

Test Anxiety among Chinese Undergraduates from Urban versus Rural Backgrounds*

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[한국어 초록]

도시와 농촌 출신 중국 대학생들 간의 시험 불안

본 연구는 중국 도시와 농촌 학부생들의 시험 불안을 깊이 이해하기 위한 질적 연구이다. 이 연구를 위해 연변대학교에 재학 중인 5명의 도시 학생들과 5명의 시골 학생들이 참여하였다. 학생 개개인을 대상으로 실시한 정형화되지 않은 면접은 그들의 수행능력에 대한 자기평가, 시험 불안의 정도, 시험 불안 원인에 대한 이해, 선호하는 대처전략, 시험 불안을 줄일 수 있는 여부에 중점을 두었다. 인터뷰를 통해 모든 학생들이 반드시 시험 기간 동안에만 불안감을 느낀 것이 아니라 그들이 시험 전에 불안을 느꼈던 것으로 드러났다. 이러한 시험 불안을 해소하고자 학생들은 다양한 정서 중심 및 문제 중심 대처 전략을 사용했던 것으로 나타났다. 도시와 농촌 학생들 간 차이의 결과에서 시골 학생들이 과하도록 심한 시험 불안을 경험했고, 자신 통제력을 포함한 시험 불안을 다루는데 있어 비교적 효율성이 떨어지는 대처 전략을 사용했다는 경향을 보였다. 마지막 성별에 따른 시험 불안에 대한 차이에서는 기대와는 다르게 차이가 발견되지 않았다. 이 연구는 농촌 학생들이 갖는 시험 불안에 대한 심각성을 이해함으로써 그들의 시험 불안을 줄여, 학교생활에 잘 적응할 수 있도록 방안을 찾는 데 교육적 의의를 두었다.

주제어: 질적 연구, 시험 불안, 반구조적 면접, 자기 평가, 대처 전략

1. Introduction

Asian students, including those from China, have been the focus of considerable research owing to their tendency to exhibit greater achievement, higher educational aspirations, and more performance-related anxiety than their Western peers.¹ Although researchers often rely on dichotomies such as “Socratic-Confucian,” “individualistic-collectivistic,” and “competitive-compliant” to frame cultural differences between Western and Eastern students, these dichotomies do not account for important within-culture variation. For example, Chinese students differ in how much pressure they experience from their families to succeed in school, and these differences are directly associated with outcomes such as test anxiety.² Although Chinese students may experience higher test anxiety on average than their Western peers,³ few studies have examined factors within Chinese culture that may result in greater or lesser test anxiety. As described in our literature review below both theory and evidence suggest that the urban-rural distinction is a critical factor, with students from rural backgrounds experiencing more test anxiety than their urban peers. In addition, evidence suggests that in China (as in many other countries), female students will

1 Chen H. “Impact of Parents’ Socioeconomic Status on Perceived Parental Pressure and Test Anxiety among Chinese High School Students,” *International Journal of Psychological Studies*, 4, (2), 2012, p.236.
Hau K-T, and Ho I. T. “Editorial: Insights from Research on Asian Students’ Achievement Motivation,” *International Journal of Psychology*, 43, (5), 2008, p.865.

2 Chen H. Op. cit, p.242.

Li H. and Prevatt F. “Fears and Related Anxieties in Chinese High School Students,” *School Psychology International*, 28, 2008, pp.447-448.

3 Dion K. L. and Toner B. B. “Ethnic Differences in Test Anxiety,” *The Journal of Social Psychology*, 128, (2), 1988, pp.166-168.

experience more test anxiety than male students.

In this study, we used a qualitative interview methodology to explore test anxiety among Chinese undergraduates, focusing on the experiences of students from urban versus rural backgrounds, as well as the experiences of male versus female students. In light of the following literature review, we addressed the following questions: Whether rural students experience more test anxiety than urban students; whether female students experience more test anxiety than male students ; and if rural and/or female students experience more test anxiety, whether the differences are related to their strategies for coping with anxiety. Our focus is on test anxiety that could occur with respect to any subject, including language and literature.

2. Literature Review

2.1. Test Anxiety among Chinese College Students

Mandler and Sarason⁴ defined test anxiety as an instinct in evaluation situations, building up past failure experiences, guilt when they fail, and hostility when parents scold them. It is also defined as undesirable reactions to the prospect of poor performance in an evaluative situation such as an exam.⁵ These undesirable reactions may be physiological (e.g., nausea), emotional (e.g., fear of failure), cognitive (e.g., distracting thoughts), and/or behavioral (e.g., fidgeting). Along with creating physical and psychological discomfort, test anxiety impairs test performance and is associated with

4 Mandler G. and Sarason S. B. "A Study of Anxiety and Learning," *The Journal of Abnormal and Social Psychology*, 47, (2), 1952, p.168.

5 Zeidner M. *Test Anxiety: The State of the Art*. (New York: Plenum Press, 1998), pp.3-27.

lower academic achievement in school children⁶ as well as college students.⁷

Internationally, test anxiety is a prevalent problem in educational settings.⁸ Gregor⁹ estimates that between 10% and 40% of all students experience at least mild levels of test anxiety. Among Chinese undergraduates, this problem may be relatively acute. For example, Dion & Toner¹⁰ found that test anxiety in Chinese undergraduates is significantly higher than among undergraduates from various Western societies, a source of concern due in part to the rapid increase in undergraduate admissions in China, resulting in total of over 35 million students currently enrolled in Chinese universities.¹¹

High test anxiety among Chinese undergraduates has been attributed to the intense pressure these students feel to succeed in school, combined with their exposure to a Confucian ethic that emphasizes filial piety.¹² According to this view, Chinese students perceive that they are working not only for themselves but also to support their parents. These students feel that they must support their parents both in an abstract sense (by upholding family

6 Segool N, et al. "Heightened Test Anxiety among Young Children: Elementary School Students' Anxious Responses to High-Stakes Testing," *Psychology in the Schools*, 50, (1), 2013, p.67.

7 Chapell M, S. et al. "Test Anxiety and Academic Performance in Undergraduate and Graduate Students," *Journal of Educational Psychology*, 97, (2), 2005, p.269.

8 Bodas J. and Ollendick T. H. "Test Anxiety: A Cross Cultural Perspective," *Clinical Child and Family Psychology Review*, 8, (1), 2005, p.66.

9 Gregor A. "Examination Anxiety: Live with it, Control it or Make it Work for You?" *School Psychology International*, 26, 2005, p.619.

10 Dion K, L. and Toner B. B. Op. cit, p.169.

11 Yang R. "Reassessing China's Higher Education Development: A Focus on Academic Culture," *Asia Pacific Education Review*, 16, 2015, p.530.

12 Chen H. Op. cit, p.236.

Dion K, L. and Toner B. B. Op. cit, p.169.

Li H, and Prevatt F. Op. cit, p.450.

honor and repaying the parents for sacrificing so much to educate them) and in a concrete sense (by ensuring material success that enables social mobility and financial support for the entire family). In brief, compared to students from Western nations, Chinese students view academic achievement as a more of an obligation to their families.¹³ As a result, Chinese students may feel especially anxious about tests and other requirements that impact their college grades.

Although test anxiety may be relatively high among Chinese undergraduates on the whole, China is a large and diverse nation. A number of studies have shown that levels of test anxiety among Chinese students vary across individual and family characteristics. Some of these findings replicate what has been observed among students from other countries. For example, the gender difference observed in many countries has also been replicated in China, with female students experiencing greater test anxiety than their male peers.¹⁴ Other studies examining family-level variables have shown, for example, that parental pressure to succeed in school is directly correlated with test anxiety among Chinese students.¹⁵ However, test anxiety research conducted in China has not considered whether undergraduates from urban versus rural backgrounds differ in test anxiety.

13 Tao V. Y. K. and Hong Y. "When Academic Achievement is an Obligation: Perspectives from Social-Oriented Achievement Motivation," *Journal of Cross-Cultural Psychology*, 45, (1), 2014, pp.132-134.

14 Liu Y. Y. "Students' Perceptions of School Climate and Trait Test Anxiety," *Psychological Reports: Sociocultural Issues in Psychology*, 111, (3), 2012, p.762.

15 Chen H. Op. cit, p.240.

Li H. and Prevatt F. Op. cit, p.451.

2.2. Student Background and Test Anxiety

Research and theory drawn from several literatures suggests that undergraduates from rural backgrounds may experience more test anxiety than their urban peers experience.

First, studies in China have shown that rural students feel less academically prepared than urban students to succeed in college.¹⁶ According to cognitive appraisal theory, feeling less prepared for an evaluative situation will increase the extent to which the situation is perceived as threatening.¹⁷ The more goal-relevant the evaluative situation, the greater the perceived threat and consequent anxiety. Successful performance on examinations is clearly relevant to the personal goal of academic success in college. Thus, as predicted by appraisal theory, test anxiety has been linked to perceived likelihood of failure on tests¹⁸ as well as lower self-assessment of preparedness for tests.¹⁹ Because rural Chinese students feel less well-prepared to handle college work such as examinations, they may perceive examinations as more threatening and experience greater anxiety before and during exams. This possibility is consistent with informal observations by many Chinese faculty (including the first author, who has spent 22 years as a professor teaching urban and rural students at the university level),

16 Zhang Q. "Research on Psychological Health of Poor College Students. In Y. Wang (Ed.)," *Education Management, Education Theory and Education Application*. (Berlin: Springer, 2011), p.447.

17 Lazarus R. S. "Cognition and Motivation in Emotion," *American Psychologist*, 46, (4), 1991, pp.354-356.

18 Putwain D. W. and Symes W. "Achievement Goals as Mediators of the Relationship between Competence Beliefs and Test Anxiety," *British Journal of Educational Psychology*, 82, 2012, pp.218-220.

19 Davis H. A, DiStefano C. and Schutz P. A. Op. cit, pp.950-952.

who believe that undergraduates from rural areas tend to experience more performance-related anxiety than peers from urban areas, in part because they lack confidence in their academic skills.

Second, test anxiety among Chinese students is attributable in part to extreme pressure to succeed materially in order to both honor and financially support their families.²⁰ Students from rural backgrounds in China tend to come from lower socioeconomic status (SES) families than students from urban backgrounds, and thus rural students may feel more pressure to make full use of their opportunity to attend college.²¹ Indeed, test anxiety has been reported to be greater among lower SES students than among more affluent students in countries such as Chile,²² Iran,²³ Israel,²⁴ the UK,²⁵ and the US.²⁶

In sum, based on the preceding review of literature, we expect that students from rural backgrounds tend to experience greater test anxiety than their urban peers.

20 Chen H. Op. cit, p.241.

Dion K. L. and Toner B. B. Op. cit, p.169.

Li H. and Prevatt F. Op. cit, pp.454-455.

21 Ma W. Op. cit, pp.267-268.

22 Guida F. V. and Ludlow L. H. "A Cross-Cultural Study of Test Anxiety," *Journal of Cross-Cultural Psychology*, 20, 1989, p.186.

23 Yousefi F. et al. "The Effects of Family Income on Test Anxiety and Academic Achievement among Iranian High School Students," *Asian Social Science*, 6, (6), 2010, p.91.

24 Zeidner M. and Safir M. P. "Sex, Ethnic, and Social Differences in Test Anxiety among Israeli Adolescents," *Journal of Genetic Psychology*, 150, 1989, p.177.

25 Putwain D. W. "Test Anxiety and GCSE Performance: The Effect of Gender and Socioeconomic Background," *Educational Psychology in Practice*, 24, (4), 2008, p.332.

26 Guida F. V. and Ludlow L. H. Op. cit, p.185.

2.3. Student Gender and Test Anxiety

Although the main focus of this study is on the urban-rural distinction, another important group difference we consider is that of gender. The relationship between gender and test anxiety is well-established. Over a period of decades, studies conducted with high school as well as college students, both within and outside of China, have shown that girls tend to experience more test anxiety than boys do.²⁷ This gender difference begins in elementary school and continues to varying degrees through college as well as graduate school.²⁸ Thus, we expect that female undergraduates in China will tend to experience more test anxiety than their male peers do.

2.4. Overview of Current Study

Our study design made use of qualitative interview methodology. Participants consisted of first-year and second-year undergraduates at Yanbian University, a large university in Jilin Province in the northeastern part of China. Using semi-structured interviews with individual students, we attempted to reconstruct the experiences of students with respect to test anxiety. As noted, our literature review leads us to predict affirmative answers to our first two research questions (“Do rural students experience more test anxiety than urban students?”, “Do female students experience more test anxiety than male students?”). As for the third research question

²⁷ Liu Y. Y. Op. cit, p.763.

Putwain D. W. Op. cit, p.320.

Zeidner M. Op. cit, pp.261-281.

²⁸ Chapell M. S. et al. Op. cit, p.271.

("If rural and/or female students experience more test anxiety, are the differences related to their strategies for coping with anxiety?"), this is an open question that we intended to explore by means of our qualitative interviews.

The potential contribution of our study to the scientific literature is that it is the first qualitative study to examine test anxiety among Chinese undergraduates with attention to differences in the experiences of students from urban versus rural backgrounds, as well as students of different genders. With respect to educational practice, the primary importance of this study is to better understand student experiences with test anxiety and their coping strategies, with particular attention to the experiences of rural students. Rural students in China (and elsewhere) face a number of interrelated obstacles in the pursuit of higher education, including underrepresentation (particularly at top institutions), financial pressure, difficulty adjusting to college life, and higher dropout rates.²⁹ Thus, it is especially important to better understand these students' experiences with test anxiety as well as their coping strategies. College counselors and other administrators in particular would benefit from knowing more about test anxiety among rural students.

3. Methods

3.1. Sample

The sample consisted of 10 first-year undergraduates at Yanbian University, which was founded in 1949 in Jilin Province, in the northeastern

²⁹ Ma W. *Op. cit.*, p.268.

part of China near the borders of North Korea and Republic of Korea. Originally a local, minority-focused university, Yanbian University received national support in order to enhance the quality of education for minority students (mostly Korean Chinese). At the same time, Yanji, the city in which Yanbian University is located, expanded greatly in size. As a result of national support and city growth, Yanbian University developed into a large university that now serves over 20,000 students from urban and rural backgrounds representing many different parts of China.

For the present study, purposive and intensity sampling methods were used³⁰ in order to obtain five Yanbian University students from urban backgrounds and five from rural backgrounds, and to ensure that each group contained both male and female students. Students were recruited from college English classes and agreed to participate on a voluntary basis.

The 10 students were all freshmen or sophomores and represented six different college majors that have a quantitative focus (information management, statistics, computer science, mathematics, economic management, and food science). The five urban students came from large cities (大城市, da chengshi) or small cities (小城市, xiao chengshi) and consisted of three males and two females. The five rural students came from towns (城镇, chengzhen) or villages (乡村, xiangcun) and consisted of two males and three females. (The distinctions between large cities, small cities, towns, and villages, as well as the way they map onto the urban-rural distinction, are natural to Chinese laypersons.) All students ranged in age from 18 to 20 years.

30 Springer K. *Educational Research: A Contextual Approach*. (NJ: Wiley, 2010), pp.108-110.

3.2. Measurement

Each student was interviewed individually by the first author using a standard, semi-structured interview technique. The interviewer used a list of questions to guide each interview. In addition, with each student, the interviewer spontaneously included additional questions and discussion in order to seek clarification or explore new ideas. Following are the basic questions that guided the interviews:

1. "How would you describe your performance in your college classes?"
2. "Do you feel anxious right before taking tests? (How anxious?) How about during tests?"
3. "Can you tell me a little about why you feel anxious before (and/or during) tests?"
4. "Do you use any coping strategies to deal with your anxiety? (What do you do?)"
5. "Have you gotten better at dealing with anxiety related to tests this year (compared to last year)?"

3.3. Coding and Analysis

All interviews were audio-taped and transcribed. The first author translated all transcripts into English and elicited support from a colleague to check on the accuracy of the translation. The English translation of the transcripts was then used as the primary data for this study.

Data coding and analysis were informed by grounded theory, a bottom-up qualitative methodology in which examination of the data leads to the

formation of hypotheses and theories that are revised as the data continue to be examined.³¹ Although the authors' interest in the role of background and gender in test anxiety certainly had some influence on how the data were understood, the authors attempted to interpret the data with as few preconceived ideas as possible, consistent with the principles of grounded theory.

A standard qualitative method of open coding was used for data analysis.³² Each author separately reviewed the transcripts, identifying the themes expressed in each student's responses to each question. Each author also engaged in limited axial coding at the individual level, by identifying common themes that each student identified in response to more than one question.³³ The two authors then compared the codes they developed in order to triangulate their understanding of student experiences. Their codes were quite similar but revised slightly based on discussion.

4. Results

Results are presented for the entire sample first, organized loosely around key themes identified by the authors during coding. Then, we address our three research questions by means of a closer look at student groups (urban

31 Creswell J. *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd Edition). Thousand Oaks, (CA: Sage, 2007), pp.10, 62-66.

32 Creswell J. *Op. cit.*, p.160.

Springer K. *Op. cit.*, p.133.

Strauss A. L. and Corbin J. M. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (2nd edition). Thousand Oaks, (CA: Sage, 1998), pp.50-60.

33 Strauss A. L. and Corbin J. M. *Op. cit.*, pp.61-70.

versus rural, male versus female).

4.1. Overall Themes

The students' self-described performance in their college classes varied widely, including descriptions like "top ten" in their class, "between the top and middle," and "middle." Three students described themselves as having poor performance. One stated "I don't think I am good," one said that she is "not so good," and one described herself "at the edge of passing and failure." There were no obvious differences between rural and urban students, or between males and females, in their self-described academic performance. That is, performance varied within each group.

All of the students reported experiencing test anxiety before taking tests. Most students emphasized the physical symptoms of anxiety they experienced, such as upset stomach, sweaty palms, impaired appetite, and/or sleeplessness, while some students referred to diminished concentration or confusion. In addition, some students noted spontaneously that anxiety before tests undermined, or threatened to undermine, their actual performance.

As for test anxiety during tests, students' comments were more varied. Five of the 10 students did not report any appreciable difference in anxiety before versus during tests. In other words, their anxiety about the tests appeared to be ongoing. Three students indicated that their anxiety diminishes a lot or disappears during tests because they are focusing on taking the tests. Three other students noted that the extent of their anxiety during a test is related to the extent of their preparation, or to the difficulty level of particular questions. As one male student put it:

"If I prepare well, I won't be anxious when I start the test. My anxiety won't be obvious, won't affect me much. Before getting the exam questions, I am slightly nervous, then I will calm down slowly."

Regarding students' explanations as for why they felt anxious before and/or during tests, the sample was evenly divided between students who talked about the past versus students who focused on the future. The five students who talked about the past explained that they felt anxious before/during tests due to lack of preparation, poor understanding of the material, or a prior history of test anxiety. The five students who talked about the future indicated that they felt anxious because they were aware of the consequences of poor performance on tests. Some of these students spoke in general terms, like the female student who said that she felt anxious because she recognized that "my GPA may also affect my future, my life." Others were more specific, referring to a plan to study abroad, or a desire to avoid retaking a class. As one female student put it:

"Test scores affect so much: GPA, ranking, scholarships, qualification of exemption from post-graduate entrance exams. At college, tests are not as frequent as in high school and one test may make a big difference."

The strategies that students reported using to cope with test anxiety were extremely varied. Some students simply focused on managing their symptoms in the moments immediately before or during the tests, such as the female who reported that she paused and sat quietly for 10 minutes before taking a test, or the female who described taking deep breaths right

before a test. Other students engaged in behaviors well before the exams that were intended to have more general effects on their well-being, such as the male who said he did “sports, walks, or other activities that can relax my brain or distract me from being anxious about upcoming exams.”

Following Lazarus and Folkman’s influential theory of coping,³⁴ psychologists distinguish between emotion-focused coping, which seeks to reduce symptoms of anxiety, and problem-focused coping, which seeks to resolve the problem causing the anxiety. Three students described problem-focused coping strategies (relating to review of material and test-taking strategies), while the rest of the students reported emotion-focused coping strategies. Finally, some students reported using a combination of strategies. For example, a male student stated the following:

“Before tests I will review more and rest up, or comfort myself that I am really well-prepared. During the tests, I will feel better since I can focus on dealing with the exam material, and I know that my potential and my new ideas will be expressed on the exam.”

This student’s strategies included problem-focused coping (e.g., reviewing more) as well as emotion-focused coping (e.g., reassuring himself that he’s well-prepared). He also distinguished between strategies applied before versus during tests. This mix of problem-focused and emotion-focused strategies, as well as strategies applied before and during tests, was also reflected in the following description from a female student:

“...I will take deep breaths until the test starts. During the test, I will not let

³⁴ Lazarus R. S. Op. cit, pp.352-367.

myself think too much, and I will start by answering the questions I know better, in order to make myself more confident. In this way I won't feel too anxious."

This student engages in problem-focused coping (by answering questions she feels she knows better) that also serves to regulate her emotions (by increasing her confidence). In addition, she engages in a coping strategy prior to taking tests (deep breathing) as well as several strategies during tests.

Finally, as for whether students felt they handled test-related anxiety better during the current year as opposed to the previous year, all the freshmen indicated that they did, because they found college work less stressful and challenging than the final year of high school (which focuses on preparation for national college entrance examination and is famously grueling). Among sophomores, some students indicated that they had improved at handling test anxiety because they were more familiar now with college work and expectations, while other student indicated that they had gotten worse, because their coursework had become harder, or because they had begun to realize that more depended on their performance, as indicated by the following male student:

"In my first year I didn't feel very anxious or nervous, because I had no idea about the rules and consequences of performing badly on exams. Now I feel more nervous because I know I may fail or even have to retake a class."

4.2. Group Themes: Urban vs. Rural

In some respects, the urban and rural groups reported similar experiences. Among both groups of students, students varied in their self-assessment of academic performance, in the kinds of test anxiety they experienced, in their strategies for coping with test anxiety, and in whether or not they had improved in their ability to handle such anxiety. At the same time, two key differences between the groups emerged from the interviews.

First, students in the rural group tended to experience more severe test anxiety than students in the urban group did. As one rural male student put it:

"My anxiety is very serious before the tests. I may be sleepless every night during the entire exam week. I have no appetite, I can't concentrate. Since I'm tired, I have to drink lots of coffee, like 5 or 6 canned coffee drinks per day though I know it's bad for my health... Test scores affect so much, especially GPA. Since I want to study abroad, I think GPA will have a big impact on my future."

This student spoke very concretely about anxiety, focusing on symptoms as well as causes (recognition that test performance will impact one's future plans). Other students from rural backgrounds spoke more broadly but still reported a great deal of test anxiety, as illustrated by a rural female student who commented as follows:

"I was quite anxious in my first year because I had no idea about exams and I was afraid of failing. My learning process was confused. I was in a bad

mood sometimes and I didn't like communicating with others. I did consult a counselor, but that didn't help much.”

Urban students also reported test anxiety, but to a lesser degree, and typically in a qualified way. For example, consider the following two comments from urban students who were likely to experience more anxiety than others in the urban group:

“I may be fairly anxious during the whole final-year exam week. When the review schedule is quite tight, I will become anxious and nervous a few days before the exam week, especially about math. As for during the tests, most of the time I'm not anxious, because I know I have to deal with different situations and figure out how to answer the questions accordingly, and anxiety won't help.”

“My anxiety isn't usually serious, but last year, due to the pandemic, all subjects and exams were taken online. During the year I wasn't serious enough about learning, and so, I felt anxious and couldn't sleep well before tests. And if I was not confident about a subject, I felt very nervous about it. And I was nervous during the tests, if I found any questions I wasn't familiar with or wasn't sure whether I reviewed for it or not.”

Whereas the rural students tended to experience a more or less constant degree of test-related anxiety, the urban students added qualifications to their descriptions indicating variability in how much anxiety they experience. For example, the first urban student quoted above mentioned being “fairly” anxious, noted that his anxiety was greater for one particular subject (math),

and indicated that he experienced anxiety before but not during tests. The second urban student quoted above indicated that his anxiety wasn't "usually" serious prior to the pandemic, and that even during the pandemic, it varied according to his confidence and familiarity with the questions.

A second difference between urban and rural students was in the types of coping strategies they relied on to help manage their test anxiety. Although a variety of different strategies was observed in both groups, the rural students were noticeably more likely to rely on simple strategies involving the use of self-control. For example:

"I tell myself to think less and review more."

"I push myself to focus on the test."

"During tests I don't let myself think too much."

"I just focus on answering questions."

"I will tell myself I can graduate if I don't fail the test and then I will feel better."

In these examples, the students were pushing themselves to overcome their anxiety through simple, specific changes in behavior or cognition. This kind of strategy differs from other emotion-focused strategies (like talking to friends, exercising, or downplaying the long-term importance of one particular test), as well as from problem-focused strategies (like engaging in additional study, or using effective test-taking strategies).

In sum, the results provide an affirmative answer to our first research question ("Do rural students experience more test anxiety than urban students?"). The rural students in our sample did tend to express more severe, unqualified test anxiety than their urban peers did. The results also

suggest a partial answer to our third research question (“If rural and/or female students experience more test anxiety, are the differences related to their strategies for coping with anxiety?”). The rural students expressed more test anxiety, as well as greater reliance on self-control strategies for dealing with anxiety. Although our study cannot demonstrate a causal relationship, we believe that the rural students we sampled experience more test anxiety at least in part because they rely more on simple coping strategies that are known from prior research to not be highly effective.³⁵

4.3. Group Themes: Male vs. Female

Contrary to expectations, the male and female students were not likely to differ at the group level in their responses to any of our questions. Thus, the answer to our second research question (“Do female students experience more test anxiety than male students?”) is negative. We did not find gender differences related to test anxiety in our particular sample. Possible reasons for this unexpected finding are addressed in the discussion section below.

5. Discussion

All participants in this study reported experiencing test anxiety prior to taking tests. At the same time, much variability was observed in students' assessments of their own academic performance, in the symptoms of anxiety they tend to experience before and during tests, in the coping strategies they typically use to manage test anxiety, and in the extent to which they felt they

³⁵ Lazarus R. S. Op. cit, pp.352-367.

had improved at managing test anxiety. In addition, two key differences were found between urban and rural students: Compared to students from urban backgrounds, rural students seemed to demonstrate greater test anxiety as well as greater reliance on simple coping strategies that involve self-control. Expected differences between male and female students were not observed. Finally, students did not report subject-specific differences in test anxiety, or in coping strategies, which suggests that our findings apply to any subject, including language and literature classes.

The relatively high test anxiety found among students from rural backgrounds is consistent with the authors' informal observations as instructors, as well as with a mix of theoretical and empirical considerations. As noted in the Introduction, rural students feel less academically prepared than urban peers to succeed in college.³⁶ Rural students may therefore perceive examinations as more threatening and experience greater test anxiety.³⁷ Higher levels of test anxiety can exacerbate the difficulties that these students face in adjusting to college, and may contribute to their dropping out at higher rates than their urban peers.

The anxiety that rural students experience may be especially acute at elite universities. In China, the percentage of rural students at elite universities is less than at other types of universities.³⁸ This is widely considered to be a problematic trend. As Ma³⁹ points out, rapidly increasing enrollments in Chinese universities has saturated the job market with college graduates, and due to this and related phenomena, upper mobility for rural Chinese

³⁶ Zhang Q. et al. Op. cit, p.447.

³⁷ Davis H. A, DiStefano C. and Schutz P. A. Op. cit, p.954.

³⁸ Hawkins J. N. Jacob W. J. and Li W. Op. cit, p.217.

Li M. and Yang R. Op. cit, p.317.

³⁹ Ma W. Op. cit, p.264.

students may be more dependent on their attending a top research university, which is likely to increase their anxiety relative to tests and other forms of evaluation.

Although greater test anxiety among students from rural backgrounds may be attributable in part to their feeling less academically prepared than urban peers, another contributor suggested by our findings is that rural students rely more on a simple strategy for coping with anxiety that involves self-control. Our finding that rural students are more likely to just push themselves to focus, to avoid distracting thoughts, and so on, is consistent with the findings of several studies showing that when faced with intense pressure, urban students in China tend to use self-regulation strategies, such as managing their emotions or making changes to their behaviors, while rural students are more likely to simply “endure.”⁴⁰ Self-control strategies like enduring or forcing oneself to concentrate may have some effectiveness, but studies suggest that they will not typically be as effective as other emotion-or problem-focused coping strategies.⁴¹

One limitation of the present study is our reliance on a small sample. Small samples are standard in qualitative research but naturally limit the generalizability of the findings.⁴² A second limitation is that we failed to replicate a commonly reported finding that female students experience more test anxiety than male students do. The absence of gender differences in our study may be an unfortunate consequence of the small sample size. Another possibility is that social changes in China in recent years have increased academic pressures to the point that most students, regardless of gender,

40 Chen H. Op. cit, pp.240-242.

41 Lazarus R. S. Op. cit, pp.360-362.

42 Creswell J. Op. cit, p.128.

experience high levels of test anxiety. Our study did not evaluate this possibility.

A third limitation of our study is that we did not investigate the relative affluence of participants and their families. The distinction between “urban” and “rural” students may actually simply correspond to a difference in socioeconomic status (SES), since, as noted in the Introduction, rural areas in China tend to be less affluent than urban areas. If the urban-rural distinction in our sample simply reflects a difference in affluence, our findings would be consistent with the view that because test anxiety among Chinese students arises in part from pressure to succeed materially in order to financially support the family,⁴³ the extent of such pressure will be greater among rural students because their families tend to be poorer. According to this interpretation, one of the main contributions of our study would be the demonstration that among Chinese undergraduates, poorer students experience greater test anxiety than more affluent students, thereby adding China to a growing list of countries in which this difference has been observed.

On the other hand, if rural background does not simply equate to less affluence, then it is conceivable that other aspects of rural background, less directly related to socioeconomic status, are primarily responsible for our findings. In particular, rural students report feeling less academically prepared than urban students to succeed in college.⁴⁴ Indeed, rural students do tend to be less academically prepared, in spite of the Chinese government’s efforts to promote equity through restructuring and other

43 Chen H. Op. cit, p.241.

Dion K. L. and Toner B. B. Op. cit, p.169.

44 Zhang Q. et al, Op. cit, p.448.

methods,⁴⁵ but what is critical here is the students' own self-perceptions. As noted in the Introduction, cognitive appraisal theory predicts that feeling less prepared for an evaluative situation will make the situation seem more threatening and increase anxiety, particularly when the evaluation is highly goal relevant, such as a college test.⁴⁶ Thus, because rural students feel less well-prepared to succeed on tests, they perceive the tests as more threatening and experience greater anxiety.

6. Conclusion

Although all study participants reported experiencing test anxiety, and that each student's experiences were different, rural students reported greater test anxiety as well as greater reliance on coping strategies based on self-control.

When considering how to help rural students deal with test anxiety, both before and during tests, school counselors and other staff have a large intervention literature to draw from⁴⁷ as well as a number of guides written for practitioners. Along with many personal-, family-, and community-level variables to be considered, coping style might be an area that merits special

45 Ma W. Op. cit, p.268.

Zhao D. and Parolin B. "Merged or Unmerged School? School Preferences in the Context of School Mapping Restructure in Rural China," *Asia-Pacific Education Researcher*, 23, (3), 2014, pp.558-560.

46 Davis H. A. DiStefano C. and Schutz P. A. Op. cit, pp.944-947.

Lazarus R. S. Op. cit, p.355.

47 Embse N. Barterian J. and Segool N. "Test Anxiety Interventions for Children and Adolescents: A Systematic Review of Treatment Studies from 2000-2010," *Psychology in the Schools*, 50, (1), 2013, p.68.

focus. Future research might consider whether rural students would benefit from learning coping strategies that go beyond simply trying to control themselves and persevere. Therefore, it will be expected for our study to help them better manage test anxiety so as to improve their academic performance in college, and cope with text anxiety in other situations throughout their college lives as well. Future research intended to clarify and extend the findings of the present study might consider more broadly the differences in coping styles between urban and rural students, while controlling for differences in affluence. The extent to which rural students benefit from learning more effective coping strategies could be considered in future studies, as well as the extent to which these students benefit from learning about how to cope with other forms of anxiety in academic settings besides test anxiety.⁴⁸ In addition, larger samples might provide greater insight into gender differences and their possible connection to urban versus rural background.

48 Horwitz E. K, Horwitz M. B, and Cope J. *The Modern Language Journal*, 70, (2), 1986, pp.125-132.

[ABSTRACT]

**Test Anxiety among Chinese Undergraduates from Urban versus
Rural Backgrounds**

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This is a qualitative research study conducted to deepen understanding of test anxiety among Chinese undergraduates from urban versus rural backgrounds in China. Five urban and five rural students currently attending Yanbian University participated in the study. Semi-structured interviews conducted with individual students focused on self-assessment of performance, extent of test anxiety, understanding of causes of test anxiety, preferred coping strategies, and the possibility to reduce test anxiety. The interviews revealed that all students experienced anxiety before tests but not necessarily during tests. To reduce test anxiety, students used a variety of emotion-focused and problem-focused coping strategies for dealing with test anxiety. The differences between urban and rural students tended to show that rural students appeared to experience more severe, unqualified test anxiety, and they relatively used less effective coping strategies involving self-control to deal with test anxiety than their urban peers. Finally, contrary to expectations, no gender differences in test anxiety were found. The educational significance of this study is to help reduce

Chinese undergraduates' test anxiety and adapt well to university settings by understanding the challenge of test anxiety, particularly among Chinese rural students.

Key words: qualitative research, test anxiety, semi-structured interviews, self-assessment, coping strategies

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