MEASURING AFFECTIVE LANGUAGE IN KNOWN PEER FEEDBACK ON L2 ACADEMIC WRITING COURSES: A NOVEL APPROACH

Roger Michael Alan Yallop

Abstract. Publishing scientific articles in English is often a prerequisite for academic success. Thus, developing effective pedagogies to support Estonian university students develop writing skills in L2 (English) is becoming increasingly more important. One such method is by forming small writing groups where each member periodically gives written feedback on their colleague’s writing. Here, the affective language used in the written communication between the reviewer and writer may strongly influence their relationship. This in turn may have a significant impact on the writing process. This study describes the development of a novel taxonomy to measure the cumulative effect of affective factors by accounting for the uniqueness of each individual, and how they project their distinct personalities or ‘social presence’ to build rapport within the group. The hypothesis is that individuals exhibiting a high social presence are more likely to produce higher-quality feedback and more improved subsequent texts than those with a lower social presence. The paper concludes by illustrating how this taxonomy can be used to both test this hypothesis and gain further insight into the peer feedback process in future studies.*

Keywords: social presence, community of inquiry, pragmatics, writing groups, peer review

1. Introduction

It is becoming common practice within L2 Academic writing courses to include peer feedback as one, or even the main, component of the teaching process (Cho et al. 2006, Kollar, Fischer 2010, Diab 2011). This is because the process of peer review brings cognitive, affective, social, and linguistic benefits to both the writer (Min 2006: 118–119) and the reviewer (Lundstrom, Baker 2009). It can also offer a more

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practical teaching solution in universities with a high demand for L2 writing instruction, but with limited resources (Su 2011). This is particularly true in this study where the main challenge is to provide a sound pedagogical basis for conducting writing for scientific publication courses to large cohorts of postgraduate students.

Feedback can be given anonymously or by a reviewer already acquainted with the writer (hereinafter referred to as ‘known feedback’). Surprisingly, many researchers (Ferris 1997, Ertmer et al. 2007, dLu, Bol 2008) advocate the use of anonymous peer feedback over known feedback arguing that reviewers can be more critical in their comments without fear of peer reprisal. This could be an advantage in ‘one-off’ feedback instances, but it fails to harness the full potential of collaborative learning. This is because known feedback is more in line with constructivist learning theories (Vygotsky 1980) and particularly so on longer courses that allow both synchronous and asynchronous feedback stages. It allows individuals more opportunities to ‘negotiate for meaning’ (Ellis 2003) as well as allowing the groups to bond over time, developing a greater ‘trust’ and ‘sense of community’ (Garrison et al. 2010a). Thus, it seems likely that, in known feedback, the use of affective factors will have a much greater impact on the uptake of peer feedback.

Randy D. Garrison, Terry Anderson and Walter Archer (1999) developed their Community of Inquiry (CoI) Model that is commonly used on both online and blended courses (Motteram 2009, Zhao et al. 2014) and is widely accepted amongst scholars (see Garrison et al. 2010b). Here, they hypothesise that students with a high social presence who project themselves both emotionally and socially within their community of inquiry are more likely to produce higher quality written texts and feedback than those who do not. Their model is designed for learners constructing knowledge collaboratively online through the medium of asynchronous text on higher education courses. This paper describes how the author adapts their CoI model to measure the ‘social presence’ exhibited within one small Academic writing group as shown through their asynchronous texts.

2. Theoretical background

2.1. Affective factors within the peer feedback process

There is controversy in the current literature about how, if at all, written affective comments between the reviewer and the writer may improve or hamper the peer feedback process. Some researchers argue that praise increases the trust between the writer and the reviewer and this enhances motivation (Topping 1998: 256, Cho et al. 2006, Nelson, Schunn 2009). In other words, these comments encourage the writer to engage with the reviewers’ comments and the writing process for a longer period of time. This results in them making a larger number of revisions (Gee 1972, Cho et al. 2006) and, thus, being more likely to produce a more improved text. Conversely, other studies claim that feedback comments containing affective language should be completely discouraged, because they have a negligible influence on the writing process (Ferris 1997). Fiona and Ken Hyland (2001: 207) argue that mitigated or ‘hedged criticism’ could even be detrimental to the process because it may confuse the writer’s understanding of the feedback. In addition, socio-cultural factors could
also strongly influence the process in that ‘Estonians seem to focus more on content than relationships in communication’ (Keevallik, Grzega 2008: 214).

What is clear, though, is that students use much affective and mitigated language in their feedback comments (Hyland, Hyland 2001, Liu, Sadler 2003). Furthermore, affective language, or the use of motivational comments, is highly valued and expected amongst peers in their written correspondence (Tuzi 2004, Cho et al. 2006, Kaufman, Schunn 2011: 390). This suggests that affective language does indeed serve a useful linguistic purpose by building rapport between the writer and the reviewer. Here, it is speculated that the greater the rapport between the dyad, the more receptive they may be to the uptake of each other’s comments in their subsequent drafts.

Previous studies have measured the affective factors, ‘praise’, ‘mitigation’ and ‘criticism’ as separate and non-dependent entities within peer feedback comments, and their effect on the writer’s revised text (Hyland, Hyland 2001, Cho et al. 2006, Nelson, Schunn 2009). This treatment, though, may be too simplistic. Madeline E. Ehrman, Betty L. Leaver and Rebecca L. Oxford (2003: 322) identify over a dozen affective factors including anxiety, self-efficacy and learning attitudes that are all inter-related, and ultimately affect the learner’s motivation. This is concurred with many influential researchers (Gardner 1985, Williams, Burden 1996, Ellis 2003) who stress the importance of motivation and how it greatly influences the amount of learning both within and outside the classroom. In this context, positive affective comments (i.e., praise and mitigation) may increase the writer’s self-efficacy leading to a higher level of motivation, whereas negative affective comments (i.e., criticism) may raise the writer’s anxiety leading to decreased levels of motivation. This suggests that these ‘emotional comments’ trigger a much more intricate and interwoven relationship that cannot be measured as independent and unrelated variables alone, and may influence the peer feedback process considerably more than is currently reported in the literature.

Thus, studies in peer feedback have employed both quantitative and qualitative research methods to measure the reviewer and writer’s anxiety and self-efficacy (Nicol, Macfarlane-Dick 2006, Kurt, Atay 2007, Choi 2013), and their attitudes to the peer feedback process (van Zundert et al. 2010: 277, Kaufman, Schunn 2011, Chang 2012). Although these studies stress the importance of how affective factors influence the peer feedback process, few have attempted to measure their overall effect on the process (Hyland, Hyland 2001: 187, Nicol, Macfarlane-Dick 2006: 212). This study heeds their call and explains how a novel methodology is developed to measure the ‘combined’ effect of affective language used by writing groups in known peer feedback as expressed in their asynchronous written texts. This methodology can then be used in tandem with other research methods in subsequent studies to further assess the impact of affective factors on the peer feedback process.

2.2. Community of inquiry model

The CoI model is based on collaborative constructivism and theoretically grounded in the research on deep and meaningful approaches to learning (Garrison et al. 2010a: 32). The model (see Figure 1) draws on Matthew Lipman’s (2003) community of inquiry where students collaborate to build, challenge and support one
another in their ideas within their community. The model assumes that learning for the individual occurs through the dynamic interaction of three crucial elements: cognitive presence, social presence (SP) and teaching presence. This means that the three ‘presences’ are all interrelated in that the individual’s SP influences and is influenced by both their cognitive presence and the teaching presence. It is supposed that a higher SP would increase the writer or reviewer’s cognitive presence that in turn would lead to either a more improved subsequent text or higher quality feedback comments. Thus, the crux of the model is in creating a better learning environment in a community of inquiry by supporting the three elements to encourage deep learning, where deep learning is often associated with a ‘high cognitive’ presence.

Cognitive presence refers to learners constructing and confirming meaning for reflection and discourse in a community of inquiry. Garrison et al. (2010b) draws on John Dewey’s (1933) critical thinking model and sets out their practical inquiry model for critical thinking. This is where the learner engages through four stages of thinking within his or her private and/or shared world as follows: trigger, exploration, integration and resolution. However, the learner does not necessarily progress through the model in a linear order and often fails to get beyond the second or third phases (Garrison et al. 2010b: 6).

Teaching presence relates to 1) Design and organization: ideally, the student should have some influence on the content and approach if this is indeed a collaborative, constructivist framework. 2) Facilitating discourse where the onus is on the teacher to monitor the asynchronous texts (feedback comments and cover letters) and aid the students in their construction of personal meaning. 3) Direct instruction.

Influential CoI researchers (Richardson, Swan 2003, Rourke et al. 2007) established that SP serves as the ‘foundation’ for building communities of inquiry, and then they turned their attention towards investigating how SP affects higher-order learning. Randy D. Garrison and Terry Anderson (2003: 48) state that ‘it (social presence) is an important antecedent to collaboration and critical discourse... It is inconceivable to think that one could create a community without some degree of social presence.’ In other words, SP is a prerequisite for higher-order thinking to occur. This hypothesis is supported through extensive research that strongly indicates that a ‘high’ SP
facilitates deep learning or promotes a ‘higher’ cognitive presence (Lomicka, Lord 2007, Shea, Bidjerano 2009, Shea et al. 2010). Furthermore, there are strong causal links between the teaching, cognitive and social presences where ‘social presence is a mediating variable between teaching presence and cognitive presence. That is, it is a responsibility of teaching presence and a condition for creating ‘cognitive presence’ (Garrison et al. 2010a: 32). This suggests that if the ‘teaching presence’ is low, then the ‘SP is likely to be similarly ‘low’ which in turn results in poor learning or a ‘low’ cognitive presence and vice-versa for a high teaching presence. In this study, I assume a reasonably high and constant teaching presence throughout the course negating this as a measurable variable.

2.3. Social presence

Liam Rourke, Terry Anderson, Randy D. Garrison and Walter Archer (2007: 53–54) give a comprehensive account of the rationale behind the development of their original taxonomy to measure social presence within the CoI framework. Here, they categorise SP into three broad categories, 1) Affective responses that express emotions, feelings and mood, 2) Interactive responses that express a willingness to build, and sustain relationships and tacitly indicate interpersonal support, encouragement, and acceptance of the initiator, and 3) Cohesive responses that build and sustain a sense of group commitment. This taxonomy has since been further developed (see Table 1) by prominent researchers in the same field.

Table 1. A comparison of social presence categories by researcher

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Social presence (SP) categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rourke et al. (2007)</td>
<td>Affective responses</td>
</tr>
<tr>
<td>Garrison and Arbaugh</td>
<td>Project their personalities</td>
</tr>
<tr>
<td>Shea et al. (2010)</td>
<td>Affective response</td>
</tr>
<tr>
<td>Meaning</td>
<td>Expresses emotions, feelings and mood</td>
</tr>
</tbody>
</table>

From this basis, Peter Shea, Suzanne Hayes, Jason Vickers, Mary Gozza-Cohen, Sedef Uzuner, Ruchi Mehta, Anna Valchova and Prahalad Rangan (2010) used a coding scheme (see Table 2) to measure an individual’s SP as expressed in their asynchronous correspondence to their group members.

In the coding process, they segment the data into SP categories using a syntactic unit of measurement of one sentence as advocated by Patrick J. Fahy (2001), and a thematic unit (Henri 1992) when it seems more logical. Each segmented unit is coded on a macro-level for overall meaning, and then micro-coded within this segmentation for further meaning. Then, the number of the indicators encountered within each message is recorded. A high frequency of indicators would denote a warm and friendly environment (high SP) whereas a low frequency of indicators would suggest a cold and impersonal environment (low SP). In their data analysis, they compared the frequency of such SP indicators used collectively by the group at each learning stage of the module.
Table 3. Demographic data on the four participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Nationality</th>
<th>Mother Tongue</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ann</td>
<td>Female</td>
<td>Estonian</td>
<td>Estonian</td>
<td>Literature</td>
</tr>
<tr>
<td>Bob</td>
<td>Male</td>
<td>Latvian</td>
<td>Russian</td>
<td>Russian Literature</td>
</tr>
<tr>
<td>Carol</td>
<td>Female</td>
<td>Russian</td>
<td>Russian</td>
<td>Semiotics (Folklore)</td>
</tr>
<tr>
<td>Dawn</td>
<td>Female</td>
<td>Latvian</td>
<td>Russian</td>
<td>Anthropology (Cultural)</td>
</tr>
</tbody>
</table>
Prior to the writing process, they are given peer feedback training and this is followed by face-to-face (f2f) and online genre-based instruction (Swales 1995) periodically throughout the course. The peer feedback process involves the following cyclic process on each draft, 1) the students submit their original drafts and their cover letters electronically in MS Word, 2) all group members give asynchronous feedback on their colleagues’ drafts and submit these online using track changes and/or comment boxes in MS Word, 3) all members attend a writing group meeting to allow the reviewers and writers to discuss (synchronous feedback given f2f), 4) the writers decide whether to implement or not implement their peer’s feedback comments, and 5) the writers submit their revised draft electronically in MS Word. The writers typically follow the IMRaD (Introduction, Methods, Research and Discussion) structure common in their discipline, where the writer’s original and subsequent draft, their cover letter, and their reviewers’ feedback are collected for each stage. To allow for the course to settle, there are seven stages in total; three stages to write one introduction section, followed by one stage each for the methods, the results, the discussion and the abstract sections. Aside from the f2f lectures, there is no teacher intervention throughout the course. Thus, the course adopts a blended learning approach (asynchronous text and f2f meeting) in a strongly constructivist paradigm. Even though f2f meetings may affect the group’s sense of community, only asynchronous text discussions are considered in this analysis.

4. Methodology

4.1. Devising novel taxonomy

The taxonomy is devised through the analysis of two data sets, 1) non-revision-oriented comments (NRCs) contained within the reviewer’s feedback letters and, 2) the writer’s cover letters. The reviewer’s feedback comments at each stage (IMRaD structure) of the writing process are segmented according to their nature into revision-oriented comments (RC) and NRCs according to Jun Liu and Randall W. Sadler’s (2004) taxonomy. RCs are those that request the writer to make a direct change to their text (i.e., ‘the title is too long’), whereas NRCs more reflect the writer’s personality and contain ‘affective comments’ (i.e., ‘this is an excellent piece of writing’). As affective comments are the subject of this research, only NRCs are analysed. Cover letters are the means by which the writer communicates to the group how their writing should be assessed. They contain much affective language and are also analysed for the purpose of formulating this taxonomy. Next, the feedback letters (i.e., Ann’s review of Bob) and the cover letters are segmented into thematic units (Henri 2002) and categorised at the macro-level only.

Firstly, deductive reasoning is used on the segmented NRCs and cover letters to translate Shea et al.’s (2010) taxonomy from their context to a revised taxonomy to measure social presence (SP) within the peer feedback process in asynchronous text environments. Table 4 shows the analysis of data collected from Ann, in the form of a cover letter and her feedback comments to Bob, and Bob’s feedback comments to Ann, at stage 1 (introduction) of the writing process.
Table 4. Segmenting feedback comments and cover letters

<table>
<thead>
<tr>
<th>Stage 1: Introductions</th>
<th>Coding System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writer</td>
<td>Draft</td>
</tr>
<tr>
<td>Ann</td>
<td>1</td>
</tr>
<tr>
<td>Ann</td>
<td>1</td>
</tr>
<tr>
<td>Ann</td>
<td>1</td>
</tr>
<tr>
<td>Ann</td>
<td>1</td>
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<tr>
<td>Ann</td>
<td>1</td>
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<tr>
<td>Ann</td>
<td>1</td>
</tr>
<tr>
<td>Ann</td>
<td>1</td>
</tr>
</tbody>
</table>

| Ann's cover letter is segmented according to theme and then categorised using Shea et al.'s (2010) taxonomy as the basis. Ann’s feedback comments to Bob, and vice-versa, are segmented into RCs and NRCs using Liu and Sadler (2004). Then, the NRCs are sub-categorised in a similar way the cover letters. Sub-categories are developed within the three categories: affective (i.e., expressing emotions), open communication (i.e., advice) and cohesion (i.e., phatics), and they adhere to the principles of the original taxonomy (Rourke et al. 2007) and its further development (Shea et al. 2010). Finally, this developed taxonomy (Table 5) is tested on data consensually obtained on other similar Academic writing courses. |
Table 5. Coding scheme for measuring social presence within known peer feedback (adapted from Shea et al. 2010: 19–20)

<table>
<thead>
<tr>
<th>Social Presence Category = Affective (AF)</th>
<th>Describes emotions, feelings and mood.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Code</td>
</tr>
<tr>
<td>Expressing emotions</td>
<td>AF-1</td>
</tr>
<tr>
<td>Use of humour</td>
<td>AF-2</td>
</tr>
<tr>
<td>Self-disclosure and personal intent</td>
<td>AF-3</td>
</tr>
<tr>
<td>Use of unconventional expressions to express emotion</td>
<td>AF-4</td>
</tr>
<tr>
<td>Expressing value</td>
<td>AF-5</td>
</tr>
<tr>
<td>Self-doubt and mitigation</td>
<td>AF-6</td>
</tr>
</tbody>
</table>

This category is mainly concerned with psychological factors and how the individual as a reviewer or writer (one person) expresses their own emotions, feelings and mood. In other words, it shows how a writer in their cover letter or a reviewer in their comments projects their own personality.

<table>
<thead>
<tr>
<th>Social Presence Category = Open Communication (OC)</th>
<th>Building and sustaining relationships.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Code</td>
</tr>
<tr>
<td>Referring to past messages either implicitly or explicitly</td>
<td>OC-1</td>
</tr>
<tr>
<td>Asking questions</td>
<td>OC-2</td>
</tr>
<tr>
<td>Praise and appreciation</td>
<td>OC-3</td>
</tr>
<tr>
<td>Encouragement and empathy</td>
<td>OC-4</td>
</tr>
<tr>
<td>Expressing agreement</td>
<td>OC-5</td>
</tr>
<tr>
<td>Criticism (expressing disagreement)</td>
<td>OC-6</td>
</tr>
<tr>
<td>Advice</td>
<td>OC-7</td>
</tr>
<tr>
<td>Apologising</td>
<td>OC-8</td>
</tr>
<tr>
<td>Clarification</td>
<td>OC-9</td>
</tr>
</tbody>
</table>

This category is mainly concerned with the interactions between two persons (the reviewer and the writer) or the whole group, and how they communicate purposefully.

<table>
<thead>
<tr>
<th>Social Presence Category = Cohesion (CH)</th>
<th>Building and sustaining group commitment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>Code</td>
</tr>
<tr>
<td>Conventional salutations, greetings and vocatives</td>
<td>CH-1a</td>
</tr>
<tr>
<td>Conventional salutations only</td>
<td>CH-1b</td>
</tr>
<tr>
<td>Greetings with vocatives only</td>
<td>CH-1c</td>
</tr>
<tr>
<td>Addresses or refers to the group using inclusive pronouns</td>
<td>CH-2</td>
</tr>
<tr>
<td>Closures and vocatives</td>
<td>CH-3a</td>
</tr>
<tr>
<td>Closures only</td>
<td>CH-3b</td>
</tr>
<tr>
<td>Closures with vocatives only</td>
<td>CH-3c</td>
</tr>
<tr>
<td>Social sharing</td>
<td>CH-4</td>
</tr>
<tr>
<td>Course reflection</td>
<td>CH-5</td>
</tr>
<tr>
<td>References to future meetings</td>
<td>CH-6</td>
</tr>
<tr>
<td>Photos</td>
<td>CH-7</td>
</tr>
</tbody>
</table>

This category is mainly concerned with the interactions between two persons (the reviewer and the writer) or the whole group, and how they 'identify' with each other and the community.
4.2. Measuring social presence

The following taxonomy is then used to measure the number of SP indicators exhibited by the group members both individually and then collectively as expressed through their cover letters, and feedback letters. For the purpose of the initial analysis and in order to make comparisons from incomplete data sets, all data collected from the three introduction stages are averaged out and are assumed to be one stage only. This resulted in data from the five writing stages (Introduction, Methods, Results, Discussion and Abstract) being available for analysis. The final analysis concerning the feedback letters examines the data over all the seven stages in order to establish whether all the proposed sub-categories within the proposed taxonomy are used at the macro-level of coding.

4.2.1. Cover letters

Apart from the abstract stage in which only Ann wrote a cover letter, all participants wrote one cover letter for each stage. Thus, the abstract stage was discarded and this analysis was conducted on the cover letters written for the other four stages only. The number of words and the quantity of SP indicators, both overall and within the SP sub-categories, in each student’s cover letter were measured along with their respective mean values. From this, the group’s mean number of SP indicators exhibited per cover letter in each writing stage was calculated. The group results are reported graphically and individual results are reported descriptively.

4.2.2. Feedback letters

Collectively, there were a total of 44 out of a possible 60 feedback letters (73%) written between the students over the five writing stages (Table 6). All the feedback letters were completed for the introduction and method stages, 9 out of 12 for the results, half for the abstract and 5 out of 12 for the discussion. Individually, Ann and Dawn both wrote 12, Carol 11, and Bob 9 letters. Bob wrote no feedback letters for the results and abstract stage, and Carol wrote none for the discussion stage.

Table 6. Feedback letters written by individual with averaged introduction stages
For the analysis of the group as a whole, the mean number of words in the non-revision-oriented comments (NRCs) and the mean length of its respective feedback letter were calculated per writing stage and student. On a similar basis, the mean quantity of SP indicators (overall and within the SP sub-categories) contained within these letters were determined and are presented graphically.

Data from the feedback letters was analysed from all the seven stages (Table 7) in order to assess the frequency of SP indicators in the sub-categories and identify possible redundant indicators within the proposed taxonomy.

Table 7. Feedback letters written by individual over the seven stages

<table>
<thead>
<tr>
<th>Person Reviewed</th>
<th>Ann</th>
<th>Bob</th>
<th>Carol</th>
<th>Dawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer/Stage</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Ann</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Bob</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Carol</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Dawn</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Collectively, there were a total of 65 out of a possible 84 feedback letters (77%) completed between the students with the vast majority of the introduction letters being completed. From this data, the total number of SP indicators used by the whole group according to category was calculated and are reported graphically. Individual results are reported descriptively.

5. Results

5.1. Cover letters

Each participant wrote one cover letter for each writing stage. Overall, the group on average wrote 77 words per cover letter (Figure 2). Bob wrote the most and Dawn the least at an average of 94 and 57 words per stage respectively. Collectively, most words were written in the introduction stage (100), followed by results (76) and methods (71), and least in the discussion stage (60).

Figure 2. Group mean number of words in cover letters per stage
Individually, the amount of SP indicators per cover letter varies from 4 (Bob in methods and discussion; Carol in methods) to 7.5 (Ann in introduction). Ann has the highest mean SP (6.3 indicators per letter) and Bob the lowest SP (4.7 indicators per letter). Despite Carol’s low SP in her methods letter, she displays a similar SP to Dawn overall. Furthermore, writing stages containing a higher mean word count (see Figure 2) have a larger number of SP indicators (Figure 3). Figure 3 shows that collectively the number of SP indicators is highest in the category, affective, followed by group cohesion and then open communication in all the stages. The total number of SP indicators varies according to category from 6.7 (introduction) to 4.8 per reviewer (discussion).

Figure 3. Group mean number of SP indicators per cover letter and writing stage

Figure 4 shows the cumulative effect of the individual’s SP expressed in their four cover letters according to sub-category and category (see Table 2 for explanation of codes).

Figure 4. Number of SP indicators in all cover letters by sub-category and category
All the students show a high affective presence in self-disclosure (AF3) and in self-doubt and mitigation (AF6). There are a few instances of expressing emotion (AF1), unconventional expressions of emotion (AF4) and expressing value (AF5) with a complete absence of humour (AF2). Advice (OC7) and apologising (OC8) are the highest and almost the only open communication indicators used by students Ann, Bob and Dawn. Carol is the only student to refer to past messages from her reviewer (OC1), to never apologise (OC8) and to appreciate the advice given (OC3) in one instance. Asking questions of other group members (OC2), encouragement (OC4), expressing agreement (OC5), criticism (OC6) and seeking clarification (OC9) are never used. In the category, group cohesion, everyone uses inclusive pronouns (CH2), most use both closures and vocatives (CH3a) with Ann alone preferring to close with the use of her name only (CH3c). However she is the only one to refer to future group meetings (CH6). The other cohesive indicators, conventional salutations only (CH1b), closures only (CH3b), social sharing (CH4), course reflection (CH5) and phatics (CH7), are not used.

Ann has the highest SP in both open communication and group cohesion. Carol has the highest affective SP, but the lowest in open communication. Overall, Ann has the highest number of SP indicators in the group. The other members have a similar amount of SP.

5.2. Feedback comments

Figure 5 shows the group’s mean number of words in NRCs and RCs within each feedback letter and writing stage as calculated from 44 feedback letters (see Table 6). Feedback letters are on average longest for the discussion (99 words) and introduction (94 words) stages, and shortest for the abstract (49 words) with a mean of 77 words per stage. The mean number of words used for NR comments overall is 19 words, ranging from 22 to 25 words for the introduction, methods and discussion letters, and 12 to 14 words for the abstract and results respectively.

The number of SP indicators per feedback letter (Figure 6) is highest in the categories open communication or cohesion, and lowest in the category affective.
The combined effect of SP per reviewer is lowest in the abstract (1.7 indicators) and highest in methods (2.8 indicators). As feedback letters are longer on average in the introduction and method stages (see Figure 5), longer letters do not necessarily result in a higher number of SP indicators.

The amount of SP indicators contained within all the feedback letters over the seven stages is 147 SP indicators (Figure 7).

The total number of words written in these 65 feedback exchanges is 4 085 words of which 1 702 words (32.5%) are NR comments. Open communication is the largest category with 45 instances of praise (OC3) and 12 instances of encouragement (OC4). There is also a small amount of agreement (OC5), advice (OC7), asking for clarification (OC9), and single instances of both criticism (OC6) and apologising (OC9). There are no instances of the students referring to past messages (OC1) or asking questions about other members of the group (OC2).
Cohesion has 36 instances of addressing the respondent by name with a conventional salutation (CH1a) and 16 instances of closing the feedback letter with both the reviewer’s name and a closing remark (CH3a). There are also a few instances of using a closure only (CH3b), name only (CH3c) or opening the letter by name only (CH1c). There are no other instances of cohesion of social sharing (CH4), course reflection (CH5), references to future meetings (CH6) or the use of phatics (CH7).

Affective is the smallest category with four instances of using humour (AF2) and mitigation (AF6), a couple of instances of unconventional expressions to express emotion (AF4), and no instances of conventional expressions of expressing emotion (AF1), self-disclosure (AF3) and expressing value (AF5).

6. Interpretation of results

This section discusses whether the proposed taxonomy can be used to understand more fully how the group and its individual members use affective language in both their cover and feedback letters. It analyses the type and frequency of SP indicators used in these sources on a category-by-category basis and coded at the macro-level only. It accounts for the length of the cover letters, and the amount of NRCs as compared to RCs in feedback letters. Then, it identifies variations in the way individuals use affective language towards the group in their cover letters and towards each other in their feedback letters that can be further analysed through qualitative analysis. Finally, and through the interpretation of these findings, it concludes by suggesting ways in which the proposed taxonomy can be used in future research to shed further light on how affective language is used in the process of peer feedback.

6.1. Affective

There is a much higher level of affective SP indicators exhibited in the cover letters (48% of all SP indicators) as compared to those in the feedback letters (7%). This is unsurprising, because cover letters are inherently affective in content. This is where, unlike in feedback letters, the author is mainly writing about themselves and their ‘feelings’ about how their text should be reviewed. The vast majority of these SP indicators show the authors expressing mitigation or self-doubt (AF6) in what they have written such as ‘I am still struggling with global issues... (Ann)’ or disclosing information (AF3) ‘I wrote something, that I refer to myself as the “last part” of the paper... (Bob).’ The few instances of expressing emotion either conventionally (AF1) or unconventionally (AF4) could be because the group either prefers to adopt a more content-oriented approach as suggested by Leelo Keevallik and Joachim Grzega (2008) and/or these indicators would be more frequent in the micro-coding of such comments that has been disregarded in this analysis. The very occasional use of expressing value (AF5), i.e., ‘I believe the following part is the part that proves the validity of my research’ (Ann) is unexpected and its low use may indicate tentativeness in the assertions of both the reviewers and writers. Humour (AF4) is a personal issue and perhaps is more frequent within certain dyads where
they become more comfortable with each other over time as in Dawn’s ‘me and my speller.’ The absence of humour in the group letters may be due to differences in pragmatic norms or personalities within the group.

6.2. Open communication

Conversely to the affective category, there is a much higher level of Open Communication SP indicators exhibited in the feedback letters (50% of all SP indicators) as compared to those in the cover letters (7%). This is because the aim of feedback letters is for reviewers to give advice on how to improve their colleague’s writing. Unlike in the feedback letters, most of these SP indicators (57 instances) are motivational comments with the majority of such containing praise (OC3), i.e., ‘I like everything! (Carol to Dawn).’ There are many remarks of encouragement and empathy (OC4) such as Dawn’s comment to Ann of ‘Good luck with your paper!’ and to a lesser extent of agreement (OC5) where Dawn again expresses agreement with Ann with her cover letter (OC5) of ‘I am feeling totally fine with three last words of your title (viz.).’ The high levels of Open Communication SP indicators suggest that the reviewers do indeed deem motivational comments as important and this concurs with Min’s (2006) findings. Purely critical remarks (OC6) are extremely rare which tends to suggest that the reviewers do not wish to be overtly critical with their feedback and so they soften such comments with positive comments. There are sometimes instances of the reviewer seeking further clarification (OC9) in aspects of the text that are unclear, and this signals issues that need to be addressed in the synchronous f2f meeting. Reviewers offering, and writers seeking advice (OC7) are reasonably common, and this is what one would expect in such exchanges. There are instances of both the reviewers and writers apologising (OC8) for the lateness of their submissions. This gives a good indication of the punctuality of the reviews, cover letters and drafts and whether the group members feel obliged to apologise if they submit them late. The few instances of referring to past texts (OC1) could be due to these references being mentioned in the f2f group meetings, and the f2f lectures may account for why there are no comments asking questions concerning the instructor or of other students (OC2).

6.3. Cohesion

The amount of cohesion (CH) indicators is reasonably high for both the reviewers (43% of all SP indicators) and writers (34%). Most reviewers opened and closed their feedback letters with a friendly salutation with the name of the recipient such as ‘Dear Bob’ (CH1a) and similarly their cover letters by addressing the whole group in, ‘Dear All’ (CH2). Both cover letters and feedback letters ended with a conventional closure with the author’s name as in ‘Sincerely yours, Bob’ (CH3a). This adheres to the more formal social norms of opening and closing letters. Frequently, reviewers and writers end their letter informally using only a closure without their name (CH3b) or with their name only (CH3c), or even abruptly with no closure. The writers may have decided to use these more informal structures because they
feel they are bonding closer to the group. Alternatively, this could be an individual style or an over-sight caused by time constraints.

However, this lack of formality in the letters could indirectly affect whether the more pragmatically minded reader might lose trust in their reviewer. This may be because they view this feedback as overtly informal or even rude. Conversely, if the dyads are both content-driven individuals, this informality will enable them to build more trust in each other. Whatever these permutations are within the dyad, the perceived ‘pragmatic’ formality intended by the writer and correspondingly interpreted by the reader may have profound effects on whether the feedback is indeed engaged with and subsequently implemented. Future studies could examine whether the perceived understanding of the use of salutations and closures has any effect on the peer feedback process. Group cohesion is further built by references on a few occasions to future meetings (CH6) or more specifically to the f2f group meetings (‘Looking forward to our meeting’ Ann). Surprisingly, there is no use of phatics or language that serves a purely social function (CH7) and sharing information unrelated to the course (CH5). This may also be because the group is more ‘content-driven’. The purpose of the course is to improve their writing skills for publication only. Thus, the use of unnecessary language such as phatics or social language is deemed a waste of time. There is also no reference to course reflection (CH5), but this may have been covered during the synchronous exchanges at the group meetings or f2f lectures.

6.4. Word count

Generally, the results seem to show that the number of SP indicators within the cover letters is normally proportional to its length. Thus, the longer the letter, the more likely it is to contain a higher amount of SP indicators, explaining why there are more SP indicators in the introduction than in the other cover letters. This is logical as the vast majority of content in cover letters contains affective language. However, this pattern is not necessarily exhibited at an individual level. This may be because the segmentation of SP indicators is based on the unit of meaning rather than the linguistic unit. In other words, SP indicators with the sub-categories of group cohesion can be as short as one or two words, i.e., ‘sincerely Ann’ (CH3a), as compared to other SP sub-categories such as praise (OC3) that can contain over thirty words. Thus, differences in the word count within different sub-categories (word length per SP indicator) as well as using other ways to analyse the word count such as taking the density of SP indicators (i.e., by dividing the number of SP indicators used by the number of words written) to give meaningful information should be included in subsequent studies. However, determining the type of SP indicators used as compared to the total written amount of words per cover letter seems to give a good indication of the amount of affective language used.

The methods cover letter contains the highest SP and mean percentage of NRCs (28.6%), but is only the third largest word count. As such, it seems that in addition to word length and word length per SP indicator, the number of SP indicators per feedback letter is also dependent on the percentage of NRCs. In other words, a lengthy letter containing a high percentage of NRCs is more likely to contain more
SP indicators than a long letter with a low percentage of NRCs or a short letter with a high percentage of NRCs. Thus, calculating the density of SP indicators (i.e., SP indicators/100 words) in follow-up studies may also give a good indication of the amount of SP exhibited by the group and individually in each individual writing stage.

7. Limitations and future research

This paper shows the development of a novel taxonomy that can be used to measure affective factors within Academic writing groups. It measures the cumulative effect of these by accounting for the uniqueness of each individual, and how they project their distinct personalities or ‘social presence’ (SP) over time to express their emotions, and build and sustain group commitment. The hypothesis is that reviewers and writers exhibiting a high SP are more likely to produce higher-quality reviews and more improved subsequent texts respectively than if they exhibit a ‘low SP’. On a practical level, this taxonomy shows instances when teacher intervention may be helpful. In research, it highlights interesting phenomena in the data that can be further explored using qualitative methods. Although not ideal, as mentioned in the methodology, a number of assumptions are made in the analysis in order to draw meaningful comparisons between the participants. This is necessary because not every participant completed all the cover and feedback letters on the course. Furthermore, the impact of the synchronous f2f writing group meetings on the participants’ SP should be included in future research designs. As such, this research needs to be repeated on much larger and complete data sets before drawing more conclusive deductions. This, though, should not distract from the strong potential and versatility of using this taxonomy in tandem with other research questions to gain a much clearer understanding of how affective factors can influence the peer feedback process. One such way this could be explored is by comparing these findings with the impact of revision-oriented comments on the quality of the texts produced.

Abbreviations
AF affective
CH cohesion
CoI community of inquiry model
Disc. discussion
f2f face to face
GC group cohesion
Intro. introduction
IMRaD Introduction, Methods, Research and Discussion
NR non-revision
NRC non-revision-oriented comment
OC open communication
RC revision-oriented comment
SP social presence
References


Ertmer, Peggy A.; Richardson Jennifer C.; Belland, Brian; Camin, Denise; Connolly, Patrick; Coulthard, Glen; Lei, Kimfong; Mong, Christopher 2007. Using peer feedback to enhance the quality of student online postings: An exploratory study. – Journal of Computer-Mediated Communication, 12 (2), 412–433. http://dx.doi.org/10.1111/j.1083-6101.2007.00331.x


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Ingliskeelsete teadusartiklite avaldamine on sageli üks akadeemilise edasijõudmise eeltingimusi. Seepärast muutub üha olulisemaks selliste toimivate õppemootorite väljatöötamine, mis aitaksid Eesti ülikoolides õppivatele üliõpilastele arendada akadeemiliste tekstide kirjutamise oskust võõrkeeleena (L2) õpitud inglise keeles. Üks võimalikke meetodeid on moodustada väikesed kirjutamisrühmad, kus kõik liikmed annavad regulaarselt tagasidet teiste rühmakaaslaste kirjutatu kohta. Niisugusel puhul võib tagasitide kommentaarides esinev afektiivne keelekasutus tugevasti mõjutada teksti autori ja hindaja vahelisi suhteid. See omakorda võib määrata, kas tekstikirjutaja võtab tehtud märkusi tehtud toimet ja hindamist, kas teksti autori ja hindaja vahelisel suhetele. Artiklis on vaadeldud, kas on võimalik kasutada uudset lähenemisviisi, et mõõta ühes magistriõppe üliõpilaste L2 kirjutamisrühmas afektiivseid tegureid tagasisidestamise protsessis.

Esitatav lähenemisviis on üks sellise metoodika aspekt, mille kaudu uuritakse, kuidas afektiivsed tegurid võivad mõjutada vastastikuse tagasiside protsessi; kõnealune uuring on ühes Eesti ülikoolis läbiviivava pikiuuringu osa. Uudne lähenemisviis mõõdab afektiivsete tegurite kumulatiivset mõju, võttes arvesse iga isiku eripära ja seda, kuidas aja jooksul konkreetne isiksus avaldub ehk milline on tema sotsiaalne kohalolu emotsioonide väljendamisel ning grupikultuuris oleva loomis- ja hoidmisel. Kõnealust lähenemisviisi kasutatakse nii rühma kui ka igas isiku sotsiaalse kohalolu mõõtmiseks.

Püstitatud hüpoteesi kohaselt on tõenäoline, et suure kohalolufaktoriga tagasisidestajad ja autorid annavad vastavalt kvantiteetsemat tagasisidet ja koostavad lõpuks parema teksti kui need, kelle kohalolufaktor on väike. Lähenemisviisi aluseks on sotsiaalkultuurilisest teoorial põhinev mudel, mis on kinnistunud sotsiaalkonstruktsioonistlikus paradigmas. Töö jaotustes on osutatud, kuidas saab seda lähenemisviisi edaspidi kasutada nii kvantitatiivsetes kui ka kvalitatiiivsetes uurimismeetodites.

Võtmesõnad: sotsiaalne kohalolu, koostööühus, pragmaatika, kirjutamisrühm, vastastikne tagasiside