

ResearchSpace@Auckland

Version

This is the Accepted Manuscript version. This version is defined in the NISO recommended practice RP-8-2008 <http://www.niso.org/publications/rp/>

Suggested Reference

Wang, Z., & Brown, G. T. (2014). Hong Kong tertiary students' conceptions of assessment of academic ability. *Higher Education Research and Development*, 33(5), 1063-1077. doi:10.1080/07294360.2014.890565

Copyright

Items in ResearchSpace are protected by copyright, with all rights reserved, unless otherwise indicated. Previously published items are made available in accordance with the copyright policy of the publisher.

This is an Accepted Manuscript of an article published in Higher Education Research & Development on 17 Mar 2014, available online:

<http://www.tandfonline.com/10.1080/07294360.2014.890565>

<http://www.sherpa.ac.uk/romeo/issn/0729-4360/>

<https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm>

Hong Kong Tertiary Students' Conceptions of Assessment of Academic Ability**Abstract**

Students' beliefs, attitudes, experiences, and responses towards assessment reflect the ecology of their specific context. The study examines Hong Kong tertiary students' conceptions of assessment using focus group interview and content analysis technique. Using six focus groups, 26 Hong Kong university students were interviewed. Hong Kong tertiary students associated assessment with lifelong high-stake examinations. Assessment determined one's personal value or worth, and achievement was an obligation one had toward one's family. As a legitimate tool for selecting the best candidates for educational and career opportunities, assessment provided upward social mobility, but also served the function of monitoring and surveillance to shape people's behaviour according to societal expectations. Resilience was reflected in both self-regulative agentic responses of effort, persistence and gaming strategy, and passive escaping from the oppressive assessment system. The general emotional reaction toward assessment was negative; and participants cast doubts on the assessment validity, accuracy, and the limited utility confined by academic-only content. In addition to the portrayal of the Chinese student as an effective, persistent learner, this study shows that Chinese students are very aware of the negative, controlling impact of assessment on their lives.

Keywords: Assessment, Research methodologies, International education, Student experience, Motivation

Hong Kong Tertiary Students' Conceptions of Assessment of Academic Ability

Self-regulation theory (Zimmerman, 2008) identifies personal beliefs and motivations as critical strategies towards improved learning outcomes. However, the contents of belief systems are not universal, since belief and behaviour systems tend to be rational for actors within each society or ecology (Rieskamp & Reimer, 2007). Assessment of learning or proficiency is used throughout higher education for certification and learning improvement purposes. These two major purposes (sometimes known as summative and formative) create tensions in how any assessment event or task can be understood. As with other important educational processes (e.g., teaching, learning, or studying), how students understand what assessment is, what it is for, and their emotional responses to it shape their behavioural responses to assessment practices (Brown, 2011). Consistent with self-regulation theory, the impact of student conceptions of assessment on academic performance has been shown to be both adaptive (i.e., increasing achievement) and maladaptive (i.e., decreasing achievement) (Brown & Hirschfeld, 2008; Brown, Peterson, & Irving, 2009).

There are few studies of how Chinese students conceive of assessment. The goal of this study was to explore Hong Kong university student belief systems about assessment, based on their personal experiences of and emotional reactions to assessment, as a way of understanding the factors impinging on their self-regulation of learning. A concept map based on our interpretation of the interview data will function as the meaning making process that facilitates better understanding of the Chinese learners' conceptions of assessment.

Students' beliefs and attitudes toward assessment

Reviews of school student beliefs about assessment have identified four major conceptions (Brown & Hirschfeld, 2008; Brown, Irving, Peterson, & Hirschfeld, 2009). These are 1) assessment leads to improved teaching and learning; 2) assessment evaluates schools and students; 3) assessment has a positive emotional impact on students personally

and corporately; and 4) assessment is irrelevant and students respond negatively to it. There is evidence that university students are aware of these competing purposes and effects and that their conceptions of assessment contribute to self-regulation. For example, Wise and Cotten (2009) showed, among American university students, that endorsement of the improvement conception predicted greater effort in and attendance at a low-stakes, computer-based test of generic skills. The conception that assessment grades students (i.e., holds them accountable) was found to predict increased self-reported use of individualistic learning strategies among German psychology students (Hirschfeld & von Brachel, 2008). Matos (2010) showed that, among Brazilian university students, endorsement of two conceptions of assessment (i.e., assessment was enjoyable and assessment was ignored) negatively predicted defining assessment with formal practices such as tests or examinations. Matos also found that students enrolled in an elite public university had much weaker ($d > .60$) endorsement of several conceptions (i.e., teachers use assessment to improve teaching, assessment is enjoyable, assessment predicts student futures) than students enrolled in self-funded programs in a private university. The discrepancy appeared to reflect the much greater need of less academically able students to rely more on their instructors and to give credibility to the accountability processes they were subjected to through the assessment system.

Students' dominant emotional reactions to assessment become increasingly negative with grade level and the raise of the stakes associated with schooling. Primary school students reported positive emotions about assessment (Atkinson, 2003), whereas secondary school and university students reported increasingly negative emotions (Harris, Harnett, & Brown, 2009; McKillop, 2006;). University students have more complicated emotions than just anxiety regarding academic achievement (Pekrun, Elliot, & Maier, 2006; Pekrun, Goetz, Titz, & Perry, 2002). It seems as students become increasingly aware of the consequences assessments have for their lives, they become less enthusiastic and more negative towards

assessment. This negative affective response to the increasing pressure of accountability (Lerner & Tetlock, 1999) implemented through the assessment system may be an ecologically rational response (Rieskamp & Reimer, 2007). Since the risks of doing poorly on high-stakes examinations are powerful, it seems rational, and possibly even self-regulating, to have less enjoyment in the process and to view the highly selective consequences as fundamentally unfair.

Thus, this study had two research goals. First, the study aimed to explore the beliefs, experiences, and emotions of Chinese university students concerning educational assessment to ascertain conceptions that might help regulate and impact learning outcomes. The second goal, since we presumed that Western studies might not adequately reflect Chinese conceptions, was to ascertain whether the students had additional beliefs to those previously identified and whether such additional conceptions might be consistent with characteristics of Confucian-heritage societies.

Hong Kong context

Chinese culture has a long history of using examinations and tests to select and reward talent (China Civilisation Centre, 2007); and regarding high academic performance on high-stakes examinations as a legitimate, meritocratic basis for upward social mobility regardless of social background (Cheung, 2008; Lee, 1996). Even in today's Hong Kong, formal assessment mechanisms are still used extensively to select students into elite schools at all levels of schooling (Gao & Watkins, 2001; Watkins & Biggs, 2001). Up until 2010 all secondary students in Hong Kong took the Hong Kong Certificate of Education Examination (HKCEE) administered by the Hong Kong Examinations and Assessment Authority at the end of Form Five. The maximum points for the sum of each student's best six subjects were 30 and scores of 14 points or above allowed entry to Form Six and access to possible entry to higher education. Only 20% of students entering secondary school have the opportunity of securing a

place in one of the University Grants Council funded higher education institutions (Choi, 1999), far lower than other regions in Asia. The extent of the selective process in Hong Kong is so pervasive that students and families pay a high financial and psychological price to secure a place in the competition for entering higher education.

The prominence of academic excellence reflects the Confucian ideology of perfecting moral character through learning (Li, 2002). An individual's merit, worth, and value are determined by performance on examinations (China Civilisation Centre, 2007), a belief persistent even in contemporary Hong Kong (Pong & Chow, 2002). Consequently, Chinese students experience high levels of parental and familial pressure on academic achievement, often accompanied by strict discipline, the development of obedience, proper conduct, conformity to social obligation, and strong emphasis on cooperative efforts within the group (Ho, 1986). Chinese parents and teachers practice a harsh, authoritarian, non-praising style for the purpose of developing effort and character. Accordingly, Chinese societies highly value persistence and attribute success to effort, rather than given levels of ability as Westerners (Salili, 2001); an apparently rational self-regulating response within the context. Indeed, motivating effort and mastery of curriculum content appears to be a fundamental understanding of how assessment should function (Dahlin, Watkins, & Ekholm, 2001). However, conformity to this expected response to assessment may not be in the self-interest of individual students, since 80% despite intense effort fail to gain university entrance. Because of the high social and personal stakes associated with assessment in Hong Kong, we might expect that Chinese Hong Kong university students would have a negative emotional response to assessment while exhibiting strong adaptive, self-regulating efforts in response to these powerful pressures.

Method

This study is the second exploratory analysis of focus group interviews carried out as precursors to a confirmatory, factor-analysed survey (currently in analysis) of Chinese and Hong Kong university student conceptions of assessment. The first analysis described the visual content of 26 drawings of assessment (Brown & Wang, 2011); while this study focuses on the discussion content of the same 26 students in six focus groups.

The focus group interview method (Morgan, 1997) was deemed an appropriate technique to elicit open and rich responses for the three research goals of the study. A key characteristic of focus group interviews is their ability to generate data based on group synergy (Rabiee, 2004) (i.e., unprompted discussions among group participants) and, thus, elicit differences in perspectives among group members (Rabiee, 2004).

Participants

Focus groups with existing relationships tend to have higher levels of trust and generate more synergy during their interactions than groups made up of relative strangers (Rabiee, 2004). Purposive sampling, beginning with students known personally to the research team, was used to recruit participants. Twenty-six students from six higher education institutions of Hong Kong participated in six focus groups of 4-6 people who were loosely connected with each other; that is, they were from the same university and knew at least one person in the group. Additionally, each participant had relatively recent experience of being selected for entry to higher education through the Hong Kong public examination system.

Participants (Table 1) were in diverse stages of post-secondary education, ranging from pre-degree diploma or associate degree programs (15%), bachelor degree programs (73%), to postgraduate programs (12%). Participants being studied were grouped into three major groupings: 46% were in a broadly social sciences area, 42% were in a broad science and technology area, and the remainder (12%) were in arts and humanities. The participants'

Fifth Form public examination (HKCEE) scores were unsurprisingly low for pre-degree students, and high for undergraduate and postgraduate degree students. While not representative of Hong Kong university students, the sample provided sufficient diversity in terms of academic performance, experience, content, and paths to higher education enrolment so as to meet the exploratory goals of the study.

Data collection and preparation procedures

Each group interview took place on one of the six campuses and lasted around one hour. According to Kitzinger (1994), starting the interview with an activity, in this case, a drawing exercise, functions as an ice-breaker and minimizes the interviewer's input. The participants were first asked to individually draw in 10 minutes a picture of assessment, reflecting their personal understanding of its function based on their personal experience and feelings about it. Each participant then explained his or her own drawing to the group. Group members were invited to query, comment, argue, or cite own experiences in response to each picture. The moderator solicited reactions, questions, and disagreements from the group, but did not judge or evaluate any remarks. Questions asked in the interview include:

What is going on in this picture?

Who is this person? What is he doing?

Why did she do/say this? What is the meaning of her behaviour?

What are these things in the picture? Why are they here?

Why did she react this way? Why is she happy/crying?

Did you have the same experience as the drawing? Could you say more about your own experience?

(Addressing other members in the group:) What do you think of this picture? Do you agree, or disagree?

All six interviews were conducted in Cantonese and audio-taped with participant permission. The moderator transcribed the tapes and the first author selectively verified the transcription for any inaccuracy. The first author translated the transcripts into English, which the research assistant read for validity of meaning. This process ensured that the English and Cantonese transcripts were consistent in meaning and accurate records of the spoken discussion. Each participant was given a unique identification code that included their group membership (Morgan, 1997). The code identified the group with a numeric value (1 to 6), the participant with an alphabet letter (A to Z), and the conversational turn in the discussion with a numeric value.

Data analysis

The discussion data were approached with inductive analysis (Thomas, 2006, p. 238) which uses “detailed readings of raw data to derive concepts, themes, or a model through interpretations made from the raw data analysis”. According to Thomas, the goals of inductive analysis are to summarize extensive and varied raw text data, to establish transparent and defensible links between the research objectives and the summary findings; and to develop a model or theory about the underlying structure of experiences and processes based on the raw data.

Familiarization with the data was achieved through detailed reading of the Cantonese transcripts. Specifically, in accordance with the goals of the study, comments that revealed the participants' views about the following topics were identified and coded: a) the nature and purposes of assessment, b) the impact of assessment on the individual's value, identity, family relationships, and emotions, c) the role assessment plays in Hong Kong society, and d) the actions students took in response to assessment. Comments were classified according to Rabiee's (2004) strategies of carefully considering text data against seven aspects (i.e., words; context; internal consistency; frequency and extensiveness of comments; specificity of

comments; intensity of comments; and big ideas). Meanings within the transcripts were triangulated against the drawings which elicited the discussions, aided by the recall of the facilitator of the focus groups. A list of 18 themes, supported by detailed indexing of transcripts and extracting of appropriate quotations, were translated into English and discussed by the research team.

By consensus, the research team grouped the 18 themes into five major categories and concept mapped the themes into a plausible set of inter-relationships. The initial concept map was member checked, in a 40 minute session, by a group of four participants drawn from four different focus groups and based on their reactions modifications were made to the concept map to ensure that it better reflected the thinking of the students (Morgan, 1997).

Results

The list of 18 themes and five major categories are presented in Table 2. The concept map of the inter-relationships of these themes is introduced subsequently (Figure 1).

Themes

The content analysis revealed ideas and opinions which have been grouped into five major conceptions; they are, (1) the nature of assessment, (2) assessment determines an individual's value, (3) assessment is selective and controlling, (4) assessment requires self-regulating agency, and (5) assessment elicits negative emotions and evaluations.

The Nature of Assessment

Participants perceived assessment predominantly as formal examinations. These formal assessments start early in life and appears to be continuous throughout the students life experiences.

It is worth noting that there was a perception that university assessment was less narrow than school-system assessments, with the former being seen as more likely to involve self-regulated qualitative evaluation.

FIS:127, 129, 137 (Female, Bachelor program in Medicine): From university level and onwards, a lot of assessments are not about right or wrong, they are about your judgment, because there is usually no right or wrong answers in universities. ...Your thinking ability is more important than being right or wrong. ...

Consistent with the societal practices, the students were aware that academic assessments had high-stakes consequences:

FIW:177 (Female, Bachelor program in Science): A-level affects whether you go to university or not, which affects your life and job afterwards, almost your entire life. This is a must-success pass.

F6H: 270 (Male, Associate program in Hotel Management): It's like a penalty kick in the football World Cup. You either score or not. If you did not score, the whole country is mad at you.

Assessment determines Personal Value

Assessment was much more than academic evaluation of students' learning. The students were aware that doing well was the basis for determining a person's moral character and had a critical impact on a person's socially constructed value, worth, merit, and identity. The impact was manifested within families as pressure from parents, comparison among siblings, and obligation. One participant talked about how her father reacted when she was ranked the 9th in her class, and how her younger brother who was less academically proficient was treated in the family:

FIH:197, 203 (Female, Bachelor program in Theology): When you were a kid in primary school, people like teachers, family, and classmates praised you as being smart when you got 100% in exams, tests or dictations. It would not work even if you got 90-something, but ranked lower. I ranked the 9th in my class, and my dad said: "The 9th?"

That bad? Why aren't you in the top 3"? I felt bad. I knew I did my best. But that's how people perceive it, the ranking.... My younger brother ranked the last ever since kindergarten. Everyone in the family thought he was useless. He was miserable.

Children's academic achievement was a very important aspect of the parent-child relationship. Almost all parents took assessment results seriously in their parenting practices. Participants talked mostly about harsh parenting and punishment, sometimes even escalating to verbal or physical abuse:

F6B: 163, 165 (Female, Bachelor program in Sociology): My parents... thought schooling was very important....They were so anxious about the mark, since that was the only standard to them. I was whipped when I got low marks, forced to kneel before the ancestors, given no food, and beaten with a clothes hanger. ...They are much relaxed now, knowing I'm attending university.

Assessment is Selective & Controlling

Assessment is used in Hong Kong to select students for education and employment opportunities. Even though the selective function of assessment seemed legitimate to some students, others were torn between the necessity and legitimacy of selection and its limitations and negative effects. Assessment was perceived as "necessary evil" by this participant:

F4M:130 (Female, Master program in Humanities): Assessment is two sided. On the dark side, one false step brings everlasting grief; failing one exam could affect your whole life. ...But there is a bright side. ...Assessment is a strong motivator, it lets you know better about yourself, and improve yourself.

In contrast, other participants saw the systematic effects of assessment as a societal tool to control people in a much more negative way. One participant commented that assessment is like a house of the *Big Brother*, the television show in which people share a house while being selected for elimination:

F6B:184, 186, 188 (Female, Bachelor program in Sociology): [The house] is the system in which people live. The system is more than exams, it's schools, job interviews. ...I think the function of the system is to make it more convenient for the manager.

The selective power of assessment was seen as a mechanism with which people were monitored or kept under surveillance, which was a stressful and unhappy experience:

F2T:027, 039 (Male, Bachelor program in Engineering): The person being assessed is in the center of all the circles, under the spotlight, with a lot of pressure. ...Assessor is up high at the ring of the circle looking down at you.

In response to the oppressive, compulsive, and controlling system, escaping or ignoring the system seemed to be a reasonable self-regulation. The student who perceived assessment as the house of the *Big Brother* show described her ideal escape:

F6B: 192 (Female, Bachelor program in Sociology): If I had children, I'd send them to countryside schools. ...They don't have to live under others' supervision and standards when they are little. I was travelling to remote countryside and found those kids were happy. Their facial expressions are something you don't see in HK children, HK children are so uptight...

Another student urged not to take assessment too seriously:

F4K:213, 217 (Female, Master program in Education): The value of assessment to me is to realize its valueless. I've seen assessment ruining a person's life. ...You'll find out that at the end, it's no big deal. ...You don't go on with your life if you failed one exam? Are you eternally a useless person? Does it mean there's no need to learn anymore, or to pursue your goal? You still have so many choices. That makes me feel assessment is even more valueless.

Assessment requires Self-regulating Agency

Just as some students spoke of escaping a negative system, others adopted a more agentic response to the assessment system by emphasising its effect on their motivation, effort, and use of performance-enhancing strategies. Assessment is a strong motivator to learn,

and hard work is rewarded not just with societal selection but also with improvement, a sense of accomplishment, and positive reinforcement.

F4K:010 (Female, Master program in Education): Assessment is hard work. ...The whole process is very exhausting, like this sweaty runner, with his eyes closed. But at the finishing point he is smiling. There is a sense of satisfaction beyond description after the assessment. Overall, my impression of assessment is positive.

Assessment also provides useful feedback to schools and teachers.

F6K:042 (Male, Bachelor program in Psychology): [Assessment] is convenient for teachers to reflect on the utility of their teaching. Teacher A and B use different teaching methods. With tests, you'll know whose is more efficient.

While the students recognised differences in individual ability, the consensus in one focus group clearly endorsed the notion that effort and preparation were more important in assessment than ability.

F1K:024 (Female, Bachelor program in Social Sciences): Nurture and learning make up for nature. Assessment [results] depend on how you prepare, it does not necessarily relate to your inborn ability.

In addition to effort, certain skills and strategies in preparing for assessment, including cheating, could significantly change the results of assessment. Participants accepted the fact that assessment had become a game that students had to play.

F2S:099 (Female, Bachelor program in Science): Assessment is too mechanical. It's all about being strategic to get good result, such as tutoring, working on previous years' papers, perfecting skills, learning the rules of the game. It seems knowing the rules of the game equals getting good marks.

Assessment elicits Negative Emotions & Evaluations

The main emotional reaction to assessment was negative because of the high-stakes consequences and the pressure.

F2B:324, 355 (Male, Bachelor program in Dentistry): Assessment makes people nervous, shaking, and sweaty. You feel alone in the world. ...You know this is something you have to do, but you are scared, scared of not achieving your fullest potential in the exam, scared of the administrator walking past you and staring at your test paper, scared of people pressing the calculator so loudly as if they hated it in accounting exams.

Reactions were negative also because of validity concerns. Students were concerned about the subjectivity, unfairness, and inaccuracy of assessment. They also worried that assessments only measured academic content and ignored valuable skills and knowledge.

F3B:198, 210, 235 (Male, Bachelor program in Engineering): Assessment of writing might look at how many words you spelled wrong, whether the format was correct, whether you went off topic, or whether you hit the point, but not whether you have your own opinions toward the subject, or the depth of the discussion. Assessment will not give you bonus points for being sincere. ... when you try to quantify things, there will be things that can't be quantified.

Some students thought assessment was only useful for schools and teachers, yet irrelevant to students. They tended to reject or ignore assessment results.

F5P:170 (Male, Associate program in Mechanical Engineering): It's about the school, not about me. Even I did badly in assessment, ...it's not my business.

Concept map: Assessment in a Confucian Society

Figure 1 shows our understanding of how these various themes related to each other. Assessment was seen predominantly as examinations with high-stake consequences, beginning early in life, and lasting throughout the life course. From a personal and familial perspective, assessment results determined one's personal value or worth, and achievement

was an obligation one had toward one's family in order to please, show respect to, or build reputation for the family. From a societal perspective, assessment was a legitimate tool for selecting the best candidates for educational and career opportunities. Assessment provided upward social mobility; but also served the function of monitoring and surveillance to shape people's behaviour according to societal expectations. In that regard, some participants discussed escaping from the oppressive assessment system. Participants also acknowledged that assessment could function as a motivator for improvement in learning and self-reflection, and was a useful tool for evaluating teachers' performance or the quality of a school. Assessment required effort, persistence, and modesty. In order to achieve desirable results in assessment, it was justifiable or even necessary to use strategies that may trivialise learning. Although there were mixed feelings of both positive and negative emotions, the general reaction toward assessment was negative. Participants expressed concerns for assessment validity, and the limited utility confined by academic-only content.

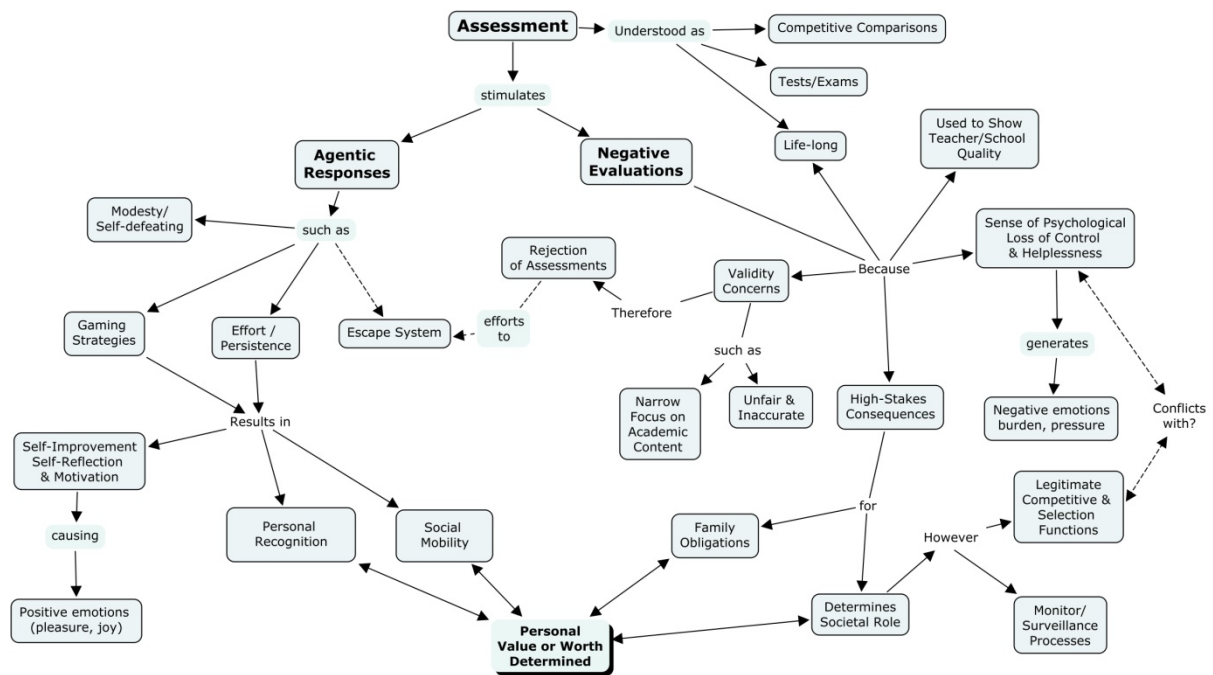


Figure 1: Hong Kong students' concept map of assessment

Discussion

The conceptions of assessment and their interrelationships in this study reveal what appears to be an ecologically rational (Rieskamp & Reimer, 2007) responses to the practice of assessing in Hong Kong's system of examinations for selection. The Chinese learner has been portrayed as persistent, effortful, and internally attributive from the point of view of learning approaches (Biggs & Watkins, 2001; Watkins & Biggs, 2001). However, when Chinese learners reflect on assessment, they have quite a different response which appears consistent with the powerful consequences of assessment practices in Hong Kong. The relentless emphasis, as Biggs and Watkins (2001) put it, on selection, norm-referenced comparisons, academic material, and rewards for those who learn faster and more accurately than others creates quite a different image of the Chinese learner.

Being monitored by assessment engenders a sense of powerlessness, in contrast to a sense of empowerment in response to learning. Furthermore, in contrast to the life changing social mobility associated with scholarly learning, assessment is associated with life changing negative consequences in the event of failure. The evaluation of an individual's worth as a

consequence of assessment is a characteristic associated with even contemporary Chinese societies. Students' conception of assessment seen in this study revealed a much darker side of the Chinese learner that seems to have been ignored by research into the Chinese learner.

In the context of pressure from society and family, it is understandable why Hong Kong students would value maximising marks and grades. While blatant cheating was not strongly endorsed, the students made it clear that all methods that helped them master the material expected in the examinations were fair and appropriate. This suggested strongly that surface learning strategies were the dominant response to assessment, though whether this was done for understanding or remembering was not made clear in this study.

Contrary to Western ideology that promotes strong individualistic values of self-esteem and intrinsic motivation in education, Hong Kong students' beliefs about assessment are in line with the other-oriented, filial piety fulfilling idea of educational achievement commonly found in cultures with Confucian-heritage (Kim & Park, 2008). Being controlled by the assessment system and regulated under the high pressure to conform to societal expectations and fulfil familial obligations, Hong Kong students' motivation mainly comes from the external approval of their teachers and families, and from societal rewards, such as educational opportunities and better jobs. In contrast, learning and self-improvement as intrinsic motivations around assessment have much less weight in students' beliefs. Instead of boosting self-esteem like Western studies suggest, Hong Kong students are most concerned about the damaging effect of assessments on self-esteem.

Students' resilience is reflected in both the active and the passive agentic responses. On the one hand, students strive to keep their heads up and fight the oppressive assessment system; on the other hand, they rationalize the situation by casting doubts on the legitimacy of the Hong Kong assessment system. Within this group of students serious doubts were expressed as to the merits of the system despite the fact that these participants had been

successful enough to enter higher education. While most reported negative responses to the burdens of assessment, there was an incipient sense of rejection of the total system in the thinking of these students.

The potential to resist the high-pressure assessment regime of Hong Kong appears to exist in the awareness of these young adults; however, the probability of changing the system does not appear to be high. The current Hong Kong policy on assessment for learning which is intended to reduce the negative impacts of assessment especially on lower-achieving students is a soft policy which is unlikely to subvert the strong policy of selective examinations (Kennedy, Chan, & Fok, 2011). Indeed, the assessment systems and careers of China and Hong Kong contribute to extremely high average performance on international tests; hence, there may be little motivation by the system or even families to change. Nonetheless, international students from Chinese societies will have had very different assessment beliefs from Western young people and this will still create some tension between families and schools/institutions. Dialogue about the differing roles and functions of assessment will certainly be required.

It is unclear whether the differing academic paths, academic abilities, and discipline areas of the participants affect students' conception of assessment due to the small sample size of this study. However, the concerns expressed in this study about assessment are somewhat alarming given that the participants in this study have had relatively successful assessment careers; indeed, a few of the participants were enrolled in the most elite of Hong Kong's universities. How young adults who are not in higher education, perhaps because of lesser academic performance or lack of economic resources, perceive assessment itself is not known. Indeed, much of what we know about the Chinese learner is based on studies with the academic elite. While we might logically expect failing students to be even more intensely negative about assessment, it is possible that such students would take up views that

rationalize their failure in terms of lack of effort or personal worth, rather than to deficiencies of the teachers, schools, or assessment system. A future large-scale survey study which maps student conceptions of assessment to measures of academic performance is warranted.

As with previous Western studies, Hong Kong tertiary students have both positive and negative emotional responses to assessment. Some viewed assessment as a motivator for improvement; others saw it as irrelevant for the self. What is different from Western studies is the sense of personal value or worth within the family as well as in society contingent on academic success. This is entirely consistent with Confucian-heritage traditions and contemporary practices such as the Chinese 'tiger mother' phenomenon (Paul, 2011); and so the very negative effect of academic achievement on personal value should not surprise us. While Western readers may be disturbed by the image of a child being yelled at for being 9th in class despite scoring over 90% on average, the emphasis in Chinese homes is on excellence through diligent effort to become the first. Whether children are really harmed by this culture, given that it is the norm in their society, is difficult to assess. Nonetheless, this study suggests that Hong Kong university students do have conceptions of assessment that have patterns quite different to those previously reported in the West.

References

- Atkinson, P. (2003). Assessment 5-14: What do pupils and parents think? *Spotlight* (pp. 1-4).
Edinburgh, UK: The SCRE Centre, University of Glasgow.
- Biggs, J. B., & Watkins, D. A. (2001). Insights into teaching the Chinese learner. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 277-300). Hong Kong: University of Hong Kong, Comparative Education Research Centre.
- Brown, G. T. L. (2011). Self-regulation of assessment beliefs and attitudes: A review of the Students' Conceptions of Assessment inventory. *Educational Psychology, 31*(6), 731-748. doi: 10.1080/01443410.2011.599836.
- Brown, G. T. L., & Hirschfeld, G. H. F. (2008). Students' conceptions of assessment: Links to outcomes. *Assessment in Education: Principles, Policy and Practice, 15*(1), 3-17. doi: 10.1080/09695940701876003
- Brown, G. T. L., Peterson, E. R., & Irving, S. E. (2009). Beliefs that make a difference: Adaptive and maladaptive self-regulation in students' conceptions of assessment. In D. M. McInerney, G. T. L. Brown, & G. A. D. Liem (Eds.) *Student perspectives on assessment: What students can tell us about assessment for learning* (pp. 159-186).
Charlotte, NC: Information Age Publishing.
- Cheung, T. K.-Y. (2008). An assessment blueprint in curriculum reform. *Journal of Quality School Education, 5*, 23-37.
- China Civilisation Centre. (2007). *China: Five thousand years of history and civilization*.
Hong Kong: City University of Hong Kong Press.
- Choi, C. C. (1999). Public examinations in Hong Kong. *Assessment in Education: Principles, Policy & Practice, 6*(3), 405-417.

- Dahlin, B., Watkins, D. A., & Ekholm, M. (2001). The role of assessment in student learning: The views of Hong Kong and Swedish lecturers. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 47-74). Hong Kong: University of Hong Kong, Comparative Education Research Centre.
- Gao, L., & Watkins, D. A. (2001). Towards a model of teaching conceptions of Chinese secondary school teachers of physics. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 27-45). Hong Kong: University of Hong Kong, Comparative Education Research Centre.
- Harris, L. R., Harnett, J., & Brown, G. T. L. (2009). Assessment from students' perspectives: Using pupil drawings to examine their conceptions of assessment. In D. M. McInerney, G. T. L. Brown, & G. A. D. Liem (Eds.) *Student perspectives on assessment: What students can tell us about assessment for learning* (pp. 53-83). Charlotte, NC: Information Age Publishing.
- Hirschfeld, G. H. F., & von Brachel, R. (2008, July). *Students' conceptions of assessment predict learning strategy-use in higher education*. Paper presented at the Biannual Conference of the International Test Commission (ITC), Liverpool, UK.
- Ho, D. Y. F. (1986). Chinese patterns of socialization: A critical review. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 1-37). Hong Kong: The Chinese University of Hong Kong.
- Kennedy, K. J., Chan, J. K. S., & Fok, P. K. (2011). Holding policy-makers to account: exploring 'soft' and 'hard' policy and the implications for curriculum reform. *London Review of Education*, 9(1), 41-54. doi: 10.1080/14748460.2011.550433'
- Kim, U., & Park, Y. S. (2008). *Asia's educational miracle: Psychological, social, and cultural perspectives*. New York: Springer Science.

- Kitzinger, J. (1994). The methodology of focus groups: The importance of interactions between research participants. *Sociology of Health and Illness*, 16, 103-121.
- Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. Watkins & J. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 25–42). Hong Kong: Comparative Education Research Centre and Australian Council for Educational Research.
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. *Psychological Bulletin*, 125(2), 255-275.
- Li, J. (2002). A cultural model of learning: Chinese “heart and mind for wanting to learn.” *Journal of Cross-Cultural Psychology*, 33(3), 248-269.
- Matos, D. A. S. (2010). *A avaliação no ensino superior: Concepções múltiplas de estudantes brasileiros [Assessment in higher education: Multiple conceptions of Brazilian Students]*. Doctoral dissertation, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil.
- McKillop, C. (2006). Drawing on assessment: Using visual representations to understand students' experiences of assessment in art and design. *Art, Design & Communication in Higher Education*, 5(2), 131–144. doi:10.1386/adch.5.2.131/6
- Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). London: Sage.
- Paul, A. M. (2011). The roar of the Tiger Mom. *Time (Asia)*, 177(4), 24-30.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2006). Achievement goals and discrete achievement emotions: A theoretical model and prospective test. *Journal of Educational Psychology*, 98(3), 583-597.
- 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(2), 91-105.

- Pong, W. Y., & Chow, J. C. S. (2002). On the pedagogy of examinations in Hong Kong. *Teaching & Teacher Education, 18*(2), 139-149.
- Rabiee, F. (2004). Focus group interview and data analysis. *Proceedings of the Nutrition Society, 63*(4), 655-660.
- Rieskamp, J., & Reimer, T. (2007). Ecological rationality. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of Social Psychology* (pp. 273-275). Thousand Oaks, CA: Sage.
- Salili, F. (2001). Teacher-student interaction: Attributional implications and effectiveness of teachers' evaluative feedback. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 77-98). Hong Kong: University of Hong Kong, Comparative Education Research Centre.
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*(2), 237-246.
doi:10.1177/1098214005283748
- Watkins, D. A., & Biggs, J. B. (2001). The paradox of the Chinese learner and beyond. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 3-23). Hong Kong: University of Hong Kong, Comparative Education Research Centre.
- Wise, S. L., & Cotten, M. R. (2009). Test-taking effort and score validity: The influence of student conceptions of assessment. In D. M. McInerney, G. T. L. Brown & G. A. D. Liem (Eds.), *Student perspectives on assessment: What students can tell us about assessment for learning* (pp. 187-205). Charlotte, NC: Information Age Publishing.
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal, 45*(1), 166-183.

Table 1. Participant Demographic Characteristics

	Current Enrolment			Total
	Pre-degree	Under-graduate	Postgraduate	
Sex				
Female	0	11	2	13
Male	4	8	1	13
Discipline area				
Architecture/ Engineering/ Medicine/ Science/ Automobile Mechanics	1	9	1	11
Arts/ Communication/ Theology	1	2	0	3
Business/ Tourism/ Education/ Social Science	2	8	2	12
HKCEE <i>M (SD)</i>	4.40 (4.16)	19.67 (5.41)	21.33 (7.09)	16.92 (8.11)
Total	4	19	3	26

Table 2. Categorical themes and definitions.

Theme	Definition
<i>Nature of Assessment</i>	
1. Examination:	Assessment is formal, high-consequence examinations, such as public examinations or end-of-year examinations.
2. Lifelong:	Assessment is a life-long experience, continuing from early childhood into adulthood, from school life to the workplace.
3. High-Stakes Consequences:	Assessments have extremely high consequences for the student both within his or her own family and within society as a whole.
<i>Assessment determines Value</i>	
4. Personal Value/Worth:	Assessment determines an individual's personal value and worth even in the eyes of families or society.
5. Family Obligation:	Achieving high in assessment is an obligation to one's family in order to please, show respect, or build reputation for the family.
<i>Assessment is Selective & Controlling</i>	
6. Legitimate Selection:	Assessment legitimately selects the best candidates just as the best athletes are chosen through races or competitions.
7. Social Mobility:	Assessment provides upward social mobility, including more educational opportunities, better careers, higher salaries, and higher social status.
8. Societal Role and	Assessment shapes students into their proper role in society by

Theme	Definition
Pressure/ Monitor & Surveillance	watching and controlling their behaviour.
Processes:	
9. Escape System:	Assessment is an oppressive system which would be avoided or even escaped from if it were possible.
<i>Assessment requires Self-regulating Agency</i>	
10. Improvement and Self-Reflection/Motivation:	Assessment is a tool to help students improve their learning and motivate them to grow.
11. Positive Emotion:	Assessment engenders positive emotions, such as pride, satisfaction, pleasure, or joy.
12. Useful for Teachers/Schools:	Assessment is a useful tool for evaluating teachers' performance or the quality of a school.
13. Effortful Modesty:	Success in assessment requires high levels of effort, persistence, or exertion and one must always be modest about one's effort and success.
14. Gaming Strategies:	Success in assessment rewards and/or requires treating it as a game. Gaming strategies include getting tips or task-oriented skills from tutoring, pleasing or knowing the right person, or even cheating.

Assessment elicits Negative Emotions & Evaluations

Theme	Definition
15. Negative:	Assessment is ignored, devalued or useless because it creates psychological burdens, pressure, or undesirable experiences.
16. Negative Emotion:	Assessment creates negative emotions, such as helplessness, doubt, or oppression.
17. Validity Concerns:	Assessments have limited validity because they are subjectively scored, inaccurate, unfair, or biased.
18. Academic Content Only:	Assessing is limited because it focuses only on academic content, neglecting other important aspects of human life and development.

Acknowledgements. We thank the 26 students who gave of their time and our research assistant, _____, who carried out the focus groups. Funding for this study was provided by
