



Received: 06 February 2018
Accepted: 10 May 2018
First Published: 16 May 2018

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STUDENT LEARNING, CHILDHOOD & VOICES | RESEARCH ARTICLE

A study of Chinese University learners' anxiety in German language classrooms in at-home and study-abroad contexts

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Abstract: This study examined Chinese university learners' anxiety in German language classrooms in at-home and study-abroad contexts. About 138 learners from a university in Beijing (at-home context) and 91 learners from a university in Germany (study-abroad (SA) context) participated in the present study. The participants answered a Background Information Questionnaire and the 21-item German Language Classroom Anxiety Scale. Of the survey participants, 10 at-home and 15 SA learners were interviewed. The major findings were (a) around one third of the learners in both contexts reported feeling anxious in German language class; (b) listening, speaking and writing were reported by both groups to be their sources of anxiety in class, and (c) differences existed between the at-home and SA students in anxiety level, causes for anxiety and relationship between anxiety and German test performance. These findings further justify the need for continuous research on this issue. Based on these findings, some implications are discussed.

Subjects: Education; Language and Literature; Language Teaching and Learning

Keywords: German; anxiety; context

1. Introduction

Anxiety, a feeling of uneasy suspense (Rachman, 1998), has been extensively researched from various theoretical perspectives and proved to be closely related to second/foreign language (SL/FL) learning outcomes. Empirical research in various SL/FL contexts have revealed that students with high anxiety tend to perform in the SL/FL worse while those with low anxiety tend to do better

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PUBLIC INTEREST STATEMENT

To many people, learning a second/foreign language is terrifying. Using or speaking it, especially in front of the public, is even more terrifying. This study examined Chinese university learners' anxiety in German language classrooms in at-home and study-abroad (SA) contexts. Both survey and interview data were collected from 138 at-home and 91 SA learners. The study revealed that (a) around one third of the learners in both contexts reported feeling anxious in German language class; (b) listening, speaking and writing were sources of anxiety in class for both groups, and (c) differences existed between the at-home and SA students in anxiety level, causes for anxiety and relationship between anxiety and German test performance. These findings further justify the need for continuous research on this issue.

in the SL/FL (Liu, 2016a, 2017; Horwitz, Horwitz, & Cope, 1986; MacIntyre, 1995). Even so, as revealed by the literature shown in the following, most research on anxiety is situated in at-home contexts, targeting learners of English as a SL/FL. Although there is research on anxiety targeting other languages as a SL/FL (Liu, 2016a, 2017; Bailey, 1983), the research is far from sufficient in that the numbers of learners of languages other than English are increasing as a result of increasing globalization. Moreover, as international education becomes a part of higher education, more and more students join in the population going abroad for higher education for varying lengths of time. Nevertheless, research on anxiety of these students is scarce as well. For these reasons, the present research aimed to examine Chinese university learners' anxiety in German language classrooms in at-home and study-abroad (SA) contexts.

2. Literature review

FL anxiety, “the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning” (MacIntyre & Gardner, 1994, p. 284), is an important affective factor. It has been revealed to be closely related to SL/FL learning (Liu & Thondhlana, 2015; Cheng, Horwitz, & Schallert, 1999; Lu & Liu, 2015; Ewald, 2007; Gardner, 1985; Guo & Xu, 2014; Horwitz, 2010; Horwitz et al., 1986) and other variables such as motivation, self-esteem and strategy use to interactively affect SL/FL learning (Liu & Huang, 2011; Lu & Liu, 2015; Liu & Cheng, 2014; Liu, Yao, & Hu, 2012; MacIntyre & Gardner, 1991). Earlier studies on anxiety revealed mixed findings, which was mainly due to the differences in research design and the definitions of SL/FL anxiety, as reviewed in Scovel (1978). Hence, subsequent research began to focus on specific types of SL/FL anxiety, such as FL classroom anxiety (Horwitz et al., 1986), French use anxiety (Gardner, 1985), input anxiety (MacIntyre & Gardner, 1991), and FL listening anxiety (Elkhafaifi, 2005; Vogely, 1998). For example, Horwitz et al. (1986) proposed the FL classroom anxiety theory and developed the Foreign Language Classroom Anxiety Scale (FLCAS) to measure this type of anxiety. Since the FLCAS has high validity and reliability, it has been extensively adopted or adapted in research in various SL/FL contexts to measure learners' SL/FL anxiety levels (Liu, 2007; Dewaele, 2007; Dewaele & MacIntyre, 2014; Ewald, 2007; Hurd & Xiao, 2010; Marcos-Llinás & Garau, 2009; Mills, Pajares, & Herron, 2006; Tallon, 2009), especially speaking anxiety in that many FLCAS items are concerned with anxiety when speaking a SL/FL in class (Liu, 2016a, 2016b, 2017; Dewaele, 2013; Dewaele & Al-Saraj, 2015; Dewaele & Ip, 2013; Dewaele & Thirtle, 2009). These studies generally show that anxiety negatively affects both short-term and long-term memory and undermines the comprehension and production process of language learning, and that students with low anxiety tend to learn better. For example, Dewaele (2007) examined the levels of communicative anxiety (CA) and foreign language anxiety (FLA) in the first (L1), second (L2), third (L3), and fourth (L4) languages of 106 adult language learners when speaking with friends, with strangers, and speaking in public, respectively. The study revealed that multilinguals experienced more CA in stressful situations in their L1 but their FLA levels were higher in languages learnt later in life. The study also showed that the knowledge of more languages was linked to lower FLA levels in the L2, and that older participants tended to report higher CA/FLA levels across languages. The findings are interesting but need to be confirmed in more research. Dewaele and MacIntyre (2014) investigated foreign language enjoyment (FLE) and foreign language classroom anxiety (FLCA) of 1746 current FL learners from around the world. The data were collected via a demographic questionnaire, the 21-item FLE and the 8-item FLCAS adapted from the FLCAS developed by Horwitz et al. (1986). Statistical analyses revealed that FLE levels were significantly higher than FLCA levels and that FLE and FLCA were related to several independent variables like participants' perception of their relative level of proficiency within the FL classroom, number of languages known, education level, number of FLs under study, gender, age group, cultural background, and general level of the FL.

Acknowledging the negative effects of anxiety on SL/FL learning, researchers of qualitative studies have been trying to identify the sources of anxiety to better the teaching and learning of a SL/FL (Liu, 2007; Ewald, 2007; Gregersen & Horwitz, 2002; Young, 1991). Young (1991) identified

six sources for classroom anxiety (personal and interpersonal anxieties, learner beliefs about language learning, instructor beliefs about language teaching, instructor–learner interactions, classroom procedures, and language testing) and suggested establishing a low-anxiety classroom environment to reduce anxiety (e.g., being clear of course objectives and requirements, being mutually supportive and empathetic, etc.). Targeting upper-level language learning class, Ewald (2007) believed that teachers played an important role in producing and relieving anxiety, which was supported by Dewaele and MacIntyre (2014). Meanwhile, some studies indicate that anxiety can be facilitating as well (Liu & Jackson, 2011; Bailey, 1983). Bailey's (1983) pioneer diary study of her own French learning experiences indicated that anxiety helped motivate her to study harder and strive to be more competitive in the French language class as the semester moved on, although it debilitated her study of French in the first few weeks. This was further supported by interviewees in Liu and Jackson's (2011) study of Chinese university learners of English.

As more and more students participate in international education, research on language anxiety has also been extended to SA contexts (Allen & Herron, 2003; Liu, 2016a, 2017; Wilkinson, 1998). For example, Wilkinson (1998) found that students suffered from stranger anxiety which might increase their reliance on their home culture. Allen and Herron's (2003) study of 25 college students of French showed that the participants faced two sources of language anxiety while abroad—linguistic insecurity and cultural differences, and that classroom and non-classroom language anxiety after SA decreased significantly. Nevertheless, more research on anxiety in SA contexts is needed not only because the number of such learners is increasing but because it is more complicated to study the issue in SA contexts.

3. Rationale for the present study

As revealed in the literature, anxiety plays an important role in SL/FL learning, and most research on SL/FL anxiety targets learners of English as a SL/FL. Although there is research on the issue targeting other languages as a SL/FL (Liu, 2016a, 2017), the research is far from sufficient in that the numbers of learners of languages other than English are increasing as a result of increasing globalization. It is the same in China. As international interaction becomes more and more frequent in China, learners of languages other than English such as Japanese, Spanish, German, and Russian have been increasing. Nevertheless, research on anxiety of these languages is rare. Moreover, as international education becomes a part of higher education, more and more students go abroad for higher education for varying lengths of time. According to Goethe Institut 2015 survey results (https://www.goethe.de/en/spr/eng/dlz.html?wt_sc=dafweltweit_2015), Germany had become the most popular non-English-speaking country for Chinese students to study abroad. Nevertheless, research on anxiety of these students is scarce as well. As a minor FL in China, unlike English which is the major FL, there is no requirement for German learning in college or any stage of schooling in China, few work positions have specific requirements for German proficiency either. Hence, it is interesting to examine how they feel when learning and using German. The literature review also shows that research on anxiety often focuses on at-home contexts and that research on anxiety in SA contexts is far from adequate considering the increasing number of learners involved in international education. For these reasons, studies on anxiety are continuously needed, especially those in both at-home and SA contexts. Consequently, the present research, targeting Chinese university learners of German, aimed to examine their German language classroom anxiety in at-home and SA contexts. The following questions are of particular interest:

- (1) To what extent do the students feel anxious in German language class?
- (2) Why do the students feel anxious in German language class?
- (3) What are the differences in German language classroom anxiety between students in at-home and SA contexts?

4. Research design

4.1. Participants

Since not many universities offered German language courses in China, the present study was conducted in a university in Beijing where German language courses were offered to about 210 students as well as a university of Germany where German language courses were offered to international students. All (Chinese) students registered in a German language course in the universities were invited to participate in the study, but valid data were collected from 138 (64 male, 65 female, 9 missing) learners from the university in Beijing (at-home) and 91 (28 male and 63 female) learners from the university in Germany (SA). With an average age of 20.73 (SD = 1.97) and an age range of 17–29, 85.5% (118) of at-home learners were undergraduates and 14.5% (14) were postgraduates. They had learned German for an average of 1.23 (SD = 1.23) years, been living/studying in Germany for an average of .05 (SD = .29) years, and spent an average of .29 (SD = .70), .33 (SD = .57), .25 (SD = .39), and .47 (SD = .42) hours in communicating in, reading, listening to, and writing in German every day, respectively. With an average age of 20.46 (SD = 1.85) and an age range of 18–27, 93.4% (85) of SA learners were undergraduates and 6.5% (6) were postgraduates. They had learned German for an average of 2.04 (SD = 1.14) years, been living/studying in Germany for an average of .27 (SD = .46) years, and spent an average of .85 (SD = .87), .85 (SD = .75), .77 (SD = 1.03), and 1.47 (SD = 1.48) hours in communicating in, reading, listening to and writing in German every day, respectively. Of the survey participants, 10 at-home and 15 SA participants participated in a semi-structured interview thereafter.

4.2. Instruments

The data in the present study were collected via questionnaires and semi-structured interviews, as detailed in the following.

4.3. Background Information Questionnaire

This questionnaire intended to gather such information about the participants as gender, age, discipline, length of stay in Germany, and time spent in learning German.

4.3.1. German test performance

The students' final German course grades were collected as their test performance, as done in current studies (Aida, 1994).

4.3.2. German Language Classroom Anxiety Scale (GLCAS)

To examine Chinese university learners' German language classroom anxiety, the FLCAS developed by Horwitz et al. (1986) was adapted in the present study because of its high reliability and validity (Aida, 1994; Horwitz, 2001). Nevertheless, to suit the learning situation in the present study, several modifications were made in the FLCAS. The words "language" and "foreign language" used in the original FLCAS were consistently replaced with "German." For example, the original FLCAS item "It frightens me when I don't understand what the teacher is saying in a foreign language" was modified to be "It frightens me when I don't understand what the teacher is saying in German." Moreover, only items related to low self-confidence in speaking German and general classroom anxiety were maintained to better explore German language classroom anxiety in the present situation. The resulting German Language Classroom Anxiety Scale had 21 items (Cronbach alpha = .916 in at-home and .923 in SA contexts), placed on a 5-point Likert scale, each of which had 5 alternatives ranging from "Strongly Disagree" to "Strongly Agree" with values of 1–5 assigned to each alternative, respectively.

4.3.3. Semi-structured interview

To elicit more insider views of German language classroom anxiety, 10 at-home and 15 SA survey respondents were invited for semi-structured interviews, which covered such questions as German learning experiences, feelings in German language class, and effects of anxiety on the learning of German.

4.4. Procedure

The questionnaires were translated into Chinese, double-checked, and then distributed, as well as a consent form, online to at-home students during the 14th week of the 16-week term and to SA students during the 16th week of the 18-week term. Then, 10 at-home and 15 SA survey respondents were randomly chosen for the semi-structured interview during the following 2 weeks, each of which lasted 15–20 minutes. All the interviews were conducted in Chinese and audio-recorded.

4.5. Data analyses

All the survey data were analyzed using SPSS 20. Means and standard deviations were computed to determine German language classroom anxiety levels, independent samples *t*-test was run to examine the differences in German language classroom anxiety between the two groups, and then correlation analyses were conducted to examine the associations between anxiety and German test performance. All the interview data were transcribed, double-checked, and then subjected to open coding to identify reasons for learning German, feelings in German language class and reasons for feeling that way, and effects of anxiety on their learning of German (Richards, 2009). To protect privacy, a pseudonym was assigned to each interviewee in each group, which was used when reporting their remarks in the paper.

5. Results

5.1. Survey results

Prior to statistical analyses, the GLCAS was subject to rotated (varimax) factor analysis for learners in both contexts. The results (Appendix A) showed that the GLCAS had two factors, as done in Cheng et al.'s study (1999): 11-item Low Self-confidence when Speaking German (GLCAS1) and 10-item General English Classroom Performance Anxiety (GLCAS2), which explained 31.66% and 20.6% of the total variance respectively for at-home and 45.67% and 10.02% of the total variance, respectively, for SA learners.

5.1.1. German language classroom anxiety levels

To explore the students' German language classroom anxiety levels, means and standard deviations of the GLCAS scales of the two groups were calculated and independent samples *t*-test was run in the scales to identify the differences between the two groups. The results are reported in Table 1.

Table 1 shows that both groups scored below the scale midpoint 3 on all GLCAS scales, except that at-home learners scored 3.02 on GLCAS1. This indicates that students in both contexts were generally not worried about their classroom performance and not anxious in German language class, and that at-home learners were generally not so confident but SA learners were generally confident when speaking German.

Cross-comparison of the scores of the two groups shows that SA learners scored lower on all GLCAS scales except GLCAS2 (General English Classroom Performance Anxiety) than their at-home peers. This means that compared with at-home learners, SA learners were more confident when speaking German as well as in German class yet worried more about their classroom performance. Nevertheless, the differences were not statistically significant.

5.1.2. Relationship between German language classroom anxiety and test performance

To explore the relationship between German language classroom anxiety and test performance, correlation analyses were run between the GLCAS scales and German test scores (see Table 2). The results showed that all GLCAS scales were significantly negatively correlated with both at-home and SA learners' German test performance, with a medium effect size. Alternatively, the more anxious a student was in the at-home or SA context, the worse he/she performed in German.

Table 1. Mean and standard deviations of GLCAS scales

	At-home (N = 138)				SA (N = 91)				t-Test results		
	Mean	SD	Skweness	Kurtosis	Mean	SD	Skweness	Kurtosis	t	p	d
GLCAS1	3.02	.713	-.078	.415	2.88	.651	-.401	.297	1.50	.135	/
GLCAS2	2.68	.782	.208	.071	2.71	.852	.013	.073	-.28	.783	/
GLCAS	2.86	.705	.047	.417	2.80	.705	-.224	.178	-.62	.538	/

Notes: M = mean; SD = standard deviation.

GLCAS1 = Low Self-confidence when Speaking German.

GLCAS2 = General English Classroom Performance Anxiety.

GLCAS = German Language Classroom Anxiety Scale.

Effect size of Cohen's d: small = $d \leq 0.2$; medium = $d = 0.5$; large = $d \geq 0.8$ (Cohen, 1988).

Table 2. Correlations between GLCAS scales and test performance

	German test performance			
	At-home		SA	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
GLCAS1	-.374**	.000	-.265*	.011
GLCAS2	-.208*	.017	-.248*	.018
GLCAS	-.309**	.000	-.271**	.009

Notes: Coefficient of determination: small = $r \leq 0.1$; medium = $r = 0.3$; large = $r \geq 0.5$ (Cohen, 1988); ** $p \leq .01$; * $p \leq .05$.

5.2. Interview results

The interview data were coded and analyzed based on themes by two research assistants with a reliability score of .927. Accordingly, the results are presented based on themes.

5.2.1. Self-reported sources of and reasons for anxiety in German language class

As shown in Table 3, for at-home learners, listening (50%) and speaking (50%) were considered to be great sources of anxiety when learning German, followed by writing (10%). When listening to German, the at-home interviewees felt anxious mainly because the speaker(s) spoke too fast (20%), they were not familiar with the pronunciation and vocabulary (20%), and/or actual listening was more difficult than what they had learned before (10%). As Yu (at-home) recalled,

The speakers speak so fast that I can't catch up with them at all. And I can't understand many words and sentences. Sometimes, even if I hear a familiar word I don't know what it means. So I become very tense, especially when I'm required to answer questions.

When speaking German, the at-home interviewees felt anxious mainly because they did not have a German environment to practice (30%), were not proficient enough to express themselves (20%),

Table 3. Self-reported sources of and reasons for anxiety when learning German

Source	At-home (N = 10)	SA (N = 15)	Reasons	At-home (N = 10)	SA (N = 15)
Listening	5/50%	10/67%	The speaker speaking too fast	2/20%	3/20%
			Unfamiliarity with pronunciation and vocabulary	2/20%	1/7%
			Actual listening being more difficult than what has been learned	1/10%	5/33%
			Unfamiliarity with vocabulary and grammar	1/10%	3/2%
			Not having a script for reference while listening	1/10%	0/0%
			Not having time to check up vocabulary while listening	1/10%	0
Speaking	5/50%	8/53.3%	Not having had a German environment to practice	3/30%	5/33%
			Being not proficient enough to express	2/20%	1/7%
			Paying too much attention to vocabulary and grammar while speaking	1/10%	2/13%
			Having little time to think while speaking	1/10%	1/7%
			Starting to learn German relatively late	1/10%	0/0%
Writing	1/10%	5/33%	Being not proficient enough to express	1/10%	5/33%

involved themselves too much in vocabulary and grammar when speaking (10%), and had little time to think when speaking (10%). The following remark was quite typical:

Even though we are in Beijing, we have little chance to speak German. We don't need to use it at all. And there are so many words. Grammar is also different, not like Chinese, not like English. So I just become anxious when I'm asked to speak German. (Fan, at-home)

Meanwhile, they felt anxious when writing in German largely because they were not proficient enough to express themselves in German (10%).

A similar pattern was observed for SA interviewees. For them, listening (67%) was the greatest source of anxiety when learning German, followed by speaking (53.3%) and writing (33%), respectively. When listening to German, they felt anxious mainly because actual listening was more difficult than what they had learned before (33%), the speaker(s) spoke too fast (20%), and/or they were not familiar with the pronunciation and vocabulary (7%). They became anxious when speaking German mainly because they did not have a German environment for practice (33%), paid too much attention to vocabulary and grammar (13%), were not proficient enough to express themselves (7%), and/or had little time to think when speaking (7%). As explained by Weiss (SA),

I speak German at school, but not always. Some courses don't require German. And I can use English on campus as well. When I'm not at school, I don't speak German most of the time. So I'm not good at German and I can't help becoming anxious when speaking it, especially in front of many people.

They were anxious when writing in German largely because they were not proficient enough to express themselves in German (33%). As confided by Joe (SA), "... I have no difficulty communicating with others in German. But when I write in German, I feel anxious because it requires a good knowledge of German vocabulary and grammar as well as organizational skills. I'm not good at them."

5.2.2. Self-reported effects of anxiety on the learning of German

When asked about the effects of anxiety on the learning of German, 30% of at-home and 33% of SA interviewees believed that anxiety negatively affected the latter, as shown in Table 4. As they remarked, "anxiety negatively affects my learning efficiency" (Lei, at-home), and "anxiety discourages learning" (Rui, SA). Meanwhile, 10% of at-home and 27% of SA interviewees reported that anxiety positively affected their learning of German in that anxiety forced them to study German after class. "Because of anxiety, I'm more motivated to study German. I want to be as good as or even better than others in class" (Suo, SA). In addition, 60% of at-home and 40% of SA interviewees maintained that anxiety had no effect on their learning of German mainly because anxiety was not strong, they had no anxiety in German learning, and/or they tended to forget anxiety after class.

Table 4. Self-reported effects of anxiety on German learning

Effect	At-home (N = 10)	SA (N = 15)	Reasons	At-home (N = 10)	SA (N = 15)
Negative effect	3/30%	5/33%	Anxiety negatively affecting learning efficiency	2/20%	4/27%
			Anxiety discouraging learning	2/20%	1/7%
Positive effect	1/10%	4/27%	Anxiety forcing after-class learning	1/10%	4/27%
No effect	6/60%	6/40%	Anxiety being not strong enough	2/20%	5/33%
			No anxiety in learning	3/30%	1/6.7%
			Tending to forget anxiety after class	1/10%	0

6. Discussion

6.1. Levels of and causes for anxiety in German language class

As presented previously, the at-home learners were generally not so confident while the SA learners were generally confident when speaking German, and both groups were generally not worried about their classroom performance and not anxious in German language class on the whole. This might be because German was not their first FL, but a second or even third FL, partially similar to that in Dewaele (2007). Even so, around one third of the learners in both contexts reported feeling anxious in German language class, which shows that anxiety is a problem to quite many learners. To both groups, listening was the greatest source of anxiety, followed by speaking and writing, respectively, largely because they were not proficient (enough) or lacked practice in German. This finding is generally consistent with that in the current literature (Guo & Xu, 2014), lending further support for the belief that listening and speaking are the most anxiety-provoking activities in SL/FL learning, and that learners become the most anxious when their performance is to be evaluated in front of others (Liu, 2007, 2016a; Gregersen & Horwitz, 2002; Guo & Xu, 2014; Horwitz et al., 1986; Young, 1991). Listening, instead of speaking, was reported by the participants in the present research to be the greatest source of anxiety, different from the finding in most current studies (Liu, 2007; Liu & Jackson, 2011; Horwitz et al., 1986; Young, 1991). This might be attributed to the fact that the participants in the present study either did not have to speak any German (at-home students) or had to speak German all the time (SA students). Nevertheless, they both had to listen to German, which could be rather challenging due to fast speed, strange/unfamiliar pronunciation, vocabulary, and grammar. More importantly, compared with speaking which could be facilitated by body language, listening is transitory, instantaneous, fast, and complex, involving comprehension of all meaning-bearing syntactic segments (Oxford, 1993). This aggravates the challenging nature of listening to German or other SL/FLs.

6.2. Differences in German language classroom anxiety between at-home and SA contexts

As seen in Appendix A, although the GLCAS was revealed to have two components, the loadings of many GLCAS items in the SA context were higher than those in the at-home context. This indicated that students in the SA context were generally more consistent regarding their feelings in German language class. The results of the quantitative data presented in Table 1 showed that SA students were more confident when speaking German but also worried more about their performance in German language class, though the differences were not significant. This might be explained by the context difference: At-home students in China had much less chance to practice speaking German, which drove them to become anxious when doing so, while SA students in Germany had much more chance to communicate in German on various occasions and thus felt more confident when speaking German. Meanwhile, students in the SA context had to compete with native speakers of German as they studied together with them in the same class. By contrast, learners in the at-home context studied German as a second, third or fourth FL, had little access to German, and did not have to compete with any native speakers. They did not need to use German much, in that they were hardly required to use the language in daily life.

As to the sources of anxiety, more SA students reported that listening, speaking, and writing were their sources of anxiety in German language class, which might be because they had to use German in different modes for various reasons in the native German-speaking environment. For example, little writing was required for at-home learners, thus few at-home interviewees reported writing to be a source of anxiety. Even so, it is surprising that 33% of SA interviewees attributed their German-speaking anxiety to the lack of a German learning environment for practice. This might be because, as reported by the interviewees in the present study and discussed in Levin (2001), they isolated themselves from all but the most rudimentary interactions and/or hanged out with their co-nationals. This might also be because these participants' SA experiences were deeply influenced by the process of globalization, as discussed in Kinginger (2008). Because of telecommunications technology, SA students' home social networks might remain perfectly intact, which indirectly helped them rid of the need for social interactions with the locals. Hence, prior to the

sojourn, it benefits the sojourners if some orientation courses (e.g., learning goals and objectives, local culture, perceived difficulties and strategies, etc.) can be held for them. It is also important for them to understand that to gain from SA requires a sincere and durable commitment to the life and study there (Kinginger, 2008).

As presented previously, German language classroom anxiety was significantly inversely related to German test performance in both contexts and around one third of the interviewees in both contexts reported that anxiety negatively affected their learning of German, largely consistent with the finding in existent research (Liu, 2016a, 2016b; Lu & Liu, 2015; Ewald, 2007; Gardner, 1985; Guo & Xu, 2014; Horwitz et al., 1986). Meanwhile, 40–60% of the interviewees in both contexts maintained that anxiety had no effect on their learning of German, which was largely because the interviewee samples were small. Meanwhile, the positive effect of anxiety was reported by a few interviewees in both contexts, supporting the earlier finding that anxiety can be facilitating (Liu & Jackson, 2011; Bailey, 1983). More importantly, comparison of the findings showed that the relationship between anxiety and test performance in the SA context was generally weaker than that in the at-home context. This might be because of two reasons: (a) the SA sample was smaller than that of the at-home sample and (b) German was much more important to SA students because they studied in the native German-speaking environment. Thus, they had to be more motivated to study it better, which might help alleviate the negative effects of anxiety.

7. Conclusions

This study examined Chinese university learners' anxiety in German language class in at-home and SA contexts. Analyses of the data revealed the following findings: (a) around one third of the learners in both contexts reported feeling anxious in German language class, (b) listening, speaking and writing were reported by both groups to be their sources of anxiety in class, and (c) differences existed between the at-home and SA students in anxiety level, causes for anxiety and relationship between anxiety and German test performance.

Consequently, though around one third of the participants felt anxious in German language classroom in both contexts, it is necessary to deal with the issue since it might negatively affect the learning of German. Foremost, it is important for learners to be fully aware of their German learning goals and objectives. Knowing what they are required and expected to do, learners may be more willing to invest in German learning and feel less anxious when doing so. Also as suggested in Hernández (2010), it is beneficial for learners to focus on learning activities that enhance their motivation and interaction with the target culture in both at-home and SA contexts, such as activities involving the history, culture, sports, and science of Germany. As learners have a better knowledge of Germany and German culture, they may be more motivated to study the language; as they are often involved in various learning activities, they may become less and less anxious when using German, especially when speaking and listening to German (Du, 2013; Hernández, 2010). It is the same with writing: the more they write in German, the less anxious they will be. This is exactly why SA students generally tend to be more motivated and feel less anxious when using the TL, as found in the present research as well as others (Liu, 2016a; Liu & Jackson, 2011). Moreover, it is critical for students, especially SA students, to engage in diverse activities and interactions with the locals to improve their proficiency in German, which will in return help increase their motivation and confidence, reducing their anxiety when using German, as indicated in the present study as well as the current literature (Isabelli, 2010; Pelligrino, 1998). In addition, as suggested in Young (1991) and Dewaele and MacIntyre (2014), it is important for instructors to build a friendly, supportive, and appreciative classroom environment, which greatly helps reduce anxiety and boost up confidence and joy in learning the language in class. Meanwhile, it is necessary for instructors to be cautious when scaffolding learning activities since a certain degree of anxiety may be facilitating, as reported by the interviewees in the present study and identified in others (Liu & Jackson, 2011; Bailey, 1983). A certain degree of anxiety can drive learners to study harder and achieve better outcomes.

The present study studied Chinese college students' anxiety in German language class, a minor FL in China, in at-home and SA contexts. The findings revealed differences in anxiety levels, causes for anxiety and effects of anxiety between the two groups, expanding our knowledge of student anxiety in class of not not-so-important SLs/FLs. Considering that the participants in the present study were various in age, education level, German proficiency, and other aspects, this issue needs further research to make the findings more generalizable. To better understand what students do and experience and how they react in different contexts, which may affect their anxiety, it is useful for future research to employ an ethnographic method to document the experiences and elucidate their effects on the development and change in anxiety in at-home and SA contexts. More differences will be revealed then. It will also be meaningful to examine learners' FL/SL learning anxiety from other perspectives such as SL/FL reading, listening, and/or writing anxiety. Since anxiety does exist in many students in SL/FL class, it is also of importance that it can be integrated into the curriculum and assessment of the teaching and learning of a SL/FL, as suggested in Zhang and Liu (2013).

Funding

The author received no direct funding for this research.

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Citation information

Cite this article as: A study of Chinese University learners' anxiety in German language classrooms in at-home and study-abroad contexts, Meihua Liu, *Cogent Education* (2018), 5: 1475917.

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Appendix A. Varimax rotated loadings for factor analysis of the GLCAS

	At-home (N = 138)		SA (N = 91)	
	GLCAS1	GLCAS2	GLCAS1	GLCAS2
1. I never feel quite sure of myself when I am speaking German in my class	.360	.640	.564	.420
2. I don't worry about making mistakes in the German class	.684	.068	.671	.054
3. It frightens me when I don't understand what the teacher is saying in German	.534	.402	.054	.683
4. I keep thinking that the other students are better at German than I am	.366	.516	.583	.224
5. I start to panic when I have to speak without preparation in the German class	.313	.734	.680	.315
6. I worry about the consequences of failing my German class	.583	.283	.159	.669
7. It embarrasses me to volunteer answers in my German class	.615	.407	.720	.153
8. I would not be nervous speaking German with native speakers	.751	-.058	-.182	.774
9. I get upset when I don't understand what the teacher is correcting	.120	.541	.690	.189
10. I feel confident when I speak German in class	.060	.748	.155	.684
11. I am afraid that my German teacher is ready to correct every mistake I make	-.019	.628	.765	-.231
12. I can feel my heart pounding when I'm going to be called on in the German class	.627	.415	-.009	.745
13. The more I study for a German test, the more confused I get	.789	.069	.784	-.150
14. I always feel that the other students speak German better than I do	.540	.491	.701	.148
15. I feel very self-conscious about speaking German in front of other students	.740	.287	.789	.125
16. The German class moves so quickly I worry about getting left behind	.615	.301	.082	.659
17. I get nervous and confused when I am speaking German in class	.784	.304	.838	-.027
18. I get nervous when I don't understand every word the German teacher says	.724	.186	-.068	.831
19. I feel overwhelmed by the number of rules I have to learn to speak German	.702	.231	.061	.819
20. I am afraid that the other students will laugh at me when I speak German	.740	-.024	.798	-.170
21. I get nervous when the German teacher asks questions which I haven't prepared in advance	.415	.570	.706	.125

Notes: GLCAS1 = Low Self-confidence when Speaking German.

GLCAS2 = General English Classroom Performance Anxiety.

GLCAS = German Language Classroom Anxiety Scale.

The bold values indicate the loadings of a factor, the significance is often set at .05 ($p \leq .05$) for all the loadings for factor analysis.

Coefficient of determination: small = $r \leq 0.1$; medium = $r = 0.3$; large = $r \geq 0.5$ (Cohen, 1988).



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