

Impact of Group Cohesion on Anxiety and Online Task Performance: A Correlational Exploratory Analysis

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Abstract

This exploratory research examines impacts of the use of teams in online Debate and Presentation courses. Prior research from both psychological and English as a Foreign Language (EFL) perspectives has theorized relationships between group cohesion, task performance, and anxiety. Forming cohesive groups can affect social identity (Turner et al, 1979), self-esteem (Cast & Burke, 2002), and anxiety (Lee & Robbins, 1998), as well as foster motivation in a second language (L2) learning environment (Dörnyei & Murphey, 2003), but these elements may be affected by learning in an online context. A 26-item questionnaire gathered quantitative data regarding student experiences with online small group learning, including perceptions of group cohesion and efficacy, and the impacts of these on social and L2 anxiety. Results indicated that cohesive groups with a positive social climate benefitted in terms of task achievement and reduced L2 anxiety across differing proficiency levels. Correlational analysis revealed strong relationships between the effects of teams on affective concerns and L2 use, which suggests that working with cohesive teams may foster motivation by improving students' learning experience (Dörnyei, 2009). Based on these findings, suggestions for future study and recommendations for improving outcomes in future courses will be discussed.

Keywords: *L2 anxiety, group cohesion, teamwork, group norms, L2 online learning*

INTRODUCTION

Theoretical Background

In an effort to improve English communication skills at universities across Japan, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has long encouraged the use of a communicative language teaching (CLT) approach within EFL classes (Tahira, 2012; Yoshihara et al., 2020). As part of many CLT-based courses, students need to participate in interactive tasks, during which social group dynamics can impact successful task performance (Poupore, 2013). In the case of group-based tasks, one measure that can mediate success is the level of “group cohesion”, or unity, of a group, which is a measure of its members' commitment to the group and of how comfortable they feel together (Dörnyei & Murphey, 2003).

Group cohesion can be challenging to define due to the diverse nature of the various group memberships that together form our sense of social identity (Tajfel & Turner, 1985), from one's part in family and social groups, to one's sense of national identity. Meta-analysis of psychological research into group cohesion (Cota et al., 1995) found it to be a dynamic process that is mediated by the tendency to remain united while pursuing group goals, which is in part bounded by the values and behaviours of its group members towards their task or goal, and in part by its members' resistance to any disruption in achieving their aims (p. 577). A further meta-analysis investigated the relationship between the cohesiveness and performance or productivity of a group (Evans & Dion, 1991), finding a positive and stable correlation between these across various studies into different types of groups

(e.g., research participants, sports teams, or business organizations). Evans and Dion (1991) concluded that although other factors will certainly influence performance, such as the metrics by which success is measured, cohesion has reliably proven to be essential for groups to succeed on tasks or otherwise attain good performance. Other research within psychology has found that feeling one is part of a cohesive ingroup can increase self-esteem through a shared sense of pride in group membership (Turner & Tajfel, 1979) and reduce anxiety (Lee & Robbins, 1998). Group cohesion is of particular importance within Japan, due in part to lasting cultural influence from Confucian values of harmony and obedience (Trommsdorff & Iwawaki, 1989). Henrich et al.'s (2010) landmark meta-analysis on psychological differences between various societies found that East Asians tend to view themselves in terms of roles and relationships with others and generally possess greater motivations to conform to group norms (p. 71). The emphasis on socialization and group identity begins at an early age, in which “children learn that they are part of a group and that without the group identity they do not exist” (Sugihara & Katsurada, 2002, p. 450).

Emotions such as anxiety are modulated by the amygdala, a region of the brain responsible for responding to emotional stimuli, particularly to anything perceived as threatening or a source of danger (Toates, 2011). Reducing anxiety may have beneficial effects on task performance, particularly within educational settings, due to the amygdala's effect on long-term memory (McGaugh et al., 1996), as successful recall of information tends to be adversely affected by strong emotional states accompanying the target recall stimuli (Koster et al., 2005). Tasks are processed within working memory, a set of cognitive systems termed ‘executive functions’ (Miyake et al., 2000) that control what information is currently held in an activated state by switching between ‘updating’ currently necessary information for the task, and ‘inhibition’, or removal of irrelevant information and stimuli (Friedman & Miyake, 2004). Anxiety and other negative emotional states, such as depression, reduce the effectiveness of the inhibition function (Joorman, 2006). If the ability to ignore irrelevant information and focus on a given task is worsened, then working memory capacity (the amount of information that can simultaneously be processed, recalled or activated) is reduced (Derakshan & Eysenck, 2010). Thus, from a psychological standpoint, working within a cohesive group increases self-esteem, reduces anxiety, benefits task performance, and may improve memory, all of which could be beneficial to students within an L2 learning environment.

Anxiety and group cohesion have also been investigated within the EFL literature. Anxiety tends to be defined as ‘trait anxiety’, how likely one is to feel anxious in *any* situation, or ‘state anxiety’, the likelihood of feeling anxious in a *particular* situation (Ueki & Takeuchi, 2012), such as when speaking a foreign language, often termed ‘L2 anxiety’. Cohesive groups can alleviate both L2 anxiety and social anxiety, benefitting L2 learners as anxiety reduces not only their self-confidence and willingness to communicate in an L2 (MacIntyre et al., 1998) but also how effectively they can process or produce it (Poupore, 2013). Cohesion also affects learner motivation; in Clement et al.'s (1994) Foreign Language Behaviour and Competence model, group cohesion correlated with positive evaluations of the learning environment (such as peer group and teachers), forming a key area of motivation separate from the learner's own integrative motivation. This suggests that working with a cohesive and highly motivated group could help to foster motivation even in less-motivated learners. Ushioda (2003) argued that supportive interpersonal relations from a peer group and a positive learning environment are necessary for fostering motivation in Japanese students, and similar observations on the importance of group cohesion for motivation have been made in other East Asian L2 learning environments such as Taiwan (Dörnyei & Murphey, 2003) and South Korea (Poupore, 2013). Moreover, the social norms or values of a group can have a direct impact on classroom atmosphere

in an L2 learning environment, with implications for student participation and motivation (Maxfield, 2020; Peragine 2019).

The Current Study

In 2014, MEXT announced plans to improve English-language fluency and communicative ability through its English Education Reform Plan, which recommended that universities conduct classes in English and focus on ‘higher language skills’, including presentations, debates, and negotiations (MacWhinnie & Mitchell, 2017). These governmental guidelines were followed at Rikkyo University in Tokyo, in which lecturers were asked to teach two new courses, Debate and Presentation, starting from 2020. What had not been foreseen was the spread of Covid-19, and the subsequent governmental request for universities to switch to an emergency online method of learning. As a result, in the 2020 Fall semester, both Debate and Presentation courses were taught via Zoom, an online video conferencing platform.

Both were required semester-length courses for freshman students that met weekly for a total of 14 weeks, with around 20 students in each class. Based on previous psychological and EFL research on the potential benefits of cohesive groups for reducing anxiety and improving L2 learning outcomes (Clement et al., 1994; MacIntyre et al., 1998; Dörnyei & Murphey, 2003; Poupore, 2013), students were assigned to work in regular groups (hereafter termed ‘teams’) of around five students. Each team worked together for large parts of weekly lessons over the course of three to four weeks, with the expectation that remaining in the same teams would encourage peer support and bonding between students and thereby both reduce anxiety and foster motivation.

At the end of these courses, students were surveyed about their experiences of working in teams, with questions on their perceptions of group dynamics (or ‘social climate’, as defined by Poupore, 2013), group cohesion and efficacy, and impacts on social and L2 anxiety. Exploratory research questions aimed to investigate:

1. Whether the use of an online method of learning affected L2 anxiety and/or social anxiety
2. Whether the use of teams allowed students to form cohesive groups
3. Whether working in teams affected students’ L2 anxiety and/or social anxiety

One element that was particularly of interest was whether there are advantageous aspects of using teams that could be incorporated into future face-to-face and/or online classes. Comparisons were also drawn on whether students in higher or lower proficiency levels (Level 2 or 3 respectively) reported differing anxiety levels, experiences of learning English online, or experiences of working with familiar groups. Noels (2013) concluded that the two factors necessary for engendering motivation were competence (the learner’s ability to complete a task) and relatedness, defined as “a sense of security and connection” (p. 20) between the learner and others. Although higher-level students may have greater L2 competence, similar levels of motivation may be observed if lower-level classes compensated for the effects of reduced competence by developing greater group cohesiveness. Previous observations conducted by the researcher indicated that building rapport within the class increased peer assistance with unknown L2 vocabulary items and improved participation in group discussions (Maxfield, 2019). Hence, prior to data collection, it was hypothesized that differences might be noted between class level, such that:

- Level 3 students would report greater L2 anxiety than those in Level 2

- Level 3 students would report greater cohesiveness than those in Level 2.

METHOD

At the end of the 2020 Fall semester, a total of 98 students enrolled in Debate ($N = 55$) and Presentation ($N = 43$) classes responded to an online questionnaire on their affective and social experiences of online learning. Questions were translated into the students' L1, Japanese, to minimize potential misunderstandings.

Most questions were multiple choice items utilizing a six-item Likert scale. Likert responses were converted into numeric data (*strongly disagree* = 1, *slightly disagree* = 2... *strongly agree* = 6) for statistical analysis in SPSS to find overall trends including mean, standard deviation, Pearson's r correlations between items, and quantify comparisons between student proficiency levels (Level 2 or 3). Negatively worded questions (such as "I did not feel comfortable talking with teammates" were reverse-coded in SPSS to maintain comparability between positively and negatively worded items.

Questions relating to the three different hypotheses under investigation were randomly ordered, for which some questions employed different wording of the same concept to maximize reliability. A further question type required students to select one to three words from a list of options that best described their overall affective state whilst working with their teams, and in the class in general. It was hoped that these questions could help to summarize general attitudes or cover aspects of student experience missed by the multiple-choice questions.

RESULTS

Table 1

Descriptive Statistics for Overall Data, Mean Responses by Class Level, and Differences in Means Between Levels Expressed as a Percentage (Mean Diff.)

Question Item	Overall Data			Comparisons by Class Level		
	% agreement	Mean	SD	Level 2 Mean	Level 3 Mean	Mean diff.
Speaking English online is easier than speaking English face-to-face	69.4%	4.01	1.36	3.84	4.05	5%
I felt more anxious when speaking English online than speaking English face-to-face	49.5%	3.47	1.26	3.16	3.55	11%
I felt anxious about talking to classmates online before I started this class	71.1%	4.30	1.39	4.00	4.37	9%
After studying in this class, it was less scary than I had expected	85.7%	4.47	1.03	4.53	4.46	-2%
I often feel anxious in face-to-face conversations	63.3%	3.82	1.30	3.37	3.92	14%
I feel less anxious about studying English online after taking this class	85.7%	4.31	1.07	4.16	4.34	4%
It was easy to make friends with my teams	77.6%	4.30	1.25	4.11	4.34	5%
Working with a team helped me in this class	93.9%	5.10	0.92	5.11	5.10	0%
I enjoyed working with my teams	91.9%	4.99	0.96	4.84	5.03	4%

There was good teamwork in ALL of my teams	91.9%	4.90	0.98	4.84	4.91	1%
Talking with my teammates helped me to feel less anxious in class	91.9%	4.96	0.98	5.05	4.94	-2%
I felt relaxed when speaking English with my teammates	75.5%	4.42	1.08	4.63	4.37	-6%
I felt more relaxed when speaking English with my teammates than other students in class	69.4%	4.41	1.21	4.42	4.41	0%
Talking with teammates online was more relaxing than I expected	82.7%	4.70	1.06	4.79	4.68	-2%
Working with a team helped me to speak English	55.6%	4.82	0.94	4.74	4.85	2%
I felt relaxed with my teammates	91.8%	4.90	0.96	4.95	4.88	-1%
R: I did not like working with the same people over several lessons	26.8%	-2.75	1.40	-2.63	-2.78	5%
R: It was difficult to talk with my team	22.4%	-2.46	1.37	-2.37	-2.48	5%
R: My teammates rarely / never helped me	20.4%	-2.20	1.62	-1.84	-2.29	20%
R: Sometimes my teams did not work well together	24.7%	-2.69	1.35	-2.78	-2.67	-4%
R: I did not feel comfortable talking with teammates	32.0%	-3.01	1.20	-2.89	-3.04	5%
R: I did not feel comfortable using English with teammates	32.0%	-3.01	1.20	-2.89	-3.04	5%
Group Mean – positive items		4.49		4.41		4.51
Group Mean - negative items		-2.69		-2.57		-2.72

Table 2
Pearson's r Correlations Between Questionnaire Items (Negative)

		R: It was difficult to talk with my team	R: My teammates rarely / never helped me	R: Sometimes my teams did not work well together	R: I did not feel comfortable talking with teammates	R: I did not feel comfortable using English with teammates
R: I did not like working with the same people over several lessons	<i>r</i>	.305**	.331**	.453**	.227*	.227*
	Sig	.002	.001	.001	.026	.026
R: It was difficult to talk with my team	<i>r</i>	1	.436**	.459**	.453**	.453**
	Sig		.001	.001	.001	.001
R: My teammates rarely / never helped me	<i>r</i>	-	1	.285**	.340**	.340**
	Sig	-		.005	.001	.001
R: Sometimes my teams did not work well together	<i>r</i>	-	-	1	.368**	.368**
	Sig	-	-		.001	.001

R: I did not feel comfortable talking with teammates	<i>r</i>	-	-	-	1	.998**
	Sig	-	-	-		.001

*. Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Table 3
Pearson's r Correlations Between Questionnaire Items (Positive)

		It was easy to make friends with my teams	Working with a team helped me in this class	I enjoyed working with my teams	There was good teamwork in ALL of my teams	I felt relaxed when speaking English with teammates	Talking with teammates online was more relaxing than I expected	Working with a team helped me to speak English	I felt relaxed with my teammates
After studying in this class, it was less scary than expected	<i>r</i>	.099	.133	.173	.099	.294**	.490**	.292**	.280**
	Sig	.331	.190	.089	.330	.003	.001	.004	.005
It was easy to make friends with my teams	<i>r</i>	1	.400**	.535**	.361**	.439**	.386**	.213*	.293**
	Sig		.001	.001	.001	.001	.001	.036	.004
Working with a team helped me in this class	<i>r</i>	-	1	.699**	.592**	.348**	.369**	.605**	.689**
	Sig	-		.001	.001	.001	.001	.001	.001
I enjoyed working with my teams	<i>r</i>	-	-	1	.669**	.561**	.455**	.558**	.574**
	Sig	-	-		.001	.001	.001	.001	.001
There was good teamwork in ALL of my teams	<i>r</i>	-	-	-	1	.361**	.339**	.437**	.574**
	Sig	-	-	-		.001	.001	.001	.001
I felt relaxed when speaking English with teammates	<i>r</i>	-	-	-	-	1	.559**	.442**	.442**
	Sig	-	-	-	-		.001	.001	.001
Talking with teammates online was more relaxing than I expected	<i>r</i>	-	-	-	-	-	1	.516**	.512**
	Sig	-	-	-	-	-		.001	.001

Working with a team helped me to speak English	<i>r</i>	-	-	-	-	-	-	1	.702**
	Sig	-	-	-	-	-	-		.001

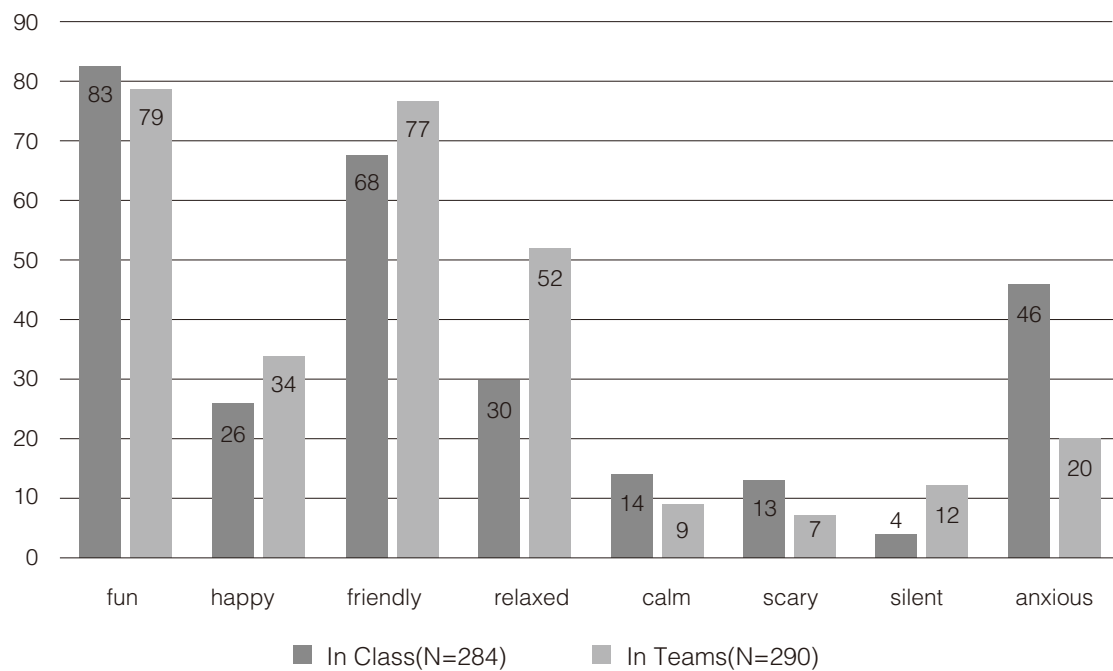
*. Correlation is significant at the 0.05 level (2-tailed). ** . Correlation is significant at the 0.01 level (2-tailed).

Results shown as $p = .000$ have been rounded up to $p = .001$.

Word Choice Data

While most items on the questionnaire utilized a six-item Likert scale, students were also asked to respond to the questions “Which words best match your experience in class?” and “Which words best match your experience with teams?” by choosing up to three words from a list. This was offered as a way for students to rapidly summarize their general attitude or isolate common emotions felt in each condition, whether in class as a whole, or whilst working with their team. The possible answer options were “fun, friendly, happy, relaxed, calm, scary, silent, bored, anxious”, with a total of 284 words being selected in response to “Which words best match your experience in class?” and 290 used to answer “Which words best match your experience with teams?”.

Figure 1.
Word Choice Data: How Students Described Experiences ‘In Class’ or ‘In Teams’



DISCUSSION

Overall Findings

On the whole, results suggest that the majority of students found working with a team helpful and enjoyable during the course, with 93.9% of students agreeing that “working with a team helped

me in this class” and 91.9% agreeing that “I enjoyed working with my teams”. Thus, it seems likely that students regarded their teamwork to have facilitated task performance and that the majority experienced a positive social climate through the formation of cohesive groups.

Although many students reported that “I felt anxious about talking to classmates online before I started this class” (71.1%), it appears that afterwards a high proportion reported feeling less anxiety than they had predicted, as 85.7% agreed that “after studying in this class, it was less scary than I had expected”. A majority believed that “speaking English online is easier than speaking English face-to-face” (69.4%), but there was no clear consensus on how L2 anxiety was affected by online learning, as around half (49.5%) agreed that “I felt more anxious when speaking English online than speaking English face-to-face”. Taken together, these results imply that although most students found using an L2 online slightly easier than they did face-to-face, studying online did not greatly affect L2 anxiety.

Some students still felt L2 anxiety by the end of the course, with 32% agreeing that “I did not feel comfortable using English with teammates”, suggesting that the use of teams did not greatly mitigate L2 anxiety for all students. A minority also reported feeling social anxiety even with their teams, agreeing with statements such as “I did not feel comfortable talking with teammates” (32%) or “it was difficult to talk with my team” (22.4%). However, it should be noted that the majority of students disagreed with these sentiments. As 93.9% of students felt that “working with a team helped me” and 91.9% had “enjoyed working with teams”, it seems that even some of the students who felt uncomfortable with their team still recognised that they had benefitted from the experience.

Correlational Analysis – Negative items

A correlational analysis was also conducted to uncover further relationships between questionnaire items (Table 2). Pearson’s r correlations were determined via SPSS and were interpreted using Dancey and Reidy’s (2007) recommended classifications for psychology or social sciences, in which correlations can be termed perfect ($r = 1$), strong ($r = .7 - .9$), moderate ($r = .4 - .6$), weak ($r = .1 - .3$), and zero ($r = 0$).

The strongest relationship found was $r = 1.00$ (perfect) between “I did not feel comfortable talking with teammates” and “I did not feel comfortable using English with teammates”. All respondents had provided matching answers to both questions, strongly suggesting that social and L2 anxiety may have compounded each other in teams with a poor social climate, whereas cohesive teams reduced both types of anxiety. Both of these questionnaire items also correlated moderately with “it was difficult to talk with my team” at $r = .45$. This would fit with previous findings indicating that L2 anxiety significantly impacts social climate, as “learners with high L2 anxiety produced less language and contributed less to creating a positive group work climate” (Poupore, 2013, p. 114).

Moderate correlations were found between “it was difficult to talk with my team” and other negatively coded items, such as “sometimes my teams did not work well together” ($r = .46$) or “my teammates rarely / never helped me” ($r = .44$). This suggests that feeling comfortable with a team was the most basic requirement, without which further social benefits, such as reducing L2 anxiety or providing peer-to-peer assistance, could not occur.

However, these values do not mean that general student experience of teams was poor, as the relatively low mean values of the negatively-coded items (-2.02 to -3.01) indicate that the majority of students tended to disagree with these statements. For instance, 75.3% of students disagreed with the statement that “sometimes my teams did not work well together”, and 79.6% of students did not believe that “my teammates rarely / never helped me”.

Correlational Analysis – Positive items

Conversely, a strong correlation was found between “working with a team helped me to speak English” and “I felt relaxed with my teammates” ($r = .70$), implying students felt that a comfortable social climate had a major impact on L2 use (Table 3). This could have been either that students were more willing to communicate in cohesive groups or that teammates were more likely to offer L2 assistance within cohesive groups. Another strong correlation was found between “working with a team helped me in this class” and “I enjoyed working with my teams” ($r = 0.70$), which was mirrored in the high mean (5.1 and 5.0) scores on both items.

Moderate correlations were also found between “working with a team helped me in this class” / “I felt relaxed with my teammates” ($r = .69$) and “I enjoyed working with my teams” / “I felt relaxed with my teammates” ($r = .57$). These suggest that a relaxed and enjoyable social climate, such as can be found in a cohesive group, was related to successful task performance. If accurate, this conclusion would fit with existing literature on the importance of cohesion for motivation and successful task performance (Evans & Dion, 1991). Students’ general agreement that “there was good teamwork in all of my teams” is evidenced by its high mean (4.9) and by the correlation with “working with a team helped me in this class” ($r = .59$). This indicates that productive teamwork was seen by students as an essential part of effective learning in these courses, as well as a major part of whether they enjoyed the task, as “good teamwork” correlated quite strongly with “I enjoyed working with my teams” at $r = .67$.

Although many students had agreed that “talking with my teammates helped me to feel less anxious in class” ($M = 5.0$), it produced only low to moderate correlations with other items such as “working with a team helped me in this class” ($r = .42$) and “I enjoyed working with my teams” ($r = .36$). It is possible that students may have interpreted “talking” in this question as meaning ‘chatting about task-irrelevant topics’ and therefore did not relate this to “working”.

In relation to the research questions,

1. Whether the use of an online method of learning affected L2 anxiety and/or social anxiety
2. Whether the use of teams allowed students to form cohesive groups
3. Whether working in teams affected students’ L2 anxiety and/or social anxiety

the correlational data indicates that the use of teams had allowed students to bond with others and form cohesive groups and, to a lesser extent, had some positive effects on L2 and social anxiety. However, no strong or moderate correlations were found between items relating to an online method of learning and L2 or social anxiety, suggesting that students’ perceptions of anxiety were neither positively nor negatively affected in any significant way by a switch to online learning.

By Class Level

In comparison with Level 3 students, Level 2 students tended to experience:

- o 6% less L2 anxiety with teams (*I felt relaxed when speaking English with my teammates*)
- o 2% less social anxiety with teams (*Talking with my teammates helped me to feel less anxious in class*)
- o 2% less anxiety than expected (*After studying in this class, it was less scary than I had expected*)
- o 1% better team performance (*There was good teamwork in ALL of my teams*).

Compared with Level 2 students, Level 3 students experienced:

- o 20% less assistance from teams (*My teammates rarely / never helped me*)
- o 14% higher social anxiety (*I often feel anxious in face-to-face conversations*)
- o 11% higher L2 anxiety online (*I felt more anxious when speaking English online than speaking English face-to-face*)
- o 9% higher social anxiety pre-class (*I felt anxious about talking to classmates online before I started this class*)

Although original hypotheses had predicted that

- Level 3 students would report greater L2 anxiety than those in Level 2
- Level 3 students would report greater cohesiveness than those in Level 2,

responses when split by class level generally differed to a fairly minor degree. The largest percentage difference found was 20% (*My teammates rarely / never helped me*), while several items differed by only 5% or less.

It would appear that Level 3 students had felt higher L2 anxiety in an online environment and higher social anxiety, both in general and in anticipation of the course. Therefore, the hypothesis that ‘Level 3 students would feel greater L2 anxiety than those in Level 2’ appears to have been somewhat accurate.

Level 2 students reported significantly better team performance, as well as somewhat reduced L2 and social anxiety when working with their teammates, than Level 3 students. This could be related to the higher levels of L2 anxiety felt by Level 3 students: Poupore (2013) reported a significant relationship between L2 anxiety and learner’s interpretations of a group dynamic, with more anxious learners being more likely to perceive the group dynamic negatively, whereas less anxious learners (such as Level 2 students) may take a more positive view of the social climate. Therefore, the initial hypothesis that ‘Level 3 students would report greater cohesiveness than those in Level 2’ to compensate for reduced competence was proven incorrect. While different ability levels may gain different benefits from teamwork, it seems that lower-level classes will not necessarily feel a greater degree of cohesiveness.

Word Choice Data

The most commonly chosen words (Figure 1) for both the ‘in class’ and ‘in teams’ condition was “fun” (83 in class/79 in teams) with “friendly” at a close second (68 in class / 77 in teams). Therefore, it seems likely that the majority of students felt there was a positive atmosphere overall, with ‘in teams’ slightly higher than ‘in class’ on both measures. Word choice data also suggests that students tended to feel more relaxed when working with their teams (52) than they generally did in class (30). This could be a good indication of cohesiveness if students had tended to feel more relaxed with the more familiar, close-knit group of their team. Furthermore, a much higher proportion of students reported feeling more “anxious” in class (46) than they had when working with their teams (20).

The Word Choice data implies that while student experience was positive overall, as evidenced by the high scores for both “fun” and “friendly”, the ‘in class’ experience was markedly more “anxious” and less “relaxed” than the ‘in teams’ experience. In terms of learning environment, this could suggest that teams were cohesive and supportive learning groups in which students felt more relaxed due to a familiar, close-knit social climate. However, it could also be that students felt more anxious when gathered as a class if they were aware that they could all be observed by the teacher.

A further potential explanation for this could be that students felt greater social anxiety ‘in class’ due to the online environment. When working in teams, students were put into Zoom breakout rooms where they could enjoy relative privacy during team discussions, yet when they came together as a whole class, students would all appear on the same Zoom screen and therefore be observable to all 20 of their classmates.

One potential way to reduce this anxiety could be to encourage students to use their cameras in breakout rooms to allow for smoother discussions and improved social bonding via non-verbal social cues (such as nodding, smiling, or laughing with classmates); however, students should be informed that those who feel nervous about using their camera in front of a larger group may turn it off. Whilst this may benefit students with anxiety, many online educators may feel disheartened when faced with a wall of blank screens, particularly as they cannot gauge from student expressions or reactions whether students are attentive, listening, engaged, comprehending, or even present at the keyboard. The effect of camera use on L2 and social anxiety in an online learning environment is perhaps one that could be better understood through further study.

Regardless of whether classes are conducted online or face-to-face, teachers can aim to mitigate L2 and social anxiety in the early stages of group formation by developing a learning environment in which students feel comfortable both with each other and with the teacher, such as through icebreaker activities to build acceptance and trust (Poupore, 2013). For instance, allowing teams to choose their own group norms that embody the ideal L2 classmate (Peragine, 2019) during the first lesson together could increase students’ sense of belonging via deliberately building a unified group identity, and hence increase the cohesiveness of newly established teams.

CONCLUSION

By offering positive L2 learning experiences, teachers can have a major effect on both students’ motivation and anxiety (MacWhinnie & Mitchell, 2017). While not all students may enter an EFL classroom with intrinsic motivation, working within a cohesive and supportive group can foster motivation (Ushioda, 2003). Regardless of ability level, an overwhelming majority of students reported that they had found working with a team helpful (93.9%) and enjoyable (91.9%). There was also widespread agreement that students felt less L2 anxiety when talking with their team (69.4%), providing further support for prior findings that cohesive groups reduce anxiety (Poupore, 2013).

Results indicate that the majority of students had been able to form cohesive groups by making friends (77.6%) and felt relaxed with their teams (91.8%). Correlational analysis of “working in a team helped me to speak English” and “I felt relaxed with my teammates” ($r = 0.70$) strongly suggests that a positive social climate improved L2 performance when students were able to form cohesive groups. High mean scores across differing ability levels demonstrate a widespread belief that “talking with teammates helped me to feel less anxious in class”, which implies that working with teams reduced anxiety. However, correlation and mean-difference data did not reveal major relationships between anxiety and online learning, indicating that the switch to online classes had not majorly affected L2 or social anxiety.

In response to the exploratory research question regarding whether working in teams had affected students’ L2 anxiety and/or social anxiety, the main finding was that social climate was the biggest factor in whether teams reduced students’ L2 anxiety and/or social anxiety. Moreover, student interpretations of social climate (i.e., whether they could “feel comfortable talking with teammates”) had a moderate effect on student perceptions of whether they were able to successfully

collaborate on tasks (“sometimes my teams did not work well together” / “my teammates rarely/ never helped me”). As the strongest correlation found was between “I did not feel comfortable talking with teammates” and “I did not feel comfortable using English with teammates”, it seems the key to productive and mutually beneficial teamwork is that students must feel comfortable before any further benefits of teamwork can occur. This finding clearly indicates the importance of icebreaker activities geared towards building a learning environment that is conducive to mutual help and support. The MEXT guidelines for English education currently in place show a clear ministerial preference towards developing students’ fluency and “higher” language skills, including presenting and debate, (MacWhinnie & Mitchell, 2017); however, from the students’ affective standpoint, meeting the pressing psychological need to feel a sense of belonging to a social group (Dovidio et al., 2009) cannot be overstated. While teachers may be under pressure to satisfy ministry or curricula objectives, such as teaching vocabulary or critical thinking skills, one of the most important components for achieving these is first establishing a comfortable L2 environment and allowing students the opportunity to bond and build mutual trust with peers (MacWhinnie & Mitchell, 2017). Only from this starting point can cohesive and therefore productive teams develop; and without a supportive team, students will not be able to meet further demands placed on them, such as providing L2 vocabulary assistance or effective and suitable peer-to-peer feedback.

Icebreaker activities are generally not awarded a preeminent place within a curriculum, yet in many situations, the adage that ‘first impressions count’ holds true. This is not to claim that the first lesson with a class will necessarily set the stage for the entirety of the course, as group dynamics can improve, decline, or fluctuate over the course of a semester (Maxfield, 2020). However, setting up a team with a set of actionable, democratically selected group norms could help to not only create a productive team (Peragine, 2019) but also create a shared or *superordinate* identity (Dovidio et al., 2009) that can increase team cohesion and mitigate the effects of social anxiety. As this study has shown a strong correlation between L2 anxiety and social anxiety, it is conceivable that any classroom activities that aim to reduce social anxiety may also diminish L2 anxiety.

This study shows that in an EFL classroom that depends on collaborative efforts, establishing a comfortable learning environment and building rapport between students must be a priority and not a secondary outcome of other educational activities. As teachers play a key role in creating and maintaining the atmosphere of a class (MacWhinnie & Mitchell, 2017), recommendations for teachers of similar courses in future include encouraging student identification as part of a team and giving teams the opportunity to autonomously select productive group norms, such as through the use of Peragine’s (2019) Ideal Classmate activity.

Limitations and Recommendations for Further Study

Limitations of the current research include a potential sampling bias created by the optional nature of the questionnaire. It is conceivable that only the more motivated students responded, as students driven only by extrinsic motivational factors, such as grades, may not have answered. All of the questionnaire data reported came from the same sample of student responses, and therefore results may not be applicable to the entire population of Debate or Presentation students or to those undertaking similar English-language courses in other institutions.

In defence of the results found by this study, however, at $N = 98$ the sample was as large and representative as possible, forming around 49% of the number of students taught by the researcher, and included learners across the spectrum of proficiency levels. Due to the low p -values ($p < .001$)

found on all major correlations reported upon, it is extremely unlikely that chance or sampling error were solely responsible for the results found. In the current study, data were gathered at only a single point towards the end of the semester; however, in future, presenting questionnaires pre-, during, and post-semester would allow for motivation, anxiety, and cohesiveness to be measured dynamically (Poupore, 2013).

Further avenues for research could include investigating the ideal group size for these class types, or perhaps within the EFL classroom as a whole. Future research could also investigate whether grouping students by different factors (e.g. randomly, by character type, by ability level, or with students choosing their own groups) has any effects on cohesion. Depending on how these classes are conducted in the future, comparisons could also be drawn between online and face-to-face learning environments.

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APPENDIX

Questionnaire for Students

€ Presentation € Debate € Level 2 € Level 3 € I do not want to give my level

Anxiety

I felt anxious about talking to classmates online before I started this class
Before I took this class, I felt anxious about starting it
Talking with classmates online was more relaxing than I expected
I often felt anxious in class
I often feel anxious in face-to-face conversations
This class was scarier than I expected
After studying in this class, it was less scary than I had expected
I feel less anxious about studying English online after taking this class
It is easier to speak English online than face-to-face
Speaking English online is easier than speaking English face-to-face
I felt more anxious when speaking English online than speaking English face-to-face

Familiar Groups (Teams)

It was easy to make friends with my teams
Working with a team helped me in this class
I enjoyed working with my teams
There was good teamwork in ALL of my teams
I did not like working with the same people in several lessons
I felt relaxed with my teammates
Sometimes my teams did not work well together
My teammates rarely / never helped me in class
I made friends with people in my teams
It was difficult to talk with my team
I did not feel comfortable talking with teammates
I wanted to stay with the same team all semester

Familiar Groups (Teams) and Anxiety

Talking with my teammates helped me to feel less anxious in class
I felt relaxed when speaking English with my teammates
I felt more relaxed when speaking English with my teammates than with other students in class
Working with a team helped me to speak English
I did not feel comfortable using English with teammates

Word choice questions:

Which words best match your experience with teams:
fun scary nervous worried relaxed calm happy friendly bored silent

Which words best match your experience in class:
fun scary nervous worried relaxed calm happy friendly bored silent