International Journal of Bilingual Education and Bilingualism

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rbeb20

An empirical investigation of Spolsky's framework applied to family language policy

Ily Hollebeke, Victoria Van Oss, Esli Struys, Piet Van Avermaet & Orhan Agirdag

To cite this article: Ily Hollebeke, Victoria Van Oss, Esli Struys, Piet Van Avermaet & Orhan Agirdag (2022): An empirical investigation of Spolsky's framework applied to family language policy, International Journal of Bilingual Education and Bilingualism, DOI: 10.1080/13670050.2022.2039894

To link to this article: https://doi.org/10.1080/13670050.2022.2039894

Published online: 19 Feb 2022.

Submit your article to this journal

Article views: 117

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=rbeb20

INTERNATIONAL JOURNAL OF BILINGUAL EDUCATION AND BILINGUALISM
https://doi.org/10.1080/13670050.2022.2039894

Routledge
Taylor & Francis Group

Check for updates

An empirical investigation of Spolsky's framework applied to family language policy

Ily Hollebeke [a,b], Victoria Van Oss [c], Esli Struys [a,b], Piet Van Avermaet [c] and Orhan Agirdag [d,e]

[a]Centre for Linguistics, Vrije Universiteit Brussel, Elsene, Belgium; [b]Brussels Institute for Applied Linguistics, Elsene, Belgium; [c]Centre for Diversity and Learning, Gent, Belgium; [d]Laboratory for Education and Society, KU Leuven, Leuven, Belgium; [e]Department of Educational Sciences, University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

The current study quantitatively applies Spolsky's triangular framework of language policy, including beliefs, practices, and management, to the family domain by investigating language policy in multilingual families in Belgium's Flemish Community. Firstly, we examine whether the three components in fact call for an independent description and examination. Secondly, we address the relationships between the components. To that end, we developed three scales for each of the language policy components according to Spolsky's model, and we tested construct validity of these scales using confirmatory factor analysis. Respondents were 776 multilingual families in Belgium. The results of our analyses confirmed that language policy in the family domain is not a unitary construct and that even though the three components are interconnected, they can still be described independently from each other. Interestingly, while beliefs and practices, and practices and management, were strongly correlated, a similar relationship was not found for beliefs and management, a finding which goes against what was reported previously in more formal domains of language policy. We believe that the current study opens up a wide range of follow-up investigations that dig deeper into the differing dynamics between language policy components in formal institutionalised domains, and the informal family sphere.

ARTICLE HISTORY
Received 4 July 2021
Accepted 3 February 2022

KEYWORDS
family language policy; multilingualism; language beliefs; language practices; language management

Introduction

Regarding research on multilingualism, the field of family language policy (FLP) has gained a great deal of recognition over the past decades. There are several reasons for the growing interest in multilingual families and FLP. Firstly, families play a key role in heritage language maintenance (Fishman 1991; Schwartz 2008; Spolsky 2004, 2012) and forming the multilingual environment in which ever more children grow up (Schwartz 2010). Furthermore, the potential short- and long-term impact of FLP on children and the family as a whole (Hollebeke, Struys, and Agirdag 2020, for an overview) underlines the value and relevance of FLP research. When studying language policy (LP), either in the family domain or institutional contexts (e.g. nations, schools), Spolsky's (2004, 2009, 2012) framework is well-established and frequently used. This framework describes language policy as a non-unitary concept encompassing three independent but interrelated components: language beliefs, practices and management. With regard to the home domain (i.e. FLP), language *beliefs* are the beliefs and attitudes family members hold towards language(s), language use and multilingualism.

CONTACT Ily Hollebeke ily.hollebeke@vub.be

© 2022 Informa UK Limited, trading as Taylor & Francis Group

Practices refer to a family's linguistic behaviour, i.e. the language(s) used on a day-to-day basis. Language *management*, lastly, involves the efforts to shape or steer family members' language use and learning outcomes through any kind of intervention or planning (King, Fogle, and Logan-Terry 2008; Spolsky 2004, 2012), e.g. parents trying to influence children's language development via explicit rules on language use at home or language classes; or children steering siblings' language choices or manipulating parental beliefs or practices (Kheirkhah and Cekaite 2018; Said and Zhu 2017; Tuominen 1999).

Numerous studies rely on Spolsky's framework, often addressing the complexity of the relationships between the three components. Some scholars illustrate the interrelatedness between the constructs by revealing how (parental) beliefs influence language practices, sometimes leading to certain management efforts (Berardi-Wiltshire 2017a; Chatzidaki and Maligkoudi 2013; Curdt-Christiansen 2009; De Houwer 1999). When parents, for instance, believe their child's acquisition of the institutional language (IL) will be hindered by the knowledge of a (lesser valued) heritage language (HL), they might adjust their practices and management efforts avoiding the language they consider a hindrance (Mertz 1989). By contrast, parents holding a positive attitude towards their HL will talk to their children in that language (Berardi-Wiltshire 2017b). Additionally, various scholars point out the interrelatedness between the different LP domains, where societal or institutional (e.g. teachers') beliefs, practices and management influence families' language policies (Berardi-Wiltshire 2017a; Curdt-Christiansen 2009; Lanza 2007; Schwartz 2008).

Concurrently, research points out discrepancies between the individual FLP components (De Houwer 1999; Kopeliovich 2010; Schwartz 2008, 2010; Spolsky 2004), underlining their independence. Schwartz (2008) and Kopeliovich (2010), for instance, describe how parental ideologies in favour of L1 maintenance do not necessarily reflect in corresponding maintenance efforts in the form of practices and management, possibly due to practicability and children's agency. Alternatively, De Houwer (1999) suggests that overtly expressed beliefs (e.g. in surveys) do not automatically coincide with covert or less conscious beliefs. A mismatch between expressed beliefs and actual practices could therefore suggest that practices are steered rather by covert beliefs.

The complex interaction of the different FLP components has thus been captured in research, supporting both their interrelatedness and independence as described by Spolsky. Yet, the framework has been largely applied in a qualitative manner as a conceptual framework to guide the collection, analysis and interpretation of qualitative data. A quantitative application may open a different avenue for inquiry. Quantitative data can facilitate, for instance, generalisations. A quantitative approach also offers the opportunity to investigate the strength of the relatedness between each of the three components, and the statistically significant (or not) impact that various domains (such as family, school, etc.) or societal contexts might have on these connections. Furthermore, quantitative evidence for the FLP framework, could enable exploring potential (significant) changes in a family's policy by comparing the FLP at different points in time. We therefore deem an empirical investigation of Spolsky's framework relevant. So far, however, only one study has explored this path, focussing on the Early Childhood Care and Education (ECCE) domain (Van Oss et al. 2021). However, since language policy encompasses several domains (e.g. state, institutions, families), it is expected that the relations between LP components can be construed domain-dependently. Beliefs, practices and management in the family domain could thus relate differently compared to a more formal institutional domain with a clear, often explicit, policy. Furthermore, as stated earlier, it is assumed that the interactions between different domains could help explain or even influence (in)consistencies between LP components in each of those domains. We believe that both the domain-specificity and interconnectedness call for a comprehensive exploration of Spolsky's framework's validity in all domains.

On that account, this article examines whether the framework holds in the family domain by aiming to answer the following research questions:

- Does FLP in fact consist of three separable components that call for independent description and examination?
- To what extent or degree do these three FLP components relate to one another?

In doing so, we used research data on 776 multilingual families to develop scales measuring families' beliefs in multilingual advantage, their home language practices and conscious management efforts, for which we tested construct validity.

Method

Research context

Growing linguistic diversity is a worldwide phenomenon, especially noticeable and interesting in families with young children, as they are often at the basis of multilingualism. This study was conducted in the Flemish Community of Belgium, the largest Community of the country including the Flemish Region, and the Brussels Capital Region. In the Flemish Region, Dutch is both the majority language and the sole official language; in the Brussels Region, Dutch shares official status with French, the dominant language of that region. According to the Flemish agency for infant welfare *Kind en Gezin (2019)*, for 30% of the children born in 2019, Dutch was not the language used between mother and child. As the Flemish context is similar to the situation in other (Western) countries, it can easily function as a petri dish to explore FLP in a multilingual environment. Moreover, contrary to English, which is still regarded as an international lingua franca and majority language, Dutch itself is a minority language on the global scene. In addition, or even as a consequence, Flanders often treats the HLs as threatening to the Dutch IL, with policy makers putting a strong focus on the IL. This effort is illustrated by language laws dictating only Dutch can be used by Flemish municipal services, by the ban on HL use some schools enforce even during playtime (Agirdag 2010) or by ECCE professionals' frequently given advice to speak Dutch at home. Multilingual families are thus often confronted with this discord between the majority and minority language(s).

Survey development

The present study is part of the Pro-M (*Promoting Early Multilingualism in Childhood and Childcare*) research project, coordinated by a consortium of four academic partners and three social partners. One of the main aims of the Pro-M project is a large-scale, quantitative and longitudinal investigation of prevalent FLPs in multilingual families raising children in the Flemish Community. As this purpose required an instrument meeting several criteria (e.g. internal consistency, validity, reliability …) which was to our knowledge not readily available, we developed a survey, which we later validated, as described in the present study. This exhaustive survey targeting, multilingual families with children under the age of three, was set up relying on FLP research, and existing surveys in the field of (early) multilingualism and multilingualism in schools (a.o. Kang 2015; Marian, Blumenfeld, and Kaushanskaya 2007; Yang, Blumé, and Lust 2007). Survey items are founded on an elaborated conceptual framework drawn from FLP theory and were included only after thorough consideration among academic experts and practitioners. Next, the survey was evaluated by the social partners in the project and pilot-tested by ten multilingual families with different socio-economic and linguistic backgrounds to determine practicality and intelligibility. The survey focused on families' general and language-specific practices, beliefs and management. Language-specific items were always formulated for both the IL Dutch and the indicated HL(s). Examples of survey questions are: 'I try to make sure my child hears *[Turkish]* as often as possible.' (language-specific), 'Parents confuse their children by speaking languages other than Dutch.' (language-specific), 'To speak to their children, parents must use the language they know best.' (general).

Data collection

Due to the set-up of the project, parents were recruited through selected day-care locations and infant welfare clinics belonging to the Flemish Community. First, nineteen municipalities in the Brussels Capital Region and the Flemish Region were selected based on (1) a large number of mothers not speaking Dutch to their child(ren), (2) a mix of high average and low average SES municipalities, (3) geographical distribution, and (4) a mix of linguistically diverse municipalities and municipalities with a high concentration of families of a particular linguistic background. Secondly, in each of the municipalities, childcare locations and infant welfare clinics were selected and asked to invite all parents frequenting the location by means of consent cards in several languages. On the consent cards, parents reported their contact information and home language(s) and/or mother tongue(s). This strategy ensured the researchers' possibility to target and select multilingual families, preventing to leave the selection to the judgement of individual ECCE professionals. Data collection ran for six months via online parental surveys in seven languages (Dutch, English, French, German, Polish, Spanish and Turkish).

Respondents

Parents were invited to take the survey when they indicated that at least one language other than Dutch (possibly in addition to Dutch) was present in the family. This could be a home language spoken with their children or partner, or a mother tongue that was or was not actively used within the family. All families had at least one child under the age of three and were asked to answer respective questions with this child in mind. Concerning the family's background (e.g. country of birth, age, education), we gathered information on both parents (in the case of a two-parent-family) obtaining a more complete overview.

A total of 776 families completed the full questionnaire and were retained for further analysis. Only 50 (6.4%) of the 776 families are separated or one-parent-families. In 93.6% of the families the child lives with both parents, this high number might be linked to the young age of the children. Almost all focal children were born in Belgium (96.9%), with the exceptions being born in Australia, Bosnia & Herzegovina, China, Colombia, Germany, Ethiopia, France, India, Morocco, The Netherlands, Poland, Serbia, Tunisia, the United States and South Africa. The parental (109) and grandmothers' (113) countries of birth, however, are manifold. The majority of parents were born in Belgium (44.2%). Other frequently reported birth places are Morocco (7.3%), Turkey (3.0%), Poland (2.2%), the Netherlands (2.1%), China (2.1%), and France (2.0%). As for the grandmothers, 27.4% was born in Belgium, followed by Morocco (15.8%), Turkey (8.7%), China (2.3%), Poland (2.2%) and France (2.1%). The diversity in heritage countries brings with a great linguistic diversity, as in total 100 different languages are represented either as a main or additional home language or (parental) mother tongue. The heritage languages most prevalent are French (24.1%), English (13.6%), Arabic (12%), Turkish (7.4%), Spanish (5.4%) and Berber (5.1%). The mean age of the parents in our dataset is 34.4 ($SD = 5.68$) years old, but ages vary from 17 to 61. Concerning education, 3.3% of the parents does not have a degree, 5.4% has a primary education degree, 33.6% holds a secondary education degree and 57.6% received higher education, either college or university of applied sciences (17.3%), academic bachelor (11%) or academic master (29.3%).

Analytical plan

In order to investigate the need to distinguish between the three FLP components, we developed scales for which we evaluated convergent and discriminant validity. In doing so, we mirrored the carefully thought-out approach and criteria used by Van Oss et al. (2021) and applied them to our sample of 776 families. Prior to the scale development, response distribution of individual items was inspected to avoid bias linked to self-reports. We applied 85% as a criterion to determine

whether a floor or ceiling effect was present (McHorney and Tarlov 1995) indicating possible socially-desirable responses to be excluded from the item pool. For potential items assessing beliefs and management, which were binary, the item was omitted if more than 85% of respondents either agreed or disagreed. The same reasoning was applied to potential practices items (e.g. if over 85% indicated to only speak Dutch to the child).

Furthermore, the items regarding practices were recoded to depict families' use of heritage languages and Dutch in a simplified and comparable manner. This recoding led to a scale from mostly or solely Dutch (IL), over a multilingual (IL and HL combined equally) approach, to mostly or solely HL(s). In order to do so, the HLs that respondents indicated as either their mother tongue or the (additional) home language were combined into one non-Dutch category, as was the response 'yet another language', enabling us to distinguish between HLs and Dutch. Furthermore, the language use of the separate family members with the child was grouped accordingly: parental language use (respondent and other parent), grandparents' (both sides combined) and siblings' language use. For instance, one parent speaking Dutch and the other parent speaking a HL with the child was labelled a multilingual approach, whereas both parents speaking Dutch or a (albeit different) HL was categorised as monolingual Dutch or monolingual HL respectively. The child's exposure via reading out loud and multimedia was recoded in a similar way, based on the frequency of Dutch and HL exposure. As for overall exposure at home, parents indicated in percent how often their child heard Dutch and HLs. This was recoded as 'always or more than half of the time Dutch', 'equal distribution between Dutch and HLs' and 'always or more than half of the time HLs'.

Next, we conducted exploratory factor analyses (EFAs) in both SPSS V26 and Mplus V7 to explore the underlying theoretical structure of the items. Very similar results were obtained, yet for accuracy we report and use the results yielded in Mplus, where we used maximum likelihood estimation with robust standard errors (MLR). Using MLR, missing data are dealt with using the full information maximum likelihood (FIML) method. FIML uses all available data to estimate parameters based on the available complete data as well as the implied values of the missing data, given the observed data (Enders and Bandalos 2001). An oblimin oblique rotation method was carried out to assess the internal structure (Tabachnick and Fidell 2007). We retained factor loadings above .21, a minimal cut-off recommended for a sample size of 600 respondents (Field 2009). Additionally, factors with less than three retained items were excluded to ensure adequate coverage of the theoretical domain and proper identification of the construct (Hair et al. 2014). Finally, corrected item-total correlations (CITC) and Cronbach's alphas were computed, in order to determine scale reliability. The acceptable level of reliability remains under discussion, however an alpha value below .60 is considered dubious (Field 2009). Regarding CITC as a measure of internal consistency, a coefficient below .30 indicates a particular item does not correlate well with the scale and should therefore be excluded (Field 2009, 678).

Subsequently, we conducted confirmatory factor analyses (CFAs) to further consolidate this study's first aim (i.e. investigating the independence of the FLP components) and to address the second aim (i.e. investigating the interrelatedness between these components). CFAs were conducted in Mplus, using 2 estimators (i.e. MLR and WLSMV (weighted least square mean and variance adjusted), both not assuming normal distribution). Very similar loadings were obtained, however, due to our interest in fit indices, we report WLSMV. To assess our model fit, we relied on the following indices: Comparative Fit Index (CFI) and Tucker–Lewis index (TLI) values above .90 and Root Mean Square Errors of Approximation (RMSEA) values smaller than .08 (Hooper, Coughlan, and Mullen 2008).

Thereafter, we applied the CFA to evaluate construct validity. In examining convergent validity, we inspected the items' factor loadings excluding loadings below the cut-off of .50 (Hair et al. 2014). Secondly, we examined construct reliability (CR), accepting all values above .60. To assess divergent validity, we relied on a rigorous test, proposed by Fornell and Larcker (1981). This method compares the Average Variance Extracted (AVE) values for any two constructs with

shared variance (i.e. the squared interconstruct correlation) between these two constructs, where it is thoroughly recommended that AVE estimates for both constructs are larger than their shared variance (Farrell 2010). Alternatively, if a construct's AVE is smaller than the variance it shares with another construct, this implies that it has more in common with the other construct (including its items) than it does with its own indicators (Podsakoff and MacKenzie 1994). If that is the case, the two constructs would not be truly distinct thus violating the divergence requirement for construct validity.

Development and validation of FLP scales

Language beliefs

The parental survey included thirty-one potential beliefs items, formulated as statements on beliefs concerning linguistic rights (five items), (multilingual) language acquisition and development (seven items), strategies and advice (nine items), and beliefs in either a multilingual advantage (five items) or deficit (five items). Parents were asked whether they agreed or disagreed with the statements or advice. An evaluation of response distribution led to the exclusion of thirteen items due to a ceiling or floor effect.

A screening of the factor loadings of the reduced battery of eighteen variables was carried out, using an MLR and applying a cut-off value of |.21|. These results are displayed in Table 1. Then, a threshold for retention was established of a minimum of three items per factor with factor loadings >.21. In case of cross-loadings, the highest value was retained, omitting factor I (only two items remained).

In order to determine scale reliability, CITC and Cronbach's alphas were computed for the remaining factors. Prior to the reliability analyses, items with negative factor loadings were reverse coded. Only two factors showed a Cronbach's alpha above .60: factor II (number of items = 4, $\alpha = .74$) and factor III (number of items = 3, $\alpha = .72$). However, as one of the items in factor III (i.e. parents' belief in advice to mix languages consciously planned) essentially encloses the other two items,

Table 1. Loadings of items measuring beliefs.

Indicators	F I	F II	F III	F IV	F V
Every child has the right to speak their own language at school.	**.609**				
Every child has the right to be taught in their own language (during class, or after school hours).	**.725**				
People want me to speak Dutch in public	.224				**.251**
Multilingual children do better at school than monolingual children.		**.650**			
Multilingual children make friends more easily than monolingual children.		**.785**			
Multilingual children have a stronger bond with their family than monolingual children.		**.804**			
Multilingual children are more confident than monolingual children.		**.902**			
Advice: Only speak another language than Dutch to your child.		.218		**−.223**	
Advice: Mix Dutch and another language, but plan consciously when to use which language.			**.666**		
Advice: Speak one language to your child, while the other parent always speaks another language to the child.				**−.476**	.239
Advice: Mix Dutch and another language freely when speaking to the child.				**.595**	
Advice: Speak Dutch and another language, but plan consciously when to use which language, dependent on the moment.			**.845**		
Advice: Speak Dutch and another language, but plan consciously when to use which language, dependent on the place.			**.911**		
Advice: Read to your child in Dutch.			.269		**.357**
At least one of the parents must speak Dutch to the children.					**.565**
To speak to their children, parents must use the language they know best.					
Children are best exposed to Dutch from birth.					**.741**
Children first must know their home language well in order to learn other languages.					
Eigenvalues	3.38	2.55	2.12	1.47	1.41

Only factor loadings >.21 are displayed

we discounted this scale. All coefficients in the remaining scale, factor II, were greater than .30, showing internal consistency on the CITC. This remaining scale was labelled 'beliefs in multilingual advantage' and was retained for further analysis.

Language practices

Prior to the scale development, the potential practices items were recoded as described in the analytical plan, leaving us with eight items instead of eighteen. Of these eight items, however, 'employed strategies' was excluded due to several subitems exhibiting a floor effect.

A MLR was conducted for the remaining seven variables, resulting in the two components displayed in Table 2. As the highest value was regarded for cross-loadings, factor I did no longer meet the required minimum of three items >.21 and was omitted. Lastly, reliability of factor II was examined and deemed highly acceptable (number of items = 5, $\alpha = .82$). Furthermore, all coefficients showed internal consistency on the CITC. We labelled the obtained scale 'child's exposure at home'.

Language management

Prior to analyses, statements concerning the different HLs were combined into one variable in order to be able to compare statements on Dutch (IL) and statements on HL(s). The survey included seven potential management items formulated as binary variables. After evaluating the response distribution, all seven items were retained for the MLR. Again, the cut-off value was |.21|. Two components were identified and are displayed in Table 3. As both factors met the threshold of a minimum of three items, scale reliability was assessed for both. Only factor I showed an acceptable alpha (number of items = 3, $\alpha = .66$). Additionally, all coefficients showed internal consistency on the CITC. The three-item scale was labelled 'conscious management'.

As some scholars (a.o. Doyle 2018; Schwartz 2008) consider reading out loud and other literacy activities part of management efforts, we also conducted a MLR including the items 'frequency of exposure via multimedia' and 'frequency of exposure via reading out loud' as potential management items. Three components were identified (see Table 4), yet only the first two factors meet the threshold of a minimum of three items, leaving us with the management scale described above.

Results

Independence of the FLP components

A confirmatory factor analysis (CFA) was performed in order to evaluate the overall fit as well as construct validity of our proposed measurement model. On the whole, the results show that our model fit the data remarkably well, χ^2 (51) = 157.50*; CFI = .98; TLI = .97; RMSEA = .05. Next, we explored to what degree the three scales reflect the theoretical components (i.e. beliefs, practices and management) they are devised to measure. Two aspects of construct validity were evaluated: convergent and discriminant validity.

Table 2. Loadings of items measuring practices.

Indicators	F I	F II
Frequency of exposure via reading out loud	**.982**	
Frequency of exposure via multimedia	**.587**	
Overall Exposure of the child at home		**.835**
Language spoken (most) with child by parents		**.865**
Language spoken (most) with child by grandparents on both sides	−.261	**.819**
Language spoken (most) with child by siblings	.224	**.751**
Language spoken (most) by parents amongst themselves		**.825**
Eigenvalues	4.08	1.42
Only factor loadings >.21 are displayed		

Table 3. Loadings of items measuring management.

Indicators	F I	F II
The other parent and I discussed the language(s) in which we want to raise our child.	**.836**	
Our family has clear agreements on the language(s) we use.	**.883**	
I am conscious of the language or languages I use at home.	**.632**	
I would like my child to be taught or tutored in the (non-Dutch) heritage language(s) later.		**.445**
I try to pass on my own dialect or accent to my child.		**.397**
I try to make sure my child hears the (non-Dutch) heritage language(s) as often as possible.		**.869**
I try to make sure my child hears Dutch (the institutional language) as often as possible.		**.250**
Eigenvalues	2.49	1.54
Only factor loadings >.21 are displayed		

Convergent validity was measured via inspection of factor loadings and reliability. We found that the factor loadings of all items were significant and well above .50, indicating the items converge on their latent construct. In assessing reliability, the following Cronbach's alphas were obtained: .74 for beliefs, .82 for practices and .66 for management. Whereas an alpha value of .66 might be considered somewhat low, it was deemed acceptable since the management scale consists of only three items. Taken together, an acceptable amount of evidence was found for convergent validity. (Table 5).

Subsequently, we examined whether our three constructs really differ from one another by seeking evidence for discriminant validity. After all, according to Spolsky (2004) the three components are 'independently describable'. To this end, we relied on the Fornell and Larcker (1981) test described in the analytical plan. The AVE values of the three constructs, 65%, 64% and 70% for management, beliefs and practices, respectively, score well above the threshold of 50%. Also, the results showed that the square root of the interconstruct correlations between beliefs and practices (0.38), between management and practices (0.30), and between management and beliefs (0.23) are all considerably smaller than their average communality, suggesting sufficient distinctiveness between the pairs of constructs. Therefore, as our model passed the Fornell and Larcker test with flying colours, we can say that substantial evidence for discriminant validity was provided. (Figure 1).

Interrelatedness of the FLP components

The conducted CFA also allows us to assess the interrelatedness of the FLP components and the strength thereof (simplified depiction in Figure 2). Interestingly, while the relationships between the three components are all positive, not all are significant. We found a correlation of .14** between beliefs and practices, of .09* between management and practices, and of .05 between management and beliefs. Our results thus give credit to Spolsky's framework suggesting the three components are interconnected in the domain of multilingual families as well. However, the relationship between the components might sometimes be smaller than is assumed based on the theory.

Table 4. Loadings of items measuring management including reading out loud and multimedia.

Indicators	F I	F II	FIII
The other parent and I discussed the language(s) in which we want to raise our child.	.812		
Our family has clear agreements on the languages we use.	.893		
I am conscious of the language or languages I use at home.	.652		
I would like my child to be taught or tutored in the (non-Dutch) heritage language(s) later.		.469	
I try to pass on my own dialect or accent to my child.		.406	
I try to make sure my child hears the (non-Dutch) heritage language(s) as often as possible.		.873	
I try to make sure my child hears Dutch (the institutional language) as often as possible.		.264	
Frequency of exposure via reading out loud			.998
Frequency of exposure via multimedia			.363
Eigenvalues	2.56	1.60	1.37
Only factor loadings >.21 are displayed			

Table 5. Standardised factor loadings of the final three-dimensional measurement model.

Factor		Item	Factor loading
Beliefs	B1	Multilingual children do better at school than monolingual children.	.65
	B2	Multilingual children make friends more easily than monolingual children.	.79
	B3	Multilingual children have a stronger bond with their family than monolingual children.	.79
	B4	Multilingual children are more confident than monolingual children.	.94
Practices	P1	Overall Exposure of the child at home	.91
	P2	Language spoken (most) with child by parents	.90
	P3	Language spoken (most) with child by grandparents on both sides	.70
	P4	Language spoken (most) with child by siblings	.88
	P5	Language spoken (most) by parents amongst themselves	.79
Management	M1	The other parent and I discussed the language or languages in which we want to raise our child.	.81
	M2	Our family has clear agreements on the languages we use.	.90
	M3	I am conscious of the language or languages I use at home.	.69

N = 776.

Discussion

Family language policy is described as a multidimensional construct consisting of three separate components (i.e. language beliefs, practices and management) that influence one another. The present study investigates whether the frequently applied FLP framework is in fact suitable for describing and examining multilingual families. On that account, we used data from the Pro-M parental survey on the FLP of multilingual families raising at least one child younger than three in the Dutch-speaking Flemish Community.

Independence of the FLP components

In order to investigate the independence of the three FLP components, three scales were developed, and assessed via two subtypes of construct validity (i.e. convergent validity assessing interconnectedness, and discriminant validity assessing independence). Regarding convergent validity, factor loadings were significant and above .50 for all items, suggesting the items within the constructs are in fact interconnected. Combined with the Cronbach's alphas measuring construct reliability (.74 for beliefs, .82 for practices and .66 for management), we demonstrate evidence for interconnectedness of the items within the three components. As for discriminant validity, the Fornell and Larcker-test (1981) clearly shows the three separate components differ sufficiently from one

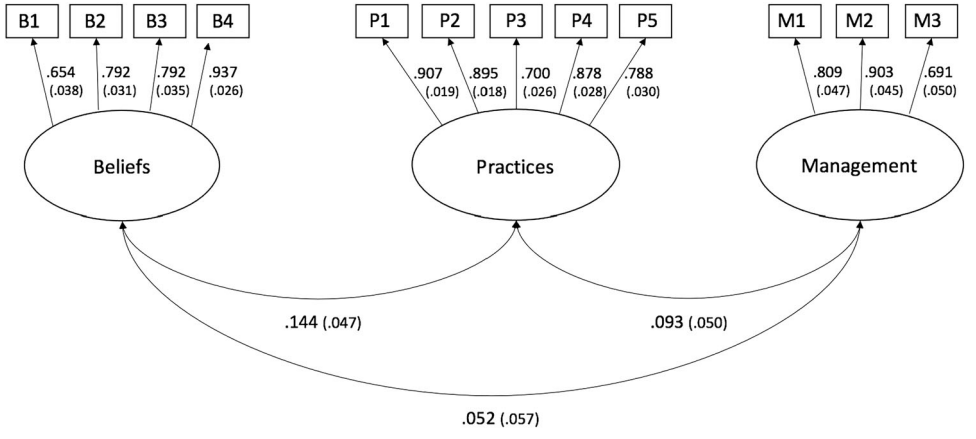

Figure 1. Final three-factor measurement model (WLSMV).

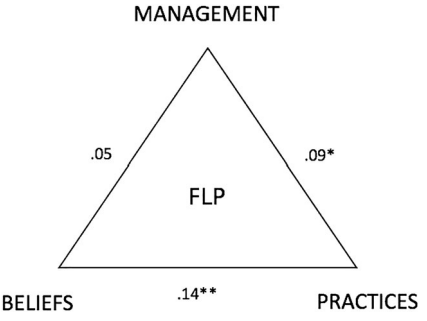

Figure 2. Correlations of the three FLP components.

another, supporting intrinsic multidimensionality of Spolsky's framework when applied to the family domain. We therefore conclude that FLP does in fact consist of three different components (i.e. beliefs, practices and management) that call for independent description and examination.

Interrelatedness of the FLP components

In examining how the FLP components relate to each other, we also build on the conducted CFA which reports positive relationships between the three components.

Interestingly though, only the correlations between beliefs and practices (.14**) and between practices and management (.09*) are strong, whereas the correlation between beliefs and management (.05) is modest at best.

A strong correlation between practices and management does not necessarily surprise, as it is often challenging to distinguish between both components, especially because, due to habituation, management efforts might eventually blend into practices. Regarding our data, multilingual families with clear agreements on which language(s) to use at home (management), for instance, are suggested to adapt their practices accordingly, increasing the child's exposure to these languages, possibly obscuring the separation between both components.

The robust correlation between beliefs and practices suggests that parents believing in a multilingual advantage tend to facilitate multilingualism, contrary to parents with a more sceptical view on multilingualism. Due to the young age of the focal children in the families we surveyed, parents still have a considerable amount of control over the language practices at home. This could help explain the strong positive relation between parental beliefs and home practices in our research. Longitudinal studies could shed light on the possible instability of FLP caused by growing prevalence of external influences (e.g. school, peers …) and children's agency (Caldas 2012; Caldas and Caron-Caldas 2000; Schwartz 2008). We hypothesise that both children's agency and a more tangible societal context could cause friction between parental beliefs and families' linguistic behaviour, creating a (more outspoken) distinction between beliefs and practices.

The insignificant correlation between beliefs and management could point to a mismatch suggested by several FLP researchers (a.o. Caldas and Caron-Caldas 2000; Kopeliovich 2010; Schwartz 2008; Wilson 2020). Though the management items in our scale are rather generic, our data suggest that parental beliefs in a multilingual advantage do not necessarily coincide with conscious management. There are a number of possible explanations for a possible mismatch. Firstly, beliefs are often based on an ideal that is not (always) limited by reality's conditions and restrictions (e.g. parents might be convinced of multilingual advantages or the importance of HL exposure, even though they cannot actually offer (sufficient) input in a certain language or adhere to certain strategies). Management, on the contrary, is more susceptible to the partner, child, influences outside the family, etc. Kopeliovich (2010), for instance, describes how a mother had to reconsider her strategies due to her children's resistance and conflicts within the family, in spite of her beliefs being

unchanged. Another possible explanation for a mismatch is the compromises families must often make, disregarding certain beliefs, even when children's and external influences are still rather limited. This can lead to discrepancies between (personal) beliefs and (actual family) management. In our survey, for instance, one parent was the (main) respondent, answering the beliefs statements from their perspective, whereas several items regarding management and practices also take the other parent into account.

A mismatch between beliefs and management is also interesting in comparison with the study by Van Oss et al. (2021), as these two components seem to correlate in the ECCE domain. We argue that the discrepancy with the family domain can be explained by the personal aspect of parental beliefs. Institutions such as infant welfare clinics or schools, conversely, do not necessarily have this emotional and personal tie with the subject of multilingualism and the surrounding policy. We also assume that beliefs are subjected to greater pressure in the informal family context, compared to a formal institutional context where language policies might be more explicit and (linguistic) diversity is not necessarily prevalent or visible. Additionally, professionals might have received some sort of formation, shaping their beliefs. Moreover, while this study does not offer insights on the influence of other domains (e.g. schools, the state …) on FLP (components), we argue that, in light of the described mismatch, it is worth investigating this influence in a large-scale and comparable manner. Management efforts in protection of a language are often based on the perception of this language as threatened. The different domains, however, do not necessarily share the same ideologies or goals. In the Flemish context, for instance, the Flemish movement (macro level) will regard Dutch (IL) as the threatened language, imposing certain laws protecting it and pushing families towards IL use. Families (micro level) desiring to protect the HL(s), however, experience a discord.

In conclusion, our results uphold the assumption that beliefs, practices and management influence one another, but suggest that this interrelatedness might perhaps be weaker than the original framework implies. Hence, while we offer quantitative evidence supporting the interrelatedness of FLP components, our results also support (qualitative) studies questioning (the strength of) these relationships, specifically the connection between beliefs and management (e.g. Kopeliovich 2010).

Significance of validated FLP scales

Exploring Spolsky's framework in the family domain, we composed three valid and unidimensional scales measuring families' beliefs in a multilingual advantage, language practices in terms of children's exposure at home and conscious parental management. As an objective, internally consistent and valid instrument is essential for enabling a quantitative study of FLP as a whole or of any of its components, we believe that the produced scales will be valuable for future research for a number of reasons, even though they are not necessarily definitive and universally implementable. Firstly, our validated scales, or an adaptation thereof, facilitate large-scale generalisation of findings on FLP (components), as often sought-after by policy makers. Furthermore, this instrument enables us to explore whether a family's language policy undergoes (significant) changes throughout time. The validated scales also allow us to study the strength of the relationships between the three FLP components, as demonstrated in this article, or the statistically significant (or not) impact various domains (such as family, school, etc.) or societal contexts might have on these relationships. Though explorative, the instrument developed by us is founded both on theoretical concepts in the literature and on statistical tests of internal consistency. However, we acknowledge several limitations. The items in the management scale, for instance, are rather general and do not necessarily hint at a multilingual, let alone language-specific approach. The items in the beliefs scale clearly consider multilingualism but are also not language-specific. Future research could therefore aim to develop scales representing language-specificness in management and beliefs, as is the case in our practices scale where the HL(s) and IL (in this case, Dutch) are both explicitly accounted for. Generalisable research tailored to HL maintenance would be especially interesting. Furthermore, one

could argue that the beliefs scale might be too generic as it comprises of items regarding the belief in a multilingual advantage rather than beliefs regarding a specific language (use) or (multilingual) language acquisition. Our choice to accept 'beliefs in a multilingual advantage' as the beliefs component within FLP, however, is supported by King and Fogle (2006) and Piller (2001) stating that parents often view bilingualism as a gift or an investment, influencing their language practices at home.

Conclusion

The growing linguistic diversity underlines the value family language policy research brings. This exploratory study aims to contribute to the field by empirically investigating Spolsky's frequently used framework. We deliver quantitative evidence that the framework is indeed a non-unitary concept when applied to the family domain (Spolsky 2004, 2012). Consequently, all three components (beliefs, practices and management) should be taken into account when examining FLP. We also support the assumption that the components are strongly and positively related to one another, with the exception of beliefs and management, where a potential mismatch was found. Furthermore, we introduce valid scales as an (adjustable) basis to continue quantitatively measuring FLP in multilingual families.

Acknowledgements

We would like to thank the reviewers for their insightful and valuable feedback.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by FWO-Vlaanderen [Fonds voor Wetenschappelijk Onderzoek] under grant number S006518N, project type: SBO/M Strategic Basic Research-Social; Research Foundation Flanders.

Notes on contributors

Ily Hollebeke is doing a PhD in Applied Linguistics at the Vrije Universiteit Brussel, Belgium. She is a member of the Centre for Linguistics and the Brussels Institute for Applied Linguistics. Her current research focuses on early multilingualism, multilingual families with young children, family language policies and implications. She was also involved in research on cognitive control in interpreting students and professional interpreters.

Victoria Van Oss is doing a PhD in Linguistics at Ghent University, Belgium. Her research interests include multilingualism, language policy and Early Childhood Care and Education (ECCE). She investigates health care professionals' language policy dynamics (i.e. beliefs, practices and management) in relation to multilingual families visiting Flemish (Belgium) infant welfare clinics.

Esli Struys is a professor of Applied Linguistics at the Vrije Universiteit Brussel. He teaches courses in the BA and MA programmes of (applied) linguistics on multilingualism (from cognitive and educational perspectives), psycho- and neurolinguistics, and interpreting studies. His research foci include the cognitive processes involved in second language acquisition, bilingualism, and interpreting; and multilingual education in family and school settings.

Piet Van Avermaet is professor in 'Language and Diversity' in the Linguistics Department of Ghent University, Belgium, where he teaches 'multicultural studies', 'multilingualism in education', 'language, diversity and globalisation' and 'language policy'. He is also director of the Research Centre for Diversity & Learning at the same University. He has a long-standing expertise in the field of diversity, language and social inequality in education.

Orhan Agirdag (Ağırdağ) is an associate professor of Education at KU Leuven, the University of Amsterdam and a member of the Young Academy of Belgium. Formerly, he was a Fulbright fellow at the UCLA. His research lab focuses on teacher education, early childhood education and multilingualism.

ORCID

Ily Hollebeke http://orcid.org/0000-0002-0277-2317
Victoria Van Oss http://orcid.org/0000-0001-9065-3539
Esli Struys http://orcid.org/0000-0001-8093-3422
Piet Van Avermaet http://orcid.org/0000-0001-8970-2911
Orhan Agirdag http://orcid.org/0000-0002-5508-1501

References

Agirdag, O. 2010. "Exploring Bilingualism in a Monolingual School System: Insights from Turkish and Native Students from Belgian Schools." *British Journal of Sociology of Education* 31 (3): 307–321.
Berardi-Wiltshire, A. 2017a. "Endangered Languages in the Home: The Role of Family Language in the Revitalisation of Indigenous Languages." *Revista Linguística* 13 (1): 328–348.
Berardi-Wiltshire, A. 2017b. "Parental Ideologies and Family Language Policies among Spanish-Speaking Migrants to New Zealand." *Journal of Iberian and Latin American Research* 23 (3): 271–285.
Caldas, S. J. 2012. "Language Policy in the Family." In *The Cambridge Handbook of Language Policy*, edited by B. Spolsky, 351–373. Cambridge: Cambridge University Press.
Caldas, S. J., and S. Caron-Caldas. 2000. "The Influence of Family, School, and Community on Bilingual Preference: Results from a Louisiana/Québec Case Study." *Applied Psycholinguistics* 21: 365–381.
Chatzidaki, A., and C. Maligkoudi. 2013. "Family Language Policies among Albanian Immigrants in Greece." *International Journal of Bilingual Education and Bilingualism* 16 (6): 675–689.
Curdt-Christiansen, X. L. 2009. "Invisible and Visible Language Planning: Ideological Factors in the Family Language Policy of Chinese Immigrant Families in Quebec." *Language Policy* 8 (4): 351–375.
De Houwer, A. 1999. "Environmental Factors in Early Bilingual Development: The Role of Parental Beliefs and Attitudes." In *Bilingualism and Migration*, edited by G. Extra, and L. Verhoeven, 75–95. Berlin, Germany: Mouton de Gruyter.
Doyle, C. 2018. "'She's the Big Dog Who Knows' – Power and the Father's Role in Minority Language Transmission in Four Transnational Families in Tallinn." *Philologia Estonica Tallinnensis* 3: 17–43.
Enders, C. K., and D. L. Bandalos. 2001. "The Relative Performance of Full Information Maximum Likelihood Estimation for Missing Data in Structural Equation Models." *Structural Equation Modeling: A Multidisciplinary Journal* 8 (3): 430–457.
Farrell, A. M. 2010. "Insufficient Discriminant Validity: A Comment on Bove, Pervan, Beatty, and Shiu (2009)." *Journal of Business Research* 63 (3): 324–327.
Field, A. 2009. *Discovering Statistics Using IBM SPSS Statistics* (3rd ed.). London: SAGE Publications.
Fishman, J. A. 1991. *Reversing Language Shift: Theoretical and Empirical Foundations of Assistance to Threatened Languages*. Clevedon: Multilingual Matters.
Fornell, C., and D. F. Larcker. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research* 18 (1): 39–50.
Hair, J. F., Jr., W. C. Black, B. J. Babin, and R. E. Anderson. 2014. *Multivariate Data Analysis*. Essex: Pearson Education.
Hollebeke, I., E. Struys, and O. Agirdag. 2020. "Can Family Language Policy Predict Linguistic, Socio-Emotional and Cognitive Child and Family Outcomes? A Systematic Review." *Journal of Multilingual and Multicultural Development*.
Hooper, D., J. Coughlan, and M. R. Mullen. 2008. "Structural Equation Modelling: Guidelines for Determining Model Fit." *Electronic Journal of Business Research Methods* 6 (1): 53–60.
Kang, H.-S. 2015. "Korean Families in America: Their Family Language Policies and Home-Language Maintenance." *Bilingual Research Journal* 38 (3): 275–291.
Kheirkhah, M., and A. Cekaite. 2018. "Siblings as Language Socialization Agents in Bilingual Families." *International Multilingual Research Journal* 12 (4): 255–272.
Kind en Gezin. 2019. *Het kind in Vlaanderen 2019*. https://www.kindengezin.be/img/KIV2019.pdf.
King, K. A., and L. Fogle. 2006. "Bilingual Parenting as Good Parenting: Parents' Perspectives on Family Language Policy for Additive Bilingualism." *International Journal of Bilingual Education and Bilingualism* 9 (6): 695–712.
King, K. A., L. Fogle, and A. Logan-Terry. 2008. "Family Language Policy." *Language and Linguistics Compass* 2 (5): 907–922.
Kopeliovich, S. 2010. "Family Language Policy: A Case Study of a Russian-Hebrew Bilingual Family: Toward a Theoretical Framework." *Diaspora, Indigenous, and Minority Education* 4 (3): 162–178.
Lanza, E. 2007. "Multilingualism and the Family." In *Handbook of Multilingualism and Multilingual Communication*, edited by P. Auer, and L. Wei, 45–68. Berlin: De Gruyter Mouton.
Marian, V., H. K. Blumenfeld, and M. Kaushanskaya. 2007. "The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing Language Profiles in Bilinguals and Multilinguals." *Journal of Speech, Language, and Hearing Research* 50 (4): 940–967.
McHorney, C. A., and A. R. Tarlov. 1995. "Individual-Patient Monitoring in Clinical Practice: Are Available Health Status Surveys Adequate?" *Quality of Life Research* 4 (4): 293–307.

Mertz, E. 1989. "Sociolinguistic Creativity: Cape Breton Gaelic's Linguistic "Tip"." In *Investigating Obsolescence*, edited by N. C. Dorian, 103–116. Cambridge: Cambridge University Press.
Piller, I. 2001. "Private Language Planning: The Best of Both Worlds?" *Estudios de Sociolinguïstica* 2 (1): 61–80.
Podsakoff, P. M., and S. B. MacKenzie. 1994. "An Examination of the Psychometric Properties and Nomological Validity of Some Revised and Reduced Substitutes for Leadership Scales." *Journal of Applied Psychology* 79 (5): 702–713.
Said, F., and H. Zhu. 2017. ""No, no Maama! Say 'Shaatir ya Ouledee Shaatir'!" Children's Agency in Language use and Socialisation." *International Journal of Bilingualism* 23 (3): 1–15.
Schwartz, M. 2008. "Exploring the Relationship between Family Language Policy and Heritage Language Knowledge among Second Generation Russian–Jewish Immigrants in Israel." *Journal of Multilingual and Multicultural Development* 29 (5): 400–418.
Schwartz, M. 2010. "Family Language Policy: Core Issues of an Emerging Field." *Applied Linguistics Review* 1 (2010): 171–192.
Spolsky, B. 2004. *Language Policy*. Cambridge: Cambridge University Press.
Spolsky, B. 2009. *Language Management*. Cambridge: Cambridge University Press.
Spolsky, B. 2012. "Family Language Policy – The Critical Domain." *Journal of Multilingual and Multicultural Development* 33 (1): 3–11.
Tabachnick, B. G., and L. S. Fidell. 2007. *Using Multivariate Statistics*. 5th ed. New York: Allyn & Bacon.
Tuominen, A. 1999. "Who Decides the Home Language? A Look at Multilingual Families." *International Journal of the Sociology of Language* 140 (1): 59–76.
Van Oss, V., P. Van Avermaet, E. Struys, and W. Vantieghem. 2021. "An Empirical Validation Study of Spolsky's Language Policy Model." *Current Issues in Language Planning*.
Wilson, S. 2020. "To Mix or Not to Mix: Parental Attitudes towards Translanguaging and Language Management Choices." *International Journal of Bilingualism* 25: 58–76.
Yang, S., M. Blumé, and B. Lust. 2007. *Virtual Linguistic Lab Child Multilingualism Questionnaire. from Virtual Center for Language Acquisition*. Ithaca: Cornell University.