Exploring motivation from a cross-cultural perspective

Rob Klassen
Korea University, May 2009
Introduction and session goals

• My background: teacher... school psychologist... motivation researcher

• Applied motivation research: located somewhere in Pasteur’s Quadrant

• Five studies with two main goals:
  – Understanding why motivation beliefs are studied across cultures
  – Understanding how motivation beliefs are studied across cultures
Motivation and Self-Efficacy Beliefs

**Motivation**: internal and external forces that drive an individual to achieving certain goals

Markers of motivation: *Choice*...

*perseverance*... *effort*

**Self-Efficacy**: Confidence beliefs in capabilities to carry out the courses of action necessary to accomplish valued tasks

“Whether you think that you can or you can't, you're usually right.”

~Henry Ford~
Self-Efficacy Beliefs

Self-efficacy: *a.k.a.* Confidence... The beliefs we hold in our capabilities to accomplish specific tasks

Sources of self-efficacy:
- Successful past experience
- Vicarious experience
- Verbal persuasion
- Physiological state
Albert Bandura

- Developed self-efficacy theory
- The “world’s greatest living psychologist”
- Born in 1925 in Mundare, Alberta!
- B.A. from UBC in 1949
- M.A., Ph.D. from U of Iowa
- Has been Professor at Stanford University since 1953
Why study motivation beliefs across cultures?

• The relationship between motivation and context is dynamic, and still very unclear

• Studying motivation across cultures forces consideration of contextual factors

• Context is not a background variable, but a major constituent of motivation

• Motivation is not only an individual factor, but is intertwined with group experience
References for articles in this talk

Student Motivation


Teacher Motivation


Students’ motivation beliefs across cultures

“Nothing is so fatiguing as the hanging on of an uncompleted task”

William James, 1886
**Procrastination**

To voluntarily delay an intended course of action despite expecting to be worse-off for the delay.

“Nothing is so fatiguing as the hanging on of an uncompleted task”

*William James, 1886*

*St. Expeditus*, Patron Saint against procrastination
Study 1: A cross-cultural study of adolescent procrastination

- Examination of adolescent procrastination in two contrasting settings
- Sample: 310 Canadian and 302 Singaporean adolescents
- Measures: self-esteem, test anxiety, self-efficacy for self-regulated learning, and procrastination
- Analysis: multi-group SEM

Published in Journal of Research on Adolescence (in press)
Results and Discussion

• Self-efficacy for self-regulation was strongest predictor of procrastination in both settings
• No significant differences in path coefficients across settings
• Gender differences across settings
• Social and cultural processes leading to similarities and differences
Conclusions

• Procrastination strongly associated with students’ self-efficacy for self-regulation, but not as strongly with school grades – similar to findings in other settings
• Procrastination is a failure not just of self-regulation, but of confidence to self-regulate
• Procrastinating behaviours vary by gender
Study 2: Motivation and procrastination of undergraduates in Canada and Singapore

- Cross-cultural study with 1145 undergraduates in Canada and Singapore
- Two phases:
  - Examining patterns of variables across settings
  - Examining “negative” procrastination across settings

*Published in Applied Psychology: An International Review (in press)*
Phase 1: Correlates of procrastination in two cultures

• 192 Canadian undergrads and 226 Singaporean undergrads
• The relationships between procrastination and the motivation variables (self-efficacy, self-regulation, self-esteem, and SESR) were the same across cultures
• Levels, though, differed across settings, with Canadians reporting higher procrastination, self-efficacy, SESR, and self-esteem.
<table>
<thead>
<tr>
<th></th>
<th>Procrastination</th>
<th>Self-Efficacy</th>
<th>Self-Regulation</th>
<th>SESRL</th>
<th>Self-Esteem</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procrastination</td>
<td>1</td>
<td>-.15*</td>
<td>-.42**</td>
<td>-.57**</td>
<td>-.23**</td>
<td>-.21**</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-.23**</td>
<td>1</td>
<td>.31**</td>
<td>.18*</td>
<td>.36**</td>
<td>.42**</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>-.47**</td>
<td>.46**</td>
<td>1</td>
<td>.53**</td>
<td>.13</td>
<td>.31**</td>
</tr>
<tr>
<td>SESRL</td>
<td>-.63**</td>
<td>.35**</td>
<td>.63**</td>
<td>1</td>
<td>.09</td>
<td>.33**</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>-.37**</td>
<td>.39**</td>
<td>.39**</td>
<td>.36**</td>
<td>1</td>
<td>.09</td>
</tr>
<tr>
<td>GPA</td>
<td>-.25**</td>
<td>.25**</td>
<td>.28**</td>
<td>.33**</td>
<td>.21**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. Canadian participants are above the diagonal; Singaporean participants are below the diagonal. SESRL = Self-Efficacy for Self-Regulated Learning.*

*\(p < .01\). **\(p < .001\).
Phase 2: Procrastination behaviours and negative impact

• What is the *behavioural pattern* of procrastination?
• What is the negative impact of procrastination in two cultures?
• 389 Canadian undergrads (79% female) and 337 Singaporean undergrads (73% female)
• Surveys: hours of daily procrastination, negative impact, avoidance tasks, replacement activities, GPA
Avoidance tasks - “On what kinds of tasks do you most often procrastinate?”

<table>
<thead>
<tr>
<th>Task</th>
<th>Canada</th>
<th></th>
<th>Singapore</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Writing Tasks</td>
<td>5.00</td>
<td>1.67</td>
<td>4.70</td>
<td>1.54</td>
</tr>
<tr>
<td>Studying Tasks</td>
<td>4.66</td>
<td>1.63</td>
<td>4.03</td>
<td>1.53</td>
</tr>
<tr>
<td>Reading Tasks</td>
<td>4.60</td>
<td>1.78</td>
<td>4.08</td>
<td>1.74</td>
</tr>
<tr>
<td>Research Tasks</td>
<td>4.58</td>
<td>1.70</td>
<td>4.15</td>
<td>1.59</td>
</tr>
<tr>
<td>Talking with instructor</td>
<td>3.09</td>
<td>1.89</td>
<td>3.01</td>
<td>1.61</td>
</tr>
</tbody>
</table>
Replacement activities - “When you are avoiding an academic task you feel you should be doing, what kinds of things do you do instead?”

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get something to eat/drink</td>
<td>4.89</td>
<td>1.48</td>
<td>1</td>
<td>4.73</td>
<td>1.63</td>
<td>2</td>
</tr>
<tr>
<td>Watch TV</td>
<td>4.49</td>
<td>1.76</td>
<td>2</td>
<td>4.33</td>
<td>1.79</td>
<td>4</td>
</tr>
<tr>
<td>Email</td>
<td>4.45</td>
<td>1.70</td>
<td>3</td>
<td>4.00</td>
<td>1.78</td>
<td>8</td>
</tr>
<tr>
<td>Do household tasks</td>
<td>4.23</td>
<td>1.71</td>
<td>4</td>
<td>2.71</td>
<td>1.56</td>
<td>13</td>
</tr>
<tr>
<td>Talk with friends</td>
<td>3.98</td>
<td>1.76</td>
<td>5</td>
<td>3.47</td>
<td>1.79</td>
<td>11</td>
</tr>
<tr>
<td>Surf the internet</td>
<td>3.97</td>
<td>1.99</td>
<td>6</td>
<td>4.51</td>
<td>1.74</td>
<td>3</td>
</tr>
<tr>
<td>Have a nap</td>
<td>3.91</td>
<td>1.96</td>
<td>7</td>
<td>4.73</td>
<td>1.63</td>
<td>1</td>
</tr>
<tr>
<td>Do more urgent schoolwork</td>
<td>3.71</td>
<td>1.66</td>
<td>8</td>
<td>4.04</td>
<td>1.54</td>
<td>6</td>
</tr>
<tr>
<td>Exercise</td>
<td>3.47</td>
<td>1.79</td>
<td>9</td>
<td>3.40</td>
<td>1.73</td>
<td>12</td>
</tr>
<tr>
<td>Read books/magazines</td>
<td>3.34</td>
<td>1.74</td>
<td>10</td>
<td>4.03</td>
<td>1.57</td>
<td>7</td>
</tr>
<tr>
<td>Go out (movies/clubs/dinner)</td>
<td>3.19</td>
<td>1.75</td>
<td>11</td>
<td>3.90</td>
<td>1.76</td>
<td>9</td>
</tr>
<tr>
<td>Go online for chat</td>
<td>2.92</td>
<td>2.08</td>
<td>12</td>
<td>4.25</td>
<td>1.86</td>
<td>5</td>
</tr>
<tr>
<td>Go shopping</td>
<td>2.80</td>
<td>1.76</td>
<td>13</td>
<td>3.51</td>
<td>1.93</td>
<td>10</td>
</tr>
<tr>
<td>Play computer games</td>
<td>1.96</td>
<td>1.63</td>
<td>14</td>
<td>2.57</td>
<td>1.85</td>
<td>14</td>
</tr>
</tbody>
</table>
Negative procrastination

• Negative procrastination: “In general, how much does procrastination negatively influence your academic functioning?”

• 44% of Singaporeans and 28% of Canadians responded “Quite a lot” or “Very much,” $\chi^2(1) = 20.63, p < .001$

• Negative procrastinators showed lower GPA, higher daily procrastination, higher score on procrastination scale, and lower SESR in both settings
Study 3: Validation of TSES in 5 countries

- Teachers’ Self-Efficacy Scale (TSES) created by Tschannen-Moran & Woolfolk Hoy (1998)
- 12 items, 3 factors: Self-efficacy for instructional strategies, student engagement, and classroom management
- 1212 teachers from Canada, Cyprus, Korea, Singapore, USA
- Questions: Is the TSES valid across 5 settings?
- Are the relationships with job satisfaction similar across 5 settings?

Published in Contemporary Educational Psychology (2009)
Results and Conclusions

• Invariance
  – Within and across regions
  – Within and across teacher levels
• Relationship with job satisfaction
• Implications of findings
Study 4: Teachers’ collective efficacy beliefs in Canada, Korea, and USA

• How does culture affect the way people think and act?
• How do *collective* motivation beliefs operate in two settings?
• Hypotheses:
  – Teachers’ collective efficacy is related to job satisfaction in North America and Korea
  – Collectivism will be more strongly related to satisfaction for Korean teachers
  – Job stress will be inversely related to job satisfaction across settings

*Published in Journal of Experimental Education (in press)*
Method

- 500 elementary and middle school teachers from Canada (210), Korea (153), and the U.S. (137)
- Measures of:
  - Collective efficacy, 12 items, e.g., “How much can teachers in your school do to produce meaningful student learning?”
  - Job satisfaction, 4 items, e.g., “I am satisfied with my job”
  - Job stress, 1 item, e.g., “I find teaching to be very stressful”
  - Collectivism, 6 items, e.g., “How important is it that you and your family take responsibility for older family members?”
- Translation approach: Committee approach to back-translation with bi-lingual experts
Results

• Construct validation: Multigroup confirmatory factor analysis
  Models showed an adequate fit to the data: $\chi^2/df = 2.28$, CFI = .91, RMSEA = .05

• North American teachers were more satisfied, more confident in their colleagues’ abilities, more stressed, and more collectivist than Korean teachers. Simple, right?

• Multi-group path analysis showed that the path coefficients varied across groups
Figure 1. Multi-group MRC for variables predicting job satisfaction.

Note. Results for Korean teachers are in parentheses.

*p < .01.  **p < .001
Implications

• Teacher preparation and retention
  – Teachers’ collective efficacy influences job satisfaction across cultures
  – Cultural context influences sources of job satisfaction
  – Understanding how teachers’ job stress operates across cultures is not well understood

• Next steps
  – What influences collective efficacy beliefs and job stress?
  – How do teachers’ motivation and job-related beliefs develop and change over the career span?
  – How do social and cultural beliefs differentially influence teachers’ motivation beliefs in a wide variety of contexts?
Study 5: Teachers’ motivation beliefs in Canada and Singapore

• Mixed methods: Study 1 quantitative and Study 2 qualitative

• What are the relationships among teachers’ motivation beliefs, student SES, and perceived school climate across two cultures?

• What do teachers say about their motivation beliefs, the role of student factors, and academic climate in Canada and Singapore?

Published in Teaching and Teacher Education (2008)
Mixed methods: Perfect fit for cross-cultural educational psychology

• **Strengths:**
  – Words and narrative can add meaning and depth to numbers
  – Exploration is *in context*, and provides an *emic* understanding of motivation constructs
  – Stronger evidence for a conclusion through convergence of findings

• **Weaknesses:**
  – Can be difficult to carry out by a single researcher
  – More expensive and time consuming
  – How does one analyze conflicting results?
Participants and Methods

• Quantitative
  – 502 secondary teachers from Canada and Singapore
  – Variables: Teachers’ self-efficacy, collective efficacy, job satisfaction, & academic climate

• Qualitative
  – Individual interviews with 10 Canadian teachers and 14 Singaporean teachers
Quantitative Results

• Mean differences
• CFA & Multiple regression using SEM
• Canada: SES strongest predictor of academic climate (no mediation by TSE or TCE)
• Singapore: Teachers’ collective efficacy strongest predictor of academic climate (TCE strongly mediated effect of SES)
Qualitative Results & Discussion

• Themes:
  – Teachers’ individual and group motivation
  – Role of student factors
  – Influences on student climate

• Qualitative results provide explanation for quantitative findings