

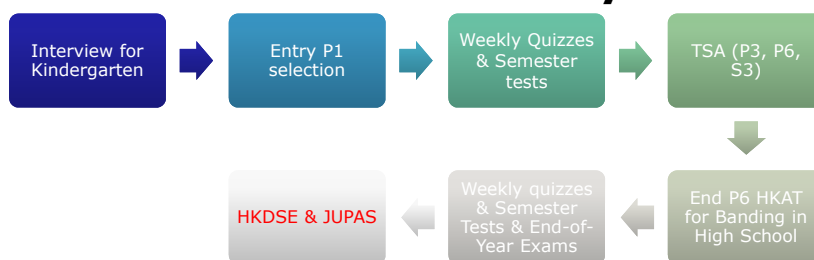
Assessment from the Chinese university student perspective

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Presentation to the University of Hong Kong, Faculty of Education, March 2015



Assessment Career: HK style



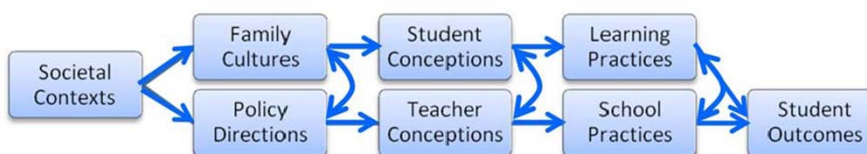
THUS: for HK & PRC Assessment is about evaluating (test & exam) students in order to ration limited resources

And so it goes...
Similar in PRC, perhaps with more exams?



So what impact is this likely to have?

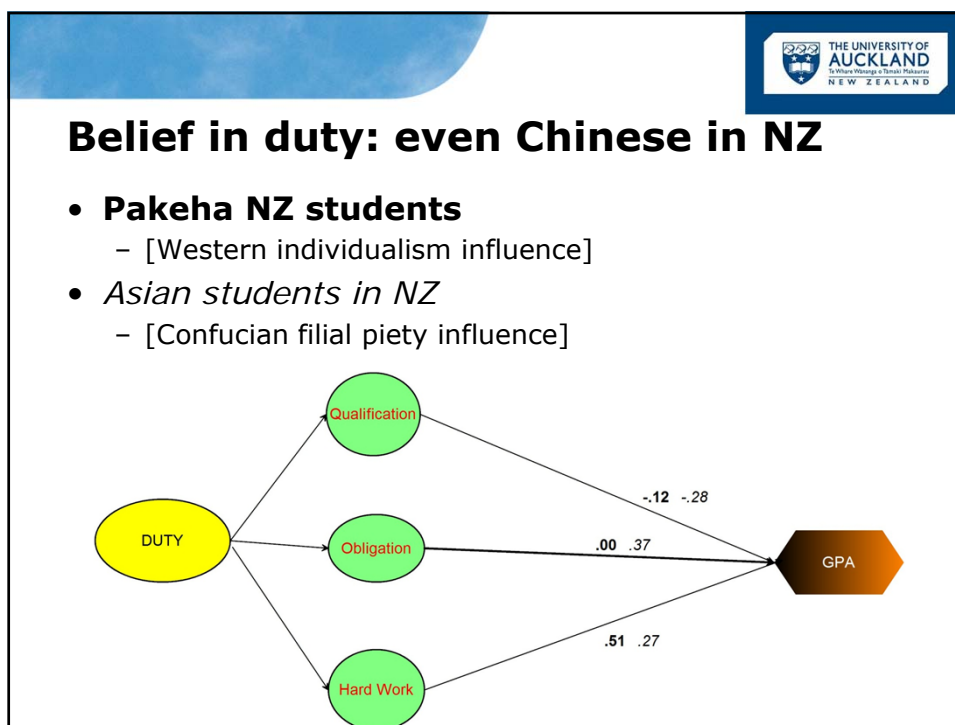
- Assumption: Beliefs develop in response to environmental experiences



- But culture is not deterministic or static—
influential and changing

Chinese context


- Chinese culture has a long history of:
 - Using examinations and tests to select and reward talent;
 - Regarding high academic performance on high-stakes examinations as a legitimate, meritocratic basis for upward social mobility regardless of social background.
 - Considering the person with high academic success as morally virtuous
 - Doing well on tests fulfills obligations to families



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Chinese context

- Chinese parents expect students to become better academically, attitudinally, and behaviourally through schooling and will enforce such expectations with harsh authoritarian parenting practices
 - (*tiger/dragon mom?*)
- Demand for higher education exceeds space available at fully funded institutions (25% in HK; 50% in PRC)




Hong Kong context

- HK relatively low university enrolment rate compared to other regions in East Asia.
- HK many innovations in schooling currently
 - Policy of assessment for learning
 - 3-3-4 curriculum changes (HKDSE, 4-year degree)
 - Emphasis on integration & critical thinking in Gen Ed & Liberal Studies
 - School-based assessment part of subjects
- Generally transparent society with rule of law & regulations
- Small and highly homogeneous society

PRC context

- entrance to university not simply based on *gao kao* scores.
 - non-academic criteria include
 - demonstrating right moral character (e.g., not participating in anti-government activities or protests),
 - giving first choice to a specific institution, and residence (i.e., preference is given to students residing in the same jurisdiction as the university),
 - membership in a specified minority group, or
 - having a recommendation that permits bypassing the examination altogether
 - Having economic resources to move to locations with lower entry standards

PRC context

- concerns about legitimacy of system
 - Entry system not seen as fair for all
 - content of examinations seems to exclude practical skills and application of theoretical knowledge
 - chance of success is not high
 - Demand on students from an early age is unhealthy
 - system not immune to corruption by teachers or officials
 - Introduction of user-pay mechanisms make it expensive
- Note these issues not unique to education
 - E.g., persistent cases of employers refusing to pay workers' end-of-year wages, esp. among migrant workers

Study 1

- 6 focus group discussions (Cantonese) on 6 tertiary campuses after 26 students drew pictures of assessment
- free response drawings "show a person's emotional state of mind much better than verbal definitions or descriptors"
- Thematic analysis of the visual elements (e.g., symbols and images) of the drawings

Participants for Study 1 & 2

	Current Enrolment			Total
	Pre-degree Diploma	Bachelor's Degree	Postgraduate Study	
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
Total	4	19	3	26

Instrument

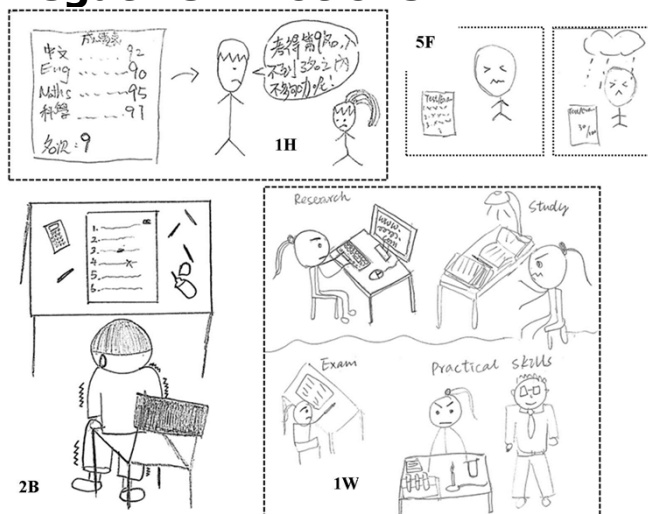
- Draw a picture of assessment. This picture should be based on your **PERSONAL** understandings of, or your experiences of, or your responses to, or your attitudes towards assessment as a **LEARNER**. Your drawing should show your **STRONGEST** ideas, feelings, or experiences about assessment. It can be based on your experiences at school, at university, or in any other context like club, team, hobbies or performing arts etc., where you have been assessed. Assessment means any act of collecting and interpreting evidence of student learning in terms of knowledge, skills, values and attitudes.
 - [*bold and capital formatting in original*]

Drawing categories

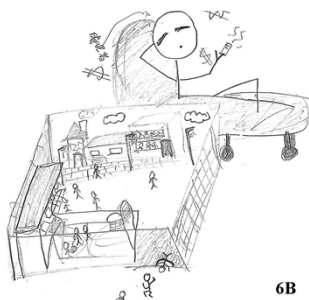
Category	Frequency	HKCEE statistics	
		M	SD
Negative Emotions	13	16.31	8.98
Monitored	11	17.55	9.79
Competitive	8	18.30	5.68
Lifelong	7	21.43	7.50
Pride & Pleasure	7	18.29	6.05
Marks	5	15.60	2.19
Inaccuracy	4	19.50	6.95
Burden	3	15.70	9.50
Total	58		

Two independent raters: 59% identical, $\kappa=.56$; moderately better than chance. Then consensus agreement

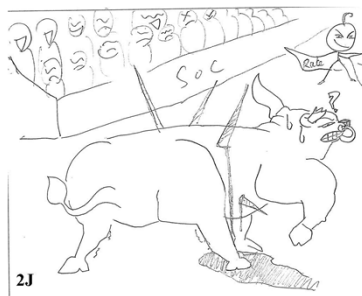
Negative Emotions



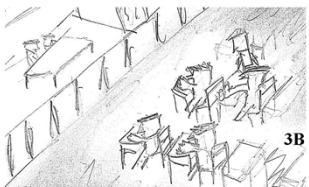
Monitoring



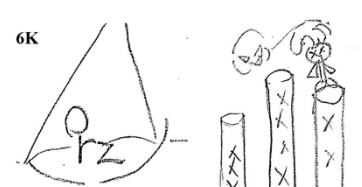
6B



2J



3B



6K

Competition



1K

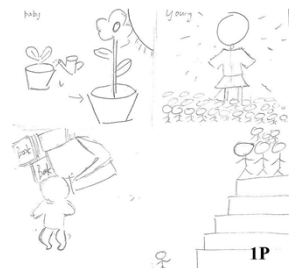


2S



4K

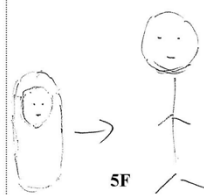
Lifelong




1P




4W



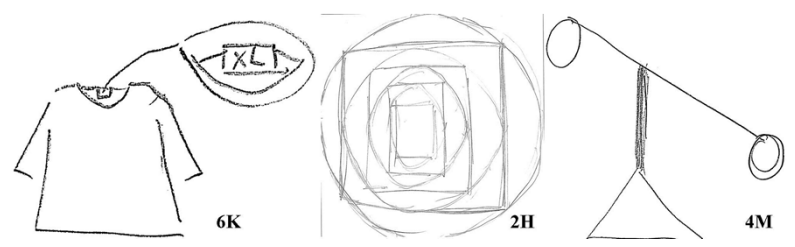
5F



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Pride

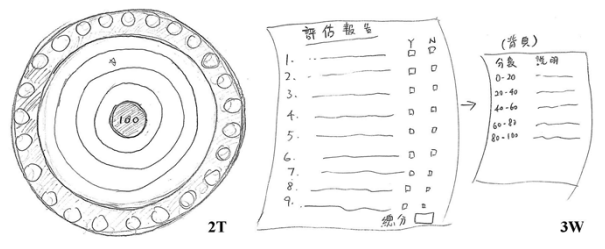


Inaccuracy

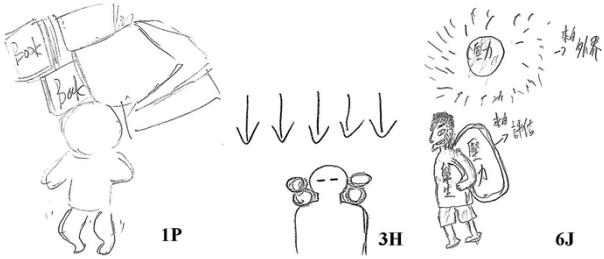



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Marks



Burden

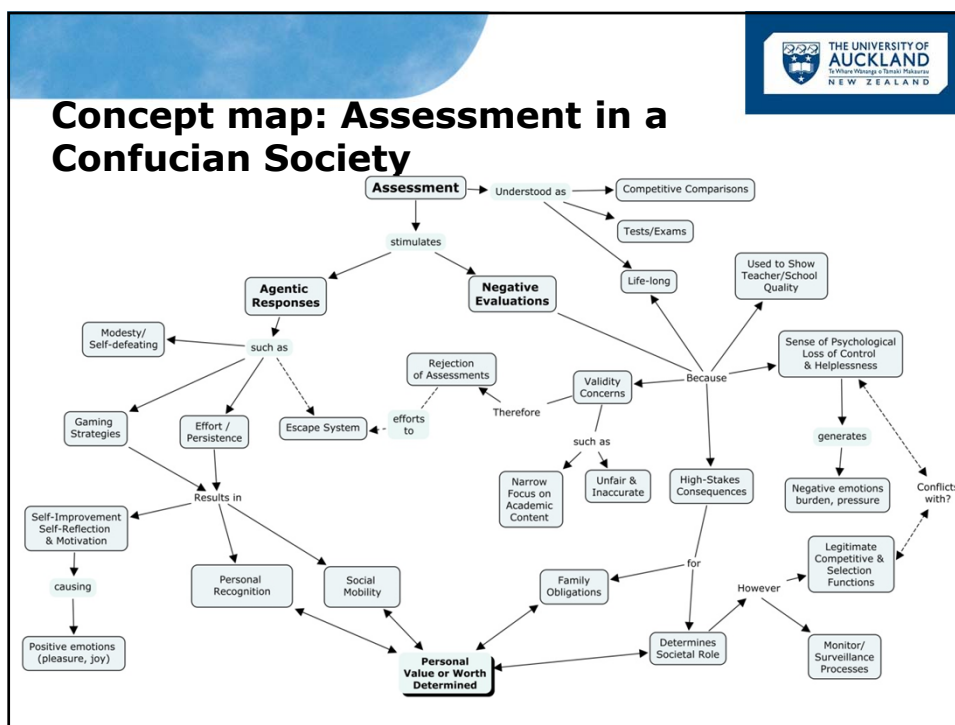


Study 2

- 6 focus group discussions (Cantonese) on 6 tertiary campuses after 26 students drew pictures of assessment
- Thematic analysis of transcribed discussions
 - In Cantonese, translated into English, creation of mind-map of relationships, member checking

Results

- 18 themes grouped into 5 major categories
 - *Nature of Assessment*: Examinations, Life-long, high-stakes consequences
 - *Assessment determines Value*: Personal Value/Worth, Family Obligation
 - *Assessment is Selective & Controlling*: Legitimate Selection, Social Mobility, Societal Surveillance & Control, Escape
 - *Assessment requires Self-regulating Agency*: Improvement/Self-motivation, Useful for teachers/Schools, Effortful Modesty, Gaming Strategies, Positive Emotion
 - *Assessment elicits Negative Emotions & Evaluations*: Negative, Negative Emotions, Validity Concerns, Academic Content Only



Discussion

- 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.

Discussion

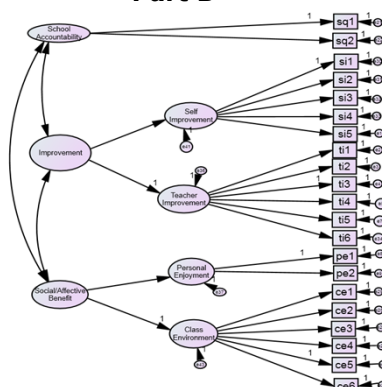
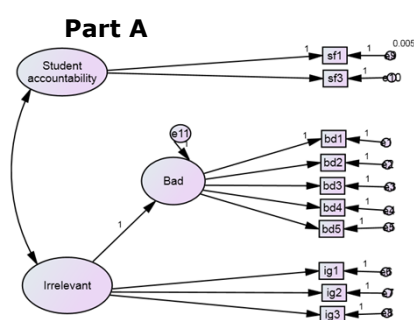
- Western ideology promotes strong individualistic values of self-esteem and intrinsic motivation in education
- Hong Kong students' beliefs about assessment are more other-oriented, filial piety fulfilling commonly found in cultures with Confucius heritage
 - Students feel controlled by the assessment system and regulated under the high pressure to conform to societal expectations and fulfil familial obligations,
 - Hence, motivation mainly comes from external approval of their teachers and families, and from societal rewards, such as educational opportunities and better jobs.
 - Instead of boosting self-esteem like Western studies suggest, Hong Kong students are most concerned about the damaging effect of assessments on self-esteem.
- Simply—reforms to involve students do not address this psychological make-up

Discussion

- Students were resilient in their responses to assessment
 - students strive to keep their heads up and fight the oppressive assessment system through diligent study, cramming, tutoring, etc.
 - They cast doubts on the legitimacy of the system despite being successful enough to enter higher education; an incipient sense of rejecting the total system
 - It remains to be seen whether this critical response to assessment will result in resistance to the public examination regime of Hong Kong by the time this group and its generation of students become parents.

Study 3

- Large-scale survey of HK & PRC university students with the NZ Student Conceptions of Assessment inventory
 - Broken into 2 parts because of fatigue **Part B**



Participants

Demographic Characteristic	Jurisdiction					New Zealand
	Brazil	PRC		HK		
		Part A	Part B	Part A	Part B	
Sex						
Female	495	148	151	144	130	212
Male	204	83	88	70	97	101
Missing	3		1	2		
Age M (SD)	24.49 (5.42)	—	—	—	—	20.80 (4.58)
Current semester of study	70.6% 3 rd or less	—	—	—	—	58.2% 3 rd or less
Full-time equivalent Years M (SD)	—	3.42 (4.87)	2.89 (3.36)	1.95 (1.24)	1.89 (1.03)	—
Qualification Enrolled						
Postgraduate		59	78	25	25	
Bachelor	699	169	161	127	148	313
Sub-degree		3	1	62	59	
Type of Higher Education Institution						
Public	297	231	240	157	178	313
Private	405			59	49	

Mean Scores HK ≠ PRC

SCoA Factors	Jurisdiction				MANOVA
	New Zealand	Brazil	China	Hong Kong	
<i>Part A</i>					
Irrelevant	2.10 ^a (.67)	2.77 ^b (.74)	2.78 ^b (.64)	2.96 ^c (.76)	$F_{(3,1457)}=85.10, p<.001, R^2_{adj}=.15, \hat{f}^2=.18$
Irrelevant-Bad	2.28 ^a (.79)	3.13 ^b (.84)	3.06 ^b (.78)	3.25 ^c (.85)	$F_{(3,1457)}=91.40, p<.001, R^2_{adj}=.16, \hat{f}^2=.19$
External-Personal Future	3.71 ^b (1.07)	2.90 ^d (1.24)	3.10 ^d (.91)	3.50 ^b (.91)	$F_{(3,1457)}=44.90, p<.001, R^2_{adj}=.08, \hat{f}^2=.09$
<i>Part B</i>					
Social/Affective	3.40 ^b (.87)	2.75 ^a (1.00)	3.27 ^b (.87)	2.88 ^a (.84)	$F_{(3,1477)}=44.10, p<.001, R^2_{adj}=.08, \hat{f}^2=.09$
Social/Affective-Class	3.57 ^d (.93)	2.70 ^a (1.06)	3.36 ^c (.95)	2.99 ^b (.91)	$F_{(3,1477)}=65.98, p<.001, R^2_{adj}=.12, \hat{f}^2=.14$
Social/Affective-Personal Enjoyment	2.87 ^b (1.17)	2.89 ^b (1.29)	3.00 ^b (1.05)	2.57 ^a (.99)	$F_{(3,1477)}=5.83, p<.001, R^2_{adj}=.01, \hat{f}^2=.01$
Improvement	4.49 ^c (.77)	3.75 ^b (.93)	3.82 ^b (.88)	3.50 ^a (.80)	$F_{(3,1477)}=70.00, p<.001, R^2_{adj}=.12, \hat{f}^2=.14$
Improvement-Student	4.72 ^d (.86)	4.34 ^c (1.05)	3.93 ^b (.99)	3.51 ^a (.86)	$F_{(3,1477)}=78.38, p<.001, R^2_{adj}=.14, \hat{f}^2=.16$
Improvement-Teaching	4.29 ^d (.80)	3.26 ^a (1.08)	3.74 ^c (.89)	3.49 ^b (.88)	$F_{(3,1477)}=84.40, p<.001, R^2_{adj}=.15, \hat{f}^2=.18$
External-School Quality	3.86 ^c (1.03)	3.17 ^a (1.33)	3.54 ^b (1.06)	3.57 ^b (.92)	$F_{(3,1477)}=27.08, p<.001, R^2_{adj}=.05, \hat{f}^2=.05$

Discussion

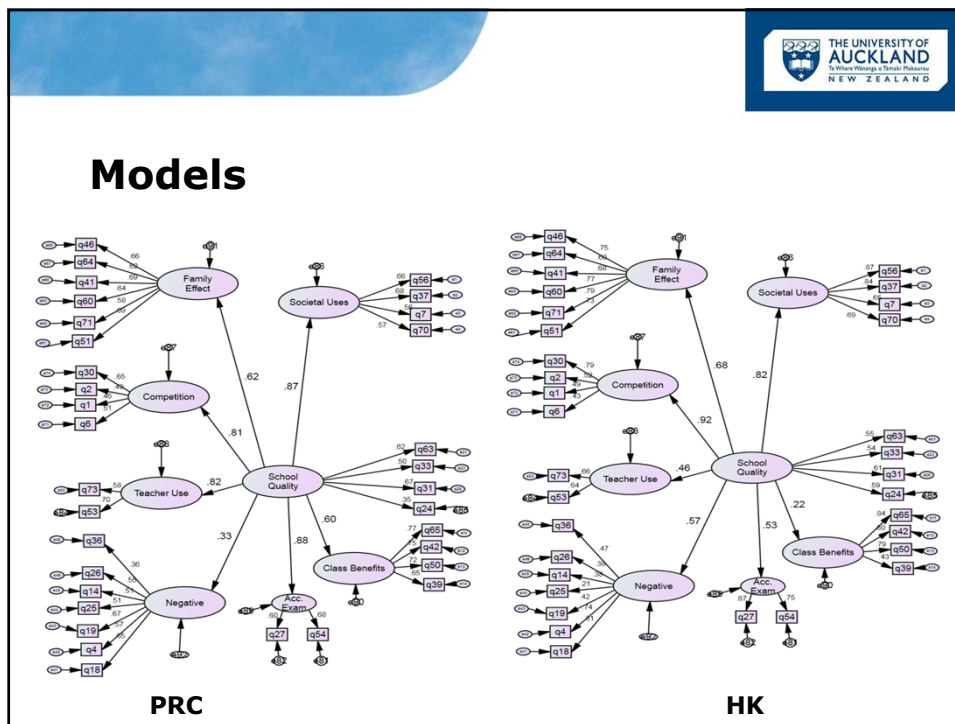
- Only in Hong Kong did students give higher or equal agreement to the external attribution factors of assessment evaluating school quality or predicting personal future. This latter result is consistent with studies which have found among Hong Kong tertiary students awareness of the selective processes based on assessment and high external pressure to perform for the sake of family honour or obligations (Brown & Wang, 2013).

Study 4

- Large-scale survey of HK & PRC university students with a NEW Chinese Student Conceptions of Assessment Inventory
 - Studies 1-2 developed new categories
 - Preliminary surveys trialled and reduced item sets for new categories
- Factors recovered
 - Confucian-Heritage societies : Competition, Societal Use, Exam Accuracy, and Family Effects
 - Jurisdictional differences in institutional practices and policies were: Teacher Use, School Quality, Class Benefit, and Negative Effects.

Participants

Country and Institute	Count
People's Republic of China	
Shenyang Normal University	183
China Academy of Art	164
South China Normal University	55
East China Normal University	20
Guangdong University of Business Studies	17
Taizhou University	6
Foshan University	3
Southwest University	3
Beijing Normal University	2
Hangzhou Women's College	1
Northeast Normal University	1
Nanjing Normal University	1
China Pharmaceutical University	1
<i>Sub-total</i>	457
Hong Kong	
HK Institute of Education	353
Polytechnic University	6
City University	3
University of HK	3
Chinese University of HK	1
HK Vocational Training College	1
HK Baptist University	1
Lingnan University	1
Open University	1
<i>Sub-total</i>	370
Grand Total	827



Confucian culture factors

#	Factor & Statements	HK B	PRC Pre	PRC Post
<i>Culturally-similar factors due to shared Confucian heritage</i>				
F8 Family Effect				
51	My family values me only if I do really well on assessments ^{ns}	.71	.69	.69
41	My grades determine my value and worth to my family and society in general ^{ns}	.65	.69	.69
64	I am smart only if I get 100% or am best in class ^{ns}	.57	.62	.62
60	A high rank in school is how I please my family**	.76	.65	.65
46	My family's reputation depends on my performance on assessments***	.77	.65	.65
71	My family is very much affected by my assessment results***	.77	.60	.60
F4 Accuracy				
27	Assessment results can be depended on ^{ns}	.62	.60	.60
54	Assessment results are sufficiently accurate**	.77	.66	.66
F1 Societal uses				
7	Higher social status comes from good academic performance. ^{ns}	.65	.58	.56
70	Success in society depends on doing well on assessments**	.70	.58	.58
56	With higher grades, I can gain a better position in society***	.87	.63	.63
37	Good grades lead to a better career path***	.84	.66	.66
F7 Competition				
2	Assessments have a huge impact on my place in society ^{ns}	.51	.49	.49
1	Assessment is used to select the best people for job and education opportunities ^{ns}	.50	.47	.47
30	Assessment is a competition to select the best***	.80	.66	.66
6	Assessment never stops; it's part of being alive***	.40	.65	.65

Statistically significant differences in **RED**

Jurisdictionally different factors

#	Factor & Statements	HK B	PRC Pre	PRC Post
<i>Institutional Policy Factors Unique to Jurisdiction</i>				
F2 Class benefits				
39	When we do assessments, there is a good atmosphere in our class***	.43	.63	.63
50	Our class becomes more supportive when we are assessed**	.79	.71	.71
65	Assessment encourages my class to work together and help each other*	.83	.77	.77
42	Assessment makes our class cooperate more with each other ^{ns}	.79	.75	.75
F3 School Quality				
24	Assessment prepares students for examinations***	.56	.35	.35
63	Assessment provides information on how well schools are doing*	.51	.62	.62
33	Growing up means you get assessed regularly ^{ns}	.53	.49	.49
31	Assessment measures the worth or quality of schools ^{ns}	.59	.66	.66
F5 Negative Aspects				
18	Assessment is limited to what can be learned in books***.	.81	.66	.66
4	Assessments only focus on book learning and knowledge***	.73	.57	.57
19	I am useless if I don't get top in my class***	.44	.68	.68
26	My classmates and peers are better at assessments than I am***	.31	.55	.55
25	I ignore or throw away my assessment results***	.22	.52	.52
36	Assessment results ignore all the other things I can do well**	.53	.36	.36
14	Assessment results are filed & ignored ^{ns}	.43	.52	.52
F6 Teacher Use				
53	Assessment helps teachers track my progress***	.56	.71	.71
73	Teachers use my assessment results to see what they need to teach me next**	.69	.57	.57

Statistically significant differences in **RED**

Mean Score differences

	<u>Group Descriptive Statistics</u>						<u>Difference Statistics</u>		
	<u>HK B</u>		<u>PRC Pre</u>		<u>PRC Post</u>		<u>MANOVA</u>		<u>Effect size</u>
C-SCoA(HE) Scale	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> ₍₂₎	<i>p</i>	Cohen's <i>d</i>
<i>Culturally-similar factors</i>									
Competition	3.86	0.89	3.40	0.88	3.69	0.97	13.02	<.001	.50
Societal Use	3.65	1.09	2.84	0.86	2.98	0.95	45.64	<.001	.82
Exam Accuracy	3.01	0.87	2.54	0.93	2.91	1.00	13.88	<.001	.50
Family Effects	2.49	0.97	2.43	0.90	2.49	0.93	0.27	.76	.06
<i>Jurisdictional Policy Factors</i>									
Teacher Use	3.98	0.89	3.50	1.05	3.83	1.07	12.57	<.001	.49
School Quality	3.63	0.81	2.54	0.89	3.39	0.88	17.35	<.001	.56
Class Benefit	3.00	0.90	3.09	0.94	3.09	1.03	0.65	.52	.09
Negative Effects	2.80	0.75	2.39	0.75	2.46	0.82	19.13	<.001	.52

HK students higher in the **GREEN**

Some speculations: family effects

- equally endorsed and relatively low
- students' perceived place in and value to the family not contingent upon tested performance.
- Chinese families are not cold and punitive towards successful students,
- divergent from traditional collectivist responsibility to ancestors and family
 - For PRC students, MIGHT reflect 'single child' policies post-1979 and free-market economic practices post-1984 and post-cultural revolution attacks on Confucianism
 - For HK students, longer exposure to western individualism and a greater diversity of economic opportunities may have defused the notion that academic success is driven by familial obligations.

Some speculations: Accuracy

- HK stronger means and item loadings
 - HK has a stronger social basis for attributing societal success to assessment results and meritocratic application of examinations; for example:
 - Independent Commission against Corruption (ICAC) and free press conduct scrutiny of government agencies such as the Hong Kong Examination and Assessment Authority
- PRC has multi-faceted basis for entry to university and difficulty in ensuring transparent and consistent application of the legal system

Some Speculations: Continuous

- item #6: Assessment never stops; it's part of being alive stronger loading for the PRC students than the HK students.
 - Chinese expression 考考考, 老师的法宝; 分分分, 学生的命根 [exam, exam, exam, teacher's magic weapon, grade grade grade, students' lifeblood]
 - reinforces widespread perception of the perpetual nature of examinations and assessment in PRC.

Some speculations: School Quality

- mean score higher for HK students
 - simplistic logic (i.e., good schools have high results; high results equal quality).
 - systemic nature of school segregation, especially in HK where schools are identified by bands
- greater loading on item #63 by PRC students
 - We know schools are good by the public dissemination of examination results. Schools that have higher mean scores on those examinations must be high quality.
 - Example: examination hothouse school 'Maotanchang High School'
<http://www.nytimes.com/2015/01/04/magazine/inside-a-chinese-test-prep-factory.html>

Some speculations: Teacher Use

- Higher in HK and postgraduate PRC students
 - teachers track students with assessment loaded on the factor more for PRC students, while teachers diagnosing next teaching steps loaded more strongly for HK students.
 - latter result may reflect the greater use of school-based assessments in HK secondary schools which makes evident to students how teachers adjust teaching in response to tested performance
 - conventional practice in PRC involves drilling for examinations and monitoring student performance regularly

Some speculations: Negative

- quite different responding; large mean score difference
 - Three items (Items #18, 4, & 36) to do with the narrow focus of assessment on book learning had stronger loadings in HK,
 - more attuned to the artificial nature of examined knowledge and skill and want a broader and more valid learning
 - rank order comparison (Items #19, 26) and ignoring assessment results (#25) stronger loadings in PRC.
 - may be result of public display of examination results (i.e., all can see my results, so it is important that I outperform my classmates)
 - PRC students: high rank matters
 - HK students reject the validity of examinations.

Conclusions

- The future for HK may be different if this generation of students resist the examination system when they become parents by:
 - enrolling children in international schools or migrating to western countries for greater educational opportunities.
 - Though recent political events might suggest a different direction?

Conclusions

- Sharing Chinese identity is not enough to understand how university students in Chinese contexts understand and respond to assessment.
- Instead, student conceptions of assessment seem to reflect more the ecological factors of the educational environment in which they are schooled
- The Chinese Learner is not universal when it comes to assessment & evaluation



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