





Classroom goal structures: Observations from Urban and Rural High School Classes in China

Journal:	Psychology in the Schools		
Manuscript ID	Draft		
Wiley - Manuscript type:	Research Article		
Keywords:	classroom goal structures, academic achievement goals, Chinese learners		
Abstract:	This study reports on the goal structures of one rural and one urban Grade 11 class in China, based on classroom observations and teacher and student interviews. Classroom observations, conducted over a sixmonth period, focused on physical settings and classroom activities. In each class, seven students and the homeroom teacher were interviewed to discern their views about classroom goal structures. Results indicated that although high scores and rankings on tests were admired, students were also encouraged to master knowledge, exert effort, develop good habits, and learn from their errors, reflecting the co-existence of both mastery and performance goals. Comparisons revealed that the rural class had a predominantly examination-oriented focus whereas the urban class did not place as great importance on examination outcomes. Implications of the findings for research and practices are discussed.		

SCHOLARONE™ Manuscripts

Abstract

This study reports on the goal structures of one rural and one urban Grade 11 class in China, based on classroom observations and teacher and student interviews. Classroom observations, conducted over a six-month period, focused on physical settings and classroom activities. In each class, seven students and the homeroom teacher were interviewed to discern their views about classroom goal structures. Results indicated that although high scores and rankings on tests were admired, students were also encouraged to master knowledge, exert effort, develop good habits, and learn from their errors, reflecting the co-existence of both mastery and performance goals. Comparisons revealed that the rural class had a predominantly examination-oriented focus whereas the urban class did not place as great importance on examination outcomes. Implications of the findings for research and practices are discussed.

Keywords: classroom goal structures, academic achievement goals, Chinese learners, urban-rural differences, high school students

Classroom Goal Structures: Observations from Rural and Urban High School Classes in

Academic achievement goals (i.e., mastery goals and performance goals) concern students' purposes for academic engagement and are important determinants of academic engagement and performance (Ames, 1992; Huang, 2012; Wigfield & Cambria, 2010). One central concern in educational psychology is to understand the role of classroom settings in students' adoption of achievement goals in order to aid construction of adaptive classroom environments. Classroom settings, including physical setting (e.g., banners and posters) and activities (e.g., teachers' behaviors and discourses) communicate purposes for academic engagement, and set standards for academic success, which influence students' goal adoptions (Lam, Ruzek, Schenke, Conley, & Karabenick, 2015). Accordingly, students develop views about what constitutes academic success in the class and this influences their adoption of academic goals. Classroom settings that make different academic achievement goals salient are referred to as classroom goal structures (Ames, 1992; Patrick, Kaplan, & Ryan, 2011).

The micro classroom setting is embedded within the broader sociocultural context and researchers have examined sociocultural influences on motivation (Kaplan & Maehr, 2007; Zusho & Clayton, 2011). Sociocultural context can greatly influence classroom settings, and in turn, influence students' goals and learning process. Due to differences in sociocultural contexts, classroom settings differ across cultures. The broader sociocultural context greatly influences classroom settings, which in turn, influence students' goals and learning process. Hence, calls to examine variations in sociocultural context on classroom goal structures are becoming increasingly prevalent (Kaplan & Maehr, 2007; Zusho & Clayton, 2011). However, studies of classroom goal structures have typically been conducted in Western societies with little attention paid to Chinese classrooms. Therefore, this study aims to investigate the cultural values and social norms that manifested in classrooms and contribute

to an understanding of Chinese classroom goal structures. Additionally, existing studies on classroom goal structures rely greatly on survey data, which provide little information about what teachers do and say and about the objective classroom setting (Ciani, Middleton, Summers, & Sheldon, 2010; Turner, Gray, Anderman, Dawson, & Anderman, 2013). To address these limitations, this study employed both interviews and classroom observations to provide systematic descriptions and detailed interpretations of classrooms' influence on students' achievement goals in China. Given that China has experienced many social changes and educational reforms, this study also aimed to offer a window into how sociocultural changes may contribute to within-country variation in the classroom goal structures.

Achievement Goal Theory and Classroom Goal Structures

Researchers have explored goals to explain why individuals try to engage in academic tasks (Ames, 1992; Wigfield & Cambria, 2010). Two goals have been primarily examined: mastery goals, which focus on competence development, and performance goals, which focus on competence demonstration (Ames, 1992). More recent research on academic achievement goals has adopted a trichotomous model by distinguishing performance goals along an approach—avoidance dimension (Midgley et al., 2000). Performance-approach goals focus on competence demonstration and outperforming others, while performance-avoidance goals focus on avoiding judgment of low ability or appearing stupid (Elliot & Murayama, 2008). Research suggests that mastery goals are more adaptive than performance goals. Mastery goals have been linked to deep learning, persistence, and high academic outcomes, whereas performance-avoidance goals have been found to be almost entirely negative (Huang, 2012; Wigfield & Cambria, 2010). Performance-approach goals have shown controversial effects, which are positively related to academic engagement and achievement, but also are associated with test anxiety and decreased interest (Huang, 2012; Leondari & Gonida, 2007; Midgley, Kaplan, & Middleton, 2001; Wigfield & Cambria, 2010).

As with academic achievement goals, two types of goal structures have been identified: 1) mastery-oriented classrooms, which assert the purpose for academic engagement is to make improvement and develop competence; and, 2) performance-oriented classrooms, which claim the purpose is to outperform others and demonstrate competence (Midgley et al., 2000; Patrick et al., 2011; Urdan & Schoenfelder, 2006). A combination of mastery and performance goal messages can also be transmitted in classrooms (Ciani et al., 2010). Quantitative analyses of survey responses and experimental studies have consistently shown that mastery goal structures predict the adoption of mastery goals and adaptive engagement (Meece, Anderman, & Anderman, 2006; Patrick et al., 2011). In contrast, performance goal structures predict maladaptive learning patterns, such as cheating, self-handicapping, and low persistence (Meece et al., 2006; Urdan & Schoenfelder, 2006).

To promote adaptive goals and engagement, Ames (1992) has summarized features of mastery-focused classrooms, in terms of three interdependent dimensions: *task* (i.e., learning activities), *authority* (i.e., students' involvement in decision making), and *recognition and evaluation* (i.e., standard, criteria, and frequency of evaluation). More recent studies have suggested factors associated with the *classroom social climate*, such as teachers' academic and emotional support, mutual respect, and task-related interactions, promote mastery goals (Patrick et al., 2011; Turner et al., 2013). Research with surveys or experimental manipulations have confirmed that these dimensions serve together as cues to trigger goal orientations (Greene, Miller, Crowson, Duke, & Akey, 2004; Lau & Lee, 2008; Meece et al., 2006; Patrick, Anderman, Ryan, Edelin, & Midgley, 2001; Patrick et al., 2011). For example, Lam, Yim, Law, and Cheung (2004)'s laboratory study showed that students' in a competitive condition were more performance-oriented and less likely to opt for a more challenging task than other students.

Four overarching dimensions (task, authority, recognition and evaluation, social

climate—see Table 1) served as the major framework of this study. Specifically, to promote students' adoption of mastery goals, tasks should be personally meaningful, challenging, and interesting, to foster enjoyment of learning; Effective learning strategies should be introduced. Teachers should give choices and involve students in decision-making about task content and rules (authority). Recognition involves effort, progress, and mastery of skills. Evaluation is made privately, based on self-referenced criteria, to avoid attenuating ability differences. Outcomes are interpreted in terms of improvement, and academic success is attributed to efforts. Students can seek assistance for emotional and academic problems from teachers and peers. On the other hand, performance goal structures are communicated by uniform assignment of tasks, a lack of support for students' autonomy, public recognition and evaluation focusing on comparative outcomes, and a classroom social climate that lacks sharing and supports.

[Table 1 near here]

Although the impact of classroom goals structures has been widely researched, these studies have mostly used surveys that provided little information about what teachers do and say and about the objective classroom setting (Ciani et al., 2010; Turner et al., 2013). Only a handful of studies have used both observation and self-reports to describe what occurs in classrooms on the dimensions of tasks, authority, recognition and evaluation, and social climate (Patrick et al., 2001; Urdan, 2004). For instance, Urdan (2004) examined goal-related messages by observing introduction of new topics and evaluation and recognition practices. Interviews were also conducted to capture teachers' beliefs and students' interpretations of and responses to the goal messages. Researchers have called for mixed-methods research with a combination of classroom observations and self-reports to describe classroom goal-related messages (Ciani et al., 2010; Turner et al., 2013).

The Role of Sociocultural Context

Researchers have stressed the need to extend the consideration of contextual factors beyond immediate classroom features, to include features of the broader sociocultural context (Hau & Ho, 2010; Kaplan & Maehr, 2007; King & McInerney, 2014). As Kaplan and Maehr (2007) stated, "Whereas cultures provide a broad setting for the construction of achievement situation schemas, specific environments embedded in the cultures could provide more proximal settings for these constructions" (p. 157). Cultural values for learning are communicated, and social norms and expectations are reflected in classrooms. In China, for example, Confucian beliefs about the role of effort in pursuing achievement may promote adoption of mastery goals (Li, 2012). In addition, as college entrance in China is determined mainly by scores and rankings on National College Entrance examination (NCEE), teachers may care greatly about students' performance on the examination (Watkins, 2010; Wong, 2017).

Findings of differences on goal adoptions between Chinese and North American students also point to the need to investigate Chinese classroom goal structures. Research suggests that Chinese students generally show higher performance-approach goals than their North American counterparts (Shih, 2005; Xiang, Lee, & Solmon, 1997). After capturing the differences, researchers overwhelmingly attributed cross-cultural differences to broader sociocultural factors and segments of classrooms, such as the Chinese competitive-oriented educational context and the Confucian cultural context (Salili & Lai, 2003; Shih, 2005). Such interpretations generally provided information about Chinese classroom through fragmented descriptions, but their discussions were largely speculative, and these interpretations may be erroneous (Matsumoto & Yoo, 2006). There is a lack of studies describing what actually happens in Chinese classrooms. Little is known about authentic classroom practices, nor what cultural values and social norms that are explicitly or implicitly manifested in Chinese

classrooms.

A China that is Changing

China is a geographical large, diverse and populous country that also undergone vast socio-economic changes over the last two decades. Economic growth has varied across regions and this may have resulted in differences in classroom goal structures across regions in China. Fei, Hamilton, and Wang (1992) posited that urban China has moved toward a modern and Westernized society, whereas rural China remains a metaphor for traditional China. Thus, compared with urban areas, rural areas should keep more traditional values. In terms of economic level, there are large disparities between urban and rural regions of China, as well as between eastern coastal and western inland regions. People in urban coastal regions have greater opportunities for industrial or commercial jobs and accordingly get higher incomes, while those in rural inland China still largely lead traditional agricultural lives and suffer from economic disadvantages. As with economic disparity, students in developed regions enjoy better educational resources and get more educational opportunities than those in underdeveloped regions. The economic disadvantage and lack of education opportunities in rural areas may lead to more emphasis on education as a means to upward social mobility in rural areas. Furthermore, while selection for college admission has been typically based on students' performance on the NCEE, some developed provinces in China have considered factors other than NCEE scores since 2014 (Chinese of Ministry of Education, 2014). For example, selection for college in Shanghai also considers students' interview performance, leadership potential and extra-curricular activities, to ensure a more holistic approach to education. The difference in college entrance policies may lead to higher emphasis on examination performance in rural areas than in urban areas.

The present study

This study examined the goal structures of a rural and an urban Grade 11 class in China based on classroom observations and interviews. Two key research questions were:

- 1) How do the Chinese classroom contexts influence students' academic achievement goals?
- 2) What are the commonalities and distinctions between classroom goal structures in underdeveloped rural and developed urban regions?

Method

Case Study

Research sites

To gain an understanding of within-country variation in classroom goal structures, two classes were purposively chosen followed three steps. First, the first author identified two regions –an underdeveloped, traditional, rural inland region in Jiangxi Province, and a developed, modernized, urban metropolitan costal region in the Shanghai Municipality. Notably, Shanghai has conducted a pioneering college admission reform wherein students' college admissions are determined by multiple criteria, in addition to their NCEE scores. Second, the first author selected one of the best public high schools in each region based on regional school banding. The school in Jiangxi (School A) had over 7000 students in 90 classes, with approximately 70 students in each class. Most students were from low to middle socioeconomic status (SES) families. The school in Shanghai (School B) had over 1100 students in 36 classes, with approximately 12 classes in each grade and 30 students in each class. Most students were from middle to high SES families. Third, the best Grade 11 class in each school was selected based on principals' recommendations. This study selected cases classes that were more in accord with local standards for a good class, rather than choosing high mastery- or performance-oriented classrooms. The chosen classes were assumed to embody cultural values and social expectations culturally endorsed values. The two classes will hereinafter be referred to as the rural class and the urban class. The rural class included 72 students (38 boys), and the urban class consisted of 38 students (20 boys).

Key Informants Participants

The homeroom teacher of each class was involved in the study. Compared with other teachers, they had greater responsibilities for students' school life. Mr. Yang (51 years, rural class) and Miss Li (46 years, urban class) had 28 years and 22 years of teaching experience, respectively. Both had bachelor's degree and professional qualifications for teaching. Seven students who varied in academic achievement (aged 15 to 17 years; two high, average, and low achievers, respectively, and the class monitor) were purposively selected from each class. This research focused on 11th graders because adolescence is an important transitional period between childhood and adulthood. Furthermore, after spending one year in the high school, 11th graders should be familiar with and have developed certain perceptions of their classes and schools.

Data Collection

Data collection lasted for a semester. The first author visited each class every two weeks. Data were collected from multiple sources, including classroom observations, classroom audio recordings, audiotaped interviews of key informant participants, and related documents. There were three types of observations. First, the static physical homeroom classroom setting where students spent most of the school days was observed, and 120 photographs were taken in each class. In Mainland China, students spend most of the school days in the homeroom with each other, and teachers come to give lessons rather than having students change rooms. Second, in each class, 10 homeroom meetings (40 minutes per each) totaling approximately 400 minutes were observed (running records). Normally, each school in China has a weekly time set aside for homeroom meetings, which is an important time when the homeroom teacher stays with students and may intensively transmit values about learning to them. Third, flexible and opportunistic observations were carried out during class breaks (20 in each class). For the homeroom meetings and class breaks, researchers observed teachers' interactions with students, and what most students were doing.

Additionally, each participant underwent two direct interviews and six to ten stimulated-recall interviews individually, and each lasted for 40-50 minutes. participants attended direct (2 times/per) and stimulated-recall interviews (6-10 times/per) individually were interviewed individually to examine their perceptions. Both direct and stimulated-recall interviews were conducted (see Table 2 for sample questions). In direct interviews, homeroom teachers were asked about personal information, perceptions of classrooms, and what they have done to motivate the students (e.g., What have you done to motivate the students?). The direct interviews for students involved three parts: (1) their reasons for academic engagement (e.g., Why do you want to do well in school?); (2) perceptions of goalrelated messages in the class (e.g., What purpose for learning is emphasized in the classroom or by the teachers?); and, (3) describe the classroom in terms of task, authority, recognition and evaluation, and social climate (e.g., What does the teacher do to make tasks more engaging (interesting, challenging, meaningful) for you?). Following their descriptions, students were also asked to rank the presence and quality of activities, using a five -point scale ranging from 1 (never) to 5 (always), based on their general experience across all subjects on the four dimensions (see table 2).

In stimulated recall interview, participants were asked to recount their thoughts and actions concerning certain observed behaviors to gain insight on: (1) their interpretations of the classroom setting designs and others' behaviors (e.g., The teacher said.... What do you think of that?); and (2) the intent of their own behaviors immediately after observations (e.g., I saw you...why do you do that...?).

Data Analysis

Data analysis was conducted based on Creswell's (2014) guidelines. All the interview transcripts and classroom audio recordings were imported into NVivo software; read through several times; coded into categories and themes, and reduced and transformed by

summarizing or paraphrasing; and finally verified through member checking. The findings were then interpreted, and conclusions drawn. Two Masters students in educational psychology coded the interviews and audio recordings. They identified and rated the quality of tasks, autonomy support, evaluation and recognition, and social climate into enhancing mastery goals or performance goals. The two coders achieved 81% agreement across all ratings. The first author and two coders discussed any disagreements over classifications until agreement was reached. The following section provides information about the two classes

Findings Results

Rural Class

Each wall had many banners. There was a large slogan and a centralized region to post class rules and timetables on the front wall. On the back wall, there was another blackboard with many posters. Students' desks and chairs faced the front wall, which filled the classroom and left very little room for student movement. On each student's desk was a stack of books about 20 to 30 centimeters high. A clock was mounted above the backblackboard. Overall, the classroom looked messy and crowded. Observations focused on classroom goal structures in terms of task, authority, and recognition and evaluation, and social climate. Figure 1 presents the findings from the observations in terms of task, authority, and recognition and evaluation, and social climate. Table 2 presents the students' average ratings for the four dimensions. The following part introduces each dimension in the rural class, in turn.

[Figure 1 near here] [Table 2 near here]

Task. Students generally evaluated the tasks as not interesting enough ($\underline{M} = 2.00$), as being unable to hold their attention ($\underline{M} = 2.83$). Five of the seven student participants mentioned tasks were seldom interesting because most time was spent on preparing for examinations. They pointed out that teachers strictly followed the examination outline and

standardized textbooks. In the lessons, teachers taught topic knowledge likely to be tested on the NCEE, whereas students listened and took notes. Teachers drew students' attention by asking questions, speaking loudly, and calling out the names of students who were not concentrating. Additionally, the observation showed that 11 pictures of physical class setting, 31 minutes in homeroom meetings, and 22 minutes in class breaks transmitted performance goals messages (see Figure 1). To maximize examination outcomes, for instance, a poster on the back blackboard presented "the six test-taking skills you must know", such as memorization of important equations, and answering the easy questions before the difficult ones. These skills showed some shortcuts to get quick payoffs on examinations.

On the other hand, the observation showed that 12 pictures of physical class setting, 21 minutes in homeroom meetings, and 4 minutes in class breaks transmitted mastery goals messages (see Figure 1). For example, on the back blackboard, some posters exhibited "13 good habits to improve efficiency in learning," such as setting concrete plans (e.g., sequence and task for tasks), and daily self-evaluation. Students also reported they were encouraged to build good learning habits (M = 3.83).

Authority. Based on coding, 6 pictures of physical class setting, 46 minutes in homeroom meetings, and 28 minutes in class breaks (see Figure 1) showed that very little choices were given to students, which was assumed to enhance performance goals. Students also rated this dimension very low ($\underline{M} = 1.00$), stating that they did not have opportunities to negotiate with teachers on homework content ($\underline{M} = 1.33$) or class content ($\underline{M} = 1.50$). It was observed that Mr. Yang usually determined assignments and demanded students' conformity. In homeroom meetings, he used controlling language, such as "You must finish...." Mr. Yang explained that the centralized education system exerted overall control of learning content, and that the school/grade exercised control over homework. Students also mentioned that teachers were very strict and rarely smiled, ant that choices and options were rarely

provided. They reported that teachers of NCEE-examined subjects, such as Chinese and mathematics, unilaterally pre-empted classes for non-examined subjects (e.g., music, arts, and P.E.), without any discussions or students' agreement.

Furthermore, there was a very rigid rule system in the class (\underline{M} = 4.83). Students were required to obey many "inhumane rules" (students' words). Mr. Yang asserted "college entrance examination is the pivotal thing now; other things should be put aside", so he confiscated students' extracurricular books, cellphones, and any other things he deemed not beneficial to examination performance or "detrimental to learning" (Mr. Yang, RC). He said, "In my class, students follow the requirements due to my deterrent force. If you are mild, they won't listen to you." Hana, a low achiever, called the classroom "a prison, and the teachers are the prison guards" (Hana, L, RC).

However, Little autonomy support was given to the students, but most (six of the seven) students did not perceive lack of choices to be a serious problem. For example, Leo, the class monitor stated, "From primary school, I have been constantly told that a good child would listen to teachers and follow the rules." They mentioned that teachers provided them with a structure and strict discipline so they could focus on studying and perform well on the NCEE. According to some students, although they wanted to focus on learning, there were too many temptations they could not resist, and they needed teachers' help to regulate themselves. "Frankly, I am very grateful to him. The college entrance examination can make or break my future. It is the most important thing now. I know he (Mr. Yang) is strict, but this was effective to improve our academic achievement" (Mary, M, RC). Mr. Yang also explained that teachers merely kept students on track, rather than deciding their direction; "Their (students') goals have been decided long ago—getting into colleges. As a teacher, my responsibility is to ensure they get satisfactory outcomes on examinations."

Most Five student participants in the rural class also interpreted Mr. Yang' control as

a sign of his willingness to nurture and care for them. For example, a low achiever said, "He is very strict for our own sake.... His way is crucial but effective. He takes his responsibility" (York, L, RC). Among them, three also mentioned authority as an important dimension of a good teacher, "Authority means he is a good teacher. Teachers need to be strict" (Penny, H, RC).

Recognition and evaluation ($\underline{\mathbf{M}} = 2.17$). Observations showed that this dimension strongly promoted performance goals, reflecting by 37 pictures of physical class setting, 93 minutes in homeroom meetings, and 46 minutes in class breaks (see Figure 1). Students' school life focused almost exclusively on preparing for the NCEE, and included taking many standardized mock tests. In the observed semester, there were 16 weekly examinations, three monthly examinations, one joint examination with other high schools, and midterm and final examinations. Except for Chinese and English examinations that included some open-ended questions, Nearly all examinations were multiple-choice or short answer problems.

Evaluation was overwhelmingly based on examination scores and rankings, leading students to give a very high rating to social comparison ($\underline{M} = 4.67$). The researcher noticed a banner bearing a slogan ("Raising one point can outperform thousands of students") that emphasized the importance of outperforming others, and reflected the severe competition. Additionally, examination scores and rankings were displayed publicly. There were also posters that presented the top students' names, scores, and exam papers. During class breaks, students usually looked at the exhibition. Whenever a new sheet was posted, almost all students rushed to the back blackboard. Outside of the front door was another bulletin board, which exhibited the names and scores of top 700 students in the whole grade.

Mr. Yang' explained that rankings were used to stimulate learning, "Putting the examination results sheet up would give low achievers pressure to do better. They will feel ashamed and make improvement" (Mr. Yang, RC). Most Five of the seven students also

interpreted the public comparison and high level of competition in a positive way. For example, Leo stated that exposing the academic achievement was a motivator for students, as everyone sought to avoid losing face; "Because if your fall behind, all the other students would know. What a shame. So, you work harder" (Leo, M, RC). Another student also reported that social comparison motivated her. "I can see the distance between others and me... I was also encouraged to study harder" (Louis, M, RC). On the other hand, some two other students objected to public exposure of their academic achievement. York, a low achiever, reported that he felt very nervous and depressed due to the performance exhibition (York, L, RC).

After each monthly, midterm, and final examination, there was a homeroom meeting that focused on examination results analysis, in which Mr. Yang held an award ceremony. He gave certificates of merit and cash prizes to high achievers, based on the most recent examination, calling each winner' name in turn— "Peter, the champion (highest achiever) of Chinese; John, the champion of mathematics..." Once their names were called, the students came to the platform to collect their certificates, while the other students applauded. One winner said, in the stimulated-recall interview, "The cash reward of 10 *yuan* is tiny. However, it is a material and spiritual double affirmation. We all want that honor" (Carl, H, RC).

In addition to frequently offering public praise, Mr. Yang also criticized students who had been careless or had not put in a good effort. He stated, "Criticizing one student in public teaches the admonished student and other students a lesson. Being criticized is humiliating. Hence, students will try their best to avoid making the same mistakes next time." Students' ratings for public praise ($\underline{M} = 4.17$) and criticism ($\underline{M} = 4.00$) in the classroom corroborated the observations and Mr. Yang's report.

On the other hand, 28 pictures of physical class setting, 86 minutes in homeroom

meetings, and 33 minutes in class breaks were found to promote mastery goals (see Figure 1). There was much evidence of students being encouraged to exert effort. A large and salient banner was put above the blackboard with the slogan, "Be diligent and think more; never hesitate to ask and learn from less accomplished people." Students' improvements were recognized (M = 4.02), and those who made the greatest improvement were praised together with those who got highest marks in the examination. Additionally, every student was required to swear an oath very passionately and loudly before each homeroom meeting. The oath emphasized effort and learning strategies, and included such sentences as, "As a student of XX School, I solemnly swear... Where there's a will, there's a way. One should be fond of learning and not feel ashamed to ask and learn from less able people.... Hardworking, diligently, think; and ask questions..." Some (three of the seven) students mentioned that the oath enhanced morale: "It gives me energy everyday" (Louis, M, RC).

Mr. Yang often asked students who made great improvements to share their learning strategies. For example, there was a homeroom meeting at which Leo (class monitor, RC) was invited to discuss his learning strategies. While introducing Leo, Mr. Yang said: "Leo's is not the highest achiever, but he keeps exerting effort and makes improvement steadily..." After Leo' presentation, Mr. Yang commented: "Why did Leo make such a big improvement? Not you? This is because he exerts lots of effort....Every student has the potential to study well if he/she makes effort and uses effective strategies."

As well, although not making mistakes was admired, Mr. Yang viewed errors as a part of the learning process, rather than dismissing them as a sign of low competence, "Through mock examinations, we want to expose students' problems, and amend their weak points, so that they can master as much knowledge as possible and get satisfactory NCEE scores". Students also reported that most teachers showed patience, even when some students made the same mistakes repeatedly.

Further, students were required to write a summary after each examination followed a self-regulated learning pattern. Specifically, students reviewed their learning and compared examination results with their previous goals. After that, they set new goals, in terms of the scores and rankings they wanted to get in each subject, or what improvement they wanted to make. They also made specific plans about how to make improvement, such as how many English or Classical Chinese words to recite, and how many mathematics or physics exercises to do.

Classroom social climate. Observations showed that this dimension strongly promoted mastery goals (5 pictures of physical class setting, 24 minutes in homeroom meetings, and 38 minutes in class breaks) and weakly promoted performance goals (1 picture of physical class setting, 7 minutes in homeroom meetings, and 1 minute in class breaks). Students also gave a very high rating to this dimension (M = 4.67), and revealed that teachers, especially Mr. Yang, gave them many emotional and academic supports. Even low achievers like Hana posited that Mr. Yang was very concerned with her academic achievement, and frequently contacted her parents. Mr. Yang often asked students, "Do you understand? Any problems?" He also encouraged students to seek help from teachers and peers in the face of setbacks. Moreover, students were in heterogeneous groups – every six students who were good in different subjects, or who had different levels of academic achievement were assigned to one group to facilitate learning. The grouping promoted peer interactions and made students more willing to discuss and share ideas and seek help from others, especially group mates.

Overview of the rural class: the crucial NCEE. A common element in interviews and observations was the importance of learning to preparing for the NCEE. The students mentioned that high scores and rankings on examinations were highlighted in the class. The rural class seemed to be unpleasant, because of its severe social comparisons, rigid rule

system, and lack of autonomy support. However, interviews revealed students were willing to tolerate this "notorious hell," because they believed what they endured now would pay off in high performance on the NCEE. Consistent with this notion, there was a banner on the wall – "No pain, no gain." Some practices in the rural class sought to promote students' intentions to learn by emphasizing education as a way to career and financial opportunities, and thereby upward social mobility. In one homeroom meeting, Mr. Yang told the students, "If you do not study hard and get into colleges, how can you gain advantage over the students who are children of officials or rich parents?" Since most students came from economically disadvantaged families, they generally perceived Mr. Yang's comments as encouragement. For example, Carl elaborated the many factors that constrained his freedom – "I do not have an affluent family background and social relationships to help me, I cannot be wayward. The NCEE is the only route to change my fate" (Carl, H, RC). Altogether, the emphasis on examination performance and students' willingness to endure the "notorious hell" was due to the crucial role of NCEE.

Urban Class

There were fewer banners and posters in the urban class compared to the rural one. Students had decorated the back blackboard in the class with paintings of world maps, thoughts about classroom experiences, and pictures of classroom activities. The classroom looked bright, capacious, and colorful.

 $Task~(\underline{M}=3.29)$. Classroom observations suggested that mastery goals were more emphasized (10 pictures of physical class setting, 29 minutes in homeroom meetings, and 12 minutes in class breaks) than performance goals (3 pictures of physical class setting, 3 minutes in homeroom meetings, and 5 minutes in class breaks) (see Figure 1). Emphasis was placed on promoting learning interest, as suggested by the large slogan on the right wall, "Learning with joyfulness." Miss Li tried to provide interesting supplementary materials and

activities, and students reported they were provided with interesting tasks and opportunities for self-exploration, such as making presentations, making experiments, and dubbing English films. Additionally, Miss Li strongly promoted the development of comprehensive competence through participating in varied activities. Diverse activities were observed in homeroom meetings, such as basketball games, reading programs, and music sharing.

Although there were no explicit exhibitions of learning strategies, students did not give a low rating (M = 3.57) to emphasis of strategy use. They reported teachers often discussed effective strategies in a domain-specific fashion. Students reported, the mathematics teacher asked them to preview content before the class and discuss confusing points with peers; the English teacher set homework that required summarization and clustering vocabularies to aid memorization; and the Chemistry teacher encouraged making mind maps of chemical equations. Miss Li also mentioned teachers usually introduced effective domain-specific learning strategies in their corresponding lessons. The emphasis on strategy use was also supposed to foster mastery goals.

Authority. A low average rating ($\underline{\mathbf{M}} = 1.70$) was given to this dimension, based on the existing criteria. Students reported having little freedom to decide homework content ($\underline{\mathbf{M}} = 2.18$) and learning content and methods ($\underline{\mathbf{M}} = 1.63$). Miss Li maintained that little choice was given to the students on content and methods because of the low teacher-student ratio, which prevented implementing personalized learning. Additionally, there was a system of class rules designed to maintain an orderly classroom ($\underline{\mathbf{M}} = 3.71$), such as coming to school on time, finishing homework in time, and no fighting or cursing. If students did not follow the rules, they would receive a warning. Their parents would be contacted if rules were consistently broken.

However, all student participants maintained that autonomy support was given.

Students' reports indicated that they interpreted autonomy support as the teacher not pushing

them to perform well or criticizing them for doing badly on tests. For example, Henry said, "Miss Li gives us lots of autonomy support. She does not force us to perform well on examinations. Her basic requirement is to maintain class discipline" (Henry, M, UC). In line with students' reports, Miss Li refused to force students to learn and was critical of focusing all attention on examination outcomes:

Learning should be sustainable and life-long. Even if students get into a good university out of my force, they are very likely to lose their interest, and would abandon themselves. By controlling, a student may get into the Tsinghua University (top university in China). So, how about after that? Can you force him/her to study for a whole life? You can lead a horse to a river, but you cannot make it drink. (Miss Li, UC)

As did Miss Li, students maintained their learning was their own business. For example, Amy said, "The teacher is a guide who tells you how to learn, but should not force us learn" (Amy, H, UC).

Recognition and evaluation. The observation showed that 5 pictures of physical class setting, 18 minutes in homeroom meetings, and 17 minutes in class breaks (see Figure 1) seemed to promote performance goals. Much attention was paid to test scores. Midterm and final examinations took place each semester, and solving a problem correctly was recognized. Students' examination results were implicitly compared. To protect students' privacy, Miss Li sent each a note to reveal his/her examination scores and overall rank in the grade, instead of publicly reporting all examination results.

On the other hand, the observation showed that 5 pictures of physical class setting, 56 minutes in homeroom meetings, and 26 minutes in class breaks (see Figure 1) transmitted mastery goals messages by emphasizing efforts. On the front wall, there was a large banner quoting an old Confucian saying ("Heaven rewards the diligent"). Students also noticed teachers attributed academic success to effort and good learning habits ($\underline{M} = 4.43$). They rated that teachers seldom criticized them publicly ($\underline{M} = 1.29$), but usually praised

hardworking students ($\underline{M} = 3.89$) and encouraged them to learn from hardworking models. Lisa, a low achiever told the researcher, "Miss Li usually praises diligent students. She tells us that the differences between high and low achievers are the learning habits and effort" (Lisa, L, UC). In another instance, Miss Li noticed Lisa had not finished her homework, but had copied other students'. She met with her to stress the importance of effort:

Do you know why I ask you to come here (the office)?

Lisa: I think ...maybe... I perform badly in this examination?

Miss Li: not really. I did not care so much about examination performance. It is your homework (make me annoy). It indicates that you do not exert effort and that your attitude is not right. Copying others' homework! Morally wrong.... I have many students in the class. For me, it is not a problem to give up you. But do you want to give up yourself?

Lisa: ... I used to try very hard, but make no changes to my learning. (Cried...) I have tried very hard. I do not know why.

Miss Li: You need to keep exerting efforts. The transition from quantity to quality takes times. Your efforts do not have effects because your learning foundation is weak. While others are learning, you need to exert much more efforts than them. Diligence is the means by which one makes up for her/his dullness (qinnengbuzhuo 勤能補拙). If you have problems in learning, ask the teachers or peers, they will help you.

In addition to emphasizing effort, Miss Li maintained that mistakes signified the areas on which students needed to focus and exert more effort. She required each student to list the errors they had made on a notebook, and checked these notebooks regularly. Students also reported teachers explained the process of figuring out a problem very carefully, especially the ones on which students made errors, so they could solve similar problems in the future.

Although test scores were still emphasized, students' competence in other areas was also a focus. In keeping with the reforms in Shanghai, school documents pointed out that achievement in multiple domains should be recognized in addition to examination outcomes. Students' achievement in aesthetics and sports were recognized, they were encouraged to

hold music concerts and art exhibitions in the school, and student art works were displayed on the blackboard.

Classroom social climate. The observation showed that social climate in the urban class overwhelmingly promoted mastery goals. As all teachers were in the school from 7 a.m. to 5 p.m., students could easily find them if they needed help. The researcher also observed many conversations between students and teachers during class breaks (33 minutes). Miss Li told the researcher, "In my eyes, they are just my own children". Students also reported that teachers were emotionally and academically concerned about them ($\underline{M} = 4.33$). They stated Miss Li not only cared about academic achievement, but also their personal issues, such as family and emotional problems.

Overview of the urban class: Not just scores; many other things also count. Miss Li and her students agreed that, although much attention was still paid to examination outcomes, examination performance was not as crucial as in the past, and many other things also counted. They offered several explanations for this change. First, Miss Li and some students thought less emphasis had been placed on examination performance because the pressure for college entrance has decreased. The relatively ease of getting into colleges in Shanghai is supported by the relative abundance of higher educational resources in Shanghai. For example, Henry stated that he left his hometown and moved to Shanghai because, "The pressure for NCEE is much less in Shanghai than other provinces in China" (Henry, M, UC). Additionally, Miss Li compared the past and present difficulty of getting into colleges, saying, "When I was young, it was so difficult to be admitted by a college. However, nowadays, in Shanghai, there are so many colleges, most students can get into universities".

Second, students in Shanghai generally came from economically advantaged families. Their parents can afford sending children to study abroad. "There is more than one path to get into colleges, studying abroad is expensive but not so painstaking" (Rachel, M, UC). Further,

four students reported they were not as strongly focused on achieving upward social mobility by getting into college as were people in the past or in underdeveloped regions. For example, Lisa, a low achiever, noted that getting into college was not as important now, and she thereafter was less intent on attaining high performance on NCEE.

Third, the recent college entrance reforms in Shanghai advocate multiple criteria for college admission. Some students posited that less emphasis was put on examinations, so they could devote more energy to other activities. For example, Amy stated that well-rounded development was admired. This emphasis on comprehensive competence was in line with career requirements. Andy, a high achiever, said, "In the past, people who graduated from colleges could find an iron rice bowl (a secure job for life)... Currently, companies consider competence a lot, not only a degree".

Discussion

This current study considered classroom goal structures in Grade 11 urban and rural classrooms in China. Findings revealed that both classes showed mixed goal messages, reflecting the co-existence of emphases on both mastery and performance goals.

Comparisons revealed that performance goals were promoted more strongly in the rural class than in the urban class. It is one of the first investigations into within-nation differences in a Chinese context. Additionally, the findings shed light on the role of the Chinese sociocultural context on classroom settings and on students' adoption of goals, respectively. This study is timely, in that it provides insights into goal structures in a context that is changing rapidly because of economic development and educational reforms.

Mastery-related Messages

Considerable commonalities in the two classes reflected mastery goal-related messages – e.g., emphases on learning strategy use and effort, recognition of improvement, and supportive classroom social climates. Students' reports reflected that teachers in both classes introduced strategies to facilitate their learning. For example, in the rural class, the 13

learning habits that were encouraged can be readily mapped onto corresponding self-regulated learning strategies, such as time management, environment management, and metacognitive strategies (Pintrich, 2004; Winne, 2014). Notably, the multiple strategies were structured as compulsory in students' learning. Students' in the urban class had homework that involved the use of many cognitive strategies required by teachers (Pintrich, 2004). Students in the rural class had to write examination summary reports in which they had to plan, monitor, and regulate their learning, reflecting metacognitive self-regulatory activities (Ferreira, Simão, Veiga, & Da Silva, 2015). The finding that self-regulated learning strategies were widely used among Chinese students challenges the stereotypical view of Chinese students as force-fed ducks almost exclusively focused on rote learning (Gan, 2009; Lee, 1996).

In terms of recognition and evaluation, students in both classes were encouraged to master knowledge, make improvements, exert effort, and learn from mistakes. Students gave high ratings to teacher's attribution of academic success to effort (M = 4.67 in the rural class, and M = 4.43 in urban class), which was corroborated by the observations and interviews. By emphasizing that exerting effort and using the right learning strategies could improve competence, students were oriented to develop a malleable and incremental view of intelligence (i.e., growth mindset). Goal theorists posit individuals' beliefs on the nature of intelligence can shape their goal profiles (Blackwell, Trzesniewski, & Dweck, 2007; Schwinger, Steinmayr, & Spinath, 2016). Many studies have confirmed that students who believe intelligence is malleable are more likely to pursue mastery goals than those who believe intelligence is a fixed entity (Blackwell et al., 2007; Schwinger et al., 2016)

Further, both classes created a warm atmosphere in which teachers cared about students' learning and were willing to offer help in a timely manner. A supportive context can also contribute to students' pursuit of mastery goals (Patrick et al., 2011; Patrick, Ryan,

& Kaplan, 2007; Turner et al., 2013). Specifically, students in the rural class were divided into heterogenous groups and were encouraged to transfer their understanding to others. These practices greatly promoted peer learning and help seeking, and should contribute to academic achievement (Saab, van Joolingen, & van Hout-Wolters, 2012).

Performance-related Messages

Some practices in both classes were perceived to promote performance goals. The tasks were mostly uniform, and students could not choose content. Evaluations were mostly carried out based on examination results and high scores and rankings were admired. These practices explained why previous studies have claimed performance goals are prevalent among Chinese students (Salili & Lai, 2003; Shih, 2005).

However, the rural class was much more performance-oriented than the urban one. Tasks in the rural class focused exclusively on preparing for the NCEE, and students were not allowed to attend activities that did not contribute directly to improved NCEE performance. Mock examinations were more frequently carried out in the rural class, and rural class students were evaluated based on examination outcomes to a larger extent than their urban peers.

There were also many more social comparisons in the rural class than in the urban class. When students are compared to each other, they tend to conceptualize competence in reference to others' performance, and their intentions to outperform others are promoted (Elliot & Murayama, 2008). Moreover, students in the rural class received praise and concrete forms of recognition (e.g., cash, certificate of merit) that may have enhanced their perceptions of learning as a path to extrinsic rewards and recognition (Wigfield & Cambria, 2010). These features of the rural class confirmed the stereotypical view of Chinese classrooms as highly competitive and examination-oriented (Lau & Lee, 2008; Shi et al., 2001; Xiang et al., 1997). The finding is aligned with Watkins (2010)'s study of 257 Chinese

students, which found over 80% of them reported being encouraged by their school to compete with one another, particularly in examinations.

The emphasis on examination performance also explains why students in the rural class did not perceive a lack of autonomy support as a serious problem. This is consistent with previous studies, in which Chinese students felt autonomous despite lacking choices (Bao & Lam, 2008; Zhou, Lam, & Chan, 2012). Rural class students generally interpreted teachers' controlling behaviors as evidences of their caring for them and as helping them do well on the NCEE, rather than unreasonably requiring their compliance. Teachers provided regulations and directions that avoided chaos in the classroom and kept students focused on NCEE-examined content. Particularly, some students explicitly mentioned they thought their lack of choice was not because of teachers, but because of the educational policy that tied college admission to NCEE scores and rankings.

In contrast, in the urban class, Miss Li and some students commented that NCEE scores were not as crucial as before. Students had the freedom to engage in activities that may not directly benefit their examination results, such as exploring their own interests.

Participants' responses also directly explained why the rural class was more performance-oriented than the urban one: (1) educational inequities, (2) economic disparities, and (3) varying criteria for college admission. First, some urban students pointed out that competition for spots in universities for them was smaller than students in other regions. The pyramidal shape of China' educational system means only a small percent of students can get into universities (Watkins, 2010), but urban students' chances of admission were much higher than those of rural class, due to educational inequities (Hansen, 2013; Qian & Smyth, 2008).

Second, the underlying reasons for many Chinese students' striving for college entrance was that attaining a good education would elevate their social status (Authors, 2018; Lau & Lee, 2008; Li, 2006), but some urban students commented that their intentions to

achieve upward social mobility had decreased, presumably due to their family's SES advantages. Moreover, due to economic advantages, some students in the urban class were able to opt out of the highly competitive college entrance system because their affluent parents could afford to send them to study overseas.

Third, after the pioneering college admission reform, Shanghai students' college admissions are determined by multiple criteria in addition to their NCEE scores.

Correspondingly, students in the urban class (located in Shanghai) were encouraged to improve competence in multiple domains. Whereas in many provinces of China, NCEE performance is still the only criterion for college admission; thus, attaining high NCEE scores and rankings was of staggering importance to the students. In the rural class, the NCEE dictated students' learning and teachers' teaching, and curriculum content and formant deliberately reflected what would be tested on NCEE. The comparisons between two classes explicitly reflected a washback effect (Cheng, Sun, & Ma, 2015). Overall, the marked differences of classroom emphasis on examination outcomes should be interpreted within a dynamic Chinese context that has experienced many economic changes and educational reforms in recent years.

Cultural factors

By conducting interviews and observations, the current case study provided systematic examination of goal-related messages in classrooms in China. While previous studies predominantly explained Chinese students' academic motivation by tracing it back to Confucianism (Hau & Ho, 2008), this study provides direct and explicit evidence that Confucian learning tradition continue to influence classroom goal structures in contemporary China. In both classes, teachers' discourses and banners included lots of folk idioms, proverbs, and well-known sayings that transmitted Confucian values of education that emphasized the role of effort. Various scholars have noted Confucian tradition attributes

academic failure to a lack of effort (Hong, 2001; Li, 2006, 2010; Tweed & Lehman, 2002). The transmission of traditional Confucian learning virtues, such as diligence, persistence, and enduring hardship, aligns with the emphasis on improvement and effort, and should promote mastery goals (Li, 2002, 2005).

Furthermore, the rural class made use of public criticism and shame to persuade students to meet social role obligations and others' expectations. Students reported they were irritated by public criticism to avoid low performance, reflecting that such practices promote performance-avoidance goals. This is in line with findings of previous studies that shame is related to performance-avoidance goals (Pekrun, Goetz, Titz, & Perry, 2002; Pekrun & Stephens, 2009). Shame is a negative emotion associated with distress and humiliation (Yik, 2010). Usually, it is caused by consciousness of the discrepancy between the actual/own self and the ought self, and the ideal self-state (Higgins, 1987; Tao & Hong, 2014). An ideal student is expected to attain high academic achievement, and failing to do so means shame because of failing to meet socially approved standards and teachers' expectations (Shek & Chan, 1999; Tong & Lam, 2011). Research has shown that shame is more prevalent among East Asians than North Americans (Yik, 2010). In China, the concept of shame is deeply rooted in Confucianism (Heine, Lehman, Markus, & Kitayama, 1999). The Doctrine of the Mean (The Confucian classic) posits that the feeling of shame is near courage and advocates amending one's socially inappropriate behaviors and behaving appropriately (Confucius, 1971). Whereas the notion of shame was emphasized in the rural class, the urban class no longer mentioned it, which may be because the Chinese are becoming more selective in certain aspects of traditional values.

Implications

This study highlights the importance of classroom environment that promote mastery goals and performance goals. The findings serve as a basis for future research examining the

relation among classroom goal structures, students' achievement goals, and academic engagement. Notably, this study found performance-related messages (e.g., social comparison) resulted in performance goals, anxiety, and low interest among Chinese students. First, researchers are suggested to examine the impact of classroom goal structures on a wide array of variables: not only academic achievement goals and performance, but also behavior engagements (e.g., cognitive and metacognitive strategy use) and emotional engagements (e.g., interest, anxiety, shame). First, future research is needed to understand the role of sociocultural factors in shaping classroom goal structures and students' goals. For example, the Confucian emphasis on effort may promote mastery goals, and the emphasis on shame may promote performance-avoidance goals. More attention should be paid to the impact of these cultural factors. Second, the findings of this study highlight the strength of using different data sources and mixed methods. Classroom observations can reveal goal-related messages in real-life classroom settings, and interviews can capture participants' interpretations of and responses to classroom practices. It is suggested that future research employ multiple data collection methods to investigate classroom goals structures.

The findings also have practical implications for promoting adaptive learning. Schools and government are advised to provide teacher education programs that introduce knowledge of classroom goal structures and provide practical tips on promoting mastery goals. Specifically, in China, due to the examination-oriented education system, it seems more realistic to promote mastery goals rather than eliminating the dominant emphasis on high scores and rankings. Ciani et al. (2010) have shown that a mastery goal structure can be a buffer against the maladaptive consequences of performance-oriented classroom practices. Concrete guidelines based on the framework (task, authority, recognition and evaluation, and classroom social climate, see Table 1) are very useful for constructing mastery-oriented classrooms. For example, the classroom setting could be constructed with slogans that

promote growth mindset, and that encourage students to exert effort (e.g., "Heaven rewards the diligent," "When there is a will, there is a way"). Teachers should attribute academic success to effort, discuss learning strategies, and help students to learn from errors.

As well, this study reflected that some aspects of Chinese classroom needed improvement. For instance, tasks, especially those in the rural class, were uniformed and not able to keep students engaged. This was likely exacerbated by the very large class size (72 students) and low teacher-student ratio (approximately 1:72 for each subject). More funding should be allocated to increase the availability of teachers in rural regions. Teacher professional development programs are also needed to guide teachers to develop more interesting and meaningful tasks, materials, and activities to attract students' attention.

Limitations

There are certain limitations to this study. First, it only involved one urban and one rural class. Findings of this study have relevance for other regions of China, but caution must be exercised when generalizing. Both were Grade 11 classes. Therefore, it is unclear whether the findings will be persistent to classes at the primary school or college levels. Future studies with a larger and more diverse sample will provide a deeper understanding of Chinese classroom goal structures and help to test the generalizability of the findings in this study. Additionally, it would be worthwhile to consider the differences between Chinese and Western classrooms in future studies. Second, albeit firmly rooted in data from multiple sources, this study did not directly examine the effects of classroom settings on students' goal adoptions. Future researchers should quantitatively examine Chinese classroom goal structures with large scale survey. The third limitation is the possible bias in data collection and analysis that occurs in qualitative research although steps were taken to reduce bias.

Conclusions

Through multiple sources, this study provided a detailed description of classroom goal structures in China, offered in-depth analyses of teachers' and students' perceptions, and

acknowledged the sociocultural factors that influence classroom settings. Both classes had a high mastery-oriented structure, whereas the rural class placed greater importance on examination outcomes than the urban class. Furthermore, classroom observations and participants' reports provided direct evidence that classroom goal structures were shaped by the economic development, educational policy, and cultural values.



References

- Authors. (2018).
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84, 261-271.
- Bao, X. h., & Lam, S. f. (2008). Who makes the choice? Rethinking the role of autonomy and relatedness in Chinese children's motivation. *Child Development*, 79, 269-283.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development*, 78, 246-263. doi:10.1111/j.1467-8624.2007.00995.x
- Cheng, L., Sun, Y., & Ma, J. (2015). Review of washback research literature within Kane's argument-based validation framework. *Language Teaching*, 48, 436-470.
- Chinese of Ministry of Education. (2014). *The implementation opinions of the State Council on deepening the reform of examination and enrollment system*. Retrieved from http://www.gov.cn/zhengce/content/2014-09/04/content 9065.htm
- Ciani, K. D., Middleton, M. J., Summers, J. J., & Sheldon, K. M. (2010). Buffering against performance classroom goal structures: The importance of autonomy support and classroom community. *Contemporary Educational Psychology*, *35*, 88-99.
- Confucius. (1971). *Confucian analects : The great learning, and The doctrine of the mean.*New York: Dover Publications.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.
- Elliot, A. J., & Murayama, K. (2008). On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology*, *100*, 613-628.
- Fei, X., Hamilton, G. G., & Wang, Z. (1992). From the soil, the foundations of Chinese

- society: a translation of Fei Xiaotong's Xiangtu Zhongguo, with an introduction and epilogue. Berkeley: Univ of California Press.
- Ferreira, P. C., Simão, A. M., Veiga, & Da Silva, A. L. (2015). Does training in how to regulate one's learning affect how students report self-regulated learning in diary tasks? *Metacognition and Learning*, 10, 199-230.
- Gan, Z. (2009). 'Asian learners' re-examined: an empirical study of language learning attitudes, strategies and motivation among mainland Chinese and Hong Kong students. *Journal of Multilingual and Multicultural Development*, 30, 41-58.
- Greene, B. A., Miller, R. B., Crowson, H. M., Duke, B. L., & Akey, K. L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary Educational Psychology*, 29, 462-482.
- Hansen, M. H. (2013). Recent trends in Chinese rural education: The disturbing rural-urban disparities and the measures to meet them. In É. Florence, & Defraigne, P. (Ed.), *Towards a new development paradigm in twenty-first century China: Economy, society and politics* (pp. 165-178). New York: Routledge.
- Hau, K. T., & Ho, I. T. (2008). Editorial: Insights from research on Asian students' achievement motivation. *International Journal of Psychology*, 43, 865-869.
- Hau, K. T., & Ho, I. T. (2010). Chinese students' motivation and achievement. In M. H. Bond(Ed.), Oxford Handbook of Chinese Psychology (pp. 187-204). Oxford; Hong Kong:Oxford University Press.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, 106, 766-794.
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological Review*, *94*, 319-340.

- Hong, Y.-y. (2001). Chinese students' and teachers' inferences of effort and ability. In F.Salili, Chiu, C., & Hong, Y. (Ed.), *Student motivation: The culture and context of learning* (pp. 105-120). New York: Kluwer Academic/Plenum.
- Huang, C. (2012). Discriminant and criterion-related validity of achievement goals in predicting academic achievement: A meta-analysis. *Journal of Educational Psychology*, 104, 48-73.
- Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review*, 19, 141-184.
- King, R. B., & McInerney, D. M. (2014). Culture's consequences on student motivation: Capturing cross-cultural universality and variability through personal investment theory. *Educational Psychologist*, 49, 175-198.
- Lam, A. C., Ruzek, E. A., Schenke, K., Conley, A. M., & Karabenick, S. A. (2015). Student perceptions of classroom achievement goal structure: Is it appropriate to aggregate?

 Journal of Educational Psychology, 107, 1102-1115.

 doi:http://dx.doi.org/10.1037/edu0000028
- Lam, S. F., Yim, P. S., Law, J. S., & Cheung, R. W. (2004). The effects of competition on achievement motivation in Chinese classrooms. *British Journal of Educational Psychology*, 74, 281-296.
- Lau, K.-L., & Lee, J. (2008). Examining Hong Kong students' achievement goals and their relations with students' perceived classroom environment and strategy use.

 Educational Psychology, 28, 357-372. doi:10.1080/01443410701612008
- Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner:*Cultural, psychological and contextual influences (Vol. 34, pp. 25–41). Hong Kong: CERC and ACER.

- Leondari, A., & Gonida, E. N. (2007). Predicting academic self-handicapping in different age groups: The role of personal achievement goals and social goals. *British Journal of Educational Psychology*, 77, 595-611.
- Li, J. (2006). Self in learning: Chinese adolescents' goals and sense of agency. *Child Development*, 77, 482-501.
- Li, J. (2010). Learning to self-perfect: Chinese beliefs about learning. In C. K. K. Chan & N. Rao (Eds.), *Revisiting the Chinese learner* (pp. 35-69). Dordrecht: Springer.
- Li, J. (2012). *Cultural foundations of learning: East and West*. New York: Cambridge University Press.
- Matsumoto, D., & Yoo, S. H. (2006). Toward a new generation of cross-cultural research.

 *Perspectives on Psychological Science, 1, 234-250.
- Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology*, *57*, 487-503.
- Midgley, C., Kaplan, A., & Middleton, M. J. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology*, 93, 77-86.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E. M., Anderman, L., Freeman, K. E., & Urdan, T. (2000). *Manual for the Patterns of Adaptive Learning Scales (PALS)*. Ann Arbor: University of Michigan.
- Patrick, H., Anderman, L. H., Ryan, A. M., Edelin, K. C., & Midgley, C. (2001). Teachers' communication of goal orientations in four fifth-grade classrooms. *The Elementary School Journal*, 102, 35-58.
- Patrick, H., Kaplan, A., & Ryan, A. M. (2011). Positive classroom motivational environments: Convergence between mastery goal structure and classroom social climate. *Journal of Educational Psychology*, 103, 367-382.

- Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of Educational Psychology*, 99, 83-98.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, *37*, 91-105.
- Pekrun, R., & Stephens, E. J. (2009). Goals, emotions, and emotion regulation: Perspectives of the control-value theory. *Human Development*, *52*, 357-365. doi:10.1159/000242349
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, *16*, 385-407.
- Qian, X., & Smyth, R. (2008). Measuring regional inequality of education in China: widening coast–inland gap or widening rural–urban gap? *Journal of International Development*, 20, 132-144.
- Saab, N., van Joolingen, W., & van Hout-Wolters, B. (2012). Support of the collaborative inquiry learning process: influence of support on task and team regulation.
 Metacognition and Learning, 7, 7-23. doi: http://dx.doi.org/10.1007/s11409-011-9068-6
- Salili, F., & Lai, M. K. (2003). Learning and motivation of Chinese students in Hong Kong:

 A longitudinal study of contextual influences on students' achievement orientation
 and performance. *Psychology in the Schools, 40*, 51-70.
- Schwinger, M., Steinmayr, R., & Spinath, B. (2016). Achievement goal profiles in elementary school: Antecedents, consequences, and longitudinal trajectories.

 Contemporary Educational Psychology, 46, 164-179.
- Shek, D. T., & Chan, L. K. (1999). Hong Kong Chinese parents' perceptions of the ideal

- CLASSROOM GOAL STRUCTURES
 - child. The Journal of Psychology, 133, 291-302.
- Shi, K., Wang, P., Wang, W., Zuo, Y., Liu, D., Maehr, M. L., . . . Hruda, L. (2001). Goals and motivation of Chinese students: Testing the adaptive learning model. In F. Salili, Chiu, C., & Hong, Y. (Ed.), *Student motivation : The culture and context of learning* (pp. 249-270). New York: Kluwer Academic/Plenum.
- Shih, S.-S. (2005). Role of achievement goals in children's learning in Taiwan. *The Journal of Educational Research*, *98*, 310-319.
- Tao, V., & Hong, Y. (2014). When academic achievement is an obligation. *Journal of Cross-Cultural Psychology*, 45, 110-136.
- Tong, Y., & Lam, S. f. (2011). The cost of being mother's ideal child: The role of internalization in the development of perfectionism and depression. *Social Development*, 20, 504-516.
- Turner, J. C., Gray, D. L., Anderman, L. H., Dawson, H. S., & Anderman, E. M. (2013).

 Getting to know my teacher: Does the relation between perceived mastery goal structures and perceived teacher support change across the school year?

 Contemporary Educational Psychology, 38, 316-327.

 doi:10.1016/j.cedpsych.2013.06.003
- Tweed, R. G., & Lehman, D. R. (2002). Learning considered within a cultural context: Confucian and Socratic approaches. *American Psychologist*, *57*, 89-99.
- Urdan, T. (2004). Using multiple methods to assess students' perceptions of classroom goal structures. *European Psychologist*, *9*, 222-231.
- Urdan, T., & Schoenfelder, E. (2006). Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of School Psychology*, 44, 331-349.
- Watkins, D. A. (2010). Motivation and competition in Hong Kong secondary schools: The

- students' perspective. In C. K. K. Chan & N. Rao (Eds.), *Revisiting the Chinese learner* (pp. 71-88). Dordrecht: Springer.
- Wigfield, A., & Cambria, J. (2010). Students' achievement values, goal orientations, and interest: Definitions, development, and relations to achievement outcomes.

 Developmental Review, 30, 1-35.
- Winne, P. H. (2014). Issues in researching self-regulated learning as patterns of events.

 *Metacognition and Learning, 9, 229-237. doi: http://dx.doi.org/10.1007/s11409-014-9113-3
- Wong, O. K. (2017). *Distilling Chinese Education into 8 Concepts*. Lanham: Rowman & Littlefield.
- Xiang, P., Lee, A. M., & Solmon, M. A. (1997). Achievement goals and their correlates among American and Chinese students in physical education: A cross-cultural analysis. *Journal of Cross-Cultural Psychology*, 28, 645-660.
- Yik, M. (2010). How unique is Chinese emotion. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 205-220). Oxford; Hong Kong; Oxford University Press.
- Zhou, N., Lam, S.-F., & Chan, K. C. (2012). The Chinese classroom paradox: A cross-cultural comparison of teacher controlling behaviors. *Journal of Educational Psychology*, *104*, 1162-1174. doi:http://dx.doi.org/10.1037/a0027609
- Zusho, A., & Clayton, K. (2011). Culturalizing achievement goal theory and research. *Educational Psychologist*, 46, 239-260.

Table 1

Four Dimensions of Classroom Settings that Influence Students' Adoption of Goals

Dimension	Enhancing mastery goals	Enhancing performance goals	
Task	Varied, meaningful, and interesting tasks; offer	Uniform assignment of tasks, rote activity	
	personal challenge; support students' use of		
	effective learning strategies.		
Authority	Students are involved in decision-making	Students have no choices on content of tasks;	
	concerning regulations and rules. Choices are	Teachers maintain authority.	
	given.		
Recognition	Students' efforts, creativity, improvement, and	Students are recognized for excelling with little	
and	mastering of skills are recognized. Evaluation is	effort and answering questions correctly.	
evaluation	done privately and is criterion-referenced.	Evaluation is done publicly and in comparison to	
	Teachers attribute academic success and failure to	others. Teachers attribute academic success and	
	efforts rather than ability. Outcomes are	failure to ability. Selected papers and outcomes	
	interpreted in terms of improvement and effort.	are displayed. Students' scores and rankings are	
	Making mistakes is viewed as part of learning.	publicly announced.	
	Teachers highlight the importance of mastering	Teachers highlight the importance of high grades	
	and understanding.	and rankings.	
Social	Teachers respect students' opinions and are	Teachers care about students' scores and rankings.	
climate of	available to help with academic and emotional	Students make fun of others when they make	
Classroom	problems. Students respect each other's opinion.	mistakes. There is a lack of sharing.	

Table 2
Average Students' Ratings of Classroom Goal Structures on the Four Dimensions

Dimensions	Categories	Rating criteria	The rural class (located in an	The urban class (located in a
			underdeveloped rural inland	developed metropolitan
			area in Jiangxi; Mr. Yang's class)	international costal area in Shanghai; Miss Li's class)
	Tasks that attract students'	1 (never) to 5 (always)	2.00	3.29
	interest			
	Tasks that make students more	1 (never) to 5 (always)	2.83	3.00
	focused			
	Introduce or demonstrate learning	1 (never) to 5 (always)	3.83	3.57
	strategies			
Authority			1.00	1.70
	Students' choice on homework	1 (never) to 5 (always)	1.33	2.18
	Teachers' negotiations with	1 (never) to 5 (always)	1.50	1.63
	students on class content			
	Existence of class rules (R)	1 (never) to 5 (always)	4.83	3.71
Recognition			2.17	3.15
and Evaluation				
	Social comparison (R)	1 (never) to 5 (always)	4.67	2.71
	Public praise (R)	1 (never) to 5 (always)	4.17	3.86
	Public criticism (R)	1 (never) to 5 (always)	4.00	1.29
	Improvements recognition	1 (never) to 5 (always)	4.02	4.17
	Teachers attribute success to	1 (attribute success to	4.67	4.43
	fixed capacity or effort	capacity or other fixed		
		variables) to 5 (effort)		
Social climate			4.67	4.33
	Teacher emotional support	1 (never) to 5 (always)	4.67	4.14
	Teacher academic support	1 (never) to 5 (always)	4.83	4.71
	Task-related interaction	1 (never) to 5 (always)	4.50	4.14

Note. Students were asked to rank the presence and quality of activities, using a five -point scale ranging from 1 (never) to 5 (always), based on their general experience across all subjects on the four dimensions. For most categories, a higher rating reflects more mastery goals messages, whereas a higher rating on class rules (R), social comparison (R), public praise (R), and public criticism (R) reflects more performance goals messages.

Figure 1. Number of goal-related messages in the classroom. For each class, observation took place one or two times every two weeks, resulting in classroom displays (the static physical homeroom classroom setting): 12 pictures per time × 10 times = 120 pictures; homeroom meetings: 45 minutes per time × 10 times = 450 minutes; class breaks: 10 minutes per time × 20 times = 200 minutes. For example, the observation showed that performance goals were promoted in the rural class, in terms of the four dimensions: tasks (11 pictures of physical class setting, 31 minutes in homeroom meetings, and 22 minutes in class breaks), authority (6 pictures of physical class setting, 46 minutes in homeroom meetings, and 28 minutes in class breaks), recognition and evaluation (37 pictures of physical class setting, 93 minutes in homeroom meetings, and 46 minutes in class breaks), and social climate (1 pictures of physical class setting, 7 minutes in homeroom meetings, and 1 minutes in class breaks).

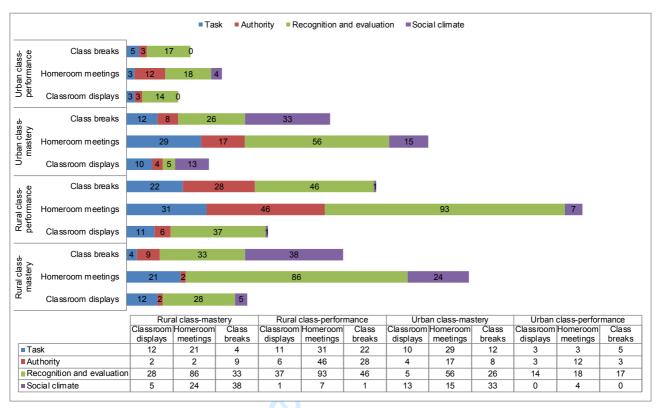


Figure 1. Number of goal-related messages in the classroom. For each class, observation took place one or two times every two weeks, resulting in classroom displays (the static physical homeroom classroom setting): 12 pictures per time × 10 times = 120 pictures; homeroom meetings: 45 minutes per time × 10 times = 450 minutes; class breaks: 10 minutes per time × 20 times = 200 minutes. For example, the observation showed that performance goals were promoted in the rural class, in terms of the four dimensions: tasks (11 pictures of physical class setting, 31 minutes in homeroom meetings, and 22 minutes in class breaks), authority (6 pictures of physical class setting, 46 minutes in homeroom meetings, and 28 minutes in class breaks), recognition and evaluation (37 pictures of physical class setting, 93 minutes in homeroom meetings, and 46 minutes in class breaks), and social climate (1 pictures of physical class setting, 7 minutes in homeroom meetings, and 1 minutes in class breaks).