

ESL/EFL Student Anxiety: How Can The Implementation of Massively Multiplayer
Online Role Playing Games (MMORPGs) and Other Forms of Computer Mediated
Communication Help Anxious Students?

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Abstract

Language anxiety is a serious issue for many students wishing to acquire a second or foreign language (L2); it can take many forms and affect many L2 learners in several different ways. The construct of language anxiety is composed of test anxiety, social anxiety, and computer anxiety; past researchers have tried to address the problem of language anxiety through traditional teaching methods employed in ESL/EFL classrooms, however these methods have limitations that can be addressed through the implementation of Massively Multiplayer Online Role Playing Games (MMORPGs) and Computer-Mediated Communication (CMC). Given the limitations of the traditional, or non-technical, teaching methods in addressing language anxiety, the present study examines the unique contributions of MMORPGs and CMC by synthesizing the results of previous studies to show how the implementation of MMORPGs and CMC can help alleviate anxiety in language learners. To this end, this paper specifically examines the electronic environment created in MMORPGs and its effect on anxious language learners, as well as what effect synchronous and asynchronous CMC communication strategies have on anxious language learners. The synthesized results show that online communication tools do have positive effects in lowering learner anxiety through several aspects including anonymity, slower conversation pace, and added control. Finally, the study offers a caveat, the online communication tools are not a panacea; there are limitations through competitive anxiety, power distances between cultures, miscommunication, public nature of discussion forums, and lack of intercultural knowledge.

Introduction

Language learning anxiety refers to the feeling of tension and apprehension students experience specifically associated within second language contexts, including speaking, listening, and learning (MacIntyre, 1994). Language learning anxiety is an important issue to be addressed as the negative effects students experience can significantly delay or block students' ultimate attainment of the target language (Cheng, 2004; Kondo, 2004). When a student suffers from language anxiety, they become so nervous that they can either not focus on the material being taught, or cannot produce the learned material in a face-to-face conversation or when called on in class. Kondo (2004) found that in traditional ESL/EFL classrooms student coping strategies were subsumed into five strategies: (1) preparation such as studying hard before class, (2) relaxation tactics aiming at reducing somatic anxiety symptoms, (3) positive thinking such as imagining oneself giving a great speech, (4) peer seeking such as less anxious students seeking out those with higher anxiety with the intention of offering help, and (5) resignation referring to students' reluctance to do anything to alleviate their language anxiety. Recently researchers (Peterson, 2013a; Reinders, 2014; Steinkuehler, 2004) have been looking to relieve student language anxiety through the relatively new phenomenon of massively multiplayer online role playing games (MMORPGs) and other forms of computer mediated communication (CMC). Although language anxiety has traditionally been investigated in the context of the classroom, where most second language acquisition occurs, the present study will synthesize findings from previous

studies to examine the potentiality and effectiveness of MMORPGs as a language learning tool for students with language learning anxiety.

Compared to other areas of second language acquisition (SLA) research, investigating the use of technology in language teaching and learning is in a relatively nascent stage; the investigation of effective variables such as language anxiety is no exception. While most technology-focused studies have analyzed the effective usage of CMC and MMORPGs in the classroom as supplementary tools for students to acquire vocabulary and grammar skills (Cruz, 2007; Delwiche, 2006; Hitosugi, 2014), no study to date has examined the effectiveness of CMC and MMORPGs usage in decreasing student anxiety levels. In response, the proposed study will initially focus on the role of technology and language anxiety by examining three different types of language learning and language learning-related anxieties: test anxiety, social anxiety and computer anxiety. All three of these anxiety types can have different effects on language learners and are caused at different moments and in different situations while learning the Second Language (L2). The present study will then examine the features of MMORPGs that create a unique environment that not only promotes learner interest in the target language but also helps students reduce language anxiety. The unique language-learning environment will then be examined in several different language learning situations to ascertain the effectiveness of MMORPGs and CMC in the reduction of students' language anxiety. Lastly, the present study will discuss the limitations of MMORPGs and CMC in reducing language learner anxiety.

Different Anxieties Affecting Language Learners

Language anxiety is consistently associated with problems in language learning and often results in deficits in listening comprehension, reduced word production, impaired vocabulary learning, lower grades in language courses, and lower scores on standardized tests (Kondo, 2004). There are important specific anxiety reactions associated with language learning that must be addressed, as language learning itself is a profoundly unsettling psychological task, and since language learning directly threatens an individual's self-concept and worldview (Horwitz, 1986). Psychologists use the term specific anxiety reaction to differentiate people who are generally anxious in a variety of situations from those who are anxious only in specific situations (Horwitz, 1986); in the situations found in language learning, even when employing MMORPGs and CMC, there are three specific anxieties that can affect language learners. These three specific anxieties can be further broken down into two groups; language learners who suffer test and social anxiety can benefit from the addition to online tools in the classroom, whereas computer anxiety is in fact caused by the implementation of online tools to the classroom. These two distinct groups of language anxiety are being associated together in this paper as they are connected through the fact that part of the solution to all three types of anxiety is the implementation of online tools.

A. Test Anxiety

The first form of anxiety that can affect a learner's acquisition of a language is test anxiety. Test anxiety can be quite pervasive and cover most aspects of language learning through three basic elements: cognitive, somatic, and behavioral (Akca, 2011). Cognitive anxiety is an important element of test anxiety, which among language learners often leads to distraction, self-related cognition such as excessive self-evaluation, worry

over potential failure, and concern over the opinions of others (MacIntyre, 2001). Therefore, the anxious language learner suffering from cognitive anxiety has his/her attention divided between task-related cognition and self-related cognition, making cognitive performance less efficient. In other words, anxiety impairs cognitive processing on tasks that are more difficult, more heavily reliant on memory, and more poorly organized. In second language contexts, this cognitive anxiety would be indicated through the increase of time taken to understand a message or learn new vocabulary items (MacIntyre, 2001).

A study conducted by Cheng (2004) contends that somatic anxiety refers to one's perception of the physiological effects of the anxiety experience, as reflected in increased autonomic arousal and unpleasant feeling states such as nervousness and tension. These unpleasant feelings can manifest in language learners through upset stomach, pounding heart, excessive sweating, and numbness (Cheng, 2004). On occasion, through somatic anxiety, language learners can become hyper-aware of their present anxiety. This hyper awareness can then increase the learner's anxiety in a self-feeding anxiety loop.

The final element of test anxiety, often assumed to occur because of poor academic skills (Kondo, 2004), is behavioral; in the second language-learning context, behavioral anxiety takes the form of avoidance behavior. Avoidance behavior includes procrastination, withdrawal from a class, and in some cases avoiding the usage of the target language (Cheng, 2004). This study will synthesize the effects of utilizing the unique language-learning environment created by MMORPGs and CMC to address a learner's behavioral anxiety. Through a synthetic review of current and past studies that discuss the utilization of these modern teaching tools, instead of or in conjunction with

traditional methods, it may be shown that a language learner's test anxiety can become less likely to cause a language learner to shut down linguistically during a lesson

B. Social Anxiety

Language is neither learned nor used in a vacuum; language is inherently a social tool, which has to be utilized when people interact. Given the inherent nature of linguistic communication, social anxiety, which arises from the desire to create a positive impression in social settings along with a general lack of self-presentational confidence (High, 2009), can present a serious problem in a language learners' ability to acquire the TL. Social anxiety can have a significant effect on a language learner's acquisition, as social anxiety is a trait-like characteristic that remains relatively stable across temporal and situational variations, resulting in anxious language learner's tendency to be inhibited and withdrawn. In a language-learning context, the consequence of social anxiety is often having difficulty forming and maintaining satisfying relationships among the student's language peers or native speakers (High, 2009). Socially anxious language students therefore often find themselves unable to practice their newly acquired target language, which in turn severely impedes their ultimate acquisition since the more anxious language learners tend to avoid attempting difficult or personal messages in the TL (Horwitz, 1986). Socially anxious language learners will also be unable to benefit from the social aspect of language and be unable to connect to the target language culture.

C. Computer Anxiety

The utilization of technology-based language teaching tools through the medium of computers can have the unintended consequence of actually adding anxiety to some students' language learning experience if a learner has no or little previous computer use.

Computer anxiety takes the form of what is called general anxiety, which can in turn be classified in two areas: trait anxiety and state anxiety. Trait anxiety refers to a general readiness to react with anxiety in many situations (Hong, 2012). In regard to the language-learning context, these are learners who will experience language anxiety whether they use a computer to learn the language or not. State anxiety refers to anxiety actually experienced in a particular situation (Hong, 2012), which can result when language students feel an added layer of anxiety when using a computer, especially if they have little to no previous computer experience. In other words, in this context, state anxiety is what actually happens when a language learner uses a computer and the frustration or nervousness they experience, which as we have seen above can spiral into a loop with the end result being a student with ever increasing anxiety. Reinders (2014) conducted a study where participants who had previous game-playing experience felt more comfortable in the game and self-reported a higher level of enjoyment and flow in the game; however, a limit to the study is that it did not report if the reverse was also true. Therefore, if in fact language-learning students experience anxiety from the computers themselves, it becomes possible that the benefits of applying the non-traditional teaching tools of MMORPGs and CMC to one's classroom will be negated by the computer anxiety.

D. Limitations of Traditional Teaching Methods

Anxiety can affect students in all language learning situations, including face-to-face settings. The anxiety can produce negative emotions such as anxiety, fear, stress, and anger. This can compromise learners' optimal learning potential and largely reduce language-learning capacity (Shao, 2013). In the past, teachers in language classrooms

have made attempts to reduce student language anxiety using traditional teaching strategies. One such line of research has investigated the role of emotional intelligence (EI) in classroom anxiety; Shao (2013) found that second language learners with a higher level of emotional intelligence are better able to control impulses, manage stress and maintain a positive attitude in the face of challenges and frustrations during the acquisition process. Shao (2013) thus investigated if students' self-awareness, as well as teacher's knowledge of student ability in reducing anxiety, might enhance learners' ability to become successful users and language learners. Shao (2013) attempted to achieve emotional literacy in the classroom through the teachers' active cultivation of a sense of humor and a friendly and cooperative environment that would encourage students to take risks in speaking the language. Secondly, in Shao's (2013) study, teachers took a more direct approach in creating an EI-supportive environment through the explicit discussions between teachers and students about the significance of EI and foreign language anxiety in L2 learning. The final strategy Shao (2013) employed is that teachers provided examples of how successful language learners went about motivating themselves to overcome language-learning obstacles; these students could also share their experiences directly thereby creating a foundation of empathy, a core component of EI. A limitation of the traditional methods in Shao's (2013) study is that teachers who wish to enhance students' emotional stability will need to keep a special eye on their students' emotions. As a result, there will always be students who fall through the cracks, especially in a classroom with a large amount of students. Another limitation is that some students may be affronted by the teacher's attempt at humor as it goes against their home culture. While students who come from a high power distance culture may be

uncomfortable with a direct conversation with the teacher about how their language acquisition is lacking. The final limitation is that there may be students who wish to save face in front of their peers and will refuse to talk about their faults with their classmates.

As mentioned above, test anxiety has far-reaching implications for language learners and can have the most influence in a language classroom, as students with test anxiety often demand more of themselves than they are capable of achieving and worry about their performance (Liu, 2008). This expectation of performance can reach into all areas of language learning; language students who experience negative evaluation anxiety, those students who do not believe they can reach their own goals, tend to sit passively in the classroom, withdraw from activities that could increase their language skills and may even avoid class entirely (Liu, 2008). The data gathered in Liu's (2008) study revealed that most of the students were willing to participate in interpersonal conversations; however, perhaps due to anxiety, or low English proficiency, many of them did not like to risk using/speaking English in class. Moreover, one third of the participants in Liu's (2008) study felt anxious in their English language classrooms; they feared being negatively evaluated and were apprehensive of speech communication and tests. Another source of anxiety was when teachers randomly called on students in class; language learners complained that they always felt on edge not knowing when or if they would be called on (Williams, 2008). In the past, a traditional solution to this problem, one that was employed in Liu's (2008) study, was for teachers to find out how students self-rate their own English proficiency. They could then have students set realistic short-term goals in learning oral English. The students' short-term goals should then be revised to suit the students' needs as they progress through the term. Another traditional solution

utilized in Liu's (2008) study was teachers' encouraging students and building up their self-confidence by pointing out the students' achievements as well as trying to increase student interest in and motivation to learn and use the L2. The final traditional solution strategy employed by L2 teachers was to encourage the students to practice English and gain more exposure to the language; students were required to practice using/speaking English both in and outside the classroom, with different people, and in a range of situations (Liu, 2008). However, some limitations to these strategies was that some students were not be able to reach their short-term goals to improve their English proficiency for fear of negative evaluation from either their peers or their language teacher. Other students found constant praise for their achievements at odds with their own cultures and ceased to believe the teacher when praised. Finally, some students found the prospect of practicing their English outside the classroom, speaking with different people, and experiencing a range of situations face-to-face too anxiety inducing to complete.

Pae (2013) discussed a study by Saito (1999), which found that language skills specific to foreign language anxiety (i.e. listening) are a construct that is distinct from, but related to, general foreign language anxiety. This finding implies that anxieties arising from each of the four skill areas should receive independent and balanced attention from second language teachers in their classrooms. Pae's (2013) study utilized the Foreign Language Classroom Anxiety Scale (FLACS), and she discovered that each of the four skill-based anxieties made an independent contribution to the prediction of FLACS, even when the effects of the other three skill-based anxieties were controlled for. The result of this discovery is that L2 classroom teachers must give balanced attention to

each of the four skill-based anxieties through the form of L2 training. However, this is almost an impossible task for any L2 teacher with a standard sized classroom to achieve.

Situational variables such as participants, physical setting, teacher and the formality of the situation can influence student reticence and anxiety in the classroom. These variables have been shown to produce an immediate effect on students' willingness to communicate (WTC) and can account for why some learners are more willing to participate in one particular classroom situation than another (Lee, 2010). The classroom, typically a large, formal gathering, which comes together for pedagogic rather than social reasons, often has its own rules and conventions of communication; these established patterns are likely to be different from the norms of turn-taking and communicative interaction which operate in small, informal social gatherings outside the classroom, where students will use the majority of their language (Lee, 2010). The traditional strategy to help combat the variables that produce student reticence is based on the assumption that how teachers conduct their lessons and how they interact with their students can influence learners' communicative behavior in the classroom, taking the form of either a teacher-fronted strategy or a learner-oriented strategy as discussed in Lee's (2010) study. A teacher-fronted strategy is where the teacher is the center of the classroom and dominates the lesson conversation, while the learner-oriented strategy is where the conversation is learner produced with only prompting coming from the teacher.

A limitation of this study is that the traditional teaching strategy depends on the student and teacher having a good working relationship as well as the teacher's classroom management and philosophy matching the students' language learning needs, which tends to be the best way for the student to reduce his/her anxiety. Another limitation of

the traditional strategy utilized in Lee's (2010) study is the need for students to interact face-to-face with their classroom peers in the learner-oriented strategy. Students with language anxiety will be much less likely to interact with their classmates if they are worried about losing face through their inability to produce the target language in a competent manner.

Lastly, mixing non-native speakers (NNSs) and native speakers (NSs) of the target language in a face-to-face setting can cause a disruption to the second language learners acquisition of the L2. When second language learners who feel uncomfortable using the target language are mixed with NSs who are quite comfortable using their native tongue, frustration can result for both students and teachers (Freiermuth, 2001). This can occur through power discrepancies between the two cultures through the fact that cultural and social norms can play a role in limiting the opportunities of others to participate through turn taking, which will obviously affect the ebb and flow of conversations (Freiermuth, 2001). The data gathered by Freiermuth's (2001) study evidenced that language teachers need to be aware that simply mixing NNSs and NSs is not a guarantee that NNSs will get sufficient opportunities to contribute to the discussion; in spoken conversations NNSs may feel that since they are non-language experts, they cannot compete with NSs. To ESL teachers, this should be a warning that planned cross-cultural speaking activities aimed at helping NNSs acculturate may not produce the desired effect (Freiermuth, 2001). A limitation found in Freiermuth's (2001) study is that NNSs feel like outsiders and do not wish to contribute to conversations, as they have to worry about mispronunciation, their stress placement and incorrect word choice. Another limitation found in Freiermuth's (2001) study is that both the NNSs and NSs can

probably attribute some hesitancy by NNs's in face-to-face communication to real or perceived language deficiencies.

It then becomes clear that despite the plethora of traditional strategies available to teachers to lessen student anxiety in the classroom, there would still be students who slip through the classroom cracks and suffer from language learning anxiety. The traditional strategies, as well as leaving certain students open to anxiety, can better assuage student anxiety with the addition of MMORPGs and CMC to the regular classroom curriculum. While utilization of technology based language teaching tools may not be a panacea of student anxiety, they will allow language teachers to reach more of their students as well as strengthen the traditional strategies already being utilized.

Key Features of the MMORPG Environment

A. Synchronous Communication: Reduced Pressure and Anonymity

One of the key features that makes MMORPGs different from other types of computer or even consol-based games (such as Xbox or Ps3) is the sheer number of players (i.e., potential interlocutors) that are available to the second language learner as they participate in the game. In traditional online games the maximum number of players that can interact at one time is around 20-25; in a MMORPG that number soars to hundreds if not thousands. This large number of players can benefit learners with language anxiety as it reduces the pressure of each conversation in which the learner/gamer participates. MMORPGs are games set in fictional three-dimensional (3D) worlds that can represent every type of natural environment possible. MMORPG players use their avatars to explore locations, defeat creatures and complete quests in order to obtain rewards, which will improve their equipment for more difficult tasks (Li, 2011).

MMORPG players can choose whether they wish to interact with the thousands of other players to complete their tasks or not; however, in many MMORPGs, playing with other gamers makes the gaming easier and more fun. Each MMORPG must find ways to allow their players to communicate with each other in an effective manner; every MMORPG on the market today employs multiple communication strategies to allow the gamer to choose the type of communication they enjoy the most. Each MMORPG and CMC communication strategy can be split into three categories: synchronous, asynchronous and instant message interaction (IMI).

The most common communication strategy employed in MMORPGs is synchronous CMC in the form of text chat. Most MMORPGs will have a section of the screen that is dedicated to only real time text chatting with the player's friends or other gamers they meet in the game. The biggest advantage of synchronous interaction is that it allows students to be logged on to the same network at the same time; although they may not necessarily be in the same physical location, they can read and respond to each other's postings immediately (Kost, 2008). As the second language learner participates in the game and the synchronous chat, they can contextualize the communication (chat) using the visual cues on the screen. This will then provide context for the language learners' conversation to help ensure comprehension.

Another advantage of synchronous text chat, is students can see if they have made a communication error and correct the mistake almost immediately because chat records remain accessible during and until after the gaming session has ended. This feature allows L2 learners to spot and correct their errors more easily than in face-to-face conversations, as synchronous text chat has been argued to afford learners more

processing time as well as increasing online planning time during synchronous conversations (Sauro, 2010). Synchronous communication contains several strategies to help anxious learners communicate. These include: initiating and expanding on a topic, asking and answering questions, requesting clarification, apologizing, giving feedback, or greeting and leave-taking (Kost, 2008). All of the above discourse moves can be found in different forms of communication, but for anxious language learners, placing these discourse moves in synchronous text chat is an added advantage.

B. Instant Message Interaction

The next communication strategy that can be found in MMORPGs is IMI. This is instantaneous text communication between two people and is different from synchronous text chat, which takes place with multiple participants at once. Since IMI is a real-time discussion, similar to face-to-face conversations between two participants, IMI moves online relationships to a more intimate level compared to synchronous and asynchronous communication tools (Jin, 2008). This communication strategy then moves the language learner one step closer to communication that is comparable to real life interaction, such as what they may experience in a classroom setting. IMI is, therefore, best suited for language learners who have low language anxiety and do not require asynchronous or group synchronous communication to help ease their anxiety.

C. Voice Chat

Lastly, MMORPGs often feature voice chat, where players wear headphones with a microphone attached and can talk as if they were face-to-face even though they may be thousands of miles away. This strategy would be more useful to language learners who either have moderate to high L2 proficiency or have little language anxiety, as voice chat

can be more difficult and have higher demands on the learner's L2 skills compared to text based communication (Peterson, 2012b). However, the communicative distance between the language learner and the native speaker may reduce the anxiety among certain language learners, for whom this strategy will be beneficial, despite their anxiety or proficiency level. Therefore, it is important to have the voice chat strategy available for language learners as a communicative option. In sum, although written communication may be a dominant communication strategy among MMORPG players, L2 learners of varying proficiency levels and anxiety levels can benefit from the combination of voice chat and written modalities (Satar, 2008).

D. Identity Concealing

The second feature of MMORPGs, which is likely to contribute to decreasing language learner anxiety, is the MMORPG's protection of the user's identity. Language learners can become anxious from more than just the worry of mispronouncing or misusing the L2. Having a personal relationship with the gamer they are conversing with in the L2 can cause language anxiety due to the learner's desire to save face and avoid communication mistakes (Normore, 2011; Shalom, 2015). MMORPGs use screen names and moldable characters called avatars to allow the gamer to control his/her identity. An avatar is a computer-generated picture of a character that can take any form the player wishes; usually a game will give the player a certain number of avatar choices and then the player can further customize the avatar. Usually, while playing a MMORPG a learner will stick to one avatar, however, if the learner becomes anxious because they realize that their avatar is gaining recognition among players, they can change the appearance of their avatar and once again gain control of who is aware of their identity. While playing the

MMORPG, anyone the learner interacts with will only see their avatar and screen name, just as the learner will only ever see other players' avatars and screen names. The use of avatars as well as screen names, which are pseudonyms that are displayed over the avatar's head, lends a real sense of identity control in MMORPGs. The result of using avatars and screen names is the chance for gamers to assume and develop new online identities through the provision of individual game characters allowing them to shift away from their language anxieties (Peterson, 2012b). Researchers note that when learners can concentrate on a task without anxiety, they are likely to experience deep learning (Hitosugi, 2004). Deep learning is a form of learning that occurs when game play elements that initially seem simple, and easy to learn, become more complex the more the player comes to master them (Peterson, 2012b). The less cognitive processing that has to be diverted to worrying about anxiety the easier it will be for students to slip into deep learning, allowing the student to master more complex aspects of the L2. The anonymity provided to the students through the MMORPG environment lowers anxiety. Lowered anxiety, in turn, induces deep learning, which is conducive to a successful language-learning outcome.

E. Utilization of Communication Strategies

The type of language interactions that a language learner has while playing the MMORPG has a similar impact as the gaming environment on the language learner, and is a key determiner of language learning outcome (Steinkuehler, 2004). The language learner's experience can be significantly affected by how kind, warm, and polite one player is to another, which then creates a welcoming environment and helps reduce language anxiety in learners. Politeness between gamers appears to be significant to

player experience (Kost, 2008; McBride, 2008; Peterson, 2012a; Reinhardt, 2008), as politeness appears effective in preventing occurrences of flaming in MMORPGs.

Flaming is an occasion in which a heated argument breaks out between two players or one player verbally attacks another. Research on gaming discourse shows (Peterson, 2012a) that when gamers are polite to each other, no instances of hostility or other types of anti-social behavior ensue in the interaction. The manner with which gamers conduct their communication is an important issue when it comes to language anxiety since the learner's language anxiety would increase if the other players in the game were unwilling to help them learn the language, or were too rude to even have a conversation (Peterson, 2012b). Thus, politeness and warmth will help ease learner anxiety. Politeness also enables the learners to signal interest in the interaction, and a desire to obtain group membership, which in turn, contributes to the establishment and maintenance of social cohesion in the game (Peterson, 2012a). Example (1) below is taken from Peterson (2012a) and shows how politeness through greetings can be used by learners to attract attention, display interest and establish collaborative interpersonal relationships: two language learners and two native speaking players introduce themselves:

- (1)
1. Learner 4: hi!
 2. Player 2: hi
 3. Learner 4: where are you from?
 - (2 lines of text)
 4. Player 2: Philippines
 5. Learner 4: Philippines!
 6. Player 2: yeah

Peterson (2012a) reported that in the session listed above, the use of greetings facilitated ongoing interaction with other players, and lowered the anxiety of the language learner. Studies investigating the communicative behavior of gamers also note that experienced gamers, in general, treat less experienced gamers with politeness and civility, thereby acculturating the new players into the social culture of the MMORPG (Rama, 2012; Steinkuehler, 2004). Example (2) below, taken from Steinkuehler's (2004) study shows the interaction between an experienced (Myrondonia) and an inexperienced (JellyBean) gamer having been facilitated by a polite greeting; the two gamers are discussing the glut of dangerous enemies in the area

(2) JellyBean: I'm scared I will click on one just walking

Myrondonia: I know a secret

JellyBean: What?

Myrondonia: hold your mouse key down

(JellyBean follows Myrondonia's advice causing her avatar to move fluidly across the screen allowing her to outrun the zombies she was previously worried about)

JellyBean: wow

Myrondonia: there you go

JellyBean: that's so cool!

New language learners thus become socialized in certain ways of acting in and understanding the virtual world, actions and beliefs that are tied to particular values (Steinkuehler, 2004). Through this acculturation, the language learner becomes a member of a community where they know the rules, are accepted and can reap the benefits including lowering their language anxiety.

F. Sandbox

Another common feature available in many MMORPGs is known as the sandbox. Sandboxes are the safe areas in games where learners can experiment, and where the risks and pressures associated with learning in the real world are greatly reduced (Peterson, 2013a); in other words, sandboxes are safe places for players to try out the game with other new gamers like themselves. In the context of MMORPGs, for example, sandboxes are an area in the game where one's avatar cannot be killed, and all gamers share the same amount of game play experience, allowing the learner to focus solely on language acquisition. In the sandbox, as in the MMORPG as a whole, anxious learners do not need to worry about having perfect language skills, since so many people who are also L2 speakers of English play from around the world. By putting the gamers on the same gaming skill level, they can better focus on communication (Peterson 2013a), and experimenting to learn the rules of the game will in turn allow learners to practice asking questions of the other players in the L2.

These sandboxes are shown to be connected to the rest of the MMORPG environment in the study conducted by Rama (2012) where two students, one a proficient gamer but novice Spanish speaker and the other an experienced Spanish speaker but novice gamer, both played an MMORPG to discover the affordances of online gaming environments for second language learning and socialization. The study Rama (2012) conducted found that gaming environments of MMORPGs have an explicit focus on communicative competence. The majority of the MMORPG environment is task-oriented through quests, and the sandbox is task oriented through learning the game mechanics. Both quests and the sandbox provide opportunities for language learners to interact in

such a way to allow time for reflection on language production and provide a significant margin for error. Thus the novice gamer and novice Spanish speaker both had ample time and opportunities to acquire skills in their respective goals, in a safe and supportive environment.

G. Fun Factor

The last aspect of MMORPGs that allows for this unique learning environment to be created is the fun factor. The fun that is inherently experienced by students utilizing MMORPGs has benefits in language learning, as the enjoyment and pleasure engendered by undertaking play not only elicits a high degree of involvement, but it can also result in learning (Peterson, 2013a). When a student is enjoying himself/herself, they are less likely to experience language anxiety, which can increase the likelihood of uninhibited acquisition (Wu, 2014). This fun factor can allow accomplishing tasks to be enjoyable, which is crucial in making MMORPGs a viable language learning tool. In all MMORPGs, the main driving force behind the game are quests; these are tasks, missions or achievements that each player must accomplish to move on in the game. Quests usually require multiple players to work together to complete the quest, which typically takes the form of some fantasy-based adventure, such as finding a lost object or slaying an evil monster. In many MMORPGs, the further one advances in the game, the harder the quests become, thus demanding the language learner/gamer to utilize the target language to advance in the game. Play, in addition to providing pleasure, increases language learners' involvement, which also helps them to learn (Bytheway 2015, Peterson 2013a); in other words, when players have fun, their involvement level increases, making it more likely that the learner will accomplish the tasks and acquire the

L2. A study conducted by Bytheway (2015) also found that language learners who were using MMORPGs in language learning contexts only utilized the fun factor inside the game itself to manage their language learning acquisition.

Effects of MMORPGs and CMC on L2 learners' language anxiety

A. General Motivation

General motivation is important for language learners to acquire a language, as the more interested they are in the language/culture/or lesson the more likely they are to acquire the L2 as past studies have found a relationship between motivation and L2 achievement (Bernaus, 2008; Bytheway, 2015; Chapelle, 1986; Chen, 2013; Dixon, 2014; Hung, 2011; Ockert, 2015; Peterson, 2013a; Wu, 2004;). Although there are several different types of anxieties that a student can suffer from while learning a second or foreign language, MMORPGs and CMC are well equipped to deal with these language anxieties. MMORPGs, depending on the construction, can be quite effective for instilling a sense of motivation in language learners, and as the virtual communities found in MMORPGs function as a major mechanism of enculturation for those engaged with them: playing one's character and living in these virtual worlds becomes an important part of daily life (Steinkuehler, 2004). In other words, MMORPGs can be structured in such a way, through the strategies available as well as the community built by other players, as to motivate language learners to utilize MMORPGs every day to improve their L2 acquisition. Since much of the excitement of the MMORPG depends on having personal relationships and being part of the community's developing politics and projects, it requires extensive participation (Steinkuehler, 2004). Thus if an anxious language learner has a good experience playing an MMORPG, the learner is more likely

to play the game again, increasing the likelihood that the language learner will benefit from the language learning tools found in MMORPGs. Once the anxious learner gains confidence in their language ability, their motivation to play the game will increase (Ockert, 2015); this increased motivation will encourage language learners to utilize the MMORPG as a language tool more often. The CMC options that can be found in MMORPGs help contribute to anxious language learner's motivation as there is a wide range of communication strategies that the language learner can employ ranging from informal to formal, from oral to written, and from planned to unplanned discourse (Deusen-Scholl, 2012). With such a wide variety of choice in communication strategies, the anxious language learner can then choose the type of CMC strategy that relieves their anxiety the most. This will increase the learner's motivation to continue acquiring the L2.

B. Experience of Test Anxiety in Relation to MMORPGs

While there are no overt tests in the sense of the traditional classroom in MMORPGs and CMC, tests of the language learner's knowledge of the L2 does take place during gaming. Therefore, it is vital that MMORPGs and CMC contain the tools needed to help students suffering from the three elements of test anxiety: cognitive, somatic, and behavioral. As we have seen, cognitive anxiety presents itself in second language students through the division of their cognitive resources between their anxiety and the task at hand. Tasks in MMORPG's should then lessen this division until the majority of the learner's attention is on the task in the game and not on the student's language anxiety. In order for language learners to be able to achieve this goal they must first be willing and able to converse with their fellow gamers. They will then be able to overcome the effects of cognitive anxiety such as excessive self-evaluation, worry over

potential failure, and concern over the opinions of others. A study conducted by Reinders (2011) investigated the effects of playing an online multiplayer game on the quantity and quality of L2 interaction in the game and on participants' WTC in the target language.

The participants started each session with a 15-minute briefing, which included linguistic preparation and familiarized participants with the quests they would undertake. Students focused on collaboration rather than competition and were randomly divided into either a text-based chat or a voice-based chat group. They were then instructed to collaborate and communicate synchronously with other players. After each game session ended, students completed a WTC questionnaire and finally a collaborative group debriefing took place so students could discuss their experiences. Reinders (2011) defined WTC in relation to second language acquisition as a readiness to enter into the discourse at a particular time with a specific person or persons, using a second language. MMORPGs then must contain a social situation between gamers that is frequently non-hierarchical and inclusive. This social situation must be one in which the second language participant has a genuine desire to communicate (Reinders, 2011). The students' participation in Reinders' (2011) study evidenced their WTC using the target language, which was quite an impressive feat for the MMORPG. This is especially true because according to Reinders (2011) students in Thailand are notoriously reticent when it comes to communicating in English. The study concluded that the MMORPG utilized in the study provided an attractive environment to participants to communicate, and the act of communicating in the online environment led them to become more willing to communicate. Finally, Reinders (2011) reported that several students, who had previously rated their face-to-face communication skills as low, gave their

communication skills a higher rating after communicating in the MMORPG environment. Through utilizing the MMORPG communication environment, the students were able to cease worrying over what others thought of them due to the non-hierarchical social structures, such as those found in the sandbox feature. This enabled language learners to be more willing to communicate and lowered their anxiety over potential failure. Once students' WTC was raised to the point where they felt little anxiety over participating in conversations in the L2, students were able to stop worrying over their self-evaluation, which in turn lead to higher self-evaluations when the questionnaires and group discussions did take place (Reinders, 2011). It follows that if utilizing the MMORPG language environment helped the students most reticent to utilize their target language to communicate openly, that the MMORPG environment can assist the majority of students in lowering their cognitive anxiety.

Somatic anxiety, unlike cognitive anxiety, affects the physical conditions of the anxious learner through the manifestation of unpleasant reactions such as upset stomach, excessive sweating and pounding heart. These physical reactions occur as the anxious learner becomes hyper aware of their anxiety, which in turn only increases their somatic anxiety and the physical reactions. In order to lower somatic anxiety, so that the anxious learner can acquire the L2, the learner must lose the hyperawareness of their anxiety and turn their focus to the MMORPG itself. This refocusing can occur through flow state or flow theory which is described by Hong (2012) as the experience of the intrinsically motivated individuals who engage in an activity because they enjoy it, find it interesting or challenging, and perceive they have the necessary skills to accomplish it. Hong (2012) discovered that when a learner's competitiveness to complete a task in the MMORPG

raises, the learner's flow state will rise accordingly. In other words the more engaged the anxious language learner is in the MMORPG game itself, the more their flow state will increase, and the learners will be unable to notice any unpleasant physical reactions they may have.

Sarsar (2008) found in her study that second language students became engaged in the MMORPG environment due to the fact that learning takes place through a non-formal route; the language knowledge and skills are acquired through the game, and the online relationships they were able to create in the MMORPG. Another study conducted by Ang (2010) found that language learner engagement could occur through the two different styles of gamers that participate in guilds: knowledge players and social players. Guilds are groups of gamers whom chose to play the game together, share knowledge of the game, share resources found in the game, as well as offer moral/emotional support. Knowledge players achieve engagement in the MMORPG through providing help to other players and developing the guild as a pooled resource that would assist other players to complete their quests (Ang, 2010). This guild aspect would not only engage certain anxious learners to the point where they would not notice their anxiety, but would also help perpetuate the friendly environment of the MMORPG. The Social player identified in Ang's (2010) study contributes to the MMORPG environment by nurturing a friendly and welcoming atmosphere within the guild community. The nurturing atmosphere should lessen learners' anxiety, especially since they are among friends.

The final aspect of test anxiety is behavioral anxiety, which can take the form of avoidance behavior, often characterized by students who sit in the back of class and never participate or students who very rarely come to class at all. The most efficient manner to

induce interest in students suffering from behavioral anxiety, thereby lessening their anxiety, is to utilize MMORPGs to make the language lesson fun. While some researchers may define play or fun as non-productive, developmental psychologists have made it clear that play or fun is inextricably intertwined with learning processes, including the learning of a language (Reinhardt, 2013). A good MMORPG functions as a highly principled learning environment, using structures that allow players to learn complex rules and narratives with seemingly minimal effort, or in other words the MMORPG creates a fun environment allowing for covert learning. So fun, in the sense of enjoyment and pleasure, puts learners in a relaxed receptive state of mind for learning; play, in addition to providing pleasure, increases learner's involvement, which is conducive to learning (Peterson, 2013a). Reinhardt (2013) contends that many MMORPGs promote goal orientation by providing players with tasks and rewarding them for completion and mastery; players are also provided with a sense of agency and autonomy through the variety of tasks and storylines offered to the language learner. Through the utilization of the unique MMORPG environment, which can create an environment similar to a well-designed learning environment (Reinhardt, 2013), students with behavioral anxiety are able to learn the L2 and keep their interest through the MMORPG's creation of fun. It then seems evident that employing an MMORPG as a curriculum supplement or even a diversification tool is an excellent way for language teachers to help lessen the effects of all three elements of test anxiety in second language learners.

C. MMORPGs/ Computer anxiety

Although the CMC strategies that MMORPGs employ have a large impact on anxious learners' ability to acquire the target language, some features of MMORPGs themselves can have a substantial impact on the anxiety of the learner through the social environments they create. As one previous study found, many MMORPGs are specifically designed to facilitate social interaction in the target language (Peterson, 2013b). The study Peterson (2013b) conducted, asserted that these social features of MMORPGs promote certain types of collaborative interaction that are hypothesized as beneficial in sociocultural research in SLA; the study further observed that repeated exposure to collaborative interaction reduces anxiety and enhances social cohesion in language learners (Peterson, 2013b). However, before the social aspects of MMORPGs can be implemented to help anxious learners, anxious language learners must gain motivation to continue to utilize computers to access the MMORPG language tool through computer self-efficacy, as it is believed to influence an individual's affect, persistence, and motivation to use computers (Hong 2012). If language learners have too much anxiety over using computers themselves, then they will never be able to benefit from the technology tools that can help alleviate their anxiety associated with language acquisition; anxious learners then must first gain computer self-efficacy before they can fully utilize and benefit from technology based language tools. MMORPGs can help learners to gain this self-efficacy through the involvement in certain types of interactions that encourage the structural movement of the players from the periphery to the core of guilds and that the 'give help' interaction between players is a key factor that promotes motivation through social connections (Ang, 2010). It is likely that learners' repetitive collaborative interaction with other MMORPG players along with the 'give help' attitude

of the learner's fellow gamers will increase their computer self-efficacy; since anxious learners who gain social relationships with fellow gamers in the forms of guilds will have the options of asking their friends for help if they are socially anxious, or can ask strangers in the guild for help if they are worried about saving face.

Wilfong (2006) found that computer self-efficacy had the most significant impact on both computer-anger and computer-anxiety over either computer-experience or computer-use. Here is a teacher-based solution to the problem of having language students who do not possess computer self-efficacy, which can then benefit students who wish to later employ MMORPGs in their language learning. Hong (2012) suggests that if a teacher can at the beginning of the course use MMORPGs and CMC to help walk their anxious learners through the basic computer skills they will need, then the students will have a much higher chance of reducing their computer anxiety to the point that they no longer experience state anxiety. Once a student has gained computer self-efficacy, they will then have a much better chance at acquiring their L2. This implies that perhaps confidence in this technological domain would ease the computer users' anxiety, as they would feel more confident resulting from stronger self-efficacy. Thus, what matters most with computer anxious students is not having the most computer knowledge, but having the motivation to continue using the computer as a tool to help acquire the L2. If an anxious learner can keep their motivation to use computers as a tool, such as through employing MMORPGs, even after making some mistakes, then the repeated exposure will create computer self-efficacy. This will aid in reducing computer anxiety and computer-anger to the point that language learners can utilize the technology to acquire the L2.

Once a teacher's students have gained computer self-efficacy the teacher can then utilize MMORPGs and CMC to replace or enhance traditional language teaching methods to help fill the gaps in the classroom. As seen above in Lee's (2010) and Shao's (2013) studies traditional teaching strategies are limited by large classroom sizes, cultural friction between student and teacher, and students' wish to save face in front of their peers. Due to the often large student to teacher ratio in classroom settings, it can be difficult for a language teacher to give each student the individual attention they require. However, through the implementation of MMORPGs and CMC as part of the traditional curriculum teachers can help address this problem. Past research (Ang, 2010; Peterson, 2012; Reinders, 2011; Steinkuehler, 2004) has shown MMORPGs to be a place where anxious language learners can find many fellow MMORPG players to help them acquire the target language. Therefore MMORPGs allow teachers to provide individual attention for students through individually assigned tasks, and provide anxious students with access to help from other players to acquire the desired language skill.

Implementing MMORPGs and CMC into the traditional classroom would also help alleviate any student-teacher friction that may arise. Shao (2013) gave the examples of using humor and praise to help the anxious student relax or directly talking to the student about the difficulties they are having acquiring the L2. However, for students who may find these types of strategies uncomfortable or inappropriate, MMORPGs and CMC provide a strategy where the anxious student can seek assistance from strangers online and therefore can easily receive the directed help they require. Finally, both Lee (2010) and Shao (2013) suggest student-centered strategies to address language anxiety; this can cause issues for students who come from a culture where saving face is quite

important. Through the anonymous environment produced by MMORPGs and CMC, students can save face in front of their peers, and not worry about being randomly selected to speak out loud in class. Liu (2008) discovered that many second language students find using their second language in public to be too anxiety inducing to even attempt. However, through the utilization of MMORPGs and CMC these students would be protected through anonymity as well as not having to worry about the fast pace that face-to-face conversations often use.

Another issue anxious language students suffer from is negative evaluation; Liu (2008) discovered that anxious second language students who are taught using traditional methods often suffer from negative evaluation, both judging themselves too harshly as well as worrying about others doing the same. Through the incorporation of MMORPGs and CMC, students can then take their time within the conversation and therefore be more likely to have successful target language interactions, which will in turn raise their self-evaluation (Acka, 2011). In this situation, even negative communication will have relatively minor consequences, as it will come from a stranger rather than a peer.

While it is often a struggle for teachers to create an environment to allow anxious language learners to engage in language acquisition, it is also important to teach anxious language learners all four skills of a language. Pae (2013) discovered in a study that all four language skills must be taught individually, as each skill is quite distinct from any of the others. To fully acquire a language, one must at least in part master all four of the basic language skills: reading, writing, listening, and speaking. Giving each student the required attention to master each language skill would be quite difficult for second language teachers to accomplish especially with modern student-teacher ratios.

However, both MMORPGs and CMC allow anxious language students the opportunity to practice and perfect their reading, writing, listening, and speaking skills with thousands of players who will inherently give the anxious learners the attention they need by assisting them with their language production. Anxious language students could supplement their classroom reading and writing language skills through the utilization of both synchronous and asynchronous CMC environments both in and out of MMORPGs. Language learners can utilize headsets and microphones to access the talking discourse option in MMORPGs to supplement their traditional speaking and listening skills instruction. Having anxious language students acquire skill in all four areas of language will better prepare them to face the challenges of speaking a second or foreign language (Pae, 2013). By better preparing anxious learners, it may help lower their language anxiety.

Finally, Freiermuth (2001) discovered that non-native speakers of the target language feel like outsiders in the majority of conversations that are made up of native speakers of the L2. The anxious language learners tend to focus most on their stress placement, incorrect pronunciation of vocabulary words, and using an incorrect word in conversation. Since an anxious language student's focus will be on how they are perceived by native speakers and not fully on the conversation, any acculturation that the non native speaker would have gained through the conversation will more than likely not be able to take place (Freiermuth, 2001). However, when anxious language learners converse through MMORPGs and CMC, there are several options that do not involve speaking, therefore the anxious learners do not have to worry about their stress placement or mispronunciation creating a negative perception from any native speakers. Anxious

learners who converse through the non speaking discourse options in MMORPGs and CMC also have more time to choose their words carefully as well as read through their response before submitting it, thereby alleviating the need to worry about choosing an incorrect word (Deusen-Scholl, 2008). Finally, for anxious learners who wish to improve their stress placement or pronunciation but wish to do so through strangers who are not sitting across from them in real life, there is both the synchronous CMC and the speaking options in MMORPGs. As a previous study found, synchronous CMC is the best non-speaking option in improving language learners' pronunciation and sentence flow without actually speaking (Razagifard, 2013). Once anxious students have reached a comfort level where they can leave synchronous CMC behind to work on their stress placement, pronunciation, and word choice through actually speaking, they have a safe space in which to do so: MMORPGs. MMORPGs and CMC can, therefore, greatly benefit traditional language teaching methods by filling in the gaps within traditional teaching methods.

D. Strategies in Synchronous CMC to Assist Language Acquisition

If an anxious language learner has enough confidence and language skills that they feel comfortable with real time communication, synchronous CMC will allow them to complete their goals in a more straightforward and timely manner than asynchronous CMC. If teachers utilize synchronous CMC in conjunction with their traditional language lesson curriculum, the anxious students in their classroom will have the opportunity to apply a greater number of learning strategies to support their language acquisition. Synchronous CMC contain indirect strategies also known as stalling strategies, which are intended to buy the learner some time to think and keep the communication channels

open (Kost, 2008). This is possible as Synchronous CMC has been described as a conversation in slow motion, which affords the anxious learner the benefit of additional time to think and to plan the discourse, generally resulting in an increase in the L2 output and a decrease in anxiety (Deusen-Scholl, 2008). Kost (2008) also discovered that students employed a variety of strategies that can be used during their conversations, the most frequent were substitution or abbreviated forms of a word, framing of a topic, fillers, and politeness markers. These strategies can be used by anxious learners to keep the conversation flowing and at the same time save face from any issues they are having. For example if an anxious student is having trouble thinking of a word, they can either send an abbreviated version if they are having trouble spelling it, or send a filler post to provide them ample thinking time to come up with the entire word.

Noticing plays a significant role in language acquisition as Schmidt (1992) concluded in his study that subliminal language learning is impossible, and that noticing is the necessary and sufficient condition for converting input to intake. In the context of this study noticing is the most effective manner for anxious language learners to repair any mistake they may have made. Kost (2008) found in her study that students' use of self-repair indicates they were able to notice some of their own mistakes while chatting and fix them. This is significant because, as Kost states, monitoring one's own output and noticing mistakes constitutes a crucial aspect of language learning. The benefits of Synchronous CMC are not just relegated to output in the form of content but also in the form of grammar acquisition. Deusen-Scholl (2008) found that several of his students were able to acquire grammatical knowledge as a result of the communicative needs that arose in the interactions between their peers through synchronous CMC, mainly

abbreviated sentence structures and word forms. Therefore synchronous CMC that takes place both inside and outside of MMORPGs can teach grammatical knowledge through the writing and reading language skills, thus benefiting the anxious learner's language acquisition.

Although CMC such as chat rooms do not have the unique environment created in MMORPGs a previous study conducted by Darhower (2002) discovered that language learners utilizing an online chat took ownership of the chat room environment and constructed a dynamic, learner-centered discourse community. This community was characterized by discussion of topics of mutual interest, social cohesiveness and group belonging, joking, experimenting with identities, role plays, and even light teasing (Darhower, 2002). It seems that anxious students utilizing CMC can use their L2 in chat rooms for solidarity and enjoyment with their peers while also developing their sociolinguistic competence. Finally, Darhower (2002) asserted that his study lends support to Vygotsky's claim that the employment of cultural tools, such as the computer in this case, not only facilitate the achievement of a given task but can also alter the entire process and outcome of task performance.

As mentioned above, language is a social tool, and as such eventually the skills learned through CMC will need to apply to real world face-to-face conversations. If the learner's anxiety stems mostly from social anxiety, synchronous CMC will be the communication tool best suited for them. This is shown through a previous study that indicated that synchronous CMC is more effective than asynchronous CMC in improving students' oral fluency (Razagifard, 2013). It seems clear that anxious students can indeed gain benefits from utilizing synchronous CMC in their language acquisition, although, a

possible effect of CMC on the development of oral proficiency has been proposed: synchronous CMC seems to develop the same cognitive mechanisms that underlie spontaneous oral communication (Abrams, 2003; Beauvois, 1998a, 1998b; Kost, 2004; Payne & Whitney, 2002; Payne & Ross, 2005). Deusen-Scholl (2008) claimed in his study that there was no difference between how L2 learners built common ground with each other when comparing students who were learning through CMC and face-to-face methods. As we have seen, language learners use a wide range of communication strategies during synchronous CMC, and that in turn those strategies are in many ways similar to those found in face-to-face interactions (Deusen-Scholl, 2008). It seems clear then that anxious language learners who utilize synchronous CMC can learn the necessary skills to make the transition to face-to-face communication easier and less anxiety producing.

E. Discussion Forums/Asynchronous CMC

While Synchronous CMC is more beneficial for language learners with a lower anxiety level, asynchronous CMC assists language learners with a higher level of language anxiety. Language learners with high levels of language anxiety can use the more secure environment of asynchronous CMC to build up their language self-efficacy. They can then utilize synchronous CMC strategies that are closer to face-to-face conversations, which as we have seen above, more effectively teach oral skills, to ultimately reach their acquisition goals. Language learners with a higher anxiety level need a more secure learning environment as according to Chan (2011), shy individuals are usually less adept at expressing themselves during social interactions and are more inhibited in the presence of others. In other words, these are language learners who must

deal with their feelings of discomfort and inhibition around other people, and require the distance from face-to-face communication in order to learn. The asynchronous CMC environment is more stable than synchronous CMC environments as the communication is public, organized within topic areas, and discussion threads take place at a much slower pace (Wanner, 2008). Since asynchronous discussion forums are the majority of the time open to the public, and anyone can post a message, they contain moderators. Moderators are men and women who have complete control of the conversation thread in the forum. They have the power to shorten or delete messages that are not in line with the forum rules and they are able to block a participant from posting further messages (Wanner, 2008). Therefore, an anxious learner does not have to worry about the unpredictability of the messages they will receive, as they might in synchronous conversations, and can be assured that the conversation will stay within the information area they are comfortable with. As according to Chan (2011) anxious learners prefer asynchronous CMC to face-to-face interactions because of the reduced demands of spontaneity. This helps reduce anxiety-derived from the increased control of how a message can be framed before it is sent. Also, language learners' anxiety about negative evaluations or judgments from other people online should decrease as the moderators will prevent any person from posting vicious comments about other posters. This anxiety reduction in relation to negative evaluation is extended as asynchronous CMC posters receive just as much anonymity as those participating in MMORPGs since each posting indicates the writer's screen name, not the participant's real name (Wanner, 2008).

The anonymous environment of asynchronous CMC reduces the 'gating feature' that can inhibit relationship development, such as physical unattractiveness and

communication anxiety, and allow individuals to build meaningful relationships and be more willing to reveal personal information to others (Chan, 2011). The fact that asynchronous CMC forums are public also benefits anxious language learners in two ways: first, messages can be read and responded to long after they have been posted, just like a note on a real bulletin board (Wanner, 2008). This means that the conversation thread can move quite slowly allowing the highly anxious language learners to make important and detailed contributions to the conversation without being rushed. Secondly, postings in an asynchronous discussion forum are not transitory, and depending on the forum, can be read, bookmarked, searched, liked, or responded to years after they have been posted (Wanner, 2008). This aspect, along with the fact that the forums are public, of asynchronous discussion forums invites more careful wording and more elaborate postings. Higher anxious students then can take the time to ensure their post has few to no errors, as well as push themselves to make their postings as complex as they can without an enormous amount of pressure to post in a timely manner.

Through the above structure of asynchronous CMC discussion forums, more highly anxious language learners have access to general learning gains both in L2 production and self-expression as compared to face-to-face interactions (Polat, 2013). Since asynchronous forums are not subject to time and autonomy limitations or disruptions embedded in traditional classrooms, asynchronous discussions allow students the opportunity to process the linguistic input at their own pace, negotiate meaning with their peers, and re-formulate responses (Polat, 2013). Anxious language learners can then use the above tools found in asynchronous discussion forums as well as multiple interactions with their peers, to scaffold their target language practice to improve their

L2. Finally, Polat (2013) states that in anonymous online learning environments the participants' anxiety decreased and their motivation to participate increased. It seems then that an asynchronous CMC discussion forum can more than adequately supplement a highly anxious language learner's traditional classroom language learning curriculum to not only increase their motivation to learn the language, but to also help them achieve their reading and writing language skills in a much more conducive environment to their needs.

F. Social Anxiety

As we have seen above, social anxiety arises from a desire to create a positive impression in social settings in conjunction with a lack of self-presentational confidence. The anonymity tools inherent in MMORPGs and CMC, as we have seen in the MMORPG/CMC environment descriptions, will help reduce anxious learner's anxiety over creating a positive impression. Since no one will know the language learner's true identity, there is no need to worry about losing face or appearing to be a non-native speaker in the L2. The greater time allowed for creating a thread posting in asynchronous CMC will help alleviate language learner's anxiety over self-presentational confidence. The most imperative problem that social anxiety can cause for language learners is that they have difficulty forming and maintaining satisfying relationships among the students' language peers or native speakers as I have mentioned briefly above. This aspect of social anxiety is so important to address because according to Lin (2008), language learning is an integral and inseparable aspect of social practice; language culture is learned in and through communication with people and by being a member of a community. Once students suffering from social anxiety alleviate enough of their social anxiety to utilize

Instant Message Interaction (IMI), they can then move their online relationships to a more intimate level than they would have been able to when utilizing asynchronous communication tools (Jin, 2008). Jin (2008) studied the intensity of the relationships between non-native and native speaking students who utilized IMI to communicate. The relationships looked at in Jin's (2008) study were considered hyper-personal relationships because of the short time span, merely one hour of chat time, taken to establish the unusually close relationship between the native speaker and the language learner. Therefore anxious language students will have access to the L2 culture, as part of building a relationship, is sharing one's culture with another. A major aspect of these students being able to form hyper-personal relationships is the environment provided through the utilization of IMI. Participants in Jin's (2008) study mentioned the relaxing atmosphere inherent in the IMI, even the first time they talked with their native speaker partner; in the synchronous chat there were few constraints on the completeness of sentences and the content to be discussed. It seems then that through the calming environment set up by IMI, socially anxious language learners who have graduated from asynchronous CMC and text-based synchronous CMC can begin to practice forming closer relationships. These relationship-forming skills that anxious language learners can master in a short time due to the hyper personal nature of the relationship, can help language learners start forming real life relationships face-to-face while utilizing the L2.

Limitations to Study

While MMORPGs and CMC can be powerful and diverse language tools when used correctly, teachers and language professionals must acknowledge that they are not a panacea to language anxiety. Therefore, a well-informed language teacher must be aware

of not only the strengths but also the limitations of MMORPGs and CMC as a language-teaching tool. The first limitation of this study concerns competitive anxiety, which can start to affect language students if they focus too much on playing the MMORPG and not enough on acquiring the L2. Competitive anxiety as defined by Hong (2012) is an individual's physiological, cognitive, and behavioral responses that stimulate negative feelings about an evaluation. In the context of MMORPGs competitive anxiety can increase due to the language learner's concern for completing in-game tasks. That is, when a language learner is engrossed in playing a game and successfully completing the tasks, the game-play itself can become the focus of the learner's attention instead of language acquisition; this is the possible negative outcome of the 'flow theory', which describes the experience of the intrinsically motivated individuals who engage in an activity because they enjoy it (Hong 2012). In a study conducted by Hong (2012), the resulting data showed that when competitive anxiety is raised, flow state will rise accordingly. In other words if a language learner is playing the online game and must perform an action they never have done before, such as casting a new spell, the learner can feel anxiety about not performing the action correctly instead of worrying about the quality of his/her verbal communication. In fact, in the worst case scenario the learner's anxiety about his/her gaming performance can impede on the learner's ability to acquire the new language; this scenario can be better avoided when language teachers are well informed in how competitive anxiety can limit their students' language acquisition.

This section aims to inform language teachers on the inherent limitations of text-based online conversations so that teachers can make an informed decision about their use of these modern tools. While various features of online communication do help

ameliorate anxiety among language learners, the very same features can lead to miscommunication. For example when anxious students interact with a native speaker through online communication the possibility for misunderstanding can increase because most forms of online communication used in ESL/EFL language classrooms, such as email, are only text-based (McBride, 2008). Nonverbal cues such as tone of voice and body language add important information to a message, and conversely messages that are stripped of these features can easily be misinterpreted (McBride, 2008). Therefore students who suffer from social anxiety will be forced to take painstaking measures to ensure their messages are not misinterpreted, adding more time and work to their language acquisition.

Participating in a conversation through online tools with a native speaker of the target language can have another limiting factor on the anxious learner's acquisition: lack of space filler in conversations. Native speakers often do not feel the need to use fillers such as, *uhhuh* and *mhmm*, when they communicate using online tools (Kost, 2008). This is because native speakers also do not feel the need to earn time before responding, as they are able to take time to formulate a response. Also native speakers when communicating through CMC do not feel the urge to feign understanding by uttering *uhhuh* and instead just wait until their partner adds something to an utterance that might not have been entirely understood (Kost, 2008).

Another limitation to this study that will help inform language teachers how to best implement these online language tools, stems from the online environment of asynchronous CMC, and concerns the use of discussion forums. As mentioned above discussion forums are usually open to the public; Ortega (2008) found in her study, that

one disadvantage of discussion forums is the anxiety provoked by the public visibility of postings. While some language learners may find the anxiety stemming from the public nature of the forum a motivating factor to make sure their post has no errors before posting, others may find the anxiety counterproductive.

Another limitation regarding anxiety created by utilizing technology-based language tools discussed in Ortega (2008) is related to the power dynamics between anxious L2 learners. When two countries have an unequal power dynamic this can effect how native and non-native language learners who come from these two countries communicate. This preexisting cultural power unbalance, where one country is perceived to be more powerful and the other less so, can cause a disadvantage for minority culture members during interactions through the form of fewer opportunities to participate in the conversation (Ortega, 2008). In other words if an anxious language learner is a member of a minority culture, certain negative feelings they may encounter when utilizing the L2 in real life with members of a majority culture, may also be found in the CMC.

Language teachers should consider their students' home culture before selecting the MMORPG or CMC they will implement in their classroom to minimize this limitation's effect.

The final limitation of online communication tools that language teachers must be aware of is language learner's lack of intercultural knowledge when communicating with native speakers of the L2 online. Jin (2008) reported when comparing the language learner's scores at the beginning and end of the intercultural learning that three out of the five NNSs became less sure of what to say when interacting with people from other cultures. It was also discovered in Jin's study (2008) that language learners tended to

overestimate their intercultural communicative competence; for example, during real-time encounters with their Chinese partners, the language learners realized that the intercultural communication was not as they imagined. This limitation to the study can take the shape of two different types of learners; the first is language learners who overestimate their intercultural communication competences (Jin, 2008). These learners may not realize the complexity of intercultural communication until they interact with people from other cultures, which can cause anxiety as to how diverse situations should be handled. The second type of language learners tend to over-estimate the difficulty of intercultural communication; they tend to assume that intercultural communication would be too complicated to handle prior to their involvement, allowing their anxiety to prevent them from even attempting to bridge their culture with another. When anxious language learners do not have the necessary intercultural knowledge they are unable to form significant relationships with the native speakers of the L2. The absence of a close relationship prevents anxious language learners from acculturation, thus limiting the anxious learner's ultimate acquisition.

Conclusion

Utilizing MMORPGs and CMC to help teach a second or foreign language alongside a traditional classroom curriculum is an excellent strategy to help ensure the students suffering from language anxiety get the help that they need. By employing these technology tools, teachers can ensure fewer language students fall through their classroom cracks, and that students who would otherwise be unable to acquire the target language, due to crippling anxiety, can enrich their lives through the successful acquisition of a second or foreign language. These technology language tools can be

adjusted to help with any anxiety-based issue a language learner may be experiencing, much easier and faster than any language classroom since each student has their own experience inside a MMORPG/CMC. ESL/EFL language teachers can help improve their anxious student's odds of acquiring the L2 through the careful selection of the correct MMORPG or CMC for his/her classroom. If the MMORPG or CMC chosen is designed for the language classroom, or has the necessary elements for the anxious language learners to access, then the anxious learners will have a much easier time acquiring the L2. As we have seen MMORPGs and CMC can assist in reducing all forms of anxiety that students can experience both in and outside of the classroom, from the formal test anxiety to the least formal social anxiety; the online environment created by MMORPGs can be a powerful tool to assist language teachers to help ensure language acquisition in all their students. While some may say that students cannot learn through MMORPGs/CMC as they are isolating, and that they are an unhealthy diversion and that learning is not necessarily meant to be fun and in fact requires work (Reinhardt, 2013), it is now clear that these technology language tools do hold merit and can actually reach students who would otherwise be lost.

Acronym Chart

- Instant Message Interaction (IMI)
- Second Language Acquisition (SLA)
- Second Language (L2)
- Massively Multiplayer Online Role-Playing Game (MMORPG)
- Computer Mediated Communication (CMC)
- Willingness to Communicate (WTC)
- Foreign Language Anxiety Classroom Scale (FLACS)
- Emotional Intelligence (EI)

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