



How Internationalizing Students Through Cross-Cultural Experiences May Affect Creativity



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What is Creativity?

Definition: Creativity is usually explained as the creation of something that is

- a) **Novel** and b) **Appropriate**.



Modeling Creativity

Insight

Because the creative process is complex, it is usually modeled through a simplified version of creativity, **Insight Problems**. Insight Problems are atypical from traditional, well-defined problems in that they are ill-defined. Rather than requiring linear, logical patterns in their solutions, Insight Problems usually result in an impasse where the problem solver realizes that normal methods of thought are not going to be successful. This is followed by a sudden insight, often called a 'Aha!' or 'Eureka!' moment. In this moment the problem solver breaks from the traditional, logical train of thought and diverges to another more creative way of thinking. This change allows for a discovery of the solution to the problem.

Activity: Try Some Insight Problems:

- Two men played five full games of checkers and each won an even number of games, with no ties, draws, or forfeits. How is that possible?
- A young boy turned off the lights in his bedroom and managed to get into bed before the room was dark. If the bed is ten feet from the light switch and the light bulb, and he used no wires, strings, or other contraptions to turn off the light, how did he do it?

Category Formation and Insight

One interesting property of Insight Problems is that their solution rates have been shown to increase with an initial practice in creation of novel categories, called **Goal Derived Categorizations (GDC)**. One method of GDC, called the Uses Task, is where a problem solver initially practices novel category formation by thinking of novel uses of various objects (i.e. a normal use of a book is to read, but potential novel uses could be: a flyswatter, paperweight, notepad, money safe, etc.).

The increase in creativity from GDCs is thought to be seen because GDCs practice breaking from traditional thoughts and conceptions through the formation of novel categories. When the problem solver attempts to solve insight problems after GDC practice, they then draw upon this practiced skill, resulting in an increase in ability to create novel solutions.

Activity: Uses Task for Goal Derived Categorization

- Shoe (To support your feet) ?
Cardboard Box (Object to carry things) ?
What are some other novel uses for these two objects?

Creativity and Living Abroad

Research looking at the effects of living abroad has also found an interesting relationship between living abroad experience and creativity. That is, life abroad and the multicultural experience it entails, is related to an increase in creativity.

Several Key Factors in this relationship have been identified:

- 1.Length of Stay Abroad:** Length of time spent living abroad predicts increases in creativity with longer stays tending to show greater benefits.
- 2.Openness to Experience:** Benefits to creativity are limited to those above a certain threshold of the Big Five trait Openness to Experience.
- 3.Integration:** The gain in creativity is limited to those who show commitment to integrating their new cultural experience to past experience.
- 4.Adaptation:** The amount of adaptation to the new culture also moderates the increase in creativity, with more adaptation resulting in a larger increase in creativity.
- 5.Need for Cognitive Closure:** While benefits are seen if the above conditions are met, they disappear under time pressure, which elicits the Need for Cognitive Closure.

Modeling Life Abroad

Maddux et al. (2010), intrigued by this enhancement in creativity, argue that these increases in creativity are due to a complex interaction between individuals and multicultural environments. To explain this interaction Maddux offers a simple model of life abroad:



Goal Derived Categorizations ???

* Cognitions must be made salient through priming!!!

Research Proposal: Studying Abroad and Creativity

Looking at the model proposed by Maddux, life abroad seems to be one that is riddled with opportunities for creative insight. Furthermore, if the model is correct, study abroad experiences where students focus on cross-cultural understanding could be more effective in this process through their practice of creation of novel categories (as seen in prior Goal Derived Categorization research).

Targets of Study

We will compare 4 main groups:

Experimental Groups

Americans Studying Abroad:
In a cross-cultural understanding program

Americans Studying Abroad:
Lack of cross-cultural understanding program

Control Groups

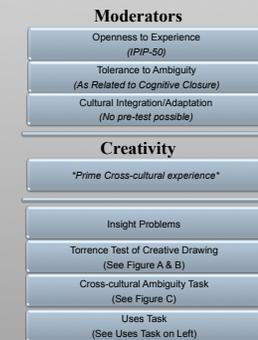
Americans with study abroad experience

Americans without study abroad experience

Method

We will measure scores on some of the introduced moderators, and creativity, first primed by thinking about a past multicultural experience, looking to see if pre and post study scores differ over a one semester study period.

Scores to be Measured Pre & Post Study Abroad Experience



Method: Continued...

Torrence Test of Creative Drawing

Directions: Please draw a picture using the provided lines.



Figure A: Initial lines



Figure B: Example drawing

Cross-cultural Ambiguity Task

Directions: Please interpret what is happening in the following scene.

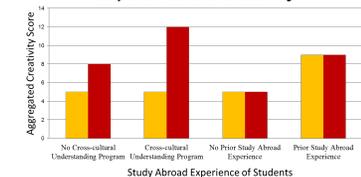


Figure C: Example of ambiguous scene

Expected Results

For our results we expect to see that 1) only the currently studying abroad groups will show an increase in creativity over the period of measurement, 2) this increase will be larger in students engaged in cross-cultural understanding programs 3a) moderators will follow previous seen relationships, but 3b) moderators also change through the study abroad experience in a direction that supports an increase in creativity, and 4) creativity will be affected in a robust manner, with study abroad experience affecting most measures of creativity tested.

Expected Results: Study Abroad Experience and Creativity



Possible Implications

- Development of cross-cultural understanding skills is a key factor in why life abroad creates more creative individuals.
- Cross-cultural understanding training should be an integral part of study abroad programs to maximize their effectiveness.

Possible Future Research Question: Is cross-cultural training, in absence of life abroad, enough to yield social and creative benefits?

References

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Contact information

Interested in learning more about this research or about a possible collaboration? Please contact **Matthew Russell** at russ0150@umn.edu.