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"Girls are better at language learning than boys": Do stereotypic beliefs about language learning contribute to girls' higher motivation to learn English in primary school?

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Dieser Artikel untersucht die Sprachlernmotivation von Primarschulkindern bezüglich Englisch, mit besonderem Augenmerk auf Geschlechterunterschiede und deren möglichen Ursachen. Währenddem bisherige Untersuchungen in der Schweiz darauf hinweisen, dass Englisch, im Gegensatz zu Französisch, welches von den Mädchen bevorzugt wird, für beide Geschlechter gleichermassen attraktiv ist, kann diese Studie diese Geschlechtsneutralität von Englisch nicht bestätigen. Nach nur 8-9 Monaten Kontakt mit der englischen Sprache in der 3. Klasse sind die Mädchen in dieser Studie signifikant motivierter Englisch zu lernen als die Jungen. Es ist erstaunlich und zu einem gewissen Grad auch beunruhigend, dass solche Geschlechterunterschiede bereits so früh und vom Beginn des Sprachlernprozesses an zu existieren scheinen. Jegliche Versuche, die Sprachlernmotivation der Jungen in diesen frühen Jahren zu fördern, müssen sich auf Erklärungsfaktoren dieses Motivationsdefizites stützen. Vier solche Erklärungsfaktoren werden in dieser Studie aufgezeigt: das Selbstkonzept der Lernenden, ihre Einstellungen gegenüber der Sprache, Zielsprachensprechern und -ländern, sowie ihre stereotypen Annahmen über das Sprachenlernen. Die Jungen unterscheiden sich in Bezug auf alle vier Faktoren von den Mädchen. Deshalb sollten sich Versuche, die Sprachlernmotivation der Jungen zu fördern, auf diese vier Faktoren konzentrieren.

Stichwörter:

Sprachlernmotivation, Geschlechterunterschiede, Spracheinstellungen, Annahmen über das Sprachenlernen, Selbstkonzept

1. Introduction

It is a commonly held folk belief that girls are better at language learning than boys. As a matter of fact, this folk belief seems to be supported by empirical evidence. Ellis (1994: 202-203) draws attention to a number of studies that have borne out the contention that girls outperform boys in language learning at different school levels. According to Holder (2005: 105) the same situation holds in Switzerland. Investigating language learning motivation of primary school children in Switzerland, Stöckli (2004: 73-74) found that girls outperform boys in both German and French, but not in English. He points out that English is the only gender-neutral language subject with respect to achievement. Dörnyei *et al.* (2006: 55) summarize the existing evidence as follows:

We do not think that there are many quantitative studies in the L2 literature that examined boys' and girls' attributes or achievement and did not find any salient differences. It seems that when it comes to foreign language learning, boys and girls behave in a strikingly different way.

Such findings necessarily raise questions as to why girls seem to do better at the task of language learning than boys. Research has identified several factors that can potentially account for these gender differences. One of these factors is language learning motivation.

Dörnyei & Csizér (1998: 203) are not the only ones that "take the view that L2 motivation is one of the most important factors that determine the rate and success of L2 attainment". In fact, this is a point on which researchers and the general public agree (see Niedzielski & Preston, 1999: 256-257). Research has not only identified motivation as an important determinant of achievement, however (see Donato *et al.*, 2000; Gardner, 1985; Gardner & Lambert, 1972; Stöckli, 2004: 69); more importantly for the purpose of this article, it has also found girls and boys to differ on this dimension.

In general, research has found that girls are more motivated to learn foreign languages (henceforth FLs) than boys (Dörnyei & Clément, 2001: 413; Dörnyei *et al.*, 2006: 55-59, 107; Holder, 2005: 108, 299; MacIntyre *et al.*, 2002: 547, 557; Mori & Gobel, 2006: 198-199, 202-205). These motivational differences may stem from or create the impression that FLs are female subjects, while maths and physics are male subjects (see Carr & Pauwels, 2006: 41-42, 65, 126; Holder, 2005: 108). A closer look reveals, however, that girls do not differ from boys in all dimensions of language learning motivation and that the gender differences do not show up in the case of all languages.

Both Dörnyei *et al.* (2006) and Mori & Gobel (2006) have looked into gender differences across a number of constituents of language learning motivation. While girls generally displayed higher language learning motivation than boys in both studies, they did not differ from the boys in all respects. In Dörnyei *et al.* (2006: 55-59), girls scored higher than boys on all but one motivational variables. Girls were higher in integrativeness, meaning that they had a more positive general outlook on the L2 and its culture; they more strongly endorsed instrumental reasons for learning; they had more positive attitudes towards target language (henceforth TL) speakers and their communities; they were more interested in the respective cultures and they were willing to put in more effort than the boys. The only dimension on which girls and boys did not differ significantly was their perception of the vitality of the respective FLs. Mori & Gobel's results differ strikingly from those of Dörnyei *et al.* in that they only found significant differences between male and female subjects in one aspect of motivation, namely integrativeness. Girls were much more interested in TL lifestyles and cultures and much more motivated to learn English in order to be able to make contact with TL speakers (Mori & Gobel, 2006: 202-205).

The general pattern of girls being more highly motivated to learn FLs than boys also does not seem to hold equally true for all languages. Carr & Pauwels (2006: 13-18, 74, 99, 101, 128) working in an Australian context demonstrated that some FLs are perceived as much more feminine than others. French, German, Italian and Spanish are perceived as more 'feminine' languages than Chinese, Japanese, Modern Greek, Russian and Latin, with French clearly being perceived as the most feminine FL.

Similar results were found by Dörnyei and his colleagues who have investigated Hungarian secondary school pupils' motivation to learn five different TLs – English, German, Russian, French and Italian. While French and Italian were clearly favoured by female subjects in their sample, the opposite was true for German and Russian. English displays a somewhat more complex pattern. In 1993 English was equally popular with both girls and boys. In 1999, however, a significant difference emerged with English being favoured by boys. In 2004 English was still favoured by boys but the gap between boys and girls had become smaller. Based on this, the researchers predict that the global nature of English will cause this gap to disappear completely and that English will become gender-neutral with respect to student motivation (Dörnyei & Clément, 2001: 413; Dörnyei *et al.*, 2006: 56).

Interestingly, a similar pattern was discovered in Switzerland by Holder. Holder (2005: 229-233) looked into Swiss pupils' achievement motivation for English and French. While girls displayed significantly more positive attitudes towards French as a language and as a subject than boys, no such gender differences could be found in the case of English. This also ties in with Stöckli's findings reported earlier regarding the gender-neutrality of English with respect to achievement. The existing research in Switzerland, thus, seems to suggest that unlike French, which is more liked by girls than by boys, English can attract both genders equally.

We have now identified language learning motivation as one possible contributor to gender differences in language learning achievement. But motivation does not exist in a vacuum either. It is itself shaped by different factors on which girls and boys have repeatedly been shown to differ, most notably language attitudes and achievement-related self-concept.

Ever since Gardner & Lambert's groundbreaking research into language learning motivation in the 1950s in Canada, research in this domain has accumulated evidence that language attitudes contribute to language learning motivation (see Donato *et al.*, 2000; Dörnyei *et al.*, 2006; Gardner, 1985; Gardner & Lambert, 1972; Grotjahn, 2004; Stöckli, 2004 among others). The most commonly investigated language attitudes are learners' attitudes towards the languages they learn, towards selected TL speakers and towards selected TL countries. Most research reports that girls display significantly more positive language attitudes than boys (Baker, 1992: 42, 120; Dörnyei *et al.*,

2006: 107; Ellis, 1994: 203; Holder, 2005: 232-233) but these differences do not necessarily manifest themselves across the board or across several languages nor were they always found (see Donato *et al.*, 2000: 385). As pointed out above, female Swiss students were shown to have more favourable attitudes towards French and learning French than their male peers, but when it comes to English and English learning, no such difference was found (Holder, 2005: 232-233).

Another variable which educational psychology has shown to be of paramount importance for student motivation is the learner's achievement-related self-concept, which consists of an individual's achievement-related self-confidence and expectancy of success (Holder, 2005: 17-18, 29-42, 63-65, 284; Pintrich & Schunk, 1996: 69-82; Stöckli, 2004: 64-65). Once again much previous research attests to gender differences in this domain with girls having less favourable self-concepts not only in math but often also in FL subjects despite their superior achievement (Holder, 2005: 112; Pintrich & Schunk, 1996: 97; Stöckli, 2004: 94-95). Holder (2005: 189), however, found a different pattern in his study with boys being more confident about their math abilities than girls but girls being more confident about their German and French abilities. Once again, English turned out to be gender-neutral which reflects the results regarding language attitudes outlined above.

The results of Holder's study might indicate that stereotypic beliefs about language learning, such as the belief that girls are better at language learning than boys or that people who are good at math are not good at language learning, are also prevalent among Swiss pupils and that such beliefs might have an impact on their self-concept and motivation. Research associated with Horwitz and an evaluation instrument developed by her – BALLI (Beliefs about Language Learning Inventory) – stresses the importance of student beliefs about language learning for motivational thinking and acting. Supportive and positive beliefs can help to overcome problems and sustain motivation. Negative or unrealistic beliefs can lead to decreased motivation and frustration (Bernat & Gvozdenko, 2005; Diab, 2006; Horwitz, 1999; Kuntz, 1996).

The fieldwork associated with this paper is a 3-year longitudinal study starting with the investigation of language learning motivation and language attitudes in 3rd grade when the primary school children start learning their first FL in school. As a result I can investigate how girls and boys motivationally react to the introduction of FL instruction at school, if and how they differ and how these patterns develop over the years. The following research questions are addressed in this article:

1. How motivated are female and male Swiss 3rd graders to study English?

2. Which factors contribute to the explanation of their motivation to learn English?

2. Method

2.1 Participants

The data for this study was collected within the wider framework of the study "Frühenglisch: Überforderung oder Chance? Eine Längsschnittstudie zur Wirksamkeit des Fremdsprachenunterrichts auf der Primarstufe" (see Haenni Hoti & Werlen, 2007). The participants were 574 3rd graders from the cantons Obwalden, Zug and Schwyz. Their average age was 9;6 years. They started learning English in August 2005 and the data was collected in April / May 2006. In October 2006 some additional variables of interest were assessed in a subsample of six classes (n=112). The different cantons involved in this study differ both in terms of the amount of lessons allotted for the teaching of foreign languages as well as in terms of teaching materials used. In Obwalden and Zug, English instruction starts with three lessons per week for 3rd graders and the pupils work with *Young World*. In Schwyz, 3rd graders have 2 lessons of English per week and work with *Here Comes Super Bus*.

2.2 Instruments

Both data collections involved a questionnaire consisting of a series of 4-point Likert scales. The following variables were assessed in the main data collection (N= 574) and cast into scales on the basis of a factor analysis¹:

Language Learning Motivation ($\alpha=.77$): On the basis of Gardner's (1972; 1985) & Deci & Ryan's (see Pintrich & Schunk, 1996) theoretical models of motivation, motivation has been conceptualized as consisting of four different dimensions:

1. Pupils' orientations (their reasons for learning) which includes intrinsic orientation (3 Items, $\alpha=.73$), extrinsic instrumental orientation (3 Items, $\alpha=.76$), and extrinsic lingua franca orientation (3 items, $\alpha=.61$)
2. Pupils' effort which refers to a willingness to do more than is absolutely required (1 item)
3. Value attributed to the learning task (1 item)
4. Amotivation / failure orientation which refers to feelings of overtaxation and fears of making mistakes (5 items, $\alpha=.73$).

¹ Varimax Rotation was used as the rotation technique and the Scree test criterion was used to guide the decision as to the number of factors extracted.

Attitudes towards TL speakers and countries ($\alpha=.79$): This variable consists of two items each probing into pupils' attitudes towards TL speakers (Americans & Englishmen) and TL countries (America² & England) (4 items).

Self-Concept ($\alpha=.68$): This variable consists of one item each looking into pupils' self-perception of competence, expectancy of success and perception of ease of learning (3 items).

The following additional variables were assessed in the subsample ($n=112$). Again factor analysis was used to create scales. The scale "attitudes towards a globalized world", however, was created on the basis of theoretical considerations.

Perception of the Ethnolinguistic Vitality of English ($\alpha=.75$): This scale consists of the following two subscales:

1. Pupils' perception of the spread of English (14 items, $\alpha=.79$)
2. Pupils' perception of the importance of English for the following domains: travel, tourism, technology and entertainment (4 items, $\alpha=.70$)

Attitudes towards a globalized world ($\alpha=.77$): This variable assesses the children's ease with or embrace of aspects of a way of life that characterizes a globalized world, such as mobility, modern communication technologies, the spread of lingua francas, and availability of global information (7 items).

Attitudes towards the English language ($\alpha=.82$): This variable investigates what the primary school children think about the English language. They were presented with eight adjectives (e.g. easy, beautiful, useful, important, modern, international) together with their semantic opposites and asked to assess the English language on a continuum between these pairs of opposite adjectives (8 items).

Stereotypes of TL speakers: This variable investigates the pupils' stereotypes of Americans and Englishmen by means of a semantic differential technique. The children were presented with a list of 24 personality trait adjectives and their semantic opposites and were asked to place members of the respective groups on a continuum between these adjectives. Based on factor analysis two scales were constructed for each group, so that this variable consists of four different scales:

1. Americans Solidarity ($\alpha=.90$): This scale consists of adjectives referring to personal warmth, attractiveness and integrity (16 items)

² The term 'America' is used here instead of the more specific term 'USA' simply because this is the term that was used in the questionnaire (that is to say its German equivalent) because I assumed that the children might be unfamiliar with the more specific term.

2. Americans Status ($\alpha=.67$): This scale consists of adjectives referring to power, ambitions and egoistic tendencies (4 items)
3. Englishmen Solidarity ($\alpha=.92$): This scale consists of adjectives referring to personal warmth, attractiveness and integrity (16 items)
4. Englishmen Status ($\alpha=.65$): This scale consists of adjectives referring to power, ambitions and egoistic tendencies (4 items)

As far as the variables *Attitudes towards TL speakers and countries* and *Stereotypes of TL speakers* are concerned it can legitimately be asked to what extent these young children, who in all likelihood have had extremely little or no contact with TL speakers, have developed relevant attitudes or stereotypes of TL speakers and to what extent these are relevant for their motivation.

The issue of the importance of language attitudes in foreign language (FL) learning settings where learners are likely to have little or no contact with the TL community has been debated at some length in motivation research. Several studies in FL settings have demonstrated, however, that language attitudes are relevant in FL settings (El-Dash & Busnardo, 2001: 224-225; Gardner, 2005: 14-21; Masgoret & Gardner, 2003: 198-199). Furthermore, there seems to be consensus in stereotype research that stereotypes do not depend on contact with or knowledge of the stereotyped group. Stereotypes are no doubt often formed through observation of and direct contact with members of the target group. But stereotypes are also often acquired through social learning. That is they are learned through indirect sources, such as parents, peers, teachers, school materials or the mass media (Gardner, 1985: 46; Leyens *et al.*, 1994: 40-41; Mackie *et al.*, 1996: 60-62; Schneider, 1996: 432; Stangor & Schaller, 1996: 6, 9-12, 16).

Another question that needs to be considered is whether 9-year old children can already have developed stereotypes of and attitudes towards certain outgroups. Stereotype research has demonstrated that the cognitive processes underlying stereotype formation, such as categorizing, classifying and making biased attributions, emerge very early in childhood (Mackie *et al.*, 1996: 46-47, 58, 61-62) and Day (1982: 116-118, 126-128) illustrates that even very young children (3;6 years) are able to discriminate linguistically and to make attitudinal judgements which reflect adult beliefs present in the speech community. These findings seem to lend support to the idea that primary school children may already have developed attitudes and stereotypes about certain outgroups.

Apart from the above-mentioned scales, the following single items probing into the pupils' beliefs about language learning were assessed:

- belief that it is easier for children to learn languages than for adults
- belief that knowing English facilitates learning French later on

- belief that a language can be learnt well within three years
- belief that girls are better at language learning than boys
- belief that being good at maths implies not being good at language learning

These beliefs could not be combined into a reliable scale which might be due to the rather diverse nature of the different beliefs assessed.

Furthermore, the following demographic variables were assessed: gender, age, nationality, number of languages spoken at home, literacy of the household (number of books at home), and parental help with homework.

The table below provides an overview of the inter-correlations of the main variables:

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Motivation	-	.44* *	.54* *	.45* *	.42* *	.44* *	.28* *	-.12	.29**	-.12	-.24* *	-.21* *
2. Attitudes towards TL speakers & countries		-	.48* *	.26* *	.41* *	.40* *	.45* *	-.26**	.26* *	.01	-.06	.02
3. Self Concept			-	.26* *	.36* *	.42* *	.21* *	-.15	.11	-.17	-.04	-.02
4. Ethnolinguistic Vitality				-	.52* *	.32* *	.13	.12	.17	.01	-.27**	-.21* *
5. Attitudes towards a globalized world					-	.40* *	.31* *	.03	.29* *	.02	-.06	-.11
6. Attitudes towards English language						-	.43* *	.07	.42* *	.11	-.11	-.06
7. Americans Solidarity							-	-.25**	.61* *	.21* *	-.02	.11
8. Americans Status								-	.04	.23* *	-.06	.06
9. Englishmen Solidarity									-	.07	-.04	.10
10. Englishmen Status										-	.08	.07
11. Belief girls vs boys											-	.32* *
12. Belief maths												-

** $p \leq .01$, * $p \leq .05$

Table 1: Correlations of main variables

3. Results

3.1 *Girls' and Boys' Motivation to Learn English in 3rd grade*

In general the results of the first data collection indicate that the 3rd graders are mostly motivated to learn English³. Pupils' total motivation score can range from 0 to 48. The mean across all participants was 32. The large bulk of the children, more precisely more than half of them (56.9%) had a total motivation score between 25 and 36. These participants can be considered rather motivated to learn English. The second largest group (29%) is the group of children with a total motivation score of 37-48. These can be considered motivated to highly motivated. Taken together, 85.9% can be considered motivated to learn English. Naturally, not all pupils are equally motivated and in view of the evidence from previous research surveyed above, it was decided to check if any gender differences could be found in this sample.

A Mann-Whitney U Test was conducted in order to find out if significant gender differences could already be demonstrated to exist in 3rd grade (N=574). The results demonstrated that the girls are indeed significantly more motivated to learn English than the boys ($U=33650$, $Z=-3.78$, $p\leq.001$) which is illustrated in Figure 1 below. That is to say that this study does not confirm the findings by Holder (2005), who reports that, unlike French, English is gender-neutral with respect to student motivation.

³ As far as the relationship of motivation with achievement is concerned, regression analyses have shown that only one of the components of motivation as it is conceptualized here, namely amotivation or failure orientation, is significantly related to achievement. This fear of making mistakes and sense of overburden, however, is one of the best predictors of children's achievement in the reading, listening and speaking tests in 3rd grade. The two best predictors of their achievement in English reading, listening and speaking were their achievement in the German reading test and their status as children with learning difficulties, with those children who are considered to have learning difficulties scoring significantly lower in the English tests (see Haenni Hoti, 2008; Haenni Hoti *et al.*, forthcoming).

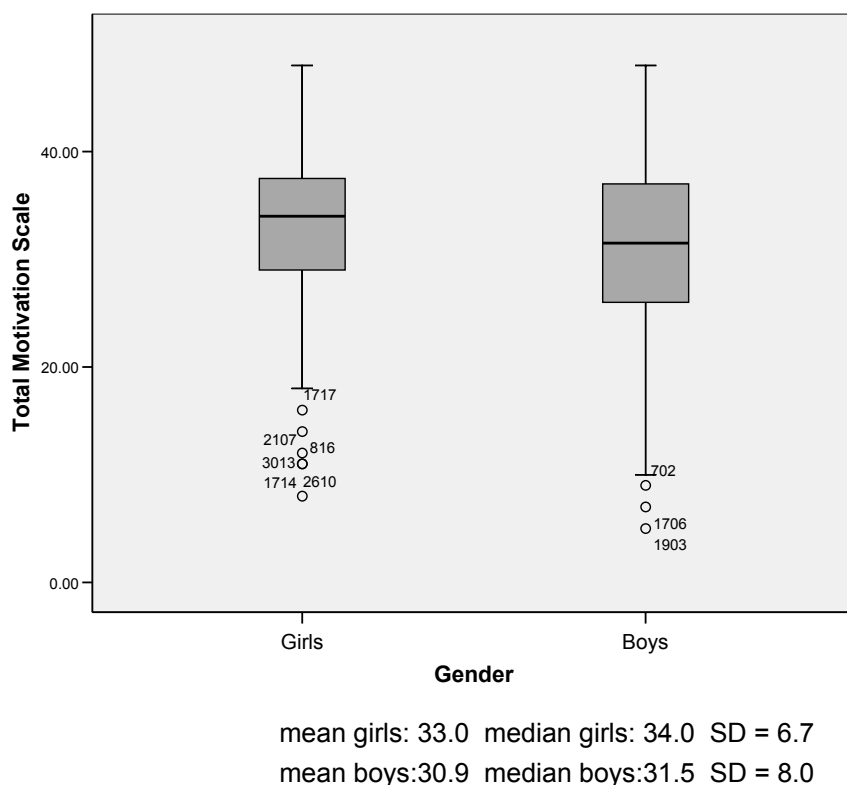


Fig.1: Motivation scores for girls and boys

A closer look at the constituents of motivation reveals where exactly girls and boys differ. While the girls do not significantly differ from the boys in terms of their extrinsic-instrumental orientation or their extrinsic lingua franca orientation, they score significantly higher than the boys in their intrinsic orientation ($U=30551$, $Z=-5.0$, $p\leq.001$) and significantly lower than the boys in terms of their amotivation / failure orientation ($U=32584$, $Z=-3.7$, $p\leq.001$) which has been found to be a significant predictor of success (see Haenni Hoti, 2008; Haenni Hoti *et al.*, forthcoming). Furthermore, the girls report putting in significantly more effort than the boys ($U=32730$, $Z=-4.2$, $p\leq.001$). In sum, the girls enjoy their English lessons more, they feel less overburdened and less anxious to make mistakes, they learn English because they enjoy hearing or speaking it more so than the boys and they expend more effort. On the other hand, girls and boys do not differ in the way they claim learning English in order to be able to communicate with people from all over the world and in order to understand their favourite music, computer games, or the internet.

Knowing on which dimensions of language learning motivation girls and boys differ provides a much needed starting point for interventions. If we want to foster boys' language learning motivation, however, it is even more useful to know what factors contribute to the children's language learning motivation. The following section will shed some light on this question.

3.2 *Factors contributing to the 3rd graders language learning motivation*

In order to uncover which factors contribute to the explanation of language learning motivation in the sample, a multiple hierarchical regression analysis which controlled for the effects of gender was conducted. In a first step a regression analysis including all the variables outlined in section 2.2 above was conducted. Due to the fact that many of the variables entered into the equation were only assessed in a subsample of 6 classes, the regression analysis had to be conducted with this subsample only.

Of the demographic variables only gender turned out to make a unique significant contribution to the explanation of the children's language learning motivation. Given the relatively unimportant role that demographic variables seem to play in the explanation of pupils' motivation to learn English, all but gender were excluded from further analysis and a stepwise multiple hierarchical regression analysis controlling for the effect of gender was conducted with the remaining variables. Based on previous correlational analyses, four scales and several single items were assumed to play a direct role in predicting student motivation: pupils' *self-concept*, their *attitudes towards English as a language*, their *attitudes towards TL speakers and countries*, their *attitudes towards a globalized world*, and their *beliefs about language learning*.

The variable *ethnolinguistic vitality* was hypothesized to affect motivation indirectly, rather than directly via their *attitudes towards a globalized world*. The children's perception of the *ethnolinguistic vitality* of English is in fact highly correlated with their *motivation* to learn it ($r_s=.45$), but it is even more highly correlated with their *attitudes towards a globalized world* ($r_s=.54$). A partial correlation between students' estimation of the *ethnolinguistic vitality* of English and their *motivation* to learn it which controlled for the effect of their *attitudes towards a globalized world* showed that once the influence of this latter variable is statistically removed the correlation between *ethnolinguistic vitality* and *motivation* to learn English is much smaller ($r=.19$).

The stepwise multiple hierarchical regression analysis ($n=107$) yielded that three of the four factors and one of the single items entered into the equation significantly contribute to the explanation of student motivation.

Model		<i>Beta Coefficient</i>	<i>R²</i>	<i>F change</i>	<i>p</i>
1	Gender	-.215	.046	4.86	.030
2	Gender	-.142			.088
	Self-concept	.294	.337	43.32	.001
	Attitudes towards the English language	.195	.426	15.33	.044
	Beliefs: Girls are better at language learning than boys	-.230	.468	7.56	.005
	Attitudes towards TL speakers and countries	.240	.504	7.07	.009

Table 2: 5-Factor Model of Language Learning Motivation

This 5-factor model explains 50.4% of the variance in the 3rd graders' motivation to learn English and 45.7% after the effects of gender have been removed. The children's *self-concept* is the most powerful predictor of their motivation. The more positive their perception of their own competence in English and the higher their expectation to succeed, the more motivated they are to learn English. *Language attitudes*, too, significantly contribute to the pupils' language learning motivation. Positive attitudes towards America / Americans, England / Englishmen and English as a language boost the motivation to learn English. Last but not least stereotypic *beliefs about language learning* also help explain the children's motivation to learn English. The more convinced the children are that girls are better at language learning than boys, the less motivated they are to learn English.

As might be expected this gender stereotype differentially affects girls' and boys' language learning motivation. A belief in girls' superiority at language learning significantly dampens boys' motivation to learn English. Intuitively it seems likely that the same stereotype might actually boost girls' language learning motivation. Surprisingly, this is not the case. A belief that girls are better at language learning than boys is neither significantly correlated with girls' motivation to learn English ($r_s = -.06$) nor does it significantly contribute to their language learning motivation (separate regression analysis conducted with girls), but the weak relationship that exists is still a negative one. Consequently, a belief in their superior language learning capabilities does not positively affect girls' motivation to learn English.

The variable *attitudes towards a globalized world* did not make a unique significant contribution to the explanation of *motivation*. It needs to be pointed out, however, that this does not necessarily mean that it does not affect the 3rd grader's motivation. It simply means that it does not make a unique significant contribution after the overlapping effects of all the other variables in the analysis have been statistically removed (see Pallant, 2005: 153-54). After all, the pupils' *attitudes towards a globalized world* correlate about as highly with

their *motivation* ($r_s=.42$) as their *attitudes towards English as a language* ($r_s=.44$) or their *attitudes towards TL speakers and countries* ($r_s=.44$). Nevertheless, they do not significantly contribute to the explanation of motivation. This may be due to some overlap with other variables in the analysis. The different kinds of attitudes are all correlated, for example, so that multicollinearity can be expected to have led to the exclusion of this variable.

In order to find out if girls and boys also differ in terms of the factors identified above as contributing to the explanation of their language learning motivation another series of Mann-Whitney U Tests ($n=112$) was carried out. The girls could indeed be shown to have significantly more positive *attitudes towards English as a language* ($U=1105$, $Z=-2.55$, $p\leq.05$). In terms of their *attitudes towards TL countries and speakers* (America / Americans and England / Englishmen) and in terms of *self-concept*, they do not significantly differ from the boys but there is still a tendency for them to be more positively disposed towards these TL speakers and TL countries and to exhibit a more positive self-concept. Furthermore, if the analysis is conducted with the entire sample, girls can be shown to be significantly more positively disposed towards TL speakers and countries ($N=565$, $U=34930$, $Z=-2.59$, $p\leq.01$) and to have a significantly more positive self-concept than boys ($N=574$, $U=35732$, $Z=-2.77$, $p\leq.01$).



Fig. 2: Gender and Language Attitudes / Self-Concept

On the whole, therefore, girls in primary school seem to be more positively disposed towards English as a language and towards representative TL countries and speakers. In addition, they seem to be more confident about their abilities in English than boys. These tendencies are illustrated in figure 2 above. Just as in the case of student motivation, this study does not replicate

the observation made by Holder (2005) regarding the gender-neutrality of English which was identified with respect to students' self-concept.

The fact that significant differences between girls and boys could be shown to exist for all three dimensions if analyses were conducted with the entire sample, but not if analyses were conducted with the subsample is most likely due to the smaller size of the subsample.

Across the entire sample girls have been shown to have a significantly more positive self-concept than the boys. Their higher competence belief is reflected in their belief that "girls are better at language learning than boys". A Chi Square test revealed that girls and boys do significantly differ in the amount of their agreement with this stereotypic belief ($\chi^2(3, n=109)=14.4; p\leq.01$). Girls believe significantly less frequently than expected that it is not at all true that they are better at language learning than boys (18.9%) and they believe significantly more frequently than expected that this is quite true (34%). The boys, on the contrary, believe significantly more frequently than expected that it is not at all true that the girls are better at language learning than themselves (50%) and they believe significantly less frequently than expected that this is quite true (12.5%). In other words both seem to have a self-serving bias, evidenced in the fact that the girls tend rather to believe the stereotype of their superior language learning capabilities, while the boys tend to reject such a belief.

Altogether the belief system of these primary school children seems to be of an encouraging nature. It is precisely the two discouraging beliefs that are rejected by the respondents, one of them very strongly (*"if you are good at math you are not good at language learning"*), the other one only mildly (*"girls are better at language learning than boys"*). On the other side, it is the more encouraging beliefs that are more strongly held by the respondents, such as a belief in children's advantages at language learning and in L2 learning facilitating subsequent language learning.

4. Discussion

Unlike previous research in Switzerland, which suggests that English is equally attractive to girls and boys and gender-neutral with respect to student motivation, attitudes, self-concept and achievement, this study could not replicate this gender-neutrality of English. While the Swiss 3rd graders in this study were generally motivated to learn English and seem to enjoy their first contact with a FL at school, significant group differences could already be demonstrated to exist in 3rd grade. After a mere 8-9 months of contact with the English language at school, the girls are significantly more motivated to learn English than the boys. They report putting more effort into learning English

than the boys. They seem to enjoy the English lessons more and to feel less overburdened and less anxious to make mistakes than the boys.

It is surprising and to a certain extent also disturbing that such gender differences seem to exist at such an early age and from the very beginning of the language learning process on. Not only is it one of the aims of language instruction in primary school to awaken and develop the pupils' interest in the language, their self-confidence and their openness towards foreign cultures and lifestyles (see Bildungsplanung Zentralschweiz, 2004: 3), but these motivational dispositions are also likely to affect ultimate achievement (see footnote 3). Therefore, attempts at fostering boys' language learning motivation are badly needed. It is certainly desirable that boys enjoy their English lessons as much as girls and that they are relieved of their sense of burden and anxiety in the classroom.

Attempts at boosting boys' language learning motivation will necessarily have to draw upon appropriate explanatory factors. Four such explanatory factors could be identified in the present study: the children's self-concept, their attitudes towards English as a language, their attitudes towards TL speakers and countries and the stereotypic belief that girls are better at language learning than boys. These four factors are the strongest predictors of language learning motivation in the sample. The more confident the children are about their English competence and future success, the more favourable their attitudes towards English, England / Englishmen and America / Americans, and the less they believe that girls are better at language learning than boys, the more motivated they are to learn English.

Hence, stereotypic beliefs about language learning do indeed contribute to pupils' motivation to learn English but they cannot be considered to exert the most powerful influence and they do not affect girls and boys equally. A belief that girls are better at language learning than boys will clearly dampen boys' motivation to learn English while it does not seem to affect girls' motivation. Furthermore, the pupils' English-related self-concept and their attitudes towards TL speakers and countries exert a more powerful influence on their motivation to learn English than this gender stereotype.

While both girls and boys strongly reject the stereotypic belief that people who are good at math are not good at language learning (with girls being even more adamant in their rejection of this belief), the endorsement of the stereotypic belief in the superior language learning ability of girls displays a more gendered pattern with girls tending to believe in their superiority and boys tending to reject such a belief. Given that the endorsement of such a belief could be shown to dampen boys' motivation, it is encouraging to see that, in general, the boys do not cling to such a belief. Nevertheless, a rather large minority of the boys (28.6%) do believe that girls are better at language learning than themselves. Bearing in mind the motivational impact of this, an

attempt should be made to work against the build-up and existence of such stereotypes in the classroom. One way of doing this might be to have an open discussion about this issue in the classroom in order to explore the pupils' views about it.

The girls' belief in their superior language learning capabilities is reflected in their achievement-related self-concept. Girls are significantly more confident about their present and anticipated English skills and this is the most powerful predictor of the children's motivation to learn English in third grade. It might make sense, therefore, for teachers to focus their efforts on the children's competence beliefs and expectancy for success beliefs, bearing in mind that these might be fed by stereotypic beliefs about language learning. Children's competence beliefs are likely to profit from a non-threatening, non-anxiety-inducing classroom atmosphere. This can also be assumed to help diminish boys' comparatively high failure orientation and sense of overburden. Establishing such a non-threatening classroom atmosphere requires an informed view of errors as a necessary and legitimate part of the learning process.

A further dimension, on which teachers might want to work, is the pupils' language attitudes. Both the children's attitudes towards English as a language and their attitudes towards selected TL speakers and countries have been identified as exerting an influence on their motivation to learn the language and girls were shown to have more favourable attitudes towards both the language and the people / countries. In a first step, improving learner's language attitudes requires making the learners aware of them, since attitudes seem to be more open to change when we are cognitively aware of them (see Baker, 1992: 101). Once awareness has been raised there are manifold ways in which negative attitudes can potentially be improved, such as establishing direct or indirect contact with group members (see Gardner, 1985: 85-88; Hewstone, 1996: 327-339; Itakura 2004: 37-48; Leyens *et al.*, 1994: 47). Last but not least, the choice of course books can also contribute to the build-up or demise of certain stereotypes and attitudes.

The fact that the subsample of six classes in which some additional variables of interest were assessed differed from the larger sample in several respects is certainly one of the limitations of this study. While girls could be shown to be significantly more favourably disposed towards TL speakers and countries and to possess a significantly more positive self-concept if the entire sample was taken into account, this was not the case if the analysis was limited to the subsample. Nevertheless, the same tendency for girls to be more self-confident and more positively disposed towards TL speakers and countries was evident in the subsample too. As pointed out above it is likely that the non-significant results found in the subsample are caused by the smaller size of this sample since the larger the sample is, the higher the likelihood of

finding significant results. In order to arrive at more generalizable and reliable results and to make more confident assertions it is certainly desirable that those variables assessed in the subsample only be also investigated in a larger sample. For that reason another data collection, investigating the same variables, was conducted in March / June 2008 in a larger subsample.

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