tasks, or unstated and ambiguous, as is the case in social interactions). One cannot fully understand or what people need for a successful interaction, without considering the goal of the interaction (Straus & McGrath, 1994). The next section considers the

uncertainty reduction process and how people adapt their communication behaviors to fit both their interaction goals and the features of the medium they are using during an interaction.

### **Making attributions of others online: adapting uncertainty reduction behaviors**

Uncertainty reduction theory (URT) argues that people's primary goal in any interaction is to reduce uncertainty about others. When uncertainty is reduced, people feel more confident in their ability to both predict their interaction partners' future behavior and their understanding of motives for current or past behavior (Berger & Calabrese 1975). URT was designed to apply to strangers who were meeting face to face and it generally assumes that people's goals are always social --at least to some extent. In essence, according to this perspective, whenever two people interact they will work to reduce interpersonal uncertainty regardless of the overall goal of the interaction. In this way, all information that is exchanged can be used to establish common ground and move the interaction and relationship forward (Berger & Calabrese, 1975).

URT argues that people use any and all information provided during the interaction to reduce their uncertainty about their interaction partner (Berger & Calabrese, 1975; Bruner 1957). It is also important to note that uncertainty is reduced not by a sum total of information, or by pure volume, but by the perceived quality and usefulness of the information a person receives about the other (Berger & Calabrese, 1975; Clatterbuck, 1979). Essentially, only information that someone perceives to be useful will increase their confidence in their ability to make attributions of their interaction partner, which is why the reduction of uncertainty is frequently discussed and measured in terms of attributional confidence (Clatterbuck's 1979).

The process of reducing uncertainty has continued in CMC where URT has been shown to maintain its predictive power (Ramerez, Walther, Burgoon, & Sunnafrank, 2002; Tidwell & Walther, 2002; Nowak, 2004). Uncertainty is reduced when a person feels they have enough information to make judgments relevant to the context of the interaction. As El-Shinnawy and Markus (1997)

explained, "To reduce uncertainty, communication media need to bridge the gap between the amount of information already possessed and that required to perform the task" (p. 445-6). Therefore, providing information that would in fact help predict the future behavior of the other does not necessarily reduce uncertainty, or increase attributional confidence.

People have shown an ability to adapt their communication strategies to utilize the characteristics of any media to complete their interaction goals, and lean media can facilitate feelings of closeness and connection (Walther 1996). However, adapting behaviors to some media require more time and effort than others (Palmer, 1995; Postmes, Spears, & Lea, 2000; Walther & Burgoon, 1992; Nowak, Watt, Walther, 2005). Moving interactions online has not altered the type of information people want about others, only how they are connected to each other, and how they get the information (Jones, 1997).

#### *Sex categorization and reducing uncertainty online*

Assigning someone to a sex category will be more difficult and take more time in a computer mediated interaction than in a face to face interaction, as is true with getting to know others more generally (Walther & Burgoon, 1992). This likely means that people have to be more selective in the types of information they pursue in cue lean environments. Because they cannot so easily get all the information they might wish to have, they can only attend to the most important information, or the information they perceive as most relevant and useful in completing their interaction and the relevance of certain types of information will likely vary with the goals of the interaction.

In face to face interactions, information about the primitive categories strongly influences the uncertainty reduction process and people believe it provides useful information about others. Further, information about category membership is obtained by visible information related to the physical body, and processed easily with little effort or conscious thought or effort. In fact, Hamilton and Sherman (1994) went so far as to argue that in face to face interactions, it is "nearly

impossible” not to notice a person’s membership in each of the primitive categories, including sex category.

Considering the mental salience and influence of sex category on the person perception process in face to face interactions, it seems unlikely that mediating an interaction would make it irrelevant. Kendall (2002) argued, “people who choose to enter online social spaces do not leave their offline world behind when they do so, but rather begin a process of weaving online communications and activities into their existing offline lives” (p. 16). If anything, uncertainty may be higher in CMC than face to face interactions, which would make it more likely that people would continue to base attributions of others on categories that are familiar and have proven useful in traditional interactions, such as sex category. Some have argued that making attributions of sex category in CMC is the human's way of bringing things they know into a new and uncertain situation, or to ground or stabilize the unfamiliar environment (Clark 1995; Spender 1996).

Essentially, sex category may always be a little salient because of people’s experiences in interactions, where primitive category membership of others (race or ethnicity, gender, age group, and social class) was perceived to provide useful information. Consistent with this, most people have continued to engage in reducing uncertainty during the person perception process and to assign others to a sex category in CMC (Cherny, 1994; Herring, 1994; Herring, 2000), though they are generally inaccurate and some individuals have reported that their partner’s sex category was unimportant (Collins-Jarvis, 1995; Cornetto & Nowak, 2006; Nowak, 2003). In light of research showing that gender has maintained perceived importance in cyberspace for a majority of users in at least some contexts, many have discounted the utopian promise (Clark, 1995; Yates, 1997), but we argue it is premature to discount it completely.

People have adapted to meet the features of lean media and use different types of information online to make attributions of gender and sex. In CMC, sex category assignment

cannot be related to biological functions, or visible physical characteristics, but people still assign others to category membership (Lipton, 1996). Everything from self reports (Featherstone & Burrows, 1995; Spender, 1996; Yates, 1997) to usernames and behavioral information such as people's speaking style, the topics they discuss, phrasing choices and 'signatures' at the end of messages (Cherny, 1994; Herring, 1994; 2000; Jones, 1997) have been used as "gender markers in CMC" (Witmer and Katzman 1997, p. 3). However, as noted above, adaptation requires more effort as in the case of making sex category assignment.

Cues that signal sex category are often believed to function as cues to social identity and we predict that the relevance of social identity is determined by the context of the interaction. At the same time, it is likely that the goal of the interaction (whether mediated or not) will influence perceived relevance of certain types of information. For example, a person's sex category may be perceived as useful to one person in one context, but less useful or unimportant to another person or in another context. It is overly simplistic to think that sex category is either salient or not. The salience and perceived relevance of sex category is likely to be relative, not dichotomous, in that it may be highly salient or less salient, but it will never be completely irrelevant. It is also highly likely that sex category salience varies by individual and context. The question here is the extent to which sex category retains the same level of perceived importance and relevance to reducing uncertainty in a task based interaction as it does in a social interaction.

### **Interaction Goal will influence Sex Category Salience**

People always engage in reducing uncertainty to some extent, though the relevance of some information may not be the same across individuals and contexts. The importance of different types of information, such as sex category, or the importance of reducing interpersonal uncertainty more generally, is likely to vary more by context and individual than it is to vary with the features of the medium, though the medium may influence it to some extent. Also, some types of information may

be easier to figure out in some contexts than in others. This is true regardless of whether the interaction takes place face to face, or through mediated channels.

There has been some research examining the relationship between context, or goal of interaction and satisfaction and success with a medium, but little focus on how that goal influences the salience of sex category, or the extent to which people continue to reduce interpersonal uncertainty about others in task based interactions. McGrath (1984) and supporters of Media Richness Theory (Daft & Lengel, 1986; Rice and Love 1987) argued that the level of coordination required for a task influences the appropriate medium for successful completion of a task. However, these researchers have largely focused on varying cues, and comparing different types of task based interactions and did not include social interaction goals which are likely to influence the salience, and relevance, of information, particularly social information, such as sex category.

Given the extra effort required to assign a partner to a sex category in cue lean media, people would need to feel this category assignment was worth the extra effort and possible in the time they have allocated to complete the task. People's focus on completing a task in the time provided in a text based interaction would certainly impact (even if by removing part of the conversation time used for the task) the amount and type of information they can get to reduce uncertainty about others.

While getting to know how someone does a task is information about them, this information might not be perceived as valuable in knowing that person as a social human being. Essentially, people who are working to complete a task might not be able to exchange as much information that might be relevant to reducing interpersonal uncertainty as those engaged in a social goal, which might affect their ability to engage in the process of assigning them to sex category. For example, it may be more difficult to work in questions about personal preferences or hobbies when the interaction goal is a task based one, but very easy and natural to discuss these issues when the goal of

the interaction is social, and further, this information may be less relevant to the completion of, and satisfaction with, the task based goal.

We argue that the extent to which people focus on assigning their partner to a sex category largely depends on the context of the interaction. Further, uncertainty will only be reduced if people perceive the information they receive to be useful in getting to know the person. It makes sense in a social interaction that this information would be more salient and perceived as more relevant than in a task based interaction. If true, this would provide partial support for the original utopian predictions.

Therefore, we predict

H1: Sex category will be more salient to those with a social goal than those with a task goal in text based computer mediated interactions.

H2: Those with a social goal will feel more attributional confidence (less uncertainty) than those with a task goal in text based computer mediated interactions.

Similarly, people with different interaction goals will spend time focused on different things and they will adapt their interaction strategies to meet the features of the available technology and to complete their interaction goals. Their communication satisfaction will likely be based on the extent to which they felt able to successfully complete their interaction goals in the time they were allocated. It could be argued from a media richness perspective that if there is not a match between the interaction goal and medium used (for example a lean medium and a social goal), people may feel less communication satisfaction, as compared to an interaction when the task and medium match (such as using a lean medium for a task goal).

Media richness argues that the lack of cues would cause interactions to be task focused and that lean media (such as text based systems) would lack the ability to connect people for satisfying rich, social interactions and for relational communication ( Rice and Love 1987; Siegel et al., 1986;

Kayany, et al., 1996). This negative view of the cue lean media argued that CMC would not be able to provide satisfying interactions has also not been supported by research. Also, people's usage of lean media for social goals indicates that they find it satisfying, are used to it, and that the significance of the match for cues and satisfaction is not as great as Media Richness advocates have argued. URT argues that everyone makes attempts to reduce uncertainty, regardless of the overall goals of the interaction. The extra effort required in cue lean media to reduce uncertainty may not be possible when people's attention is split between a task, and an attempt to reduce uncertainty. This may mean that those engaged in the social goal will be able to reduce uncertainty and will therefore be more satisfied with the interaction. Therefore, we predict:

H3: Those in a social goal will feel more communication satisfaction than those in a task goal in a text based CMC interaction.

Above, we predicted that those in the social goal would spend more time and energy assigning their partner to a sex category. Here, we consider how the goal of the interaction might influence people's perceptions of credibility and how credibility might influence (or be influenced by) attributional confidence and the reduction of uncertainty. Credibility refers to the judgments made by the perceiver about the believability of the communicator and his or her message (O'Keefe, 1990). Credibility is an important part of person perception and it is arguably the central variable in all communication and it makes communication more effective (McCroskey, 1971). At the same time, receivers have been shown to be more open to communication from sources they perceive to be credible (McCroskey, Hamilton, & Weiner, 1974).

Above, we argued that adapting to the features of lean media requires more effort, and that this means that people have to select what type of information is most relevant to their interaction goals. Media richness predicts that in lean media (such as a text based interaction) people will spend more of their energy on the task and thus will be more focused on issues related to knowledge on

the topic and not on social factors, which may increase people's perceptions of the others credibility. This may have implications for attributions of credibility. When people spend their time and attention discussing a task, they may spend more time considering the credibility of their partner, as this may be more salient to them than to those in a social goal. However, predicting direction may be difficult because the partner may spend time thinking about their partner's credibility and decide they are not very credible.

On the other hand, uncertainty reduction theorists may argue that people that spend time getting to know social information about others would feel uncertainty had been reduced and people like others more when they have less uncertainty. This could lead to higher attributions of credibility that are based on liking following a social interaction and not on information about their actual credibility that may be attained following a task focused interaction. Therefore, we ask:

RQ1: What is the effect of interaction goal (task or social) on people's perceptions of the other's credibility?

### **Method**

A between-subjects experiment was conducted using one factor: goal of the interaction. Participants were either assigned to a social goal or task-oriented goal during a 20 minute synchronous text based interaction with a partner.

#### *Participants*

Participants ( $N=132$ ) were recruited from communication courses at a large northeastern university where they received extra-credit for their participation. There were 52 males, 79 females and one participant did not report this information. Participants reported frequent usage of the computer both for work ( $M=5.42$ ,  $SD=1.89$ ) and for socializing ( $M=6.03$ ,  $SD=1.74$ ), both measured, on an 8 point scale ranging from 0 to 7 indicating the number of days that the participant used the computer during the last week for that purpose. Participants also reported a very frequent

use of instant messaging ( $M=7.39$ ,  $SD=1.52$ , on an 8-point scale with 1=very rarely and 8=very frequently).

### **Procedure**

Participants were randomly assigned to dyads, which, in turn, were assigned to either the task or social goal condition. Partners reported to different buildings to ensure that they would remain unacquainted prior to the interaction. Before the interaction, participants signed a consent form indicating their voluntary participation. They then filled out a pre-test questionnaire with demographic and computer usage information. After filling out the pre-test, participants were then given a one-page instruction sheet that outlined their goal assignment, whether it was the social goal, or the task goal. This sheet described the protocol for their interaction. Instructions were repeated and clarified by a proctor verbally. Interactions lasted approximately 25 minutes. Following the interaction participants were asked to complete a post-test questionnaire.

### *Stimulus Materials*

*Interaction Goal.* Participants were assigned to either a social or a task oriented goal. The typology of tasks proposed by McGrath (1984) splits task according to the flow of information and outcomes (e.g. cooperative-competitive, structured-unstructured) but it does not distinguish between the amounts of social interaction involved in the task. This project explores a social-task oriented dichotomy using either a social goal or a task-oriented goal. A social goal is ambiguous, cooperative, unstructured and requires more coordination than a task-oriented goal. The task oriented goal is ambiguous, cooperative, structured and requires less coordination than the social goal. The differences between the interaction goals used reside in structure, coordination involved, and the social-task dimension.

The social goal used is known as the “get acquainted” goal (Douglas, 1994). Participants were instructed to “just chat” and get to know the other without giving out their names.

The task goal used is known as the “desert survival task”. In this task goal participants were assigned the Desert Survival Task (Lafferty & Eady, 1974). This tool was comprised of a list of twelve items<sup>1</sup> and participants were instructed to rank order them in order of importance each item would take if one were stranded in the desert. After ranking the items individually, participants would interact through instant messaging to discuss their rankings; no instruction was made to come to a joint solution although participants had to write a final ranking based on their discussion after.

*Program.* The interaction was done through ICQ, version 2002a, a popular text based instant messaging system (Mirabilis, 2002). This program provided a synchronous connection for the interaction between networked computers. Participants typed in text and hit the return key to send their response.

#### *Measurement Instruments*

All scales were Likert-type scales on a 7-point metric and were tested for internal consistency and parallelism through confirmatory factor analysis using the software CFA (Hamilton & Hunter, 1997). All the items of the scales had factor loadings of at least .47 and loaded highest on their primary factor.

*Attributional Confidence.* A 7-item scale based on Clatterbuck's (1979) Attributional Confidence Scale was used to measure uncertainty reduction. This included items measuring confidence in predicting the other's attitudes, values and future behavior and items included “Following your interaction. How accurate are you at predicting his/her attitudes?”, and “Following your interaction. How accurate are you at predicting the values he/she holds?” (1= unable to answer; 7 = confident, Standard alpha = .91).

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<sup>1</sup> The items included a magnetic compass, a 20-by-20 piece of heavy-duty, light blue canvas, the book Edible Plants of the Desert, a rearview mirror, a large knife, a flashlight (four-battery size), one jacket per person, one transparent ground cloth (6 feet by 4 feet) per person, a loaded .38-caliber pistol, one 2-quart plastic canteen per person, full of water, an accurate map of the area, and a large box of kitchen matches.

*Sex Category Salience.* First, participants were asked to assign their partner to a sex category. This was done with a 1 item measure, and the choices were male, female, or cannot determine. Second, the accuracy of this assignment was calculated by comparing the sex category assignment with the partner's self report. Finally, importance and confidence were assessed through 1 item scales with a 7 point metric asking how important the participants felt gender was in the interaction and how confident they were about their ability to assign their partner to a sex category.

*Communication satisfaction.* This variable was measured with 12-slightly revised items from the conversational effectiveness scale by Canary & Spitzberg (1987). Items included "The other person let me know that I was communicating effectively," "I was very satisfied with the conversation," "I did not enjoy the conversation," and "I would like to have another conversation like this one" (Standard alpha = .91).

*Credibility.* This variable was assessed using a 5-item scale based on McCroskey (1971), including whether the partner was knowledgeable on the task, experienced, and qualified (Standard alpha = .72).

## Results

To address the Hypotheses about the direct influence of goal of the interaction on the dependent variables, a MANOVA on the dependent variables using goal of the interaction as the only factor was conducted using a multivariate GLM procedure. Because of missing data, 9 participants were removed from the test bringing the sample size to 123. With only one factor with two levels,  $\eta^2$  can be interpreted as a Pearson correlation  $r$ . See Table 1 for the dependent variables means for each group and the interaction goal manipulation effect sizes on the dependent variables.

H1: Sex category will be more salient to those with a social goal than those with a task goal in text based computer mediated interactions.

This hypothesis was tested in 3 ways. First, we examined whether participants discussed sex category during the interaction. Second, we examined how many participants made an attribution of their partner's sex category and their accuracy. Finally, we asked participants how important they felt sex category was for their interaction. All 3 tests supported the hypothesis.

First, the content of the text chat was evaluated. None of those in the task condition asked about, or explicitly revealed sex category information. In the social condition, 66% asked about, or explicitly revealed their membership in a sex category.

In terms of sex category assignment. In the task condition, 50% assigned their partner to a sex category, as did 92% of those in the social condition. Overall, participants were not very accurate when they did make attributions, and just over half (58%) were able to correctly categorize their partner. Accuracy was influenced by condition, with 89% of those in the social condition making a correct sex category assignment, but only 27% of those in the task condition were accurate.

The MANOVA revealed large, statistically significant differences between the two interaction goal groups on both sex category importance ( $F(1,123) = 32.66, p < .001, \eta^2 = .46$ ) and sex category confidence ( $F(1,123) = 29.24, p < .001, \eta^2 = .44$ ). Participants with a social goal reported that sex category was more important ( $M = 5.68, SD = 1.67$ ) in the interaction and were also more confident about their ability to predict the sex category of their partners ( $M = 6.05, SD = 1.39$ ) compared to the importance ( $M=3.77, SD = 1.96$ ) and confidence ( $M = 4.28, SD = 2.10$ ) of those engaged in a task goal.

H2: Those with a social goal will feel more attributional confidence (less uncertainty) than those with a task goal in text based computer mediated interactions.

This hypothesis was supported. Participants in the social goal reported more confidence about their partners ( $M = 3.24$ ,  $SD = 1.29$ ) than those in the task goal ( $M = 2.48$ ,  $SD = 1.05$ ,  $F(1,123) = 9.35$ ,  $p < .001$ ,  $\eta^2 = .27$ ).

H3: Those in a social goal will feel more communication satisfaction than those in a task goal in a text based CMC interaction.

This hypothesis was supported. Participants with the social goal ( $M = 4.78$ ,  $SD = 1.17$ ) reported significantly higher levels of communication satisfaction ( $F(1,123) = 4.02$ ,  $p < .05$ ,  $\eta^2 = .18$ ) than those with the task goal ( $M = 4.35$ ,  $SD = 1.09$ ).

RQ1: What is the effect of interaction goal (task or social) on people's perceptions of the other's credibility in a text based CMC interaction?

Participants with the social goal ( $M = 4.48$ ,  $SD = 0.94$ ) reported their partners to be significantly more credible ( $F(1,123) = 6.74$ ,  $p < .01$ ,  $\eta^2 = .23$ ) than those with the task goal ( $M = 4.26$ ,  $SD = 0.94$ ).

## Discussion

The results confirm that people continue to engage in the uncertainty reduction process, and that the goal of the interaction influences the type of information people perceive to be relevant to the process. The goal of the interaction influenced both the level of attributional confidence and the extent to which participants asked about, made attributions of, and reported sex category to be important. People with a social goal were much more likely to ask and reveal sex category information and people were confident that the disclosed information was accurate and they were correct. None of the participants who disclosed their sex category gave inaccurate information to their partners.

Also, the results are consistent with predictions that people are generally inaccurate in sex category assignment when it is not explicitly discussed. Half of participants with a task goal did not

expend the extra time or effort required to assign their partner to a sex category. Even when those who did expend this effort were neither confident nor accurate.

As was predicted by our extension of uncertainty reduction theory, it seems that the extra effort required to reduce uncertainty in cue lean media resulted in a reduction of communication satisfaction. People were also more satisfied with their communication interaction in the social condition where they got to know the other, than in the task condition. Although it is possible that people simply enjoyed getting to know the other more than thinking about the task, it illustrates that goal of the interaction influenced satisfaction levels in the opposite direction of what might be predicted by media richness theorists who focus on the features of the medium. Similarly, people who spent time getting to know their partner socially reported their partners to be significantly more credible than those who spent their time talking about a task where they would potentially disagree with one another's rankings of items. People cannot, and do not directly map behaviors from one context to another or even from one medium to another--they adapt their behaviors and the information considered relevant varies across interaction goals, and likely across individuals as well.

Future research should examine other tasks and other primitive categories to see if this finding holds in tasks where category membership may be more relevant. It is likely that there are individual differences that also play a role in the salience of sex category in this process. Further, individuals likely have unique perceptions of the level of importance of different information for reducing uncertainty and future research should continue to examine individual differences.

The results are consistent with the prediction that participants in the task goal need to focus on the task and share their attention between reducing uncertainty about the other person and the information needed to complete the task. In the social condition, participants focused all their attention to reducing uncertainty and attending to their partner and as a result, they felt more communication satisfaction.

## Conclusions

These data partially support the utopian promise of the reduced salience of sex category in task based interactions in cue lean CMC. Sex category was less relevant to those engaged in a task goal than to those in the social goal. This implies that those engaged in the task goal found other information to be more important to their ability to complete the task. These results support the prediction that people are forced to focus on the information they perceive to be the most important as they work to adapt their communication strategies to meet the available features of CMC, and that sex category is not as salient to those working on a task.

If we look at this in media richness terms, this result could reflect the fact that, because of the nature of the medium, people had to work hard to discern any information about their partner, and had to be selective in the categories of information they worked to uncover. When the focus of the interaction was on the task, people did not have time to make attributions of sex category and it was not deemed as important as other things. However, instead of resulting in lower satisfaction as Media Richness would have predicted, those with the social goal felt more satisfaction and less uncertainty than those in the task goal following an interaction in a cue lean medium.

The effect of interaction goal on credibility is consistent with Walther's (1996) hyperpersonal theory, which argued that people assume others are like them in the absence of disconfirming information. If there is an assumption of commonality, there may also be an assumption of credibility. Those who allocated effort to get to know their partners (social goal) felt their partners were more credible, and felt increased communication satisfaction and less uncertainty. This could be explained by the mechanics of the interaction. Those engaged in the task spent their time discussing items, and the rationale one had for assigning an item to a particular rank. As with the expectation of commonality, the expectations of other people's credibility are maintained until evidence contradicts this assumption. In a social goal people tend to guide the conversation towards

common ground whereas in a task goal, it is more likely that tension and disagreement will surface. Those in the task condition had an opportunity to disagree about the assessment of items during the discussion and this might have led them to report their partner as less credible. More research should test this possible explanation and the extension of hyperpersonal to include predictions of higher credibility.

As predicted, the participants who were asked to get to know the other (social condition) felt reduced uncertainty, than those who engaged in a task. Further, contrary to what would be predicted by Media Richness, and in support of predictions of Uncertainty Reduction theory, those in the social condition felt more communication satisfaction using this lean medium than those in the task condition. This reveals that the Media Richness perspective places too much emphasis on the features of the medium and does not take into account the need, and people's remarkable ability, to adapt behaviors to complete their interaction goals, regardless of the features of the available medium. The medium is just a tool that can be utilized in any way the user sees fit. This could explain why people so frequently choose lean media for interactions--because they can provide a convenient and satisfactory way to meet most goals. People continue the process of reducing uncertainty regardless of goals, or number of cues.

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Table 1  
*Dependent variables means and interaction goal effect sizes*

	<i>Condition</i>		–	F(1,123)
	<i>Task</i>	<i>Social</i>		
<i>Gender Importance</i>	3.77 (1.96)	5.68 (1.67)	.46***	32.66
<i>Gender Confidence</i>	4.28 (2.10)	6.05 (1.39)	.44***	29.24
<i>Attributional confidence</i>	2.48 (1.05)	3.24 (1.29)	.27 ***	9.35
<i>Credibility</i>	4.26 (0.94)	4.48 (0.94)	.23 **	6.74
<i>Communication Satisfaction</i>	4.35 (1.09)	4.78 (1.17)	.18 *	4.02

MANOVA term is significant at \*  $p < 0.05$ . \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$ .