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Motivation *for* or *from* bilingual education? A comparative study of learner views in the Netherlands

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ABSTRACT

Content and Language Integrated Learning (CLIL) has been said to increase not only foreign language proficiency but also learner motivation (Coyle, D., P. Hood, and D. Marsh. 2010. *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press). In contexts where CLIL is elective, however, the question can be raised as to whether its motivational effects can be distinguished from the pre-existing motivation that may have influenced the learner's choice of educational route. The current study examined motivational differences between learners in Dutch-English bilingual and mainstream education. The aim was to establish whether the learner groups were differently motivated and whether their motivation appeared to be diachronically related to their chosen educational format. 581 learners in the first three years of general secondary education completed a questionnaire exploring their views on (language) learning. Results were analysed in terms of differences between bilingual and mainstream learners and across year-groups. Learners in bilingual education displayed more motivation in nearly all of the areas examined. There was little evidence, however, of this being a result of exposure to bilingual education, reinforcing the idea that motivation may be inherent to this group of CLIL learners.

Bilingual education in the Netherlands is nearing its thirtieth anniversary. First established in a handful of schools in 1989, it has since grown into a broad-reaching educational paradigm that is monitored on a national level (de Graaff and van Wilgenburg 2015) and has been shown to produce positive academic outcomes (Verspoor, de Bot, and Xu 2015). As with bilingual education approaches elsewhere (e.g. Rumlich 2014; Broca 2016), however, the question has been raised of whether its apparent success is related to its pedagogies or to the type of learner who chooses to follow it (Sieben and van Ginderen 2014). The current study sought to address this question not with regard to academic achievement but in terms of motivation.

Tweetalig onderwijs (TTO): Bilingual education in the Netherlands

Bilingual education in the Netherlands was first established as a means of providing motivated, high-achieving secondary school pupils with the opportunity to increase their proficiency in a second language (L2) while at the same time learning subject content (Maljers 2007). Since then, it has

expanded not only in scale but also in breadth, with some schools offering bilingual programmes in general and pre-vocational streams as well as at the pre-university level.[1] The most academic stream (VWO) is still favoured as a bilingual route, although the pre-vocational (VMBO) variant in particular has produced promising outcomes in recent years (Denman, Tanner, and de Graaff 2013).

Bilingual education is implemented according to a national standard developed in collaboration with bilingual schools (de Graaff and van Wilgenburg 2015). The Standard for Bilingual Education (Nuffic 2017) sets out minimum requirements in terms of target language use, level of L2 to be reached, teachers' L2 proficiency, academic outcomes for both L2-medium and Dutch-medium subjects, use of content and language integrated learning (CLIL) pedagogy, and emphasis on European and International Orientation (EIO). Schools offering bilingual education are required to follow an accreditation programme and are subject to inspection approximately every five years.

It is perhaps due to the selective beginnings of the approach that the inclusivity of bilingual education has been brought into question. As most bilingual schools also offer a parallel mainstream track, entry into a bilingual programme is usually a carefully thought-through decision on the part of the learner, his/her parents/carers and often also the receiving bilingual school, which may have specific admissions criteria. Weenink's (2005) thesis on elitism in Dutch education identifies bilingual education as a platform for already high-achieving and socially privileged young people to be given yet more opportunities. Sieben and van Ginderen (2014) supported this view with the finding that bilingual education learners tended to come from families with higher socio-economic status. The same view has been echoed recently in CLIL research outside of the Netherlands, for example in Bruton's (2011) call for more rigorous attention in research to excluding pre-existing population differences, in Rumlich's (2014, 2016) conclusion that German CLIL learners are affectively better-disposed to language learning, and in Broca's (2016) assertion that CLIL cohorts in Spain are inherently different to non-CLIL cohorts. In response, Dutch researchers have begun to incorporate comparator samples from schools that do not offer a bilingual option (Verspoor et al. 2010), or to take a 0-measurement and report only value-added differences (Verspoor, de Bot, and Xu 2015). Results of these studies have thus far continued to reflect positively on the outcomes of bilingual compared to mainstream education in terms of academic outcomes.

Motivation in language learning

Theories of language learning motivation have been in a state of change since the move away from the dominant social psychological approach in the 1980s and the subsequent incorporation of a range of theories from cognitive psychology, self-plurality and, most recently, a complex dynamic systems approach (Dörnyei and Ushioda 2011). All of these approaches incorporate a number of elements from a range of different concepts, many with overlapping features. One of the most popular approaches to language motivation in the past decade has been Dörnyei's (2009) L2 Motivational Self System (L2MSS), which is the theoretical model at the centre of the current study.

The L2 Motivational Self System

The L2MSS is a model of L2 motivation that incorporates elements of earlier models, combined with the concept of self-plurality and, in particular, of 'possible selves' (Markus and Nurius 1986, 1987) and self-discrepancy theory (Higgins 1987). Two elements of Dörnyei's tripartite model reflect aspect inherent to the learner's sense of self, namely his image of the L2 user he would like to be in the future (Ideal L2 Self), and his sense of obligation to become a certain kind of L2 user (Ought-to L2 Self). The Ideal L2 Self has been argued to reflect rather than surpass long-standing concepts of L2 motivation (Macintyre, Mackinnon, and Clément 2009), including Gardner's (1985) concepts of integrative and instrumental orientation, which dominated the field for most of the twentieth century (Dörnyei and Ushioda 2011). The third element of the L2MSS is the experience of the L2 learning situation (L2 Learning Experience), which is usually interpreted as referring to the language classroom. In

this sense, both internal and external factors are thought to combine to pull the learner forwards in his language learning, or potentially to hinder that process (Dörnyei 2009).

The L2MSS has been extensively tested, with largely positive results in terms of its cultural robustness and transferability (Muir and Dörnyei 2013). A number of instruments have been created on its basis. For example, Ryan (2009) created a lengthy Motivational Factors Questionnaire (MFQ) to investigate the interplay between the L2MSS and integrativeness, and Csizér and Kormos (2009) investigated its elements as predictors of motivation. Their results were positive regarding the validity of the Ideal L2 Self and the L2 Learning Experience, although the Ought-to L2 Self provided less convincing results.

CLIL and (language) motivation

In the context of CLIL specifically, motivation has been mentioned to varying degrees as one of the major benefits of the approach (Nuffield 2000; Morgan 2006; Merisuo-Storm 2007; Seikkula-Leino 2007; Lasagabaster and Sierra 2009; Mearns 2012; Ruiz de Zarobe 2013). As highlighted by Koster and van Putten (2014) in relation to bilingual education in the Netherlands, the use of the target language (TL) for an applied purpose (the learning of subject content) and real-life communication within the CLIL classroom can provide learners with a degree of relevance and authenticity, as well as with proximal learning goals that can further contribute to positive attitudes and motivation. Likewise, Sylvén (2007) posits that the use of authentic TL materials, as encouraged in the Standard for Bilingual Education (Nuffic 2017) and in the CLIL literature (Coyle, Hood, and Marsh 2010) could make a similar contribution. Some argue that it is the diversification of teaching and learning methods in CLIL classrooms that is motivating and stimulating for learners, for example through increased ownership and autonomy (Gajo and Serra 2002; Nikula 2007; Marsh 2008; Baetens Beardsmore 2009; Banegas 2012), as well as interaction, communication and active engagement (Ting 2010; Hüttner, Dalton-Puffer, and Smit 2013). Indeed, experimental studies such as those conducted by Gajo and Serra (2002) and Hunt (2011) have identified benefits to learners school-wide, where teachers adopted elements of CLIL pedagogies in both bilingual and non-bilingual lessons.

While the studies cited above have provided positive evidence for CLIL, the same debate referred to earlier has arisen regarding its benefits to motivation as well as to linguistic and academic attainment (Rumlich 2014, 2016; Sylvén and Thompson 2015). Initial findings from Sylvén and Thompson's (2015) longitudinal study of motivation in a Swedish CLIL stream suggested that students who had elected to follow a CLIL programme displayed more motivation than those who had not. This suggested that motivation may be a trait of CLIL learners rather than a state evoked by the CLIL experience. Rumlich (2014) revealed similar findings regarding learner attitudes in Germany. In the context of the Netherlands, where bilingual education has a reputation for being elitist but is growing in terms of inclusivity, it is likewise relevant to consider whether motivational differences appear to be the result *of* or a driver *for* the choice for bilingual education.

Research questions

On the basis of the previous studies cited above, the current study sought to address the recent discussions regarding the chronology and causality of higher levels of motivation among CLIL learners. The questions at the centre of this research were:

(1) How does the motivation of learners in bilingual education differ from that of learners in mainstream education?
(2) To what extent do motivational differences between learners in bilingual and mainstream education appear to develop differently following exposure to their chosen educational format?

Simply put, are learners motivated *for* or *from* bilingual education?

Method

The current study aimed to investigate the nature and strength of motivation in the first three years of bilingual and mainstream general secondary education (HAVO). It considered whether pupils were already differently motivated on entering bilingual education and also whether exposure to bilingual education appeared to have influenced that motivation. Cross-sectional data were collected using a self-administered online questionnaire. The details of this instrument and the more general methodology are described below.

Participants

The online questionnaire was sent to the bilingual and mainstream junior secondary departments of four schools in different regions of the Netherlands in September 2012. The schools had agreed to participate voluntarily, and confirmed that they had followed their own procedures for obtaining informed consent from the participants.

The questionnaire was completed in October 2012, by 581 learners aged between eleven and fifteen, in the first three years of general secondary education (HAVO). In the case of the first-year pupils, this was viewed as a baseline measurement as it took place only weeks after first entering bilingual education. The decision to focus on the general stream (HAVO), which prepares learners for entry into universities of applied science, was based on the limited focus on bilingual education research at this level in the Netherlands. All four schools provided participants from both the bilingual and mainstream cohorts. Responses were given anonymously.

Of the 581 participants, 234 attended bilingual education and 344 attended mainstream education. Entry into bilingual education at the participant schools was voluntary, although all of the bilingual streams had additional admissions criteria. For example, potential pupils at some schools were required to complete a language aptitude test, while at other schools they had had to display their commitment in an interview or letter. Existing level of English was not a criterion for admission to the bilingual stream at any of the participant schools.

In accordance with the national Standard for Bilingual Education (Nuffic 2017). The bilingual education pupils received at least fifty per cent of their lessons in English, including lessons for a variety of subjects alongside discrete lessons on English language and literature. The remaining subjects were taught in Dutch or, in the case of foreign languages,[2] the relevant target language. The mainstream pupils followed all of their lessons in Dutch and English followed a similar curriculum to other foreign languages.

Distribution of participants across the different Education Types and Year-groups are displayed in Table 1.

Questionnaire design

Groundwork for the questionnaire design had been carried out through a Student Participatory Research approach (Leitch et al. 2007) at one of the research schools in 2011–12 (Mearns, Coyle, and de Graaff 2014). The researcher had worked closely with a group of ten pupils (five from bilingual, five from mainstream) and their classmates in order to investigate the issues that they found to be relevant and the language that they used to discuss their motivation for

Table 1. Summary of participants per year-group in bilingual and mainstream.

Year	Bilingual	Mainstream	Total
1	90	110	200
2	52	100	152
3	92	137	229
Total	234	344	581

and roles within school. Data from this preparatory work were coded in NVivo 9.2 and the most pertinent topics were used as a basis for the two research questions above (see Mearns 2015, for a full account).

These themes were compared with the frameworks used by Ryan (2009) and by Csizér and Kormos (2009), and with Dörnyei's (2009) L2MSS. On this basis, a questionnaire was designed in which the central part consisted of 20 Likert-style batteries, totalling a maximum of 95 items.[3] These concerned the pupil's attitudes towards, motivations in and experiences of school and (language) learning. Bilingual and mainstream learners were presented with identical questionnaires, with two exceptions. Firstly, items relating to either Dutch-medium or English-medium lessons and teaching were separated for bilingual, and secondly, items regarding reasons for choosing bilingual or mainstream differed according to the group.

A five-point scale was used for the Likert items in order to include a neutral category, as advocated by Friedman and Amoo (1999). The initial questionnaire was piloted with pupils who had been involved in the preparatory data collection and small changes in wording were made accordingly. The pilot respondents expressed a strong preference for retaining the odd number of items in the scale.

Choice for bilingual or mainstream education

The items regarding participants' choice to follow bilingual or mainstream education were selected on the basis of the reasons offered by participants in the preparatory phase of the study, as reported by Mearns (2015). The reasons included in the questionnaire reflected those most commonly referred to during online and live group discussions, and are displayed in Table 3 of the Findings section. It was noticeable at the design stage that learners in mainstream had difficulty in identifying positive reasons for their choice of educational route and more often gave reasons for not having chosen bilingual education. This is reflected in the items included in the questionnaire and is addressed further in the Limitations section.

Design of scale variables

Initial analysis of the scale data focused on individual items, viewed as non-parametric data as recommended by Boone and Boone (2012) (see Mearns 2015, for further explanation). Subsequently, suitable items were reworked into manageable scale variables and analysed parametrically. This led to the identification of eight key factors incorporating 41 of the original items. The remaining items were excluded either because they adversely affected the statistical reliability of the scales or because they were not included in the questionnaires for both groups.

Cronbach's Alpha was used to test reliability of the scales, for which the results are displayed alongside the eight factors and the contributing items in Table 4. All but one of the factors had a reliability score ($á$) higher than 0.7. The remaining factor had a reliability score of 0.61, which is acceptable according to Muijs (2011).

The theoretical basis for the variables was drawn from the L2MSS and the related studies by Ryan (2009), and Csizér and Kormos (2009). Variables 1 and 2 (*Attitude to English* and *Attitude to Foreign Languages*) relate to similar variables from Ryan (2009). Attitudes were deemed important on the basis of the model presented by Kormos, Kiddle, and Csizér (2011), which suggests that language attitudes can exert important influence on the Ideal L2 Self element of the L2MSS. A distinction was made between Variables 1 and 2 in order to identify whether potentially more positive attitudes towards the learning of English in bilingual education also appeared to exist in relation to language learning in general. According to Rutgers (2013), learners in bilingual education may approach the learning of an L3 differently to learners in mainstream.

Variables 3 and 4 (*Attitude to L2 English Speakers* and *Instrumental Motivation*) relate to Ryan's variables, Attitudes to L2 Community (Variable 3) and International Contact, Travel Orientation and Instrumentality, and Csizér & Kormos' International Posture (Variable 4). Elements of these variables are grounded in Gardner's (1985) categories of integrativeness and instrumentality, which it has been

argued can contribute to the formation of the Ideal L2 Self (Macintyre, Mackinnon, and Clément 2009). As the international nature of the English language as it is learned in the Netherlands makes it increasingly controversial to interpret motivation on the basis of the desire to integrate with a single English-speaking community (Coetzee-Van Rooy 2006), the L2 community referred to in Variable 3 is a community of successful L2 learners of English, such as the participants in this study might realistically hope to become. Instrumentality (Variable 4) incorporates practical advantages to speaking English, including those associated with travel and international contact, although these form separate variables in Ryan's MFQ.

Variables 5–8 relate directly to elements of the L2MSS. Variable 5 (*Vision of Future Self*) addresses the learner's vision of him/herself in the future, as in the Ideal L2 Self element of previous studies (Csizér and Kormos 2009; Ryan 2009). Variable 6 (*Family Attitude to English*) concerns the influence of family in motivation to learn English, as an element of the Ought-to L2 Self. The original questionnaire also contained items pertaining to the influence of friends in this respect although responses to these items did not relate to those with regard to family. Qualitative data obtained in the preparatory phase of the study suggested that many learners viewed friends as having little influence on their decisions or motivations with regard to school, which could go some way towards explaining this outcome. Inclusion of friends within the same variable as family would have adversely affected the reliability of the scale, hence its omission.

Variables 7 and 8 (*English Lessons* and *Extramural English*) both relate to the L2 Learning Experience element of the L2MSS, and to Milieu in Ryan's (2009) MFQ. As learners of English in the Netherlands are exposed to a large amount of L2 input outside of school, through media and an increasingly international community (Verspoor, de Bot, and van Rein 2010), it was deemed appropriate to differentiate between the learning experience in the classroom and that outside of it. Verspoor et al.'s study of L2 attainment among bilingual learners with more or less extramural exposure to English showed that this variable had a significant impact on language learning. Furthermore, Sylvén's (2007) research into CLIL in a similar linguistic context in Sweden revealed that large amounts of extramural exposure could adversely affect learners' attitudes towards learning English in school and even cancel out the motivational benefits of CLIL.

Data analysis

Quantitative data analysis was performed in SPSS 23. For the data regarding reasons for choosing bilingual or mainstream education, means analyses highlighted the most and least popular reasons from each group. Data from these items were employed to support the findings regarding inherent differences in the motivations of mainstream and bilingual learners (RQ1).

For the scaled items, which were the same for both bilingual and mainstream respondents, two-way ANOVAs for Education Type (bilingual/mainstream) and Year (1/2/3) were performed. The main effects for Education Type (ET) were interpreted as reflecting differences between the learner groups, which relates to RQ1. RQ2 was addressed by examining interactions between ET and Year, using one-way ANOVAs within each ET. There, Scheffé posthoc tests were carried out to identify where differences lay between individual year-groups.

For all of the ANOVAs, partial eta squared (η_p^2) was used to calculate effect size, using the parameters advised by Cohen (1988), namely >0.01 for a small effect, >0.06 for a medium effect and >0.14 for a large effect.

Findings

This section will begin by addressing the reasons given by respondents for having opted for their chosen educational route. This will be followed by analysis of the motivation factors displayed in Table 2, first in terms of main effects of Education type and then in terms of interaction between Education Type and Year-group.

Table 2. Factors for Likert scale items with reliability scores.

Factor	á
1. Attitude to English (5 items)	.74

- *I find the English language useful*
- *I find the English language important*
- *I find the English language boring**
- *My friends think it's useful to learn English*
- *I need to do well in English because it's useful for communicating with different people*

2. Attitude to Foreign Languages (7 items)	.81

- *I find languages boring**
- *I find languages useful*
- *I find languages important*
- *It's important to learn different languages because it's fun*
- *It's important to learn different languages if you want to travel to countries where those languages are spoken*
- *I find languages difficult**
- *If I make a mistake when speaking another language I try to correct the mistake the next time*

3. Attitude to L2 English-Speakers (5 items)	.81

- *People who have learned to speak good English have good jobs*
- *People who have learned to speak good English earn lots of money*
- *People who have learned to speak good English are clever*
- *People who have learned to speak good English are well-educated*
- *People who have learned to speak good English are interesting*

4. Instrumental Motivation (4 items)	.71

- *Learning English is important to me because I want to travel internationally*
- *Learning English is important to me because I want to work or study abroad*
- *Learning English is important to me because I want to make contact with people in other countries*
- *I need to do well in English because it is important for my future job or studies*

5. Vision of Future Self (5 items)	.80

- *When I think of myself in 10 years, I think of someone who can speak good English*
- *When I think of myself in 10 years, I think of someone who travels a lot*
- *When I think of myself in 10 years, I think of someone with a good job*
- *When I think of myself in 10 years, I think of someone with friends all over the world*
- *When I think of myself in 10 years, I think of someone successful*

6. Family Attitude to English (4 items)	.71

- *My family says that English is important for my future*
- *My family would be disappointed if I failed English*
- *My family thinks English is more important than other subjects*
- *I need to do well in English because my family finds it important*

7. English Lessons (7 items)	.84

- *My English teacher makes learning English fun*
- *I learn a lot during English lessons*
- *My English teacher varies his/her lessons*
- *My English teacher thinks I work hard for English*
- *My English teacher seems to enjoy his/her subject*
- *I find English lessons useful*
- *I find English lessons challenging*

8. Extramural English (4 items)	.61

- *I watch TV in English outside of lessons*
- *I use English for gaming*
- *I use English for social networking*
- *I seek opportunities to speak English outside of lessons*

*Negatively-worded items were recoded prior to analysis.

Choice of education type

Table 3 displays the mean responses to the items regarding the choice for bilingual or mainstream education.

As can be seen in the standard deviations, there was wide variation in the responses regarding reasons for choosing each Education Type. This variation was narrower in bilingual education,

Table 3. Mean responses regarding the choice for bilingual or mainstream education.

Item	Mean	N	SD
*I chose **bilingual** education because …*			
… I knew other people who were doing it	2.42	233	1.33
… my parents wanted me to	2.31	233	1.28
… my friends were going to bilingual education	1.78	233	.99
… I could already speak good English	3.39	233	1.24
… I thought the trips would be fun	3.53	233	1.25
… English is important for my future	4.17	233	.91
… I wanted an extra challenge	3.64	233	1.20
*I chose **mainstream** education because …*			
… I was afraid that bilingual education would be too difficult	2.86	345	1.45
… my friends did	2.12	345	1.32
… bilingual education wasn't an option for me	2.60	345	1.60
… I didn't see the point in bilingual education	2.39	345	1.42
… it never occurred to me to do otherwise	2.65	345	1.44

where the standard deviation ranged from 0.91 to 1.33 on a five-point scale. In mainstream education, the range was from 1.32 to 1.60, suggesting less consensus within the group. For both groups, friends appear to have had the least influence on their choice of education type.

Among the reasons given for following bilingual education, the strongest response was regarding the relevance of English for the respondent's future plans, followed by a desire for challenge and then the attractiveness of trips abroad. All of these had an average rating of higher than 3.

For mainstream, the reason that scored highest was the fear that bilingual education would have been 'too difficult', although it should be noted that none of the mean responses from the mainstream group were higher than 3. No additional reasons for choosing mainstream were offered by learners in the accompanying open question.

Motivation scales

Table 4 displays the descriptive data for the responses to the eight motivation scales created from the Likert scale items. These will be discussed with regard to main effects of Education Type, and interactions between Education Type and Year, below.

Main effects of education type

Table 5 displays the results of the two-way ANOVAs in terms of the main effects for Education Type.

As Table 5 shows, significant main effects of Education Type were observed for seven of the eight variables. As highlighted by the mean scores in Table 4, bilingual learners scored higher for all factors except Variable 6 (*Family Attitude to English*). Here, the difference between scores in bilingual and mainstream was nonsignificant although, as explained below, significant interactions between Education Type and Year-group were observed.

Interactions between education type and year

A medium-sized significant interaction between ET and Year was observed for Variable 7, (*English lessons*) $F(1, 568) = 23.39$, $p < .001$, $\eta_p^2 = .076$. The subsequent one-way ANOVA within each Education Type highlighted a medium to large significant difference between Year-groups in both mainstream ($F(2, 343) = 21.34$, $p < .001$, $\eta_p^2 = .111$) and bilingual ($F(2, 231) = 36.53$, $p < .001$, $\eta_p^2 = .240$). Scheffé posthoc analysis and the descriptive data in Table 5 indicate that first years in mainstream scored significantly higher than third years ($p = .048$), and that both first and third years scored significantly higher than second years (both $p < .001$). In bilingual, first years scored significantly higher than third years ($p < .001$), as did second years ($p < .001$), while the difference between first and second years was nonsignificant.

Table 4. Summary of responses from mainstream and bilingual learners to scale variables.

Factor	Year	Bilingual			Mainstream		
		M	SD	N	M	SD	N
Attitude to English	1	4.25	.45	90	3.99	.65	110
	2	4.17	.41	52	3.68	.69	100
	3	4.13	.55	92	3.94	.67	137
	Total	4.18[†]	.48	234	3.88[†]	.68	347
Attitude to Foreign Languages	1	3.91	.53	90	3.79	.61	110
	2	3.84	.71	52	3.48	.67	100
	3	3.80	.72	92	3.48	.70	137
	Total	3.85[†]	.65	234	3.58[†]	.68	347
Attitude to L2 English Speakers	1	3.26	.55	90	2.85	.53	110
	2	3.20	.69	52	2.99	.72	100
	3	3.22	.64	92	2.84	.68	137
	Total	3.23[†]	.62	234	2.89[†]	.65	347
Instrumental Motivation	1	3.84	.71	90	3.30	.84	110
	2	3.89	.74	52	3.34	.86	100
	3	3.85	.73	92	3.48	.86	137
	Total	3.86[†]	.72	234	3.38[†]	.85	347
Vision of Future Self	1	3.79	.75	89	3.30	.79	110
	2	3.79	.69	52	3.43	.79	100
	3	3.99	.65	92	3.66	.72	136
	Total	3.87[†]	.70	233	3.48[†]	.78	346
Family Attitude to English	1	3.13	.88	90	3.22	.80	110
	2	3.17	.94	52	3.30	.82	100
	3	3.23	.82	92	3.09	.88	137
	Total	3.18	.87	234	3.19	.84	347
English Lessons	1	3.93[§]	.53	90	3.69[§]	.60	110
	2	3.78[§]	.46	52	2.98[§]	.98	100
	3	3.14[§]	.82	92	3.44[§]	.78	136
	Total	3.59[†]	.74	234	3.39[†]	.84	346
Extramural English	1	3.16	.79	90	2.65	.82	110
	2	3.21	.90	52	2.72	.86	100
	3	3.28	.80	92	2.98	.86	137
	Total	3.22[†]	.82	234	2.80[†]	.86	347

[†]Significant main effect of Education Type.
[§]Significant interaction ET*Year.

Table 5. Main effects for Education Type, including effect size (η_p^2), from 2-way ANOVA.

Factor	F (df = 1)	p	η_p^2
Attitude to English	39.731	<.001**	.065
Attitude to Foreign Languages	24.495	<.001**	.041
Attitude to L2 English speakers	38.617	<.001**	.064
Instrumental motivation	49.821	<.001**	.081
Vision of Future Self	39.951	<.001**	.066
Family Attitude to English	.021	.884	.000
English Lessons	16.766	<.001**	.029
Extramural English	39.527	<.001**	.065

** = significant at $p < .001$.

There were no significant interactions between Education Type and Year for the remaining seven variables.

Discussion

This study sought to address two research questions regarding the nature and role of motivation in bilingual and mainstream education. The findings presented above will now be discussed in relation to each of those research questions.

RQ1. How does the motivation of learners in bilingual education differ from that of learners in mainstream education?

The above statistical analysis of factors relating to motivation suggests a generally higher level of motivation among bilingual learners compared to mainstream learners in terms of their attitudes towards English, other foreign languages and the L2 English-speaking community, instrumental motivation, response to English lessons, and extramural exposure to English. The tendency towards stronger motivation from bilingual learners reflects findings from previous studies of CLIL in other contexts (e.g. Lasagabaster and Sierra 2009; Sylvén and Thompson 2015), in which CLIL learners have also displayed higher motivation than non-CLIL learners.

Further evidence of higher levels of motivation among bilingual respondents may be drawn from learners' motivations for their chosen education type. Dörnyei (2009) highlights the importance of the clarity and potency of one's future self-image if it is to be a strong motivator for (language) learning. The range of responses regarding reasons for choosing a particular educational route was broader in mainstream than among bilingual learners. This might imply that their reasons for choosing bilingual education were clearer than the mainstream learners' reasons for not choosing it. Furthermore, the mean responses from the bilingual learners were generally higher, perhaps suggesting stronger conviction. The most strongly identified reason for having chosen bilingual education was its relevance for the learner's future plans, followed by a desire to be challenged. The drive to achieve an image of the ideal self, and thus also motivation, may therefore have been higher among the bilingual group. The mainstream group, in contrast, identified the perceived difficulty of bilingual education as their most prominent motivator for their choice of mainstream education, suggesting on the one hand more negative than positive motivation, and on the other perhaps a lack of academic self-confidence.

The factor that did not appear to drive bilingual learners more strongly than it did the mainstream group was their family's (perceived) attitude to English. Sieben and van Ginderen (2014) observed that family background could influence the choice for bilingual education, and suggested that parental engagement with and valuing of the bilingual route could be a key difference between bilingual and mainstream learners. These findings are to some extent contradicted here, where it appears that family attitudes towards English were a marginally stronger motivator for mainstream than for bilingual learners. The marginality of this conclusion, however, could reflect Ryan's (2009) view that the Ought-to L2 Self is less influential and perhaps also less measurable than the other elements of the L2MSS, perhaps due to its being closely linked to cultural values and norms (Azarnoosh and Birjandi 2012). In this sense, the lack of contrast between the bilingual and mainstream responses in this respect may reflect a lack of (conscious) concern with parents' attitudes among both groups.

RQ2. To what extent do motivational differences between learners in bilingual and mainstream education appear to develop differently following exposure to their chosen educational format?

Dörnyei's inclusion of the L2 Learning Experience as a vital pillar of the L2MSS was based on the understanding that both internal and external factors are important in determining learning motivation (Ushioda 2012). While the bilingual learners in the current study displayed higher levels of motivation across all factors investigated, it is possible that that motivation existed independently of the bilingual education experience. This would reflect the views expressed in criticisms of research into CLIL and other bilingual programmes (e.g. Bruton 2011). It was therefore of interest to further examine responses in order to gauge the extent to which motivation appeared to differ following exposure to the bilingual or mainstream programmes.

Cross-sectional comparisons of responses across year-groups revealed little difference between the motivational levels of learners at the beginning of their career in bilingual education and those with more experience of it. Indeed, with regard to English lessons, responses among third years in bilingual education were significantly more negative than among first years. This could be a reflection of the decline in positivity commonly observed as learners grow older (Lasagabaster and Sierra 2009) and therefore does not necessarily imply a negative effect of bilingual education on motivation. It also does not, however, suggest that bilingual education successfully counteracts falling motivation, as might have been expected in the light of CLIL literature that promotes the approach for its motivational benefits (Coyle, Hood, and Marsh 2010).

Limitations of this study

A limitation of this study lay in the research instrument, which was not statistically validated prior to use. The scale variables created for the purpose of this analysis were not part of the original questionnaire design, which was aimed at non-parametric analysis. It would be valuable for future research in this area to employ a purpose-designed and validated instrument in order to confirm the findings reported here. Alternatively, future research using a streamlined version of the questionnaire featured here could serve to further validate the instrument.

A second element of the questionnaire design that could be improved were the suggested reasons for having chosen mainstream or bilingual education. The reasons offered were based on those suggested by pupils in the first phase of the research but were biased towards the assumption that a choice of mainstream education was a conscious rejection of bilingual education. While it would be interesting to investigate in more detail whether mainstream learners might also make a conscious positive choice for mainstream education, perhaps this is also an indication that mainstream programmes do not offer obvious extra benefits to learners. In that sense, pupils' interpretation of mainstream being a rejection of bilingual education may be understandable.

A further limitation of this research was its absence of qualitative data and of focus on actual classroom practices and the role of the CLIL teacher in influencing learner motivation. Future research in this area could combine learner views on motivation with a study of teacher beliefs as performed by van Kampen, Admiraal, and Berry (2016), and with interviews and classroom observations in order to determine more directly the relationship between CLIL practices and learner motivations. This would also serve to better accommodation current views on motivation as a dynamic system (Dörnyei and Ushioda 2011).

Finally, Variable 7 in this study referred to learners' attitudes towards English lessons as a reflection of the in-school L2 Learning Experience element of the L2MSS. In a CLIL, context, however, the L2 Learning Experience extends beyond the English classroom. The influence of English-medium lessons for other subjects may therefore also play a role. Somers and Llinares (2017) have highlighted the need to operationalise motivation in CLIL differently for this reason, although the questionnaire design in the current study did not allow for the creation of a reliable scale variable to measure responses to subjects other than English. It is recommended that future motivation research take this unique feature of the CLIL context into account.

Conclusions

This paper has addressed data gathered from 581 learners in the first three years of bilingual and mainstream secondary education in the Netherlands. It considered the data in terms of motivational differences between the groups, but also of potential differences in motivation among learners following more or less exposure to the different educational formats. The study reflected the growing emphasis in the international CLIL research community on establishing whether differences between CLIL and non-CLIL predate entry into CLIL programmes. The questions the research sought to address were, firstly, whether learners in bilingual education were more motivated than their mainstream peers; and secondly, whether that motivation appeared to be diachronically related to exposure to bilingual education.

In terms of overall levels of motivation at the beginning of the academic year, this study confirmed findings from elsewhere that learners in the bilingual stream displayed in most respects more motivation than their mainstream counterparts. In addition, they were able to express with more conviction their reasons for choosing bilingual education, compared to the impression of resignation given by mainstream responses. Among these reasons, relevance for the future was the most common.

Findings regarding differences between learners of different ages suggest little differential influence from bilingual education on motivation. The decline in positivity between first and third year in the bilingual stream regarding the experience of English lessons reinforces this conclusion, as well as

the common belief and other research findings that bilingual learners are inherently more motivated, independent of their programme of study (Coleman 2006; Sylvén and Thompson 2015).

The findings reported here add to the growing body of research contributing to our understanding of characteristics of learners in bilingual/CLIL and mainstream routes in education, specifically within the Dutch general secondary education context. The suggestion from the outcomes of this study that motivation in many respects predates entry into a bilingual stream reinforces the need for inclusion of both pre- and post-data in comparative studies of the effectiveness of CLIL in terms of both affective and academic elements, as motivation has been identified as influencing both of these areas (Dörnyei and Ushioda 2011).

A further implication of these findings, as explored in more detail in Mearns (2015) and Mearns and de Graaff (in press), is the importance of recognising and addressing differences between learners or groups of learners not only in terms of academic performance but also with regard to affective factors such as motivation. If we observe that learners are likely to have chosen a CLIL route because of the instrumental value of English and its relevance to their future plans, and that they are motivated by this, it may be possible to tailor CLIL programmes to respond to and nurture this motivation. Alternatively, it could be beneficial to harness the more self-determined forms of motivation (Deci and Ryan (2002) among learners at the outset of a CLIL programme and to encourage their growth, rather than allowing them to stagnate. 'Motivational differentiation' (Mearns 2015, 305) such as this would not only apply to CLIL streams, but also to the tailoring of approaches to engaging and motivating learners who have not selected a bilingual route.

Notes

1. Dutch secondary education is streamed. Approximately 50% of learners follow a pre-vocational (VMBO) route, the other 50% being spread across general (HAVO) and pre-academic (VWO) routes (Onderwijs in Cijfers 2016). Learners following a general route will be likely to progress to higher vocational degrees such as nursing, hotel management or paralegal studies.
2. Usually French and/or German although increasingly also Spanish or Mandarin Chinese.
3. The exact numbers of questions and items per section was dependent on filter questions, e.g. year-group and education type.

Disclosure statement

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