Students' Academic Self-efficacy in International Master's Degree Programs in Finnish Universities

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This study analyzes students' academic self-efficacy while studying in international master's degree programs in Finland. The primary aim is to determine if students' self-efficacy varies depending on their field of study and nationality. This study contributes to the research on students' self-efficacy in an international academic context with a special focus on social and course performance tasks. The results indicate some variations in students' self-efficacy, particularly in students from different fields of study. Recommendations for activities supporting students' self-efficacy are provided based on the results of the analysis. Implications for future research, as well as limitations of the study, are discussed.

This study aims to examine the self-efficacy of graduate students in international master's degree programs (IMDPs) in Finland, with a special focus on field of study and nationality. Although this study explicitly examines Finnish IMDPs it can be assumed that many of the observations made in this study could also apply to other non-English speaking European universities and IMDPs (cf. Urbanovic, Wilking, & Huisman, 2016). This study seeks to analyze students' self-efficacy in executing various academic tasks in order to gain a deeper understanding of students' views on their ability to perform during their studies. Moreover, providing information on students' self-efficacy will contribute to the development of the IMDPs' curricula and practices, and thereby support teachers' work and students' learning.

Self-efficacy refers to a person's belief that s/he is capable of successfully completing a task in a designed environment (Bandura, 1986; 1997). In this vein, academic self-efficacy is defined as a student's judgment in successfully executing academic tasks (Chemers, Hu, & Garcia, 2001). Academic self-efficacy covers the general studying experience in a higher education institution and includes both social and academic aspects, depending on the type of environment and interactions (Gore, 2006; Solberg, O'Brien, Villarreal, Kennel, & Davis's, 1993).

The theoretical framework for self-efficacy can be found in Bandura's (e.g. 1982a; 1986; 1997) Social Cognitive Theory (SCT). As described in the SCT (Bandura, 1982a), an individual's self-efficacy, goals, and outcome expectations determine his/her behavior. Bandura (1982b) noted that perceived self-efficacy asks individuals to judge whether or not they are capable of performing specific tasks rather than if they will actually perform the task. Thus, self-efficacy refers to capability judgments, not expected outcomes. Mastery experience, vicarious experience, social and communicative persuasion, and physiological arousal are sources of self-efficacy (Bandura 1977; 1986; 1997). DeWitz, Woolsey, and Walsh (2009) further

explained these four sources of self-efficacy as past performance in a task, learning from others through observation, emotional states, and social support. There is an interrelation, as previous studies have suggested (e.g. Bong, 2001; Chemers et al., 2001), between students' self-efficacy and their academic performance. Therefore, delving into the factors which contribute to students' academic success, including students' self-efficacy, is deemed important.

International Students in Finnish Higher Education

European trends and the globalization of the economy have strongly influenced higher education reforms in Finland (Weimer, 2013). Concomitantly, over the past few decades, Finnish higher education has turned towards internationalization (Dervin & Tournebise, 2013) and transitioned away from a Nordic state-centered welfare model in favor of European market-driven policies (Rinne, 2000). As a result of active internationalization measures, Finnish universities and universities of applied sciences have established a number of IMDPs; currently there are more than 200 IMDPs (Finnish National Agency for Education, 2017a). The proportion of universities offering English-taught programs ranks Finland as the leading provider in the Nordic region (Wächter & Maiworm, 2014).

Considering the OECD indicators (2018), 12% of all master's degree students in Finnish higher education are international. Here, the term "international student" refers to an individual enrolled in a Finnish higher educational institution who left their country of origin and moved to another country for the purpose of study (OECD, 2018, p. 201). The number of international students attending Finnish universities has doubled over the past decade (Official Statistics of Finland, 2016), from 2.7% of the total student population in 2004 to 6.5% in 2016. In 2016, a little more than 21,000 international degree students were studying in Finnish universities and universities of applied sciences

(Finnish National Agency for Education, 2017b). The most common nationalities of international degree students are Russian, followed by Vietnamese, Chinese, Nepalese, Indian, and Pakistani (Finnish National Agency for Education, 2016).

Current practices which are established to support students in IMDPs, especially at the beginning of their studies, are orientation days which introduce students to the structure of their program and university services, such as the library facilities or the IT services. Moreover, survival guides are distributed with daily life information and facts about the country, city, and university. Some universities have also established a tutor system in which an experienced student assists the new student with practical matters, such as getting a bus card and becoming familiar with the university campus. Moreover, English language support during the thesis process and academic writing courses are usually offered in IMDPs.

Master's degree students are expected to become self-directed learners and to develop their critical thinking, problem solving, and research skills (Drennan & Clarke, 2009). This is also expected in the context of Finnish universities, where students are required to work independently throughout their studies. However, a recent study revealed that IMDPs' students have varying expectations of the supervisor's responsibilities according to their nationality (Filippou, Kallo & Mikkilä-Erdmann, 2017). The diverse population of the IMDPs requires teachers' cultural awareness. Thus, research on IMDPs, students' learning and self-efficacy, which helps in understanding students' perceptions of their own abilities in a new cultural environment, is deemed necessary both for the students and their teachers.

International Students' Challenges

International higher education students' acculturative stress, challenges, well-being and academic adjustment have been widely investigated (e.g. Smith & Khawaja, 2011; Telbis, Helgeson & Kingsbury, 2014; Zhang & Goodson, 2011). Telbis and colleagues (2014) specified four problems that can obstruct international students' success in their studies: social adaptability, academic competence, language challenges, and financial difficulties. Moreover, Wong (2004) and Smith and Khawaja (2011) noted that though all university students experience academic stress, international students must also deal with language anxiety and adapt to the new educational environment and new learning styles, which can further increase their academic stress.

Additional challenges international students often face include depression, loneliness, and acculturative stress, all of which are consequences of living in a host country with different social interaction styles (Arthur, 2003; Smith & Khawaja, 2011). Furthermore, international students face the obstacles of adjusting to a different climate, as well as life without a responsive network of friends and family (Leder & Forgasz, 2004; O'Reilly, Ryan & Hickey, 2010). On the other hand, the participants in Leder and Forgasz's study (2004) mentioned that learning in an environment which differs from that of their home countries can also denote a positive change. The challenges described in this section have inspired a number of studies examining international students' self-efficacy (e.g., Telbis et al., 2014; Zajacova, Lynch & Espenshade, 2005).

Self-efficacy in Higher Education

Meta-analyses suggest that academic self-efficacy is a strong predictor of grades (Richardson, Abraham, & Bond, 2012; Robbins, Lauver, Le, Davis, Langley, & Carlstrom, 2004), motivation, and achievement (Multon, Brown & Lent, 1991). Gore, Leuwerke and Turley (2005) highlighted the importance of college self-efficacy in developing students' academic engagement, interactions, and goals, as well as influencing their enrollment decisions. A recent review (Bartimote-Aufflick, Bridgeman, Walker, Sharma, & Smith, 2016) similarly indicated that students' learning outcomes, learning strategies, self-regulation, and metacognition highly correlate with self-efficacy.

Previous research has pointed out that students with high self-efficacy work harder, pursue more challenging goals, and are more persistent when they encounter difficulties (Bandura, 1997; Pajares, 2003). Students with high self-efficacy can better monitor and self-regulate their efforts and more effectively use their cognitive strategies for time management and learning as compared to students with lower self-efficacy, and this leads to higher academic performance (Chemers et al., 2001; Komarraju & Nadler, 2013).

Self-efficacy has also been linked to emotional constructs such as mental and physical well-being, and stress (e.g., Finney & Schraw, 2003; Gore, 2006; Solberg & Villareal, 1997). Barry and Finney (2009) asserted that individuals with lower levels of self-efficacy experience more stress and anxiety, and lower motivation compared to individuals with higher self-efficacy. Similarly, having conducted a longitudinal study, Wei, Russell and Zakalik (2005) found that the social self-efficacy of university students is a mediator between feelings of loneliness and subsequent depression. Overall, the multiple studies, their various designs and their significant results as related to self-efficacy and the aforementioned constructs, explain why self-efficacy is considered as a strong behavior and performance predictor.

Comparing students' self-efficacy according to their field of study. Previous studies have examined students' academic self-efficacy based on their field of study, such as engineering (Marra & Bogue, 2006) and educational psychology (Finney & Schraw, 2003). However, researchers have investigated students' self-efficacy without examining the field of study as a comparable variable (e.g., Komarraju & Nadler, 2013). Abd-Elmotaleb and Saha (2013) categorized the participants' fields of study as practical or theoretical, and they concluded that the academic achievements of students from theoretical faculties are more influenced by their self-efficacy than the students from practical faculties. Furthermore, their study indicated that there were no statistically significant differences on students' self-efficacy according to their field of study. A lack of references in previous studies which investigated the impact of self-efficacy on students' academic performance according to their field of study has also been noted (in Abd-Elmotaleb & Saha, 2013). In an attempt to bridge this gap, this study uses the field of study as a variable of comparing students' self-efficacy.

Comparing students' self-efficacy according to their nationality. Since self-efficacy has been found to be a strong and positive academic and psychological predictor, it can be assumed that international students who have high self-efficacy face fewer emotional and academic challenges. Constantine, Okazaki, and Utsey (2004) underline that social self-efficacy is linked with international students' adaptation. They also found that university students from Latin America were more socially self-efficacious than those from Africa and Asia. Zhang and Goodson's (2011) review investigated predictors of international students' psychosocial adjustment in the United States. Among many variables, like country of origin and personality, they found that self-efficacy was positively related with sociocultural adjustment.

Methodology

Research Questions

The purpose of this study is to examine and discuss the self-efficacy of students in Finnish IMDPs by seeking answers to the following research questions:

1. What are the differences between students' academic self-efficacy according to their field of study?
2. What are the differences between students' academic self-efficacy according to their nationality?

Procedure

Five Finnish universities that organize IMDPs participated in this research. The international officers and coordinators of the IMDPs mediated as the students received an email with information and a link to the online questionnaire. Participation was anonymous and voluntary. At the time of this study, the participants were registered as active students who had started their studies in IMDPs between 2011 and 2013 inclusively. The data collection was held in two phases: the first round took place during the Spring 2013 semester, and the second round took place during the Fall 2013 semester. The latter round was used as a reminder to answer the survey.

Participants

The research population comprised 2915 participants. There were 493 respondents (response rate 17%), 248 female respondents and 245 male respondents. The students were between 21 and 56 years of age (M = 27.29; SD = 4.457). Most respondents were technical sciences students (38%), followed by IT students (17.7%), natural sciences students (12.2%), humanities students (11.7%), business students (11.3%), and social sciences students (9.2%).

The students represented sixty-seven nationalities, and the largest groups of respondents were as follows: Finnish (18.1%), Chinese (9.3%), Indian (6.5%), Russian (6.5%), and Pakistani (6.3%). The aforementioned cultural groups of students are analyzed in this study. The students are referred to by their nationality, even though the author acknowledges the significant differences within cultural groups and between individuals. The variable of nationality was chosen in order to group students who have experienced similar educational environments and cultural practices prior to their arrival in Finland. A relationship between students' cultural background and their learning styles and patterns have been reported by previous studies (e.g., Charlesworth, 2008; Marambe, Vermunt, & Boshuizen, 2012) and with this publication there is no intention in forming stereotypes against these groups.

Table 1 reflects the percentages of international students registered in all Finnish universities in 2016 by the Finnish National Agency for Education (2017b) and the participants of this study by continent. Table 1 indicates that the collected data is representative in terms of the students' demographics despite the low response rate.

College Self-Efficacy Inventory

This study used Solberg et al.'s (1993) College Self-Efficacy Inventory (CSEI) as the instrument to measure

Table 1
IMDPs Students and Their Continent of Origin.

Continent	Finnish National Agency for Education %	Respondents %
Africa	8.7	7.3
Asia	46.9	45.1
Australia and Oceania	0.5	0.4
Europe	36.3	38.4
North America	3.7	3.8
Latin America and the Caribbean	3.6	4.8

students' self-efficacy. The CSEI measures students' degree of self-efficacy in multiple university-related tasks and consists of three subscales including roommate self-efficacy, course self-efficacy, and social self-efficacy.

Studies by Barry and Finney (2009) and Vuong, Brown-Welty and Tracz (2010) solely used the CSEI. Barry and Finney (2009) examined the CSEI's evidence validity, discussed its weaknesses, and concluded with a three-factor model containing 15 items. Part of their criticism focused on the instrument's lack of social peer efficacy measurements and the reliability measurement of the total scale score. Vuong and colleagues (2010) studied all three CSEI subscales and found that academic performance and persistence are positively related with self-efficacy. Significant differences were found between student groups of different ethnicities and the three subscales of self-efficacy, leading the researchers to the recommendation for further research on this phenomenon. Gore et al.'s psychometric study (2005) found the CSEI to have high internal consistency reliability and thereby assisted in establishing the construct validity of CSEI scores, preliminary supported *"the viability of a three-factor correlated solution for scores on the CSEI"* (p.238), and underlined that CSEI can be used in any academic domain.

This study used the CSEI's course and social self-efficacy subscales to measure students' self-efficacy. The course self-efficacy subscale (seven items) assesses students' course performance, such as understanding the course literature and writing essay papers. The social self-efficacy subscale (six items) measures students' efficacy on interpersonal tasks such as talking to professors and participating in class discussions. The course and social self-efficacy subscales were included in the questionnaire because they address academic issues inside the university environment. Therefore, the roommate subscale that examines interpersonal aspects in shared housing areas was deemed irrelevant and was excluded.

The scale's instructions stated, "Please read each of the following 13 statements and choose the number that represents how confident you are about successfully completing the following tasks, for example, 'using different research methods'." The items were rated on a seven-point Likert-type scale that described the strength of self-efficacy from weakest to strongest, ranging from 1 = "not at all confident" to 7 = "extremely confident." Higher scores indicated greater self-efficacy. The seven-point Likert-type scale differed from the original (10-point Likert-type scale), and four statements were paraphrased to fit the university's environment, for example, the Item 5 of the CSEI, "Keep up to date with your school work," was changed to, "Keeping up with academic work."

Analysis and Instrument Reliability

To analyze the data, statistical tests such as the one-way ANOVA were run using SPSS Statistics 20, a software package for statistical analysis. The first research question was tested using a one-way ANOVA to compare the self-efficacy items, the overall course, and social self-efficacy scales of the six largest groups by field of study. The second research question was tested using a one-way ANOVA to compare the self-efficacy items, the overall course, and social self-efficacy scales of the five largest groups by nationality. Post-hoc tests such as Duncan's and Tukey's tests were conducted to confirm where the differences between groups occurred. When the data met the assumption of homogeneity of variances, Tukey's test was conducted, and when the data did not meet the assumption of homogeneity of variances, Duncan's test was conducted. Eta square was also calculated to indicate the variable's effect.

An examination of the Kaiser-Meyer-Olkin measure of sampling adequacy suggested that the sample was factorable (KMO = 0.85). Principal component analysis was conducted as well, and the two components together explained 38.74% of the variance, proving that the division between social and course self-efficacy items is statistically justified. The internal consistency for the CSEI instrument resulted in a Cronbach's alpha of 0.86. Two other reliability tests were carried out to confirm the internal consistency of the course and social self-efficacy subscales. The Cronbach's alpha was 0.79 for the course self-efficacy and 0.82 on the social self-efficacy

Table 2
Academic Tasks and Descriptive Statistics.

Subscale	No.	Academic Task	M	SD
Course Self-efficacy	1	Using different research methods	5.05	1.30
	2	Writing essay papers and assignments	5.40	1.31
	3	Doing well on exams	5.29	1.26
	4	Taking good notes during the lectures	5.13	1.38
	5	Keeping up with academic work	5.41	1.17
	6	Managing time effectively	4.86	1.43
	7	Understanding course literature	5.58	1.15
Social Self-efficacy	8	Participating in class discussions	5.31	1.51
	9	Asking a question in class	5.20	1.61
	10	Talking to professors	5.60	1.37
	11	Talking to university staff	5.50	1.45
	12	Making new friends at the university	5.32	1.53
	13	Joining a student organization	4.35	1.77

subscale. For the comparison of the five largest cultural groups, the other cultural groups were excluded, and additionally reliability tests were carried out, which resulted in a high internal consistency for all 13 items (α = 0.89) and strong internal consistency levels for the subscales of course self-efficacy (α = 0.82) and social self-efficacy (α = 0.85).

Results

Descriptive Statistics of Academic Self-efficacy and IMDPs Students

The means and standard deviations of the statements regarding students' course and social self-efficacy (Table 2) indicate that they are highly self-efficacious when it comes to talking to professors and understanding course literature. However, the students felt less capable of using different research methods, managing time effectively and joining a student organization. Overall, the IMDP students have high levels of course (M = 5.25; SD = 0.87) and social self-efficacy (M = 5.21; SD = 1.12). A moderate correlation between the subscales of social self-efficacy and course self-efficacy was recorded (r = 0.543, n = 466, p = 0.000).

Academic Self-efficacy and Students' Field of Study

The overall social self-efficacy of humanities students (M = 5.60; SD = 0.98) was statistically significant and higher [F (5,459) = 3.728, p = 0.003] than that of the business students (M = 4.92; SD = 1.23) and IT students (M = 4.88; SD = 1.36). The students' field of study seems to have a medium influence on their self-efficacy linked with professors and staff discussions. As shown in the results of the one-way

ANOVA tests (Table 3), the students from the social sciences felt less capable in using different research methods in their studies compared to students in other fields, especially IT students.

Academic Self-efficacy and Students' Nationality

Students coming from Finland, Russia, India, Pakistan, and China did not differ regarding their overall course and social self-efficacy. However, a few differences were noticed when one-way ANOVA tests compared the responses (Table 4). The interaction between students' nationality and their self-efficacy in writing essay papers and assignments accounted for 10% of the total score. Similarly, the results show that the self-efficacy was influenced by students' background at a medium effect size.

Discussion

The purpose of this study was to provide a more comprehensive view on the academic self-efficacy of IMDP students while analyzing their field of study and nationality. The results clearly show that IMDP students have high self-efficacy in most of the academic tasks, which indicates a high level of motivation and skill, as well as appropriate materials and assignments in IMDPs.

The findings suggest that students' self-efficacy on academic tasks within the IMDPs environment varies according to their field of education. These results are inconsistent with the results of Abd-Elmotaleb and Saha (2013). This variation might, however, have resulted from the different categorization of programs and field of study. In the research of Abd-Elmotaleb and Saha (2013), the authors divided the programs into two categories: theoretical and practical field of studies.

Table 3
One-way ANOVA Results on Academic Tasks and Students' Field of Study.

Academic Task	Groups	M (SD)	ANOVA	p	η^2
1. Using different research methods	IT	5.24 (1.31)	F (5, 459) = 2.329	.042	0.025
	Social Sciences	4.52 (1.33)			
4. Taking good notes during the lectures	Humanities	5.58 (1.16)	F (5, 461) = 3.719	.003	0.036
	Social Sciences	5.50 (1.23)			
	IT	4.68 (1.48)			
6. Managing time effectively	Natural sciences	5.35 (1.28)	F (5, 460) = 3.605	.003	0.038
	Technical Sciences	4.97 (1.30)			
	IT	4.43 (1.58)			
8. Participating in class discussions	Technical Sciences	5.49 (1.36)	F (5, 460) = 2.420	.035	0.026
	IT	4.90 (1.64)			
10. Talking to professors	Humanities	6.07 (1.06)	F (5, 461) = 4.444	.001	0.046
	Social Sciences	5.79 (1.37)			
	Natural Sciences	5.77 (1.19)			
	Business	5.08 (1.54)			
11. Talking to university staff	Humanities	6.15 (1.07)	F (5, 461) = 4.370	.001	0.045
	IT	5.18 (1.64)			
	Business	5.06 (1.58)			
Overall social self-efficacy	Humanities	5.60 (0.98)	F (5, 459) = 3.728	.003	0.039
	Business	4.92 (1.23)			
	IT	4.88 (1.36)			

Results for the groups showing $p>0.05$ are not reported.
The groups were selected based on the pair comparisons (post-hoc tests).

For their statistical analysis they used t-test in order to compare the theoretical and practical fields of studies. In this study, on the other hand, the programs were categorized into six groups: technical sciences, IT, natural sciences, social sciences, humanities, and business, and thus a one-way ANOVA was conducted for the statistical analysis. The division of programs into more discrete categories might have revealed these differences and characteristics between the students.

Most of the statistical differences were observed between IT and humanities students. The IT students seem to have less self-efficacy in non-practical and communicative tasks, while they feel more capable of using various research methods. Studies in IT tend to include less class discussion and note-taking lectures but more team-work activities, analytical skills, and practical techniques such as engineering. The nature of note-taking in IT is also very different from that of the

humanities or social sciences, due to the lack of narratives and different types of assessment. The IT students' low self-efficacy on time management highlights the need for more guidance and workshops on effective time management.

The results suggest that the business and IT students feel less capable in having discussions with their professors and staff members. Academic staffs in disciplines like IT and technical sciences aim to prepare students' for their future working career. This comes into contrast with disciplines like the humanities and social sciences where class discussions are aligned with developing critical thinking since the goal is to develop students' character and general education (Braxton, 1995, as cited in Sawir, 2011). Given the finding that social support is one of the main sources of self-efficacy (Bandura, 1997), more organized social activities and events that promote academic interaction between the students and teaching staff in the IMDPs, as well as between international and local students, could foster friendships and provide social support (Telbis et al., 2014). Knowing students' profiles and their beliefs regarding academic tasks and providing them with positive feedback and encouragement could enhance self-efficacy by increasing their motivation. As Dewitz and colleagues (2009) claimed, by supporting and motivating international students, the teachers can directly and positively influence students' self-efficacy.

Using research methods is a necessary skill for completing a master's thesis and degree studies (Filippou, Kallo & Mikkilä-Erdmann, 2017). This study showed that the students from the social sciences feel less capable of using different research methods, which should alert the university teaching staff. As Murtonen's study (2015) reports, some education students may still have confused conceptions about empirical, theoretical, qualitative, and quantitative research even after the completion of a research methodology course. Another reason that could influence students' beliefs towards the use of research methods is the uncertainty regarding the use of these skills in their future (Murtonen, Olkinuora, Tynjälä, & Lehtinen, 2008).

Students' nationality was found to be a moderate indicator of students' self-efficacy. Finnish students had higher self-efficacy in talking to university staff, writing essay papers, and completing assignments. The Finnish students may feel more comfortable since they study in a familiar social-academic environment (Wright & Lander, 2003), even though in this study the language of instruction is not the local language. Furthermore, students coming from China had lower self-efficacy compared to the other groups in writing papers, succeeding in exams, and understanding course literature. This might be a result of both language anxiety in academic writing tasks and in using English. In previous studies, students with a Chinese background studying abroad noted the aforementioned tasks as challenges (Brunton & Jeffrey, 2014; Vinther & Slethaug, 2015). Thus, courses on academic writing and speaking skills based on students' needs could be provided or enhanced. Furthermore, the exams might also be perceived and expected differently since students' previous experiences influence how they prepare and write an exam (Pilcher, Smith, & Riley, 2013). Hence, discussions on students' prior knowledge, experiences and academic traditions could be considered and initiated by the teachers and thesis supervisors.

Table 4
One-way ANOVA Results on Academic Tasks and Students' Nationality.

Academic Task	Groups	M (SD)	ANOVA	p	η^2
2. Writing essay papers and assignments	Finnish	5.90 (0.96)	$F(4, 215) = 5.980$	<.001	0.100
	Chinese	4.85 (1.42)			
3. Doing well in exams	Indian	5.81 (0.89)	$F(4, 215) = 3.339$	.011	0.058
	Chinese	5.04 (1.22)			
7. Understanding course literature	Russian	5.81 (1.09)	$F(4, 216) = 3.335$	.011	0.058
	Chinese	5.04 (1.29)			
11. Talking to university staff	Finnish	5.71 (1.41)	$F(4, 216) = 2.796$	.027	0.049
	Pakistani	4.80 (1.76)			

Results for the groups showing *p*>0.05 are not reported.
The groups were selected based on the pairwise comparisons (post-hoc tests).

Conclusion

The findings of this study are vital for IMDPs' coordinators, thesis supervisors who could reconsider their current practices in relation to students' academic self-efficacy where necessary. The few items with low academic self-efficacy can be perceived as indicators of students' challenges, and the programs could therefore build on these needs and provide differentiated courses in research methodologies or supplementary courses in English academic writing, speaking, and presentation skills. Moreover, thesis supervisors could initiate conversations on students' self-beliefs and teachers could consider including interactive and innovative teaching approaches (Sawir, 2011). More time management workshops and social activities involving students and staff members, regardless the field of study, are needed. The universities could develop activities to enhance cultural awareness and intercultural competencies among teaching staff.

Limitations

Despite the fact that this study was carefully prepared and carried out, there were some unavoidable limitations. Firstly, the low response rate might have occurred as a result of both the time needed to complete the questionnaire and the students' busy schedules. Furthermore, it is impossible to know exactly how many emails were sent, received, opened, or perceived as spam email or how many addresses were valid. Therefore, the population and response rate should be considered estimates. As Nulty (2008) noted, the low response rate is more common in online surveys than paper surveys. However, paper surveys were not chosen for this study due to the length of the questionnaire and costs. Secondly, only one instrument was used for this study, and it failed to measure a number of academic tasks, such as interacting with classmates. Students' responses were mere statements, which means that in practice they might act differently. Finally, it is difficult to know how well each statement represents each field of study, such as doing well in exams since it is possible that some IMDPs have more exams than others.

Directions for Future Research

Future research could focus on examining emotional constructs and students' adaptation to Finnish higher education, or how self-efficacy is related to students' sociocultural adjustment. Replication of this study with a wider sample of Nordic universities could establish the validity of the findings and justify the use of field of study and nationality as variables. More studies on students' experiences and expectations of the academic tasks could

provide a clearer view of their beliefs in the IMDPs. Additional questions that could be further investigated include, "Were you expected to participate in class discussions at your former university?," or, "Are you expected to participate in class discussions at your current university?" The similar or different practices between the former and current university could be linked with their self-efficacy beliefs.

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