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Masters Students' Perceptions of Distance and Transport Options

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Abstract

This article is situated within the Arctic Regions North Norway and North/East Iceland. It presents a study on what motivates adults in Arctic regions to apply for and complete a Master's degree in Education. Motivation is examined in relation to distance, transport options and degree completion times, focusing on whether distance and transport options were significant motivation factors for students in the Arctic regions. Data is based around two Master's degree programmes, one at the University of Akureyri in Iceland and the other in Alta, at the Arctic University of Norway. All students who had completed the Master's degree programme in Akureyri and Alta respectively were invited to take part in a questionnaire distributed to students' email addresses. The results are introduced in terms of distance and travel time and the reason for choice of university.

The findings indicate that difficult weather conditions do not negatively affect students' learning processes as the students seem rather to take these conditions and circumstances for granted. The students are driven by intrinsic motivation such as determination, relatedness and coping and their motivation is thus directed by ownership of the decision; a significant decision that also affects their partner and their children.

Key Words: Arctic Regions, Adult Students, Master's in Education, Motivation, Geography.

Introduction

In the last 100 years, the proportion of adult students has grown considerably (Roos and Grepperud, 2007). An increasing number of adults are going back to school to do a Master's degree after spending a number of years in working life. Learning is no longer confined to a specific age group; learning is lifelong (de Oliveira Piers, 2009; Jarvis, 2004; UNESCO, 2002; 2015). Scholars within this research field (Rubenson, Desjardins and Yoon, 2007), OECD documents (2005; 2016) and UNESCO (2002; 2015) have emphasized that lifelong learning is important to citizens in order to acquire adequate skills and to prevent low-paid jobs from becoming life cycle traps.

According to OECD data (OECD, 2016), most people with a university degree live in the biggest cities but smaller percentages in rural areas and therefore at greater distances from university institutions. Bjarnason, Eðvarðsson, Arnarson, Skúlason and Baldursdóttir (2016) reiterate that the impact of distance on a university is related to various factors, such as the structure of the education programme, quality of infrastructure and communications in the country concerned and students' access to a vehicle or public transport.

The focus of this paper relates to the arctic regions of North Norway and North/East Iceland, both of which are rural and remote areas. We are interested in exploring and learning how adult students in universities in these arctic regions deal with distances and transport as part of their education and whether the universities need to consider these factors when developing courses and their structures. Due to geographical position and sparse population, the communities in question are vulnerable in terms of job availability and opportunities and therefore it is of crucial importance that students should consider it valuable to both study and work in these regions. In both areas, there are universities (the University of Akureyri, Iceland, and the Arctic University of Norway, Alta) that offer a good range of study opportunities, including educational studies. Alta and Akureyri are similar population nuclei; on the 1st of January 2017 the population of Akureyri was 18,488 (Statistics Iceland, 2017) and for Alta the numbers are 20,446 (SSB, 2017). Each town is the main service sector for its region. A prerequisite for a sustainable community is that the area's resources and infrastructure enable people and institutions to thrive (Arbo and Eskelinen, 2003). It is crucial that educational opportunities enhance human capacity in the northern regions (Bjarnason *et al.*, 2016), promoting viable communities and sustainable economies.

The article is based on a study of what motivates adults in arctic regions to apply for and complete a master's degree in education. By adult students, we mean individuals who have completed a bachelor's degree. A number of scholars have examined motivating factors, for example Roos and Grepperud (2007) and Jarvis (2004). Interest and motivation are seen to be the driving force that will encourage learners to continue learning throughout their lives (UNESCO, 2002). However, it is evident that the population catchment area and the distance

to university can affect people's opportunities and decisions regarding further education (OECD, 2016). Meanwhile, Ahl (2006) writes that it is difficult to discuss motivation as an entity. She argues that motivation is a relational concept that must be coupled with other dimensions. It is important, nevertheless, to recognize that the learning experience must inspire adult learners to see value in whatever they learn, just as other students. Thus, their learning must be relevant and applicable to their lives (UNESCO, 2002; 2015).

Inspired by Ahl (2006), we examine motivation in relation to distance, transport options and degree completion times. In this article, our point of departure is the question whether distance and transport options were significant motivation factors for students in the arctic regions. The research question on which the article focuses is, therefore: *How do distance and transport options affect adult students' motivation to complete a master's degree programme?* Adult students are understood as students outside life's preliminary phase of education (Arbo, 2013).

The article will examine theoretical perspectives on adult students' motivation, autonomy and barriers and obstacles to learning followed by a section on methods. The results will subsequently be introduced by two themes: 1) distance and travel time and 2) choice of university, discussed in the final section based on the thematic approach.

Flexibility and costs

The growing number of adult students may be ascribed to various factors. Rønning (2007) is of the opinion that new basic skills requirements and the desire to enhance one's formal competence or position in working life may partly explain the increased number of adult students. Another probable reason is the increased flexibility that students are now offered (Roos and Grepperud, 2007).

Flexible programmes of study are understood here as studies provided in forms that differ from ordinary full-time courses. For example, they may be part-time, session-based or online courses (Rønning, 2007). Flexible programmes give students the opportunity to combine their studies with work and family.

Patterson (2018) has studied those who did not participate in formal or non-formal education. She found that, among other things, insufficient institutional flexibility can explain why adults do not choose further education. Costs also affect students' personal flexibility. Patterson (2018), for example, found that low income and study costs affected whether adults studied after initial education. In both Iceland and Norway, adult students pay a registration fee each year (Iceland: 75,000 ISK (610 €), Norway 1,020 NKR (105 €) for their education and for that reason visibility of rewards is of importance and the acquired skills must be transparent. For this group of students, it is essential to ensure that certification systems are credible and

transparent to employers, otherwise certified skills might be devalued in the labour market (OECD, 2005).

Motivation

Adult students' motivation to participate in continuing or further education depends on the individual. The central assumption of theories of andragogy is that learning in adulthood means growth in self-direction and autonomy (Abdullah, Parasuraman, Muniapan, Koren and Jones, 2008) and that adults generally have a deep psychological need to be self-directed. Many critical factors also affect students' success in higher education. Motivation is one of the key factors and plays the main role when it comes to sustaining effective learning (Sogunro, 2014). This is, however, a complex term related to human behaviour and personality.

Motivation researchers such as Deci and Ryan (2000) distinguish between intrinsic and extrinsic motivation. The group of students who regard their studies as integrated in their professional role have perhaps extrinsic motivation to study (Støkken, Lorentzen and Niemann, 2007), such as pressure from an employer, the threat of unemployment or other external factors. Different forms of support from the employer may also constitute extrinsic motivation. Deci and Ryan (2000) describe three basic psychological needs that give the individual intrinsic motivation; these are autonomy, relatedness and competence. In this particular study, the main focus will be on the autonomy of these three. This is based on Deci and Ryan (2000) who claim that autonomy is the factor that matters most when it comes to intrinsic motivation. Relatedness and competence are elements that reinforce intrinsic motivation. This interpretation suggests that intrinsic motivation is a driving force whereby motivation is directed by ownership of the decision. Behaviour is not dependent on external reward but instead based on interest and desire.

Autonomy

Roths, Lemos and Gonçalves (2017) claim that high autonomous motivation gives students greater involvement and ability to master the study. Autonomy can be understood as self-determination in that actors can make independent decisions on their own actions, free from outside influence (Ballou, 1998, p.105). An autonomous action is thus based on the wishes, values and intrinsic motivation of the autonomous actor. Wermke and Forsberg (2017), who are engaged in examining the autonomy of Swedish teachers, maintain that it may be relevant to speak of different qualities of autonomy, and that the teaching profession can be described as either extended or restricted, with cultural codes playing a role. Lynch, Vansteenkiste, Deci and Ryan (2011) maintain that an action is no less autonomous even though actors comply with laws and regulations, as long as they perceive these as expedient. This may suggest, therefore, that an autonomous choice may also be the result of external conditions and cultural codes, provided that actors perceive the decision as their own or that they have freely consented to the action.

Bjarnason *et al.* (2016) argue that the location of a university can affect the educational level of the region since universities create multiple economic impacts by creating new jobs and growth in various trades and services. Later it will be discussed how these and similar factors affect adult students' ability to make autonomous choices.

Barriers and obstacles

Barriers and obstacles to learning for this group of students have proven to be *time* – or more specifically *lack of time*, followed by financial constraints, and family responsibilities. These were the findings of an extensive EU study carried out by the OECD (Chisholm, Larson and Mossoux, 2004). Respondents mentioned that family commitments, work or leisure demand too much of their energy, leaving no time available for learning. Other types of barriers or obstacles have been identified as institutional barriers (de Oliveira Pires, 2009), such as shortage of courses related to student needs, whether courses were available in the local area, and insufficient harmonization and reciprocity across systems offering related programmes (Gouvernement du Québec, 2002).

These theoretical perspectives show that, for adult students, many factors must be in place to trigger their motivation to complete a master's degree programme. Earlier studies have examined the various factors in different ways. A few of these studies have specifically examined the importance students ascribe to distance and transport.

Method

This is a descriptive study, where the authors 'seek to describe the aspect of social reality under investigation' (Hesse-Biber, 2017, p. 13). The study investigates how students who have completed a master's program describe their reality in terms of distance and transport options and it is examined how those aspects may have influenced their motivation to complete the study. The project is based around two master's degree programmes, one in North/East Iceland, and another in North Norway. The purpose of the study is not to compare Iceland and Norway, but to use two similar arctic areas to find patterns that can be valuable for developing educational offers in the Arctic.

Location and geography

The University of Akureyri is situated in north-eastern Iceland. The drive from Reykjavik, the capital in the south, to Akureyri takes approximately five hours. The flight between Reykjavik and Akureyri takes about 30 minutes. Flight connections between north and south are good, but unreliable in the winter months due to weather conditions. The map below (figure 1) displays this area.

The Arctic University of Norway, Alta, is situated in Finnmark, Norway's northernmost county. It takes 24 hours to drive to Oslo, the capital, and a direct flight takes two hours. Students apply from the entire country, including Svalbard, but most students come from Finnmark and the northern parts of Troms County. The map below (figure 2) displays this area.

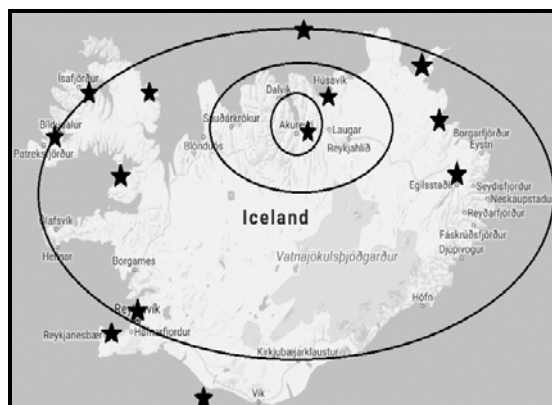


Figure 1: Iceland

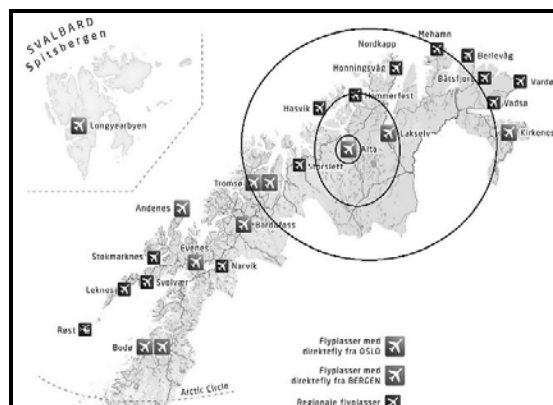


Figure 2: The North of Norway. Kilde: NordNorsk Reiseliv/www.nordnorge.com

The inner circle in both figures 1 and 2 shows the area immediately surrounding the campus in Akureyri/Alta. The next circle displays a two-hour drive from campus. The outer circle displays a maximum drive of up to six hours. The stars and planes represent airports in the area.

Both Akureyri and Alta are large towns of approximately 20,000 inhabitants. They both have an airport and Alta has an express boat harbour. It is expensive to fly in both Iceland and Norway, so most students choose to travel by bus or car, which increases the travel time. All roads from both towns cross mountain passes that may be closed due to rough weather in winter. Snow and difficult weather conditions may also result in cancelled flights. Winter lasts from October until about the beginning of May. Buses and planes provide the only feasible means of public transport for reaching Akureyri and Alta.

The University of Akureyri in Iceland offers an inter-disciplinary master's degree programme (120 ECTS credits) in educational sciences. The Arctic University of Norway, Alta, offers an experience-based master's degree programme (90 ECTS credits) in special needs education. All students who had completed the master's degree programme in Akureyri and Alta respectively were invited to take part in a survey. A questionnaire was compiled and distributed via Survey Monkey to students' email addresses.

The Centres for Research Data in both Norway and Iceland were notified of the study, and all the students involved have given their informed consent, with an opportunity to withdraw. The Icelandic sample consisted of 143 students, of whom 118 responded, giving an 82% response rate. 14.8 % (n=17) were men. The Norwegian sample consisted of 84 students, of

whom 69 responded, giving a response rate of 82%. 18.5 % (n=12) were men. The response rate is considered to be valid for both samples. However, the number of informants is not large enough for a full statistical analysis. Therefore, descriptive statistics was primarily used (Steedle, 2017).

The questionnaire dealt with a variety of areas relating to the students' path from initial application to a completed master's degree. For example, they were asked what had led to their application for admission, how they had experienced the different components of the master's degree programme and what support they had received in the process.

The questionnaire consisted of both open-ended and closed-ended questions with a Likert scale on some questions. The responses to some of the open-ended questions were later categorized in order to make the data manageable and to facilitate the study of correlations. Analyses of responses about the distance between their home and the university, as to whether this distance was perceived as problematic and whether transport options affected the effectiveness of the programme of study are of interest to this article. In addition, responses were analysed with regard to reasons for choice of university, in order to examine whether this could shed light on the research question.

The students' responses were later entered into SPSS for further processing. Frequency tables were derived for all the relevant questions. Several questions were cross-tabulated to test whether there was a correlation between the two variables. Cross-tabulation was performed using Pearson Chi-Square. The significance level was set at 0.05.

Results

The results will be introduced by two themes, namely 1) distance and travel time and 2) reasons for choice of university.

Distance and travel time

Table 1 shows the distribution of responses regarding distance from students' homes to university.

Table 1: *How far was it from your home to the university where you studied?*

	Iceland			Norway		
	Frequency	Valid percent	Cumulative percent	Frequency	Valid percent	Cumulative percent
0–9 km	58	50.9	50.9	15	23.4	23.4
10–39 km	12	10.5	61.4	7	10.9	34.4
40–190 km	16	14.0	75.4	16	25.0	59.4

191 km– 449 km	20	17.5	93.0	8	12.5	71.9
450 km+	8	7.0	100.0	18	28.1	100.0
	N = 114			N = 64		

Table 1 shows that somewhat over 60% of the Icelandic students live within a radius of 40 km from the university. The corresponding figure for Norway is lower – approximately 35%. Altogether 25% of the Icelandic students have a journey of over 190 km, while the figure for the Norwegian students stands at 40%. This means that many of the students in question need to travel by air. The alternative is long travel time.

The students were asked to state the exact travel time (open-ended question). The responses were later categorized. Those who stated 'flight' have by definition travel time of over two hours, including the trip to and from the airport, check-in and flying time. Table 2 provides an overview of the travel time stated by the students.

Table 2: *What was the normal travel time one way?*

	Iceland			Norway		
	Frequency	Valid percent	Cumulative percent	Frequency	Valid percent	Cumulative percent
0–30 min	52	56.5	56.5	20	31.3	31.3
31–60 min	6	6.5	63.0	1	1.6	32.8
61–120 min	8	8.7	71.7	9	14.1	46.9
121 mins. +	21	22.8	94.6	20	31.3	78.1
Flight	5	5.4	100.0	14	21.9	100
	N = 92			N = 64		

Table 2 shows that approximately 70% of the Icelandic students and about 45% of the Norwegian students have travel time of up to two hours. However, half of the Norwegian students (53.2%) have travel time of more than two hours. The figure is lower for the Icelandic students (28.2%). Altogether 5.4% of the Icelandic students and 21.9% of the Norwegian students state that they primarily choose to travel by air.

When comparing Iceland and Norway, it is observed that a larger proportion of Norwegian than Icelandic students have a long commute and therefore spend considerable time travelling between their home and their place of study. A characteristic feature of Icelandic students is that more than half live less than 10 km from the university (50.9%) and have a maximum travel time of 30 minutes (56.5%).

By cross-tabulating travel time and gender, the authors examined whether there are any variations that can be explained by the gender variable. Here only valid percentages are presented.

Table 3: Gender variation regarding travel time

	Iceland		Norway	
	F	M	F	M
0-30 minutes	55.1%	64.3%	36.7%	9.1%
31-60 minutes	7.7%	0.0%	0.0%	9.1%
61-120 minutes	5.1%	28.6%	10.2%	27.3%
121+ minutes	26.9%	0.0%	28.6%	45.5%
Flight	5.1%	7.1%	24.5%	9.1%
	N = 78	N = 14	N = 49	N = 11
Pearson Chi-sq.		0.013		0.035

Table 3 shows that there is a significance in the data of 0.013 (Iceland) and 0.035 (Norway) respectively, which indicates that there is a significant difference between men and women. As regards Iceland, there is an equal gender-based distribution with a travel time of less than 30 minutes. In Norway less than 10% of the men (N = 1), but more than one-third of the women (N = 18) live near the university. In Norway, a majority of the men state that their travel time exceeds two hours, 45.5% and 28.6% respectively. If travelling time over two hours and flying is considered as one, the gender distribution is equal for the Norwegian students. Women choose flying to a greater degree than men, 24.5% and 9.1% respectively. In Iceland no male students indicate travel time of more than two hours. Men whose travel time is over 30 minutes mainly state that their travel time is between 61 and 120 minutes (28.6%). A total of 26.9% of the women state that they have travel time of over two hours. There is an equal gender distribution with respect to choice of flying as a means of transport.

Travel time is further cross-tabulated with age on completion of the thesis in order to establish whether there are significant differences between various age groups. The Icelandic students were between 21 and 70 years of age while the Norwegian students were between 21 and 60 years of age on completion of their master's degree. Table 4 is, therefore, categorized into five and four age categories respectively, and demonstrates the variation in different age groups.

Table 4: Variation in the different age groups

	Iceland						Norway				
	21-30	31-40	41-50	51-60	61+	T	21-30	31-40	41-50	51-60	T
0–30 mins.	71.4 %	55.2 %	53.3 %	47.1 %	100 %	56.5 %	0.0%	47.6 %	31%	9.1%	31.7 %
31–60 mins.	7.1%	3.4%	6.7%	11.8 %	0.0%	6.5%	50.0 %	0.0%	0.0%	0.0%	1.6%
61–120 mins.	7.1%	6.9%	10.0 %	11.8 %	0.0%	8.7%	0.0%	14.3 %	20.7 %	0%	14.5 %
121+ mins	14.3 %	27.6 %	23.3 %	23.5 %	0.0%	22.8 %	0.0%	23.8 %	24.1 %	63.6 %	30.2 %
Flight	0.0%	6.9%	6.7%	5.9%	0.0%	5.4%	50.0 %	14.3 %	24.1 %	27.3 %	22.2 %
N	14	29	30	17	2	92	2	21	29	11	63

The Icelandic data does not indicate any significant correlation between travel time and age. This correlation is significant for the Norwegian students. Most Norwegian students are in the age group 31–40 (N = 21) and 41–50 (N = 29). In the age group 31–40 almost 50% live within the travel time of 30 minutes. For the 41–50 age group, the percentage is lower at almost 30%. The remaining members of both age groups are fairly evenly distributed across the last three categories (61–120 minutes, 120+ minutes, flight).

One of our questions was whether they had perceived the geographical distance as problematic. Table 5 shows the distribution for 'Yes' and 'No' cross-tabulated with gender. The correlation between perception of this as problematic and gender is significant for the Norwegian students (0.030), but not for the Icelandic students.

Table 5: Correlation between gender and the perception of geographical distance as problematic

	Iceland						Norway					
	Female		Male		Total		Female		Male		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	7	7.2	1	5.9	8	7.0	5	9.4	4	33.3	9	13.8
No	90	92.8	16	94.1	106	93.0	48	90.6	8	66.7	56	86.2
Total	97	100.0	17	100.0	114	100.0	53	100.0	12	100.0	65	100.0
Pearson Chi-sq.	0.843						0.030					

Less than 10% of the Norwegian females perceive the distance as problematic. The corresponding figure for men is over 30%. Since the corresponding correlation in the Icelandic data was not significant, we have not commented on this.

Based on the response to the open-ended questions on travel distance and travel time, several students viewed the lengthy travel time as positive. They spent their time reading and preparing, both during the flight and when staying at hotels. One student commented that for her the gatherings represented a holiday from household chores, a break from family responsibilities. Of those who were negative to the long distance and perceived this as problematic, three response categories were singled out: weather and driving conditions, expenses and problems with childcare.

Choice of the university in question

Six alternative reasons were given as to why the students had chosen the university in question rather than others: these are shown in Table 6. In addition, students could give other reasons in response to an open-ended question.

Table 6: *The reason why I chose this particular university rather than others*

	Iceland	Norway
1) The content of the programme of study corresponded well with my academic needs	58.9%	40.9%
2) I lived at the place of study	53.6%	39.4%
3) The organization of the programme of study was well suited to my work situation	36.3%	54.5%
4) The organization of the programme of study was well suited to my family life	32.1%	33.3%
5) I lived within driving distance of the place of study	17.9%	22.7%
6) I assumed it was easy to be accepted for admission to this university	8.9%	4.5%
	N=112	N=66

Table 6 shows that the majority chose the university in question because of the range of programmes of study offered (response alternative 1). This applies to both countries. Closeness to the place of study (response alternatives 2 and 5) was important for 71.5% (Iceland) and 62.1% (Norway) respectively. Another important factor, particularly for Norwegian students, was that the organization of the programme of study was well suited to the student's work situation. Approximately one-third of students in both countries state that they chose the university because the organization of the programme of study suited their family life.

Students who give other reasons for their choice of university write, for example, that they had positive earlier experiences from the university, that they knew people who studied there, and that they had the opportunity to complete the programme on a part-time basis. Some of the Icelandic students were in a different situation from the Norwegian students. In Iceland, teacher education was in the process of being converted to a five-year master's programme. As one person wrote in the comments field, 'Taking the programme of study was the only way to get teaching certification after teacher education was lengthened to five years', while

another wrote 'Wanted to get teaching certification before the programme of study was lengthened'. One of the students stated that receiving a grant was the reason, while others generally wanted to have more education.

Discussion

The research question on which the article focuses is: *How do distance and transport options affect students' motivation to complete a master's degree programme?* In order to answer this question, our discussion of the data will be based on four topics: 1) Autonomy, 2) Flexibility, 3) Costs and 4) Transport and weather.

Autonomy

The life circumstances of adult students are rarely such that they only have themselves to consider. Normally their employer, partner and children are parts of the equation. Autonomy constitutes a basic mental factor for inner motivation (Deci and Ryan, 2000). An autonomous action entails an independent choice, without coercion or manipulation as Ballou (1998) has pointed out. From the outset, deciding to take a master's degree and completing it is not the result of coercion. The students themselves have decided to begin the master's degree programme so that this is a result of their autonomous choice. Nor have they been manipulated to undertake this action. Nevertheless, the degree of autonomy of choice is open to discussion and generally, the choice is the result of external factors such as social relevance, framework conditions and the students' life circumstances. Wermke and Forsberg (2017) discuss this according to different qualities of autonomy, as culture and various conditions can play a role in the decisions.

However, the data suggests a mode of coercion. Some students state that they need a master's degree to retain their present employment while others want to apply for a post where master's degree qualifications are a requirement. Several of the Icelandic respondents needed supplementary master's studies in connection with the restructuring of teacher training courses. These are examples of external factors that reduce the degree of autonomy in choice of educational programme. According to Deci and Ryan (2000), intrinsic motivation is weakened if autonomy is not present. Therefore, it may be appropriate to examine this issue in greater depth by focusing more closely on why students chose a particular university.

We presented six pre-defined reasons for choosing to study in Alta or Akureyri, respectively (table 5). These centred on programme content (1), proximity to home (2 and 5), whether students believed the organization of the programme of study was well suited to their work or family situation (3 and 4) and whether they believed it was easy to be accepted for admission (6). The majority of the students chose the programme of study on the basis of proximity to where they lived – approximately 70% of the Icelandic students and 60% of the Norwegian

students, respectively. Of those who stated that they had chosen the programme of study on the basis of programme content, approximately 60% were Icelandic and 40% Norwegian, respectively. This may indicate that proximity to the place of study was more important for students than the content of the programme of study. This prompts the question whether the choice of programme is autonomous or whether it results from lack of alternatives. Or we can view this from a different angle – access to a university in close proximity to where they live allowed them to decide to continue their studies; in other words they made an autonomous choice which reinforced their inner motivation to study.

Both Bjarnason *et al.* (2016) and Rubenson *et al.* (2007) emphasize the location of the university as a key factor in students' choice. Most of those who apply for a programme of study in arctic regions already live in the area. Of those participating in the study, altogether 75.4% (Iceland) and 59.4% (Norway) lived within a radius of 190 km of the campus. It may be assumed that these students will continue to live in the area after completing their studies. The programme of study they chose must therefore be relevant to the local community to which they belong. Similarly, the portfolio of courses and the content of some of the programmes is designed to suit the arctic region. The portfolio is also based on the fact that the number of applications is low compared with larger towns. Therefore, there must be fewer and broader programmes of study that are also relevant to rural economies. The result is that adults applying for admission have fewer programmes to choose between if they do not want to travel long distances. On the other hand, about 25% (Iceland) and 40% (Norway), respectively, travel over 190 km. Nevertheless, they chose to apply for admission to a university in the north, indicating that they may have a greater degree of autonomy.

Flexibility

Greater flexibility in programmes of study has led to more adults taking higher education (Roos and Grepperud, 2007). Adult students are in a phase of life when they often have children, a partner and a job. They may be subject to the all-round pressure of expectations from their family and their employer, and moving away from home is not an alternative they wish to consider. Consequently, we have examined how the question of flexibility emerges in the data.

One form of flexibility is the ability to make independent choices as regards both the content of the programme and the place of study. An analysis of the data shows that in the case of the Norwegian students, it is particularly the age group 31–40 years that live within 30 minutes of the place of study. This may be linked to factors such as responsibility for small children and therefore a need or wish for proximity to their home or short travel time. We also observe a trend whereby a larger percentage of Norwegian women, as compared with men, chose air travel as a means of transport, even though the percentage is the same for both groups when it comes to travel time in excess of two hours. The age group 51–60 (Norway)

consists of altogether 11 students, of whom approximately 90% (10 students) have travel time of more than two hours. The reason for this may be that the students in this age group have both the time and the means to choose programmes of study regardless of distance, circumstances that do not apply to younger students in the sample to the same degree. We do not find such differences between age and gender in the Icelandic data. In general, the Icelandic students fall into two categories: up to 30 minutes' travel time or over two hours' travel time. This does not depend on age.

Approximately one-third of both Icelandic and Norwegian students chose their programme of study because it was well suited to family life, and one-third (Iceland) and half (Norway), respectively, chose the programme because it was well suited to their work situation. We assume that the flexibility of the programme as regards block scheduled sessions and the opportunity to study part-time were the factors that meant it was suited to family life and/or the work situation. With respect to the work situation, programme content may be significant for the choice. Moreover, proximity to the place of study may also have meant that the programme is well-suited to family life and the work situation.

Most of the students in the sample work alongside their studies. From the outset, this reduces their ability to be flexible. They need predictability with regard to the dates of study sessions and examinations, and are present on campus only during the study sessions. In Alta, voluntary courses on the use of tools are provided for students on the day before or after the study session, whereas in Akureyri such courses are integrated with these sessions. Such courses may be devoted to the design of the master's thesis, the use of sources, search tools etc. Several students in the Norwegian data reported that they were unable to participate in these courses since they did not live on campus and had no opportunity to take time off other than for the study sessions. They also stressed negative factors such as lack of access to the university library and other on-campus facilities, for example a reading room.

Both Bjarnason *et al.* (2016) and Rubenson *et al.* (2007) stress that the structure of the programme of studies is important for adult students. We do not have data that directly relate to the structure of the programme of study but the students were asked whether the programme content was important to them when they applied for admission. Altogether 58.9% (Iceland) and 40.9% (Norway), respectively, reported this as one of the reasons for their choice of university. This indicates that the programme content is less important for this group. The motivation appears to be the master's degree itself rather than the academic content.

The students' input shows that a flexible programme of study involves more than the question of part-time, session-based programmes. In order to promote greater flexibility, it may be appropriate to take Deci and Ryan's (2000) three factors for intrinsic motivation as a starting

point: competence, autonomy and relatedness. Relatedness is regarded as an element that reinforces intrinsic motivation (Deci and Ryan, 2000). In their comments, some students mentioned that the joint sessions on campus promoted collaboration with other students. The organization of the programme is such that it is not a given that the students feel a sense of relatedness to the programme or to the other students. In both Akureyri and Alta the programmes are session-based. Students are encouraged to organize discussion groups in their home town or via social media. Not all students take up this challenge. In addition, some of the students choose to take the master's degree on a part-time basis, so that they take courses at a different pace and in a different order than full-time students. This may cause further problems regarding relatedness, since they will encounter different students on the different courses. Increased flexibility in the programme of study may thus lead to reduced relatedness. As a result, intrinsic motivation may lose a fundamental support element. Flexibility with regard to competence will concern access to key lectures online, an extended library service for students off campus and the opportunity to hold online meetings for groups of students. Flexibility in terms of relatedness will also be linked to the establishment of online meetings in addition to discussion forums. Individual students must feel that they are seen and included, and this must be reflected in the organization and routines of the study institution. A varied range of facilities that fulfil the differing needs of students will give them autonomous flexibility in that they themselves can choose the lectures they want to focus on in depth, and the groups and meetings in which they want to participate.

Costs

There are two references to the topic of costs in the data: the direct cost of the study and the financial benefits of the study. OECD documents (2005) highlight that the visibility of rewards is of importance to adult students and that the skills acquired must be transparent. For this group of students, it is essential to ensure that certification systems are credible and transparent to employers, otherwise certified skills might be devalued in the labour market (OECD, 2005). We see a similar context appearing in our data. In table 5: *The reason why I chose this particular university rather than others*, the majority of the students in both countries place the range of programmes and relevance to their academic needs in first place. Proximity to the university played a role, since 71.5% in Iceland and 62.1% in Norway described this as important. We did not ask the reason for this but we can assume that costs are a significant factor in their choice. When discussing what motivates adult students Abdullah, *et al.* (2008) state that one factor related to choosing a programme according to your academic needs is that you expect value for money. In answer to a question about why students think they managed to complete their studies, 68.75% of the Icelandic students chose the options "highly agree" and "agree" regarding the possibility and expectations of higher salaries. For Norway the response rate was 81.82%. Both researchers (Rubenson *et al.*, 2007) and OECD (2005; 2016) and UNESCO documents (2002) highlight the importance

of lifelong learning not only to acquire adequate skills but also to prevent people from becoming trapped in low-paid jobs.

In responses to open-ended questions some Icelandic students mentioned the need to obtain a master's degree before this became mandatory for teachers (a change that took place in Iceland in 2008) since this had a direct impact on salaries. Another Icelandic student said that his motivation for applying for the programme of study was a grant from the municipality to teachers taking a master's degree, and using this grant enabled him to lower the cost of his studies and have his teaching hours reduced. This is in line with what Rønning (2007) has argued regarding adult students and their desire to enhance their position in working life, and the importance of the visibility of rewards.

As stated in the *Results* section those who do not live close to the university inevitably face considerable expenses of travel and accommodation. About 60% of the Icelandic students live within a radius of 40 km from the university and for Norway the ratio is 35%. For those who have longer travel times (e.g., 25% of the Icelandic students have to travel more than 190 km and also 40% of the Norwegian students), this means the use of a car and petrol, or travel by air which is costly in both countries. The Icelandic students commented on the high cost of attending study sessions (blocks of one week) on campus and the frequency of four such sessions during one term. An OECD study (Chisholm *et al.* 2004), revealed that one of the main barriers to learning for adult students were factors like time/lack of time and lack of money. It is therefore interesting to compare factors relating to students' costs as regards means of travel and distances. Not surprisingly, fewer students chose to travel by air – only 12.2% of the Icelandic students although the numbers are higher in Norway, or 33.6%, of whom 24.5% are women. This raises questions about how men and women finance their studies.

Transport and weather

Although the geographical situation of Akureyri and Alta can be seen as similar in terms of location in each country, all distances and travel times are longer in Norway than Iceland. About 60% of the Icelandic students live within 40 km of the University but only 35% of the Norwegian students are in a similar situation. The proportion who need to travel more than two hours in Iceland amounted to 28.2%, compared to 53.2% in Norway. In both places the weather can be unpredictable during winter and there are difficult mountain roads to pass, even more so in Norway. It is therefore interesting that 93.10% of the Icelandic students and 86.96% of the Norwegian students answered in the negative to the question as to whether geographical distance from the university was a problem. Those who answered in the positive to this question and wrote a comment did not mention geographical distance *per se* as a reason but referred to stormy weather and impassability as a problem. The same applies to the question on transport, and whether it affected students' opportunities to engage in the

study. The majority of the students both in Iceland and Norway answered in the negative to the question but those who believed transport affected their study progress (8.62% in Iceland and 13.04% in Norway) mentioned stormy weather and impassability as well. Students in both countries could use public transport, which they sometimes did when the weather was bad and they did not trust themselves to drive, but these transport options are also very dependent on weather.

Several of the students reported that they viewed the travel time as positive. It gave them the chance to read and to prepare for the sessions, or to summarize them. Some also commented on the opportunity to work in their hotel room, since participation in the teaching sessions entailed time off work and a break in respect of family commitments. Thus, students used the travel time to concentrate on their studies.

Conclusion

Our interest in this paper is rooted in the conditions and situation of adult students who live in rural and remote arctic regions, and how they deal with distances and transport as part of their education. The literature discusses both motivations and obstacles to students' learning (Ahl, 2006; Roos and Grepperud, 2007) and, as mentioned above, factors such as time, money and family situation can act as impediments.

Our findings do not indicate that difficult weather conditions and transport in the arctic regions of North Norway and North Iceland negatively affect students' learning processes, although this might be seen as the logical impact. It is perhaps more likely that adult students living in this environment simply take these conditions and circumstances for granted. In line with Deci and Ryan (2000) we can conclude that these students are driven by intrinsic motivation such as determination, relatedness and coping and their motivation is thus directed by ownership of the decision; a significant decision that also affects their partner and their children. Consequently, they will not let bad weather or long travel times affect their plans. Future research needs to take a closer look at the motivation factor and adult learning, especially with regard to family circumstances and the effect on family members. Although the response rates to the questionnaire were rather high in both countries, the number of informants is not large and can be seen as a limitation of this research. However, we hope that our findings will be valuable to the universities concerned, as well as to other institutions when organizing and restructuring their study programmes and modes of teaching and learning. Future research within this field will need to explore how the nature of learning might be adapted to new technology and the digital age. For remote areas, as in Norway and Iceland, such an approach is not only important but necessary in order to enable and encourage students to undertake education despite long distances from their home.

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