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# School students' beliefs about the benefits of multilingualism 

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#### Abstract

Multilingualism is increasingly seen as a resource among researchers, educators and in society. Whereas positive beliefs about the benefits of multilingualism may foster increased motivation for language learning, little is known about students' beliefs about potential multilingual benefits. This study examined the beliefs of Norwegian secondary school students concerning the benefits of multilingualism and the role of some individual differences in these beliefs. The data consisted of questionnaires completed by 593 secondary school students. The initial descriptive statistical analysis showed that students held diverging beliefs regarding the benefits of multilingualism being more positive about benefits related to the language learning process and less positive about general cognitive advantages. Further statistical analyses with independent $T$-tests revealed interesting relationships between students' overall beliefs about multilingualism and the following variables: Students' who reported having friends with other home languages than Norwegian, students who had lived abroad and students with migration backgrounds held significantly more positive beliefs about multilingualism than students' without such experiences. No significant relationships were found between students' beliefs about multilingualism and the number of languages learned in school or students' multilingual identity. Pedagogical implications for students' language learning in school contexts are discussed.


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beliefs; school students; questionnaire; education; foreign languages; language attitudes

## Introduction

Knowing more than one language was often seen as a disadvantage, a mental handicap, and even as a curse to people and society during the first half of the twentieth century (Jensen 1962; Thompson 1952). Although these views likely still exist to some extent, multilingualism is nowadays increasingly perceived as a normal phenomenon and as a positive resource to individuals and societies. Research from several fields suggests that there are many benefits associated with multilingualism, such as increased cognitive flexibility and working memory (Antoniou 2019; Bialystok 2011; Mepham and Martinovic 2018; Monnier et al. 2021), creativity (Fürst and Grin 2018, 2021; Kharkhurin 2012), later onset of dementia (Alladi et al. 2013), increased metalinguistic awareness and better language learning skills (Jessner 2008; Kemp 2007), increased empathy and open-mindedness (Dewaele and Wei 2012; Tiurikova, Haukås, and Storto 2021), economic advantages (Bel Habib 2011), and increased academic performance (Rutgers et al. 2021) Also in education, multilingualism has been increasingly embraced as a resource. This resource orientation is evident in Norway's

[^0]curricula for the various language subjects (for example, NDET 2019a, 2019b). For students in school, knowledge of potential benefits of being multilingual may be an important trigger for them to decide to and continue learning languages. Since students' beliefs about language learning can influence the language learning process to a large degree (Ellis 2008; Kalaja and Barcelos 2003), insights into students' beliefs about multilingualism are essential for creating pedagogies that can promote positive and realistic views and foster motivation for learning. The objective of this study is, therefore, to explore Norwegian lower secondary school students' beliefs about commonly documented benefits of multilingualism. Furthermore, it aims to investigate beliefs about multilingualism linked to individual learner variables such as students' degree of multilingualism, multilingual identity, exposure to multiple languages in the homes and with friends, and having stayed abroad.

Before continuing to the next section, we need to define some key concepts used in this article. First, multilingualism and other terms such as bilingualism, plurilingualism and polylingualism are used and understood in a number of ways by researchers, teachers and among people in general (Cenoz 2013a, 2013b; Haukås 2022). In the context of this study, however, multilingualism refers to 'the dynamic and integrated knowledge and/or use of more than one language or language variety' (Haukås et al., 2021a, p. 84). Following from this definition, which to some extent draws on the definition of plurilingualism by the Council of Europe (2001), multilinguals can have varied levels of proficiency and knowledge in their languages, and their knowledge can be both productive and receptive. All students in Norwegian school can be considered as multilingual since they learn a variety of Norwegian (Bokmål or Nynorsk) or Sami and English from the first school year. Starting from grade 8 , around $75 \%$ of the students decide to learn an additional foreign language, typically Spanish, German and French (Fremmedspråksenteret 2018). Moreover, most students with immigrant backgrounds, or born to parents with immigrant backgrounds, know further languages than those taught in the school context. According to Statistics Norway (2021), around $18.5 \%$ of the Norwegian population belong to this group. In Norway, the use of local dialects is also common in different social settings, and most Norwegians understand Swedish and Danish (Zeevaert 2007). Nevertheless, while all students in Norway can be referred to as multilingual, this does not automatically mean that they identify as multilingual themselves. Self-identifying as multilingual can have an empowering effect and may influence students' beliefs about language learning and willingness to invest in the language learning process (Busse 2017; Forbes et al. 2021; Henry 2017; Henry and Thorsen 2018). Thus, we include the perspective of the students about their own multilingualism as an interesting variable to explore in this study. Along with Fisher et al. (2020), we define multilingual identity as one's explicit self-identification as multilingual 'precisely because of an awareness of the linguistic repertoire one has' (449).

## Benefits of multilingualism

Whereas it is beyond the scope of this article to provide a comprehensive overview of the documented benefits of multilingualism, this section discusses some of the main findings. During several decades, scholars have repeatedly reported several cognitive benefits in multilinguals. As early as 1962, Peal and Lambert (1962) showed that multilingual participants scored higher on both verbal and non-verbal intelligence tests than monolinguals. In the years to follow, multiple studies documented that multilinguals have higher cognitive flexibility, creativity, and better episodic and semantic memory compared with monolinguals (for an overview and discussion of general cognitive benefits see Antoniou 2019; Bialystok 2011; Monnier et al. 2021). Additionally, multilingual students have been shown to score higher in standardised tests also in non-languguage subjects than those who were not categorised as multilingual (Armstrong and Rogers 1997). Similar results have been documented for students who self-identify as multilingual. The study by Rutgers et al. (2021) with secondary school students in England, revealed a significant association between self-identification as multilingual and all GCSE subjects, except English Language and History. Furthermore, studies
suggest that multilingual people experience cognitive decline such as Alzheimer's disease later than monolinguals (Alladi et al. 2013). Perhaps more relevant for language learners in schools are the positive effects of multilingualism on additional language learning documented in several studies. Above all, multilinguals seem to have increased metalinguistic awareness, and they show better developed metacognitive skills related to using language learning strategies more efficiently (see Cenoz 2020; Jessner 2008; Hofer and Jessner 2019; Kemp 2007). Huang, Steinkrauss, and Verspoor (2020) summarise these advantages as follows: 'The more language learning experience learners have, the more learner-based advantages they enjoy for learning an additional language, and the easier it is for them to achieve a higher language proficiency in that language' (1). These added advantages are not only useful for further language learning, however, as they may also lead to an increased awareness of previously learned languages such as one's first language (Forbes 2021; Spies et al. 2018; Talebi 2012). In addition to cognitive effects and benefits for language learning, scholars emphasise the economic and work-related advantages of multilingualism (Bel Habib 2011), and increased open-mindedness and intercultural understanding (Benzehaf 2021; Dewaele and Wei 2012; Fürst and Grin 2021; Tiurikova, Haukås, and Storto 2021). Multilingual students see themselves as being better able to move across intercultural spaces. Thus, they tend to positively define their multilingual identities as being 'modern, global, open and intercultural citizens' (Benzehaf 2021, 1).

It should be noted, however, that scholars have also failed to demonstrate cognitive benefits for multilinguals and the debate is still heated (see Antoniou 2019; Bialystok 2011; Gunnerud et al. 2020; Monnier et al. 2021 for reviews). The ongoing debate is a reminder to consider confounding factors such as age, educational background, and socioeconomic status of the study participants when evaluating the effects and relevance of a study for the school context. Furthermore, one should pay attention to what type of multilingualism was investigated and how it was defined, and also which and how many languages belonged to the participants' repertoire including how they were named and counted (Berthele 2021).

## Benefits of multilingualism in the Norwegian curriculum

Despite some inconclusive results regarding general cognitive benefits of multilingalism, there seems to be less disagreement related to positive advantages of multilingualism for language learning and for interacting with people across contexts and cultures. As also suggested by Myklevold and Speitz (2021), national, official language policies celebrating multilingualism in education are now commonplace in Europe. In the Norwegian curriculum LK20, resource-oriented views on multilingualism are expressed in the Core curriculum as well as in the language subject curricula. In the Core curriculum (NDET 2017, 7), all students' languages are embraced as a resource, both for the individual and society:

> Language gives us a sense of belonging and cultural awareness. [...] Knowledge about the linguistic diversity in society provides all pupils with valuable insight into different forms of expression, ideas and traditions. All pupils shall experience that being proficient in a number of languages is a resource, both in school and society at large.

The curricula for both English and Foreign languages (NDET 2019a, 2019b) highlight several benefits of being multilingual. As noted by Kjelaas and van Ommeren (2019), these benefits are formulated as undeniable facts. For English (NDET 2019a), the main benefits are related to the development of intercultural competence, enabling the students 'to deal with different ways of living, ways of thinking and communication patterns' but also to see 'their own identity and others' identities in a multilingual and multicultural context' (2). The curriculum for foreign languages (NDET 2019b, 2) states that 'Knowledge about a society's language and cultural diversity provides valuable insight into one's own and others' backgrounds'. It goes on to claim that learning about topics like different identities, values and ways of thinking in areas where the language is spoken will develop
students' 'tolerance and an understanding that our views of the world are culture-dependent' (2). Thus, the curriculum seems to take it for granted that learning a foreign language will increase the students empathy and understanding of others and themselves. Both curricula postulate that being proficient in multiple languages is an asset, but only the curriculum for foreign languages specifies what this means (NDET 2019b, 3): 'Having knowledge about language and exploring one's own language learning improves the ability of the pupils to learn and understand language in a lifelong perspective'. Again, multilingual benefits, i.e. increased metalinguistic and language learning awareness, are stated as facts. Interestingly, the curriculum for foreign languages also declares that students in the foreign language are multilingual already and that this can benefit them in multiple ways:

> In the encounter with the foreign-languages subject, the pupils are already multilingual and have extensive language-learning experiences from various contexts. By transferring their linguistic knowledge and language learning experiences from other languages they know and are familiar with, learning becomes more effective and meaningful. (NDET 2019b, 3)

## Teachers beliefs about and approaches to multilingualism in the Norwegian context

An embrace of multilingualism and related benefits in the Norwegian curriculum does not guarantee, however, that teachers have adopted a multilingual approach in their teaching and that benefits of being multilingual are explored in the language classroom. A study by Haukås (2016) shows, for example, that language teachers see being multilingual as beneficial for themselves, but not necessarily for their students. Furthermore, teachers rarely invite students to explore their own multilingualism or use it as a resource during learning and communication. Particularly the languages of students with minority language backgrounds tend to be ignored. Similar results can be found in other studies from the Norwegian context (e.g. Vikøy and Haukå 2021; Dahl and Krulatz 2016; Myklevold 2021). There are several likely reasons for this mainly monolingual approach, such as lack of knowledge of a multilingual turn in teaching (Haukås 2016; May 2014), and widespread beliefs among teachers that one should stick to one language to guarantee maximal exposure to the target language (Flognfeldt et al. 2020). Furthermore, national assessment guidelines in the language subjects still mainly focus on language competencies as discrete entities (see also Council of Europe 2009, 23). Thus, although scholars have pointed to several advantages of being multilingual, and the school curriculum highlights multilingualism as an asset, this does not necessarily mean that students are familiar with this knowledge nor that they share the same positive beliefs.

## Students' beliefs about multilingualism

Students' beliefs about language learning affect students in complex ways and have been identified as an important individual difference in language learning research (Ellis 2008; Horwitz 1988; Kalaja and Barcelos 2003). Learners' belief systems are shaped and influenced from several sources, such as past positive or negative experiences in language learning and teaching, students' cultural and educational backgrounds, parents' attitudes and students' personality traits (Ellis 2008). As explained by White (2008), understanding students' beliefs is vital, because students hold beliefs to be true, and their beliefs influence how they interpret their experiences and also their language learning behaviour. Consequently, students' beliefs about multilingualism may have important pedagogical implications. For example, whereas positive beliefs about multilingualism may spark interest in investing time and effort in the learning process, negative or unrealistic beliefs may hinder students from seeing the relevance of being multilingual, resulting in decreased motivation.

Beliefs questionnaires have been widely used in second and foreign language learning settings, starting out with Horwitz (1988) Beliefs about Language Learning Inventory (BALLI). Most of these take a broad approach to investigating beliefs about the language learning process. Yet,
although students' beliefs about potential benefits of multilingualism likely have a strong impact on students' learning processes, expectations, and commitment, they have remained relatively unexplored. Some studies have investigated students' beliefs about multilingualism related to particular languages (e.g. Lasagabaster and Huguet 2006; Thompson and Aslan 2015), or the relationships between multilingualism and language ideologies (Vogl 2018) and language diversity (Bellinzona and Carbonara 2021), but to the best of our knowledge, only Wei, Jiang, and Kong (2021) have explored students' beliefs about multilingual benefits. They asked Chinese Mongolian university students to consider a number of advantages related to being multilingual, such as multilingualism being helpful for finding a good job, making more friends, being promoted in the workplace, earning more money, learning more, and becoming smarter. The participants provided answers on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The mean score for all the statements was 4.52 , indicating that the participants had very positive beliefs about the benefits of multilingualism. Nevertheless, research on students' beliefs about the benefits of multilingualism in compulsory school settings has been neglected so far. Their beliefs may differ from beliefs of university students who have actively chosen to study languages of their own free will and likely were particularly motivated for learning languages.

## Method

## Research questions

The literature review above discussed several documented benefits of multilingualism, and it showed that the Norwegian curriculum LK20 has embraced multilingualism as a positive resource. It went on to discuss the importance of understanding students' beliefs about language learning and pointed to the lack of studies exploring students' beliefs about the benefits of multilingualism. To address this gap, this study sets out to investigate Norwegian secondary school students' beliefs about potential benefits of being multilingual. Additionally, it attempts to provide insights into differences within the student group. Of particular interest are variables related to the students' language learning and cultural experiences, such as the learning of one (L2 English) or two foreign languages (L3 French/German/Spanish) in school, self-identification as multilingual, having migration backgrounds, having friends with other home languages than Norwegian, and having stayed abroad.

We asked the following research questions:
RQ1: To what extent do students hold positive beliefs about commonly documented benefits of multilingualism?

RQ2: Which individual factors are significantly linked to students' positive beliefs about multilingualism?

## Data collection instrument

To answer our research questions, we developed the questionnaire Ungspråk (see Appendix). Further details about the development and validation of the questionnaire can be found in Haukås, Storto, and Tiurikova (2021b). The questionnaire has four sections. The first section maps the languages of the particpants and in which contexts the languages are practiced. For each language, the students are asked if they consider the language to be their first/native language by ticking 'yes' or 'no'. We refer to students with a migration background as those participants who did not perceive Norwegian or any other national indigenous or minority language as their first/native language by ticking 'no' to this question. Section 1 also includes the question 'Do any of your friends speak a language other than Norwegian with their family?'. Answers to this yes/no-question is used to explore to what extent knowing and listening to friends practicing multiple languages influence students beliefs about multilingualism.

The second section includes 25 items belonging to three different constructs. One of them is Beliefs about multilingualism (BAM), investigating the degree of students' positive beliefs about the benefits of multilingualism. The eight individual items in BAM are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). We opted for 'not sure' as the middle option instead of 'neither agree nor disagree' to avoid the problem of how to interpret the midpoint (Nadler, Weston, and Voyles 2015). The 'not sure' option likely also genuinely mirros many students' beliefs, as they may never have reflected on some of the statements before and, consequently, are unsure of what to answer.

All items are written in a single direction with positive wordings (Wolfe and Smith Jr 2007). The content of the items was decided based on research findings and popular beliefs about the benefits of being multilingual (see Table 1).

Three items are related to purported cognitive benefits associated with multilingualism, such as better cognitive functioning, creativity and flexibility (BAM2, BAM3, BAM8). Two of the statements are concerned with benefits related to language learning. Item BAM1 states that being multilingual facilitates further language learning, whereas BAM5 is linked to research showing that multilingualism is associated with increased language awareness in general and cross-linguistic awareness in particular. Two items are concerned with economic (BAM4) and general academic benefits (BAM6), whereas BAM7 derives from research suggesting multilinguals show signs of being more empathetic than others. The latter can also be linked to increased intercultural understanding, a central component of the language subject curricula in Norway. Each item is interesting in and of itself, because it determines the degree to which participants believe a stated benefit to be related to multilingualism and language learning in and out of school. Nevertheless, given the lack of exisiting scales investigating students' beliefs about the benefits of multilingualism, we also wanted to find out how well these eight items form a single scale measuring the same concept, namely students' overall positive beliefs about multilingualism. Running a Cronbach's Alpha test with the whole datatset $(n=593)$ revealed that all items show moderate to strong correlations. Cronbach alpha is 0.81 , which indicates good fit (for further details of the piloting of the questionnaire, see Haukås, Storto, and Tiurikova 2021b).

In section 3 of the questionnaire, the students are asked to define being multilingual by completing the sentence 'to be multilingual means ...'. Thereafter, they are asked the following question: 'Are YOU multilingual?' with the alternatives yes/no/not sure. Furthermore, they are asked to explain their choice. This part is important for deciding how many and which students self-identify as multilingual by answering 'yes' to the question.

The final part of the questionnaire includes questions about students' experience of living abroad and other factors that can be significant in relation to students' beliefs about multilingualism (see Appendix).

## Participants

Secondary schools in and around Bergen, Norway's second biggest city, were contacted via email and invited to take part in the study. We thus tried to capture a great variety of students living

Table 1. Items in the beliefs about multilingualism (BAM) construct.

| BAM1 | The more languages you know, the easier it is to learn a new language |
| :--- | :--- |
| BAM2 | People who know many languages are usually smarter than others |
| BAM3 | People who know many languages are usually more creative than others |
| BAM4 | People who know many languages, usually make more money than others |
| BAM5 | Learning new languages helps you to better understand the languages you already know |
| BAM6 | Knowing many languages makes you better at other school subjects |
| BAM7 | Knowing many languages helps you understand other people's feelings better |
| BAM8 | Knowing many languages helps you to see things in different ways |

in inner city areas, suburbs, and in rural regions. Seven schools accepted our invitation. In total, 593 students, 317 girls and 276 boys, answered the questionnaire. The students were all in the final months of grade 8 of lower secondary school, i.e. between 13 and 14 years old. In total, 522 students reported Norwegian to be their first language, whereas 71 students reported having other languages than Norwegian as their first language. All students reported learning the first foreign language English, whereas 505 students were learning one additional foreign language, either French, German or Spanish. The questionnaire was administered digitally on the platform SurveyXact and answered anonymously. It was available in two languages, Norwegian and English, to provide students with some autonomy of choice and to make sure that the questions were understood by all. Newcomers to Norway who struggled with understanding both of these languages, were assisted either by the teachers or by one of the researchers when answering the questionnaire. One or more researchers were present in the classroom when the students answered the questionnaire in order to inform them about the project, how participants' data were guaranteed an ethical treatment, and what the data would be used for. Moreover, the researchers were available to answer any questions from students and teachers when filling in the questionnaire (see more about the data collection process in Haukås, Storto, and Tiurikova 2021b). Prior to the data collection, the research project, including the questionnaire, was submitted for ethical assessment and subsequently approved by the Norwegian Centre for Research Data (NSD).

## Analysis

We used SPSS version 25 to analyse the data. For answering the first research question exploring the extent to which the students ( $n=593$ ) agree with particular beliefs about multilingualism, we calculated the mean and median scores for students' responses to the corresponding items. By calculating descriptive statistics in this way, looking into scores for individual items, we wanted to better understand which particular multilingual benefits students hold positive beliefs about and which not. These insights are important in order to address students' beliefs adequately in school settings. For answering the second research question examining which individual factors can be significantly connected to students' agreement with overall positive beliefs about multilingualism using the BAM construct, we looked at the answers of particular groups of students distinguishing them based on several factors. These factors included learning an L3 vs. only the L2 (English) at school, self-identifying as multilingual, having friends with home languages other than Norwegian, having a migration background, and having experience of living abroad. The construct BAM, which was explored with Likert scale questions, was approached as a continuous variable in the further analysis. As the invidual factors were based on students' 'yes' or 'no' answers to corresponding questions, they were approached as categorical variables. Since the sample size ( $n=593$ ) was sufficient to expect a normal distribution of the data, we decided to run parametric tests for further analyses (Piovesana and Senior 2018). To find out which factors were statistically significant in relation to BAM and which were not, we ran independent samples $t$-tests. We considered a $p$ value with an alpha coefficient 0.05 as significant. Furthermore, the effect size (Cohen's $d$ ) was calculated to determine the importance of the difference between groups and to allow for comparisons between studies, with 0.2 being considered a small effect, 0.4 a medium effect, and 0.6 being a large effect (Calin-Jageman and Cumming 2019).

## Results

Answering the first research question, the results in Table 2 show that there is considerable variation regarding the beliefs of the students for the individual items.

First, it is notable that the mean scores are rather low with the lowest score for BAM4 (2.55) and no statements with a mean score above 4 (agree). Interestingly, the items with the lowest scores (BAM2, BAM3) are not directly linked to the language learning process or using the language.

Table 2. Students' beliefs about the benefits of multilingualism for individual items ( $n=593$ ).

| Items | Statements | Mean | Median | SD |
| :--- | :--- | :---: | :---: | :---: |
| BAM1 | The more languages you know, the easier it is to learn a new language | 3.72 | 4 | 1,16 |
| BAM2 | People who know many languages are usually smarter than others | 2.64 | 3 | 1.26 |
| BAM3 | People who know many languages are usually more creative than others | 2.69 | 3 | 1.17 |
| BAM4 | People who know many languages, usually make more money than others | 2.55 | 3 | 1.14 |
| BAM5 | Learning new languages helps you to better understand the languages you already know | 3.47 | 4 | 1.16 |
| BAM6 | Knowing many languages makes you better at other school subjects | 3.12 | 3 | 1.23 |
| BAM7 | Knowing many languages helps you understand other people's feelings better | 2.97 | 3 | 1.26 |
| BAM8 | Knowing many languages helps you to see things in different ways | 3.75 | 4 | 1.23 |

Thus, most students do not seem to hold beliefs that there are general cognitive advantages of being multilingual such as being smarter or more creative. Furthermore, they do not link knowing multiple languages with economic benefits (BAM4). The highest mean scores are found for items related to the language learning process, such as item BAM1 'The more languages you know, the easier it is to learn a new language', indicating that the students believe that the increasing sum of one's language learning knowledge and experiences are helpful when embarking on learning additional languages. Furthermore, many students hold the positive belief that knowing multiple languages will provide increased insights into the languages they know from before (BAM5). The highest score is found for BAM8 'Knowing many languages helps you to see things in different ways', thus indicating that being multilingual helps students shift perspectives more easily. This item can be linked to increased cognitive flexibility. Interestingly, BAM7, that also can be associated with flexibility, i.e. increased understanding and empathy with others, has a much lower score. It is not clear from the data why these beliefs are scored so differently. Thus, interviews with students could be helpful for better understanding these two beliefs, which both are important for developing interculturally aware citizens.

Regarding the second research question, the results of the independent samples $t$-tests with corresponding calculations of effect sizes (Cohen's $d$ ) for each statistically significant factor are presented in Table 3.

## Factors with no statistical significance in relation to students' beliefs about multilingualism

The independent samples $t$-test revealed no statistically significant differences in beliefs about the benefits of multilingualism between students who self-identify as being multilingual ( $n=396, M=$ 3.15, $\mathrm{SD}=0.78$ ) and those who do not identify themselves as such ( $n=197, M=3.05, \mathrm{SD}=0.76$ ) ( $t$ (591) $=1.55, p=0.12$ ). Furthermore, there was no difference between the beliefs of students who have chosen to study only one language (English) ( $n=88, M=3.05, \mathrm{SD}=0.74$ ) and those who

Table 3. $T$-tests: Differences in beliefs about multilingualism (BAM) between groups.

|  | Pupils | $N$ | Mean | SD | $T$-test | $p$ value ${ }^{\text {a }}$ | Effect size (d) ${ }^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Self-identification as multilingual | 396 | 3.15 | 0.78 | 1.55 | $p=0.12$ |  |
|  | No self-identification a multilingual | 197 | 3.05 | 0.76 |  |  |  |
| 2 | Learning only English (L2) at school | 88 | 3.05 | 0.74 | 0.8 | $p=0.42$ |  |
|  | Learning an L3 at school | 505 | 3.13 | 0.78 |  |  |  |
| 3 | Friends with home languages other than Norwegian | 406 | 3.17 | 0.77 | 3 | $p<0.01$ | 0.35 |
|  | No friends with home languages other than Norwegian | 83 | 2.89 | 0.93 |  |  |  |
| 4 | Migration background | 71 | 3.32 | 0.74 | 2.43 | $p=0.02$ | 0.3 |
|  | No migration background | 522 | 3.09 | 0.77 |  |  |  |
| 5 | Experience of living abroad | 78 | 3.37 | 0.79 | 3.07 | $p<0.01$ | 0.37 |
|  | No experience of living abroad | 498 | 3.09 | 0.75 |  |  |  |

[^1]study two foreign languages (English plus Spanish, German or French) in school ( $n=505, M=3.13$, $\mathrm{SD}=0.78)(t(591)=0.8, p=0.42)$.

## Factors with statistical significance in relation to students' beliefs about multilingualism

Having friends with home languages other than Norwegian was a statistically significant factor in relation to students' beliefs about multilingualism. Students who reported having such friends ( $n=$ 406) tended to agree more with positive benefits of multilingualism ( $M=3.17, \mathrm{SD}=0.77$ ) than learners who reported having no friends with home languages other than Norwegian ( $n=83, M=2.89$, $\mathrm{SD}=0.93)(t(487)=3, p<0.01)$. Cohen's $d$ indicated that the effect size was small to medium for this factor ( $d=0.35$ ).

Furthermore, students with migration background ( $n=71$ ), i.e. those who reported that Norwegian was not their first/native language, had more positive beliefs about multilingualism ( $M=3.32$, $\mathrm{SD}=0.74$ ) compared to the 522 students with no migration background, i.e. those who reported Norwegian to be their first/native language ( $M=3.09, \mathrm{SD}=0.77$ ). The $t$-test result $(t(591)=2.43$, $p=0.02$ ) indicates that this difference between groups is statistically significant. The value of Cohen's $d(d=0.3)$ suggests a small to medium effect size.

Having experience living abroad also turned out to be a statistically significant factor. Students who reported having lived abroad $(n=78)$ had more positive beliefs about multilingualism ( $M=$ 3.37, $\mathrm{SD}=0.79$ ) than those who reported having no experience living abroad ( $n=498, M=3.09$, $\mathrm{SD}=0.75)(t(574)=3.07, p<0.01)$. Cohen's $d$ indicated a medium effect size for the factor of having lived abroad $(d=0.37)$.

## Discussion

The two main objectives of this study were to explore school students beliefs about the potential benefits of multilingualism, and investigate possible differences in beliefs between groups. When comparing the beliefs of the students in this study with beliefs of students in existing research, for example, Wei, Jiang, and Kong (2021), it becomes clear that the students in our study have more divergent beliefs about multilingual benefits. This is a reminder to take the context and individual learner variables into consideration when reporting on participants' beliefs about multilingualism. Students at universities, the focus segment of the study conducted by Wei, Jiang, and Kong (2021), for example, have often chosen to study languages themselves. They can be highly motivated and may consequently have completely different beliefs about the advantages of multilingualism than students in a mandatory school context. Nevertheless, the most positive student beliefs in this study are coherent with the main stated advantages in the curricula for the language subjects in Norwegian schools, namely that learning multiple languages can help increase one's language awareness, learn languages more effectively, and make individuals more flexible to shift perspectives and interact in a complex and increasingly mobile and diverse world (NDET 2019a, 2019b). These findings may indicate that the students have discovered the benefits of multilingualism in their own language learning by themselves, or that their teachers, unlike in previous studies, have focused on these benefits of being multilingual in their teaching. After all, these beliefs are likely the most relevant to address and nurture in school contexts, as they have immediate relevance for the students in their daily lives both inside and outside of the language classroom.

By formulating the second research question, we wanted to explore to what extent there are differences between groups in the dataset. Interestingly, students' beliefs about multilingualism did not seem to differ between those who learn only one foreign language in school (L2 English) and those learning two foreign languages in school (L2 English and L3 French/German/Spanish). Furthermore, identifying as multilingual did not seem to influence students' beliefs positively, as there was no statistically significant difference between students who self-identifed as multilingual and those who did not. The only statistically siginficant differences between groups were found
between students' who reported having friends with other home languages than Norwegian, students with migration backgrounds and students who had stayed abroad. What these variables have in common is that they are all independent from the language subjects the students are learning in school. Thus, the language subjects seem to have less influence on students' beliefs compared to extramural experiences (Sundqvist 2009).

We can only speculate why knowing and learning multiple languages in school contexts and identifying as multilingual do not impact students' beliefs about multilingualism. One reason could be that benefits of being multilingual are not sufficiently adressed and explored in school settings for students to perceive what the benefits may be. As discussed earlier, language teachers see multilingualism as advantageous for themselves, but not automatically for their students. Furthermore, in studies from Norwegian classroom contexts, language teachers have reported focusing only sporadically on students' previous lingustic and language learning knowledge, which may prevent students' from seeing their own multilingualism as an advantage (Haukås 2016; Myklevold 2021; Vikøy and Haukås 2021). In contrast, being with and visiting friends with other home languages than Norwegian may be a direct way for students to experience how multilingualism can be of benefit and relevance to those who use multiple languages in everyday life. Likewise, students with experience of living abroad have likely felt how knowing multiple languages are advantageous when communicating with others. Similarly, students with immigrant backgrounds, i.e. those with other home languages than Norwegian, perceived more benefits of being multilingual than those without immigrant backgrounds. These students are likely exposed to and use multiple languages regularly. Thus, they have probably experienced that knowing and using multiple languages have direct advantages for them when interacting with others and when learning further languages.

## Pedagogical implications

What can be learned from this study? First, teachers of the language subjects should focus on and explore the potential benefits of being multilingual together with the students, as students' counterproductive beliefs may hinder students' motivation for investing time and effort in the language learning process (Ellis 2008; Horwitz 1988). Mantle-Bromley (1995) showed in her study that students' beliefs about language learning can be modified in even short interventions. Furthermore, studies from the UK with similar age groups as in our study have shown that even very short term interventions such as a one lesson panel discussion or a lesson with external guests may positively impact students attitudes to learning languages (Taylor and Marsden 2012). Lanvers, Hultgren, and Gayton's (2019) and Lanvers's (2020) short interventions in the UK also had a positive impact on school students motivation for learning languages. Their interventions are of particular interest, as they included lessons where the benefits of multilingualism were explicitly addressed.

In the Norwegian context and elsewhere, the statements in the Ungspråk questionnaire (Haukås, Storto, and Tiurikova 2021b) on the potential benefits of multilingualism may be a useful starting tool for stimulating students' reflection about their language learning and reasons for becoming multilingual (see Appendix). The teachers can, for example, administer the questionnaire to the students to collect information about their beliefs, and subsequently engage the students in exploring and discussing the results in the group and comparing them to research findings on the benefits of multilingualism.

Nevertheless, the results of this study suggest that awareness-raising activities like discussions in the classroom may not be as effective for changing students beliefs about multilingualism as encounters where the use of multiple languages are seen as of immediate relevance. Thus, all students need authentic opportunities to experience that being multilingual is beneficial. Given that travelling abroad with schoolchildren may not be a realistic option, students should be offered the chance to experience using their languages in authentic situations organised by the school. This can be done by inviting multilingual people of various linguistic backgrounds to the classroom
and practising the curriculum's goals of increased understanding with them (NDET 2019a, 2019b), or by organising online exchanges with language learners from other contexts. In this way, learning and knowing languages may increasingly be seen as rich instruments for interacting with real people and as tools for stimulating students' intrinsic motivation (Krüsemann 2017).

However, the pedagogical implications discussed above are dependent on teachers' preparedness to make changes in how they teach languages and how they value their students' multilingualism. Given teachers' reported lack of knowledge of how they can foucs on students' multilingualism as a resource in meaningful ways, this calls for an increased emphasis on multilingualism in teacher education programmes and in professional development courses. As suggested by Krulatz, Neokleous, and Dahl (2022, Introduction Section), "through promoting self-reflection in teacher education programmes and engaging teachers in action research in multilingual settings, teachers can be empowered to act as agents of change".

## Conclusion

Whereas students' beliefs about language learning in general have been explored in a large number of studies, our knowledge of students' beliefs about the benefits of multilingualism is quite limited. More knowledge in this field is important to understand how multilingual teaching approaches can be better adapted to and challenge students' views of multilingualism, and to motivate them for further language learning. This study provided first insights into Norwegian secondary school students' beliefs about the potential benefits of multilingualism. Nevertheless, the findings of this study need to be complemented by qualitative research and intervention studies. First, qualitative individual or focus group interviews could make us better understand students' reflections related to the items in the questionnaire. This may be particularly important for understanding students' tendency to disagree with several items. Second, 'beliefs interventions' in the languages classrooms could explore to what extent such initiatives can foster increased motivation for language learning and for becoming multilingual. Furthermore, interventions in the classrooms that better mirror multilingual and intercultural interactions outside of the classrooom could provide insights into how successful multilingual pedagogical approaches can be developed.

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[^1]:    ${ }^{\text {a }}$ The value was significant at $p<0.05$.
    ${ }^{\mathrm{b}} 0.2=$ small, $0.4=$ medium, $0.6=$ large (Calin-Jageman and Cumming 2019).

