

Sensation seekers who learn abroad: Exploring the role of risk perception in co-op students' international plans

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Universities around the world seek to increase their students' learning abroad in forms like international co-op and exchange. The authors build on findings in a 2016 publication by Behrisch in this journal to focus on the correlation of perceived risk with students' completion of a learning abroad experience. Using binary logistic regression analysis, findings suggest that students' perceived risk is negatively correlated with their likelihood of completing a learning abroad experience. Drawing on approach/inhibition theory and sensation seeking literature, the authors form a picture of how risk perception interacts with other factors to influence students' completion of learning abroad. Risk is typically regarded at the institutional and student levels as something negative to avoid. Reframing risk within the university as a conversation about learning, opportunity, and cognitive processing is recommended, since learning and teaching are essential elements of universities. The goal is to increase student engagement in learning abroad.

Keywords: Learning abroad, perceived risk, sensation seeking, co-op, exchange, international education

LEARNING ABROAD

Learning abroad is widely accepted as a good thing for university students. Within the North American university environment, there is a push to increase participation in learning abroad, with the dual aims of producing globally competitive graduates and increasing universities' international prestige. (Ahn, 2014; Stronkhorst, 2005). The benefits of learning abroad for students have been well documented (Potts, 2015; Chalou & Gliozzo, 2011; Guest, Livett, & Stone, 2006; Pagano & Roselle, 2009; Tiessen, 2007; Fairhead, 2012; Simon, 2013; Supiano, 2013; Reinhard, Satow, & Sisco, 2007).

This paper builds on the work by Behrisch (2016) that explored barriers and motivations amongst business undergraduate students to learn abroad at a single western Canadian university. Financial cost and perceived increase in degree completion time topped the list of barriers preventing students from going abroad (Behrisch, 2016). Learning abroad encompasses a myriad of programs that take place in another country from the student's home institution. These include co-op, exchange, field schools, service learning, practica, volunteering, and more. For this paper, the authors looked specifically at co-op and exchange as examples of learning abroad. Co-op is often conflated with internship, work experience, practica and other terms. In the Canadian context, "co-op" refers to specific criteria established by the national accreditation body for WIL at post-secondary institutions, called CEWIL (Co-operative Education and Work-Integrated Learning Canada) (CEWIL, 2019).

A co-op work term at a Canadian university must include meaningful paid work experience, be directly related to the student's field of study, supervised, full-time, and temporary. Co-op students spend a minimum of 30% of their degree on co-op and graduate on an academic term. Canadian university co-op students complete their work terms locally, nationally and internationally. "Exchange" refers to the highly regulated and standardized academic exchanges that occur between Canadian universities and their international partner institutions. In spite of myriad benefits associated with learning abroad,

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Canadian student outward mobility remains low (Stroud 2010). Universities Canada (AUCC) reports that "only 2.6% had a for-credit experience abroad" (2014, p. 7).

RESEARCH OBJECTIVES

This paper focuses on a subset of data collected in 2014. This subset is part of a larger data set that was discussed in the Behrisch (2016) paper. For this article, the authors employ binary logistic regression analysis to examine how perceived risk correlates with student completion of a learning abroad experience. Students' perceived risks of learning abroad are included here as new data. These qualitative responses provide texture and detail, and compliment quantitative data produced through the binary logistic regression analysis. These qualitative responses were not explored in Behrisch (2016). In order to avoid duplication, demographic details of the sample population are included in Behrisch (2016, p. 283) and are not been included here.

Stroud (2010) looked at personality characteristics of students who learn abroad through exchange programs, with an eye towards "actualizing" more students' intent to go abroad. By exploring the interplay between students' perceived risks and other factors such as risk tolerance, academic grades and number of credit hours completed towards degree attainment, the authors aim to understand how risk avoidance prevents student uptake in learning abroad programs. The ultimate goal was to foster greater "actualization," using Stroud's (2010) term, in learning abroad at the Beedie School of Business at Simon Fraser University.

LITERATURE REVIEW

Perceived risk and risk tolerance in post-secondary education have been considered by Lam, Tong, and Ariffin (2017) and Behrisch (2016). Lam et al. (2017) identify specific types of perceived risks among international students learning abroad in Malaysia as:

1. financial
2. opportunity costs
3. family or socio-cultural
4. legal administrative
5. academic or course
6. psychological
7. security

However, most literature around perceived risk falls outside of education, drawing instead from the fields of business and psychology. Business literature relates to risk assessment, entrepreneurialism and approach/inhibition theory. Psychology looks at risk from a lens of "sensation seeking" behavior. The authors attempt to weave these disparate literatures together to form a picture of how perceived risk plays out amongst university students' decisions to complete a learning abroad experience.

Approach/Inhibition Theory and Risk

Risk tolerance is an important and complex personality trait. Anderson and Galinsky (2006) suggest that the greater a person's sense of power, the higher their propensity for risk. People who feel powerful are more likely to see the world as a place of opportunity, rather than as a dangerous threatening place. They tend to feel optimistic about the outcome of risky endeavors, instead of pessimistic. Conversely, people with a low sense of power are more likely to perceive the world as

dangerous and threatening and are more pessimistic about the outcome of a risky venture, such as international co-op. The theory that a person's sense of personal power increases their risk propensity stems from the approach/inhibition theory outlined by Anderson and Galinsky (2006).

Based on the approach/inhibition theory, we propose that possessing power increases people's proclivity for risk. When people have power and their behavioral approach system is more active, they attend more to reward-laden information; thus, powerful people presented with a choice to engage in a risky course of action should focus more on the potential payoffs of that risk. At the same time, when people have power and their behavioral inhibition system is less active, they should attend less the potential dangers inherent in that risk. Focusing on rewards and being less aware of dangers should propel the powerful toward risky behavior. (Anderson & Galinsky, 2006, p. 513)

Approach/Inhibition theory suggests that possessing power increases people's attraction to risk. People with higher levels of power possess a behavioral approach system that tends to be more active, and they pay attention to positive information. When a powerful person has the choice to engage in risky behavior, they tend to focus more on the payoffs rather than the downsides of the risk. In addition, people with power have a behavioral inhibition system that is less active. They tend to pay less attention to potential dangers in that risk. Focusing on rewards and being less aware of dangers increase the tendency toward risky behavior (Anderson & Galinsky, 2006). This theory may be applied to learning abroad, which business students at Simon Fraser University consider risky (Behrisch, 2016).

Brockhaus (1980) defines risk taking propensity as:

the perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation (p. 513).

Atkinson (1957) considered motivational determinants of risk-taking behavior, dividing people's motivations into two categories, the achievement motive and the motive to avoid failure. The achievement motive drives individuals who are motivated to act in a situation where the potential rewards of a situation are more important than the motivation to avoid failure. A person motivated by the achievement motive has a disposition to approach success rather than avoid failure. A person driven to avoid failure has a high capacity to experience shame or humiliation as a consequence of failure. This inhibits a person from pursuing a risky experience and overrides potential rewards. Atkinson's motive to avoid failure parallels with some students' preference to avoid risk, which may contribute to their decision to forego learning abroad. Students who complete a learning abroad experience may be driven by the achievement motive, where possible rewards outweigh fear of failure.

Riley and Chow (1992) suggest that for the general population, "relative risk aversion is a function of age, education, wealth and income" (p. 34). These factors can be related, at least tangentially, with the power arguments in approach/inhibition theory (Anderson & Galinsky, 2006). People who possess a sense of power are often those for whom ideal age, education, wealth, income and social status intersect. Post-secondary students comprise a relatively privileged and therefore powerful segment of the general population, with access to resources to pay for their education. Bringing Riley and Chow's (1992) model of risk aversion together with Anderson and Galinsky's (2006) approach/inhibition theory, it might follow that post-secondary students would likely possess a higher than average

propensity for risk because they have excess resources to pay for education, and should therefore be receptive to completing a learning abroad experience.

Sensation Seeking and Roles

Risk tolerance is explored mainly in two bodies of literature, "sensation seeking" behavior among at-risk youth, such as engaging in unsafe sex or drug experimentation (Stanford, Greve, Boudreaux, Mathias, & Brumbelow, 1996; Zuckerman, 1987; Zuckerman, 1991) and the role of risk tolerance among entrepreneurs (Brockhaus, 1980; Palich & Bagby, 1995). Sensation seekers crave novel, complex and diverse sensations experiences and are willing to take social and physical risks in order to obtain these (Zuckerman, 1979a, p.10). This quest for novelty aligns with Behrlich's (2016) findings regarding students' top two motivations for completing a learning abroad experience: "opportunity to travel" and "meet new people." The authors suggest that students who complete a learning abroad experience fit within the rubric of Zuckerman's sensation seekers (Zuckerman, 1979b).

Palich and Bagby (1995) assert that entrepreneurs are considered risk takers and describe the anti-thesis of an entrepreneur as someone who never loses because they never put themselves at risk which leads to a logical assumption that entrepreneurs are risk takers. However, Palich and Bagby (1995) cite studies that show no difference in risk propensity between entrepreneurs and non-entrepreneurs. "Rather than risk-taking, perhaps the characteristics observed and reported in the entrepreneurship literature are actually the result of systematic differences in cognitive process" (p. 428).

Instead of having a higher tolerance for risk, they suggest that entrepreneurs actively frame situations differently from non-entrepreneurs and are more optimistic than non-entrepreneurs; they are more likely to perceive business situations as opportunities rather than as threats. Aligning with Palich and Bagby's (1995) theory, Masters and Meiers (1988) suggest that rather than defining entrepreneurs by a risk propensity attribute, they are more aptly defined by roles. Highlighting an active role over an innate attribute like higher risk tolerance starts to reframe the risk taker as agent, rather than as passive identity. This diminishes the deterministic view of non-risk takers as immutable and unable to change or learn to take calculated risks. The role of risk tolerance and perception in the international post-secondary context has not been studied extensively, however, Lam et al. (2017) provide a useful framework of perceived risk categories for students enrolling abroad from their home institution. What follows here is an attempt to bring together divergent fields of research relating to risk tolerance, including the cognitive framing of risk by entrepreneurs.

RESEARCH QUESTIONS AND HYPOTHESIS

Analysis of data collected in 2014 and published by Behrlich (2016) raised new questions about the role of risk perception in learning abroad completion. A new hypothesis and two research questions were developed:

Hypothesis

Students' perceived risk of learning abroad is correlated with their completion of a learning abroad experience.

Research Questions

1. How does perceived risk affect students' completion of a learning abroad experience?
2. What factors mitigate or increase the effect of perceived risk on completion of a learning abroad experience?

METHODOLOGY

The research methodology for this paper was a case study focusing on the undergraduate student population in the Faculty of Business at a single western Canadian university, the Beedie School of Business at Simon Fraser University (SFU). An undergraduate degree at SFU is typically four years in length, which can be extended depending on students' involvement in additional curricular offerings. The Beedie School of Business is located in the metropolitan area of Vancouver, British Columbia. The data reported here is based on the same case study in which Behrisch published findings in this journal in 2016 on students' motivations and barriers to learning abroad. Data collected from this case study supported the Behrisch (2016) paper, however, this paper draws from a different subset of data collected in 2014 not reported in the 2016 paper.

A research ethics review process was undertaken to ensure integrity of the research process and security of students' confidentiality. Once ethics approval was received (reference # 2104s0327), an electronic questionnaire containing 40 quantitative and open-ended questions was emailed to all 3821 students enrolled in an undergraduate business class in October 2014. Two hundred and thirty students completed the survey. Of these, 163 reported they were approved business majors. Data outside this sample of 163 students were set aside and not included in this analysis, as they speak to a wider diffuse undergraduate university population. The scope of this research was to contain it to business majors only. All further references to students in this paper refer to the sample of 163 students described in detail in Behrisch (2016 p. 283).

RESULTS

Our data analysis revealed an inverse relationship between perceived risk and a student's likelihood of learning abroad completion. The higher a student's perceived risk of an international experience, the less likely they were to complete it. However, a few key factors were found to mitigate this inverse relationship, especially a student's tolerance for risk. The higher a student's tolerance for risk, the more likely he or she was to complete a learning abroad experience. Additional mitigating factors included academic cumulative grade point average (CGPA) and number of credit hours completed toward degree attainment. The higher a student's cumulative grade point average and credit hour completion, the higher their likelihood was of completing a learning abroad experience.

Binary Logistic Regression

Andrew Gemino, one of the authors of this paper, conducted binary logistic regression analysis of data collected in 2014 and published in Behrisch (2016) in order to better understand the relationship between students' overall risk tolerance and their decisions to participate in international co-op or exchange. Logistic regression is a special case of the generalized linear model that assesses the relationship between a categorical dependent variable and one or more independent variables using a logistic function (Hosmer, Lemeshow, & Sturdivant, 2013). A binary logistic regression has only two values for the categorical dependent variable (normally 0 and 1). The technique is analogous to linear

regression and uses the Wald statistic to assess statistical significance of independent variables (Peng, Lee & Ingersoll, 2002).

The dependent variable was a binary variable indicating whether the student had participated in a learning abroad experience, specifically international co-op or exchange. Binary response variables, where the outcome can only be one of two values, are common for social science research. When there are only two possible outcomes (learning abroad completion or non-completion), logistic regression is useful. When there are more than two possible outcomes, variable regression is used. Hence the use of binary logistic regression for the purpose of this study. The only possible outcomes here were completion or non-completion of a learning abroad experience, with non-completion coded as 0 and completion coded as 1. A full explanation of binary logistic regression for social science research and the tests of significance it provides is presented by Tarling (2008, p. 63-76).

Three independent variables were used in the analysis. Factors included the relative risk tolerance of the student, the number of credit hours completed and the overall cumulative grade point average (CGPA). The number of credit hours and cumulative grade point average were included as they are important and natural components in the decision students will make to go abroad. For example, a first-year student with a poor CGPA would not likely see international co-op or exchange as an option. The relative risk tolerance of the student was established by considering the difference between the perceived overall risk tolerance and the perceived risk of international co-op or exchange. People who viewed the international risk as low compared to their overall level of risk tolerance scored lower on the relative risk scale than students who indicated international risk was higher than their overall risk tolerance. Only a portion of the sample, 115 students, provided data on their relative risk tolerance, CGPA and credit hours. Of these 115 students, 86 had not participated in co-op or exchange and 29 students had participated in either co-op or exchange.

The binary logistic regression was run using SPSS version 24. Results from the regression are shown in Tables 1 and 2. Overall, the results showed significant effects for all three of the independent variables. The classification table indicated an overall predictive accuracy of 76.5%. The relative risk variable showed a significant negative relationship, indicating that when students perceived the relative risk as low, they were more likely to participate in a learning abroad experience than students who perceived the risk as high. Overall, the chi-square statistic (22.20) indicated the model was statistically significant ($p = <0.001$).

TABLE 1: Initial classification of students' predicted learning abroad completion

Observed	Predicted Learning Abroad Completion			
	0.00	1.00		
Completed Learning Abroad	0.00	81	5	94.2
	1.00	22	7	24.1
Overall Percentage				76.5

a. The cut value is .500

b. 1.00 indicates student completed learning abroad experience

Cut value is the point for classifying cases. Cases with predicted values that exceed the classification cutoff are classified as one, while those with predicted values smaller than the cutoff are classified as zero. As this is binary logistics, we have only two possible outcomes: one (which is an outcome ≥ 0.5) or zero, which is an outcome less than 0.5).

TABLE 2: Results of independent variables in regression analysis equation

Variables in the Equation	B	S.E.	Wald	df	Sig.
Relative Risk	-1.731	.645	7.205	1	.007
How many credit hours towards degree completion have you completed?	.0290	.011	7.505	1	.006
What is your cumulative grade point average?	1.373	.577	5.662	1	.017
Constant	-8.322	2.203	14.269	1	.000

Explanation for terms used in Table 2 headings:

B: estimated coefficient (slope term) for the independent variable in a regression.

S.E.: Standard Error is the standard deviation of the sampling distribution

Wald: The Wald statistic is analogous to the t-test in linear regression. It is used to assess the significance coefficients in a logistic regression. The Wald statistic (also referred to as the Wald Chi-Squared Test) is a way to find out if explanatory variables in a model are significant. It assesses the constraints on statistical parameters based on the weighted distance between the unrestricted estimate and its hypothesized value under the null hypothesis (which in this case assumed equal values of 0 and 1).

df: degrees of freedom.

Sig.: p-value associated with estimate. In our case, we accept p-value less than 0.05 as significant.

The logistic regression results indicate that the level of perceived relative risk plays a significant role in students' completion of international co-op or exchange. It also shows that CGPA (cumulative grade point average) and the number of credit hours have some significant impact on this decision. If administrators would like more students to engage in international activities like co-op or exchange, then administrators should understand how students are thinking about risk and ensure students have good information to assist in decision making. Drawing from the results of our binary logistic regression analysis, a heuristic model has been developed (Figure 1) to show how perceived risk interacts with students' likelihood of learning abroad.

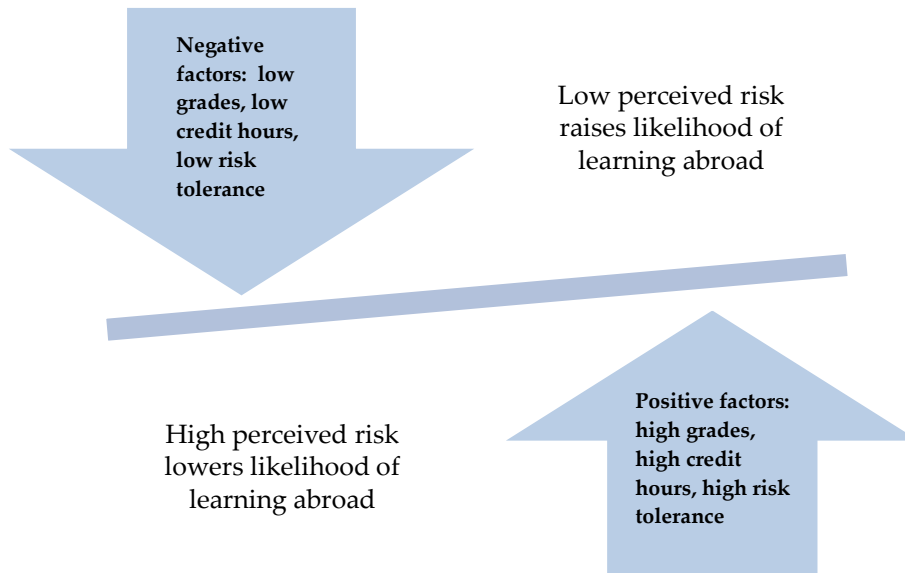


FIGURE 1: Risk perception balance of learning abroad.

The questions relating to how students perceived risk are therefore important and begin the next part of our discussion.

Perceived Risk of Learning Abroad

Students were asked a variety of open-ended questions, including "What level of risk does international co-op represent to you?"

Repeated themes of risk included cost, increased length of time for degree completion, fear for safety, loneliness, language barriers, separation from community. Respondents' open-ended answers align with specific types of perceived risks identified by students learning abroad by Lam et al. (2017) listed in the literature review section of this paper. For example, several students perceive international co-op as a "security risk." One described the world as a "dangerous place," adding that "tourists are usual targets". Another identified gender discrimination, saying, "I had some problems . . . working within the Indian culture . . . since I was a young female on my own."

Psychological risk and family or socio-cultural risk emerged as dominant themes. "Not being good at your job and having no one to share it with," and "being completely lost," show a general sense of unease and uncertainty when contemplating international co-op. "Uprooting yourself from the support structure and established norms at home" summed up one student's perceived 'family or sociocultural risk. Financial risk was a persistent and strongly articulated theme. Students cited high cost of housing and living expenses coupled with uncertain co-op salaries as major obstacles to students moving to countries where they have no family with whom to stay.

When asked why "only 4% of business students complete an international co-op?" students identified multiple categories of risk including family or socio-cultural and financial. "Wasting money, not maintaining relationships with those I love in my hometown, experiencing too many challenges in the workplace like language barriers" wrote one student about the insurmountable obstacles to overcome. Indeed, the language barrier emerged as a common theme among students contemplating learning abroad. The 'legal administrative risk was embedded in additional multiple layers of risks. One student wrote, "It's a big step. One has to be fluent in the target country's language to succeed at their job. Additionally, one has to have connections in the city of the international co-op or be prepared to spend large sums of money". Finally, there are other variables that can complicate the process. If the process was more straightforward and all risk was apparent maybe students would be more receptive towards international co-op. This shows a sense of overwhelm and impasse of perceived challenges. This student would not be a suitable candidate for international co-op, regardless of how well the perceived barriers were addressed by the co-op program.

'Family or socio-cultural risk' echoed repeatedly throughout students' expressions of doubt. One student wrote, "most students aren't willing to leave their support networks. Breaking routine by doing a co-op in Vancouver is difficult enough for students, few students that still live at home would be willing to go international." Another shared that, "going to a place where you don't know anyone - not having anyone to depend on - not being familiar with the language spoken," feels insurmountable.

'Administrative risk' was expressed through logistical and practical hurdles associated with relocation, in addition to "not aligning with business students' objectives." Also "many business students are already international students or have recently moved to Canada, so their 'international' experience is happening here." 'Psychological' and 'financial' risks appeared to coalesce in several respondents' perceptions. About international co-op, one student wrote, "too expensive, do not want to adapt to

hostile environment." Another shared that "most people are risk adverse and don't want to travel by themselves. Or, they are financially unable to complete it."

'Opportunity cost' was articulated by some students who feel that international co-op completion precludes domestic co-op completion. This is expressed by one student who wrote, "...it is more convenient to gain work experience domestically. You can also get a better sense of domestic organizational cultures doing co-op domestically." Fear that "experience might not transfer back to Canada" shows another student's perceived 'academic or course risk' to learning abroad.

After completing international co-op, respondents were asked "Was this sense of risk validated by your international co-op experience?" Overall, learning abroad completers acknowledged the presence of real risks to their learning abroad experiences, but countered negative impacts with their appreciation of an overall positive learning experience. For one student, "the risks were worth the learning involved. Increase level of tolerance and adaptation," were the benefits he derived from his risky adventure. Another wrote, "yes — through experience and exposure over time; but it was hard to go in with expectations," while another wrote, "monetary benefits were not consistent between work terms, therefore I experienced both good and poor paying jobs. Social development was greatly improved during both terms, and culture shock became interesting memories."

Learning abroad completers demonstrated resilience and appreciation for novelty, noting that "so far most companies are interested in my international coop experience," and "it was fun learning about new cultures and people from them." The language barrier was identified as a risk that was overcome by all students who completed an international co-op. Throwing inhibition aside and embracing the unknown, one student wrote, "I love to try new things and gain diverse experience from meeting new people. I'm open to challenges. I don't really care about the risk..."

Respondents acknowledged the very real presence of risks including cost, language barriers, and culture shock. However, their responses revealed these were manageable risks which offered a greater sense of reward over threat of failure, describing their experiences in terms such as "fun," "I like the country" and, "increased level of tolerance and adaptation". These testimonials align with Zuckerman's (1979a, 1979b) description of what motivates sensation seekers. Despite perceived risks associated with learning abroad, these students approached risk as opportunity rather than as threat in order to gain novel life experiences.

DISCUSSION

Perceived risk appeared to have a negative impact on students' completion of learning abroad at the Beedie School of Business as illustrated in Figure 1. Using regression analysis to investigate other student traits collected in the 2014 survey, Gemino found that higher grade point average, greater number of credit hours towards degree completion and higher self-reported tolerance for risk mitigated against the effect of high perceived risk. Risk tolerance was found to be directly correlated with a student's completion of a learning abroad experience. The higher a student's risk tolerance, the more likely they were to have completed learning abroad. Conversely, the more risk averse they were, the less likely they were to complete a learning abroad experience.

For this paper, the authors drew from approach/inhibition theory (Anderson & Galinsky, 2006), Atkinson's (1957) work on risk-taking behavior, and Zuckerman's concept of the sensation seeker (Zuckerman 1979a) as useful tools to understand the dynamic of perceived risk with respect to student completion of learning abroad. Brockhaus' (1980) definition of risk-taking propensity outlined earlier

in this paper provides a useful background for interpreting student responses in Table 5, where students reported that the rewards of learning abroad outweighed real risks that they encountered.

Anderson and Galinsky's (2006) approach/inhibition theory suggests that people with a sense of power are more likely to approach risk with a sense of optimism because they possess a less active inhibition system and tend to pay more attention to possible rewards rather than to the threat of failure. This ties in with Atkinson's (1957) seminal work on risk-taking behavior where people's motivations are grouped into two categories: 1) the achievement motive and 2) the motive to avoid failure. The achievement motive influences a person to approach success rather than to focus on avoiding failure. People driven by Atkinson's achievement motive are similar to the sensation seekers described in Stanford et al., (1996) and Zuckerman (1987, 1991) who crave novel, varied experiences. Atkinson's motive to avoid failure parallels with some students' risk avoidance, which may result in foregoing a learning abroad experience. A person's high capacity to feel shame or humiliation as a consequence of failure will avoid risk, even if there are potential rewards present. This inhibition was articulated by students with responses such as "Students don't like change and uncertainty", "Too expensive, do not want to adapt to hostile environment", and "too much work, too little time, too little guarantees of success", among other longer responses.

Students across the sample, including those who completed a learning abroad experience, acknowledged that the risks associated with going international are real. However, they offered insight into how rewards outweigh perceived risks and why these overpowered their inhibitions regarding perceived risk. Whether these students could all be described as sensation seekers is unclear, but it can be surmised that every student who completed a learning abroad experience gained novel varied sensations from their experience that they would not obtain at their home institution. Students who perceived low risk to learning abroad exhibit the achievement motive outlined by Atkinson (1957) and were more likely to complete a learning abroad experience as illustrated in Figure 1. The authors suggest that these were the "sensation seekers who learn abroad," the characters featuring in this paper's title.

As universities aim to increase student participation in learning abroad programs such as international co-op and exchange, they may need to target students for whom the achievement motive outweighs the motive to avoid failure. Those with the achievement motive tend to strive for intermediate risk and are more likely to try learning abroad. Coupled with this achievement motive is the sensation seeking trait needed to overcome inherent risks associated with learning abroad programs like international co-op and exchange. The authors of this paper propose that universities strive to reach students who naturally possess sensation seeking traits, who crave new experiences and sensations, and are risk tolerant. Those motivated to avoid failure want to avoid risks and hence will likely avoid a learning abroad experience. The challenge is to identify students with the achievement motive. High cumulative grade point average and credit hour completion towards degree attainment can provide hints at where our better student prospects lie, but the best prospects of all are those students who report a low perceived risk of learning abroad. Sensation seekers who are willing to take risks for novel, varied and complex experiences also provide excellent student candidates for learning abroad programs as they will more likely approach risk with an eye towards possible rewards than to potential failure. This ties directly back to approach/inhibition theory (Andersen & Galinsky, 2006).

IMPLICATIONS

Three chief challenges face universities in the quest to increase student engagement in learning abroad. The first is to confront perceived risks that may not be grounded in reality, such as extended degree completion time, financial cost, and unknowns like social isolation and language barriers. The second is to reframe risk-taking as a cognitive process undertaken by active agents, as proposed by Palich and Bagby (1995) and Masters and Meier (1988) rather than as an objective hazard to be avoided. To achieve this, the concepts of risk, perceived risk and risk tolerance need to be embedded in a thoughtful curriculum, starting at the undergraduate level. The third challenge is to tap into the sensation seeking trait characterizing the hardest, most resilient students at this university and to leverage that trait to actualize more student learning abroad.

Students comprise a relatively privileged segment of society, possessing extra resources to pay for education while meeting their basic necessities to live. Privilege is often equated with social power which has been tied to higher propensity for risk taking (Anderson & Galinsky 2006). This research suggests that across this sample, social privilege and power do not translate consistently to a higher propensity for risk. Drawing on Palich and Bagby's (1995) assertion that risk taking is a cognitive process rather than an innate personality trait, the authors propose that educators begin an intelligent open discussion around the concept of risk at all levels. If students can learn to frame learning abroad as potentially positive and rewarding, there may be a way to engage more students in learning abroad. This would enable educators to tip the risk perception balance between risk avoidance and risk tolerant behaviors illustrated in Figure 1.

Universities are inherently risk-averse institutions, making promotion of learning abroad programs, which students perceive as risky, difficult. A certificate in risk management is offered through the department of continuing studies at Simon Fraser University where this research was conducted. This certificate program offers an opportunity to "become a critical member of any management team with specialized knowledge in identifying, assessing, monitoring and limiting risks" (SFU Continuing Studies 2019). Language around risk talks of limiting, monitoring and containing risk. However, the authors warn that risk is not necessarily a domain that universities should impulsively strive to avoid, because many possible opportunities, in addition to potential for failure, are inherent to risk. These opportunities lie at all levels: at the institutional, faculty, program and students' levels. To automatically turn away from risk is to forego potential learning and other valuable possibilities.

The authors do not, however, propose to push, pressure or cajole risk-averse students into participating in risky experiences. Before anyone launches into a learning abroad experience, they need to feel that possible rewards may outweigh risks. Otherwise, the risk-averse student will leave Canada without the requisite resilience, sense of curiosity and excitement needed to launch a risky venture successfully. Forcing or cajoling risk-averse students to go abroad will likely backfire in failure, as they will be ill-equipped to deal with unexpected outcomes.

CONCLUSION

Understanding the importance of perceived risk could lead to more targeted outreach of learning abroad programs as illuminate whether perceived risks are grounded in reality. Some perceived barriers are real, and some are imagined and can be dispelled. Clarifying perceived risks may help to widen these learning abroad programs' appeal to undergraduate students. Students' likelihood of learning abroad changes over the course of their degrees, as shown through our regression analysis. As students move through their four year degree requirements, they appear to increase their likelihood

of participating in a learning abroad program. It is unclear from a liability point of view whether it is wise to encourage students with low risk tolerance to pursue learning abroad, as they view this as fraught with danger and likely to result in a loss rather than a gain. Risky learning abroad programs may be domains best left to the sensation seekers described by Zuckerman (1979a, 1979b), who crave novelty and have some familiarity with digging themselves out of unexpected challenges. The authors do not propose to increase students' risk tolerance, but rather to engage in actively reframing how learning abroad is perceived and talked about at a program level.

This research and paper have inherent limitations, starting with the nature of a case study. Findings from this single case study represent a single sample at a single Canadian university, and therefore cannot be extrapolated to a wider post-secondary environment in Canada or North America. However, themes that emerged here such as the importance of perceived risk and students' desire for novelty are echoed throughout literature spanning divergent fields. This lends some credulity to the idea that findings presented here may have relevance at other institutions. Further research into engaging students in learning abroad is needed, in addition to starting a conversation about risk as opportunity, not only as threat, at the university level. How can educators expect students to engage in risky learning abroad experiences if the message at the highest administrative level is that risk is to be suppressed and avoided in all situations? It behooves us as educators and as researchers to focus our attention on risk if we are to build up our curricular offerings abroad. This will have the benefit of growing student engagement in this area and will also contribute to graduating stronger, more resilient and adaptive students.

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