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Effects of Peer Tutoring on Reading Self-Concept

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Abstract

This study investigates the development of the Reading Self-Concept and of the mechanisms underlying it, within a framework of a reading programme based on peer tutoring. The multiple methodological design adopted allowed for a quantitative approach which showed statistically significant changes in the Reading Self-Concept of those students who played the role of tutor in fixed peer tutoring. The qualitative approach of the analysis suggests that by performing the tutor's role, in an induced work atmosphere, by reading aloud and actively listening, by evaluating their effort, and engaging in meta-cognitive reflective processes, students become aware of their own capabilities and of their possibilities of improvement; thus promoting the development of the tutor's Reading Self-Concept.

Keywords: peer tutoring, reading competence, reading self-concept, metacognition

Incidencia de la Tutoría entre Iguales en el Autoconcepto Lector

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Resumen

En este estudio se indaga sobre la evolución del autoconcepto lector y algunos de los mecanismos responsables de dicho desarrollo en el marco de un programa de lectura basado en la tutoría entre iguales. El diseño de multiplicidad metodológica adoptado permite una aproximación cuantitativa que evidencia cambios estadísticamente significativos en el autoconcepto lector del alumnado que ejerce el rol de tutor en la modalidad de tutoría fija. La aproximación cualitativa de análisis del proceso sugiere que el propio ejercicio del rol de tutor, el clima de trabajo creado, la lectura en voz alta con escucha activa, la valoración del esfuerzo realizado para la mejora, así como los procesos de reflexión metacognitiva en los que participan ambos miembros de la pareja, permiten tomar conciencia de las propias capacidades y posibilidades de mejora; hechos que pueden favorecer el desarrollo del autoconcepto lector de los tutores.

Palabras clave: tutoría entre iguales, competencia lectora, autoconcepto lector, metacognición

Within the framework of inclusive education, cooperative learning stands out as an advantageous methodology to cater for diversity: peers learn from one another in interactive environments structured by the teacher to promote cooperation (Villa, Thousand & Nevin, 2010). In this context, heterogeneity is perceived as a positive element and psychosocial and interactive abilities are developed by utilising peers' potentials as learning engines (Duran & Monereo, 2012).

Topping (1996) defines peer tutoring generically as a cooperative learning method in which people from similar social groups help others to learn, and in so doing they learn by teaching. In a school environment, Duran & Vidal (2004) contextualise peer tutoring as the creation of pairs of students in an asymmetrical relationship, derived from the performance of the tutor or tutee roles, with a common shared goal, which is achieved in the context of a relationship arranged by the teachers. In terms of role continuity, under fixed-role tutoring each student is assigned a permanent role, either as a tutor or tutee; whereas with reciprocal tutoring (Fantuzzo, King & Heller, 1992) both students are required to switch roles.

Peer tutoring has proved to be one of the most effective instructional practices in the achievement of quality education (Topping, 2000). Among this tool's most widely cited benefits are: improved learning of academic competences; promotion of positive attitudes towards learning, teachers and school; development of a more positive self-image; establishment of a relationship of trust and mutual enrichment between tutor and tutee, among others (Goodland & Hirst, 1990; Gordon, 2005).

Like cooperation, reading stands out as one of the key competences in modern society; reading grants people autonomy and it is an essential foundation of education. The reading competence encompasses a range of skills, knowledge and strategies that are attained through life in different contexts and communities in which an individual intervenes and takes part, and in which a reader plays a leading role by reflecting on and interpreting

the meaning of a text (Solé, 2011). A key component of the reading competence is the Reading Self-Concept.

Brookover & Lezotte (1979) have highlighted the great significance that schools attach to self-concept, given that it forms the basis for solid personal, social and professional performance. School experience plays a key role in the development of self-perception, as affirmed by Rath & Nanda (2012). Academic self-concept is regarded as essential (Wouters, Germeijs, Colpin & Verschueren, 2011) and it is indeed considered one the main objectives to achieve in several educational programmes. Self-concept develops from one's own perceptions, stemming from personal assessments and various external factors, which together help configure its form and internal structure. According to Marsh (1986), the development of academic self-concept is marked by simultaneous processes of interpersonal (with others) and intrapersonal (with self) comparisons. Academic motivation and self-concept foster positive attitudes to school in terms of greater participation and task completion, and also of improved attendance (Green, Liem, Martin, Colmar, Marsh & McInerney, 2012).

Similarly, Mandelman, Tan, Kornilov, Sternberg & Grigorenko (2010) state that in addition to external agents (the environment and other significant elements), there is also another key factor likely to have a bearing on the construction of the self-concept; namely, the individual's internally-generated own view, specifically their metacognitive evaluations which, according to these authors, have not been sufficiently researched. Thus, they focus on the impact of the individual's own metacognition on the development of their self-concept. Along these lines, the Reading Self-Concept is constructed depending on the student's response to certain reading challenges. Therefore, a key issue to consider is the Reading Self-Concept's relationship with reading performance. There appears to be a reciprocal influence (Fantuzzo, Tighe & Childs, 2000), by means of which these two constructs feedback into each other, whilst gaining strength from psychosocial and family factors, and also benefiting from specific learning

strategies (McInerney, Cheng, Mok & Lam, 2012).

Recent research (Dabbagh, 2011) confirms the multidimensional configuration of the self-concept and suggests that in their hierarchical organisation, the multiple dimensions tend to be less stable the lower they are placed in the hierarchy. As the Reading Self-Concept stands at a rather stable level, it takes longer to detect any changes taking place, a view which coincides with many reviews of cooperative learning studies that highlight the temporal factor as an important element to consider when detecting changes, thus calling for sufficiently long performances (Johnson & Johnson, 1990; Slavin, 1996; Duran & Monereo, 2008).

In specific contexts of peer tutoring and paired reading, some authors have produced evidence indicating that paired reading can have positive effects on the participants' self-esteem (Miller, Topping & Thurston, 2010; Topping, Miller, Thurston, McGavock & Conlin, 2011). In this context, they have carried out research on the development of self-esteem, observing two dimensions they consider to be interlinked: self-worth and self-competence, which to a certain extent are among those we took into consideration in this study. The results from these previous studies show improvements to self-esteem in all the peer-tutoring participants, according to both the different organisational modes (cross-age/same-age) and the role performed (tutor/tutee). Topping *et al.* (2011) attribute this improvement to the additional reading practice granted by peer tutoring and also to the work situation with a peer, particularly for the students taking on the tutor's role (although not exclusively). Moreover, Miller *et al.* (2010) suggest the need for qualitative research which includes the observation of interactions, in order to be able to assign them meaning and examine the influence they have on improving self-esteem in paired-reading contexts.

The present paper forms part of this context of various contributions to the understanding of self-concept construction, the Reading Self-Concept specifically.

Method

Objectives

Around 200 schools, 600 teachers and thousands of students and their respective families have been involved so far in the *Leemos en pareja* (*Reading in Pairs*) programme (Duran, Blanch, Corcelles, Flores, Oller, Utset & Valdebenito, 2011a) – and its partner programmes in the Basque language *Bikoteka Irakurtzen* (Duran, Blanch, Corcelles, Fernández, Flores, Kerejeta, Moliner & Valdebenito, 2011b) and in Catalan *Llegim en parella* (Duran, Blanch, Corcelles, Flores, Merino, Oller & Vidal, 2009). The programme was created with the aim of improving reading comprehension by means of peer tutoring. It is grounded on three conceptual bases: peer tutoring, reading competence and family involvement, and it also involves a teacher training process implementing peer tutoring. Furthermore, in order to ensure the initiative's success, prior to starting the programme, all students received basic training on its theoretical framework and functioning, with interactive guidelines aimed at creating appropriate scaffolding and tailored support, thus progressively promoting the pairs' autonomy in achieving their learning goals. The programme runs for 12 weeks, with two 30-minute sessions each week, revolving around an Activity Sheet, previously designed by the teachers, which is intended to guide the pairs' interaction and the reading process by means of pre-reading, while-reading and post-reading activities.

The programme's design allows for a sufficiently long intervention so as to consider its possible effect on the Reading Self-Concept of the students taking part in it.

The aims of this study are to examine the changes taking place in the Reading Self-Concept in the context of the *Leemos en pareja* programme and to identify the processes which may be responsible for producing the observed changes.

Design and procedures

Sample. The study involved 577 students (enrolled in years 3 to 6, Primary Education), in addition to 20 teachers, all belonging to 10 schools which took part in the programme during the academic years 08-09, 09-10 and 10-11. This was a representative sample of schools both in terms of funding source (public/state-assisted private) and setting (urban/rural).

The intervention team comprised 441 students, distributed as shown on [Table 1](#). The comparison group included 136 students belonging to four of the institutions from the intervention group. Peer tutoring was not implemented in the comparison groups during the intervention period, although they did work on their reading comprehension by using the same Activity Sheets as the intervention group, but only with the usual teaching methodology used in their respective institutions.

Table 1
Distribution of the intervention group

Ac. Year	Institution	Year Group	Type of Tutoring	No. of students
08/09	A	3 and 5	Fixed	81
09/10	B	3 and 4	Fixed	39
	C	3 and 5	Fixed	29
	D	5	Fixed	39
10/11	E	5 and 6	Reciprocal	96
	F	5	Fixed	39
	G	6	Fixed	20

H	5 and 6	Fixed	46
I	3 and 5	Fixed	22
J	5 and 6	Fixed	30
Total			441

Instruments.

- *QALect Reading Self-Concept questionnaire (pre-test and post-test).*

Designed taking into account early research on reading self-image (Moliner, Flores & Duran, 2011), the questionnaire is aimed at students in years 3 to 6, primary education. It consists of 12 items comprising a statement and a Likert-type answer scale (five categories), except for number 2, which is assessed descriptively and consists of a statement and a list of topics offering several answer options (all valid). In addition, two other items collect supplementary information by requesting free writing about the students’ own reading preferences. The theoretical structure is grounded on two key dimensions in the construction of the self-concept: affective factors linked to reading (emotional and motivational), and factors related to metacognitive knowledge and regulation strategies which intervene in the reading process.

Once the questionnaire had been formulated, we then proceeded to validate the content and construct, and to determine its reliability. To validate the content, an expert judgement was employed with a Kappa index of agreement between judges (Cohen, 1960) of 95%, which enabled us to revise the questionnaire and incorporate the judges’ suggestions. To validate the construct, an exploratory factor analysis (EFA) was carried out with a sample of 95 students, the results of which were found adequate (KMO=.76) in relation to the sample (Norusis, 1990). The structure in two factors revealed good characterisation (Bartlett’s $\chi^2= 203.09$; $p <.01$) of the way in which these items were grouped. The factor analysis results thus validated

the questionnaire's construct. The reliability index for each of the factors was also calculated; Cronbach's α indicators $\geq .70$ show good internal consistency in relation to the questionnaire's factors.

- *Audiovisual register*: Analysis of the interaction of a sub-sample of 20 random pairs, over 3 sessions. In total, 60 work sessions were analysed.

- *Focus groups*: these were carried out at the end of the project with the students taking part in the audiovisual register and the teacher participants, where they evaluated the work done, the programme implementation, the degree of satisfaction, learning achieved, the progress made and the potential improvements to undertake in the programme's organisation and implementation.

- *Programme's final evaluation questionnaire* (Duran *et al.* 2011a). This questionnaire captures the students' and teachers' final evaluation of the different dimensions related to the programme: learning among peers, learning via the *Leemos en pareja* programme and evaluation of the programme implementation.

Procedure. As previously mentioned, the methodological design combines a quasi-experimental study with a comparison group and a qualitative study of the data of the process. For the former, the quantitative data analysis was performed with the SPSS Statistics 17 software, based on the *t-student* test for related samples.

The audiovisual registers were performed with the Atlas.ti v6.2 software, via a category system created for the analysis. For this category system, the following references were taken into account: Colomina, Onrubia & Rochera's (2005) interactivity analysis proposal; Colomina & Onrubia's (2005) interaction analysis, and De Backer, Van Keer & Valcke's (2012) proposal for the analysis of cognitive and metacognitive strategies which facilitate learning of reading comprehension in a peer-tutoring context. The latter was complemented and enhanced with the contributions made by Solé (2001) and Cassany, Luna & Sanz (1993). The category

system was in turn augmented with emerging categories observed in the pairs’ interaction, resulting in an *ad hoc* system whose reliability was validated by using Pearson’s coefficient (Ruiz & Sánchez, 2006) in an inter-judge test. The registered work sessions show the students performing the tasks associated with each role, according to the initial training received and following the reading Activity Sheet, which includes a text and activities to carry out both before and after reading.

The data gathered in the focus groups and the final evaluation questionnaires were analysed with the software Atlas.ti v6.2.

Results

Results from the quasi-experimental study. Following Levene’s test (Table 2), no variation is initially observed between the two groups, CG (comparison group) and IG (intervention group) and we can observe that the dispersion between them is similar. Although this study aims to study the pre-test and post-test changes of the two groups separately, the *t-student* test shows initial differences between them, with an initial higher level in the CG.

Table 2
Reading Self-Concept (RSC) pre-test results in CG and IG

Variable	Group	<i>N</i>	<i>M</i> pre-test	<i>SD</i>	<i>Levene</i>	<i>t</i>	<i>g^l</i>	<i>p</i>
RSC	CG	136	68.78	13.53	.23	2.97	575	.00
	IG	441	64.55	14.82				

Having shown the initial results, we will now present the results obtained by both groups in the pre-tests and post-tests (Table 3)

Table 3

Reading Self-Concept (RSC) pre-test and post-test results in CG and IG

Variable	Group	N	<i>M</i> pre-test	<i>SD</i>	<i>M</i> post-test	<i>SD</i>	<i>t</i>	<i>p</i>
RSC	CG	136	68.78	13.53	69.37	13.74	-.73	.47
	IG	441	64.55	14.82	66.91	14.33	-3.84	.00

As can be seen, the means between the pre-test and the post-test from the two groups increased between the initial and final post-test. But the comparison group improvement doesn't indicate statistically-significant differences between the pre-test and the post-test, whereas the intervention group does show statistically-significant differences. This leads us to consider that taking part in the *Leemos en pareja* programme offers students learning opportunities which can also benefit the development of their Reading Self-Concept.

By fine-tuning the results, it was possible to examine the development of the Reading Self-Concept in the intervention group, according to the type of tutoring undertaken (fixed or reciprocal), and in the fixed tutoring's case, according to the role performed (tutor or tutee).

In relation to the development of the Reading Self-Concept according to tutoring type (Table 4), significant differences are observed between the pre-test and the post-test in the group performing fixed tutoring, but not in the group performing reciprocal tutoring.

Table 4
Reading Self-Concept (RSC) pre-test and post-test results in IG according to tutoring type (fixed/reciprocal)

Variable	Tutoring Type	N	M pre-test	SD	M post-test	SD	t	p
RSC	Reciprocal	96	66.69	12.69	68.39	13.55	-1.73	.09
	Fixed	345	63.96	15.33	66.50	14.53	-3.45	.00

Table 5 below shows the development of the Reading Self-Concept according to the role performed by the students taking part in fixed tutoring. The students who acted as tutors show statistically-significant differences between their pre-test and post-test, whereas the tutees do not show any statistically-significant differences.

Table 5
Reading Self-Concept (RSC) pre-test and post-test results in IG according to role (tutor/tutee)

Variable	Tutoring type	N	M pre-test	SD	M post-test	SD	t	p
RSC	Tutor	172	65.04	13.78	68.37	13.98	-3.42	.00
	Tutee	173	62.89	16.70	64.63	14.86	-1.59	.11

The above results relating to the evolution of the Reading Self-Concept can perhaps be attributed to the fact that tutors are aware of their responsibility in performing their role, the expectations placed on them and the behaviour expected from a good tutor. They have also publicly

acknowledged their reading competence to be able to teach a peer, and all of this combined may mean that, during the programme's development, their self-concept is reinforced and improved with regards to the initial self-concept. On the other hand, despite receiving personalised help according to their reading and comprehension needs, the tutees may develop their Reading Self-Concept at a slower pace and may not improve at the same rate as the tutors; perhaps because they are in fact being tutored, having been identified as those needing help to progress. Furthermore, another influential factor previously mentioned is the perception of improvement in reading; although the tutees may show improvement in their reading comprehension, they are likely to attribute such improvement to the help received from their tutors instead of acknowledging their own dedication and efforts.

Analysing the results obtained according to tutoring type and role type, we need to understand that the students taking on a reciprocal role have half the time to perform each of their roles, due to the switch of roles in this modality. If the Reading Self-Concept progresses at a slower pace among the tutees than the tutors, it is then likely that the improvement may be smaller and this could explain why there are no statistically-significant results in the reciprocal tutoring mode.

After analysing the results from the quasi-experimental study, we then proceeded to analyse the process in order to identify some of the interaction factors of the pairs' inner workings, which may be influenced the development of the Reading Self-Concept.

Results of the analysis of the process. The category system was created following the sequential structure of the *Leemos en pareja* sessions, which were organised through the use of Activity Sheets (Duran *et al.* 2011a). The category system's reliability was assessed with the Pearson's coefficient (Ruiz & Sánchez, 2006), with values close to 1 and significant levels lower than .01 (Table 6), which indicates a high correlation between the judges, thus validating the system of analysis.

Table 6
Reliability of the category system according to Pearson’s correlation coefficient

Interjudge agreement	<i>r</i>	<i>p</i>
Judge 1* Judge 2	.987	.00
Judge 1* Judge 3	.990	.00
Judge 2* Judge 3	.989	.00

In the category system (Table 7), 3 segments were identified and ordered according to the session’s temporal sequence: before, while and after reading. The latter are taken as the units of analysis and are in turn divided into dimension, each of which is then subdivided into categories (shown in Tables 8, 9 and 10). These categories allowed for the analysis of the interaction between students in the programme’s sessions.

Table 7
Results of the interactivity analysis

Segment	Dimensions	<i>f</i>	%
1.Before reading		43	6.57
	1.1 Creation of work environment (CWE)	6	0.92
	1.2 Assessment of task quality (ATQ)	37	5.65
2.During reading		112	17.13
	2.1 Tutor’s model reading (TMR)	59	9.02
	2.2 Assessment of task quality (ATQ)	53	8.11
3.After reading		499	76.30

3.1 Assessment of task quality (ATQ)	130	19.88
3.2 Tutee's expressive reading (tER)	47	7.19
3.3 Pair's self-evaluation (PSE)	322	49.23
Total	654	100

The table above also shows the contrast between the performances registered in each of the segment and the frequency accumulated in each of the dimensions. The *after reading* segment stands out due to the number of observed performances, making up 76.30% of the total number.

For each segment we can also observe the registration of frequency in each of the categories across all dimensions. In Segment 1, *before reading* (Table 8), it can be observed that in the category “creation of work environment” (CWE), there is a low number of registered performances, which are distributed equally among the categories, thus confirming that not many performances are required and that the responsibility for creating a working environment falls equally on tutors and tutees. Although few performances were registered in relation to the creation of a kind and safe work environment to facilitate the task completion, teachers (*Tr*) affirm that in the focus groups this is a progressive and authentic development, as can be seen from their comments:

Tr (4) It was nice to see that in the first session the shyest students were at first uncomfortable but were fine later on. That is why it is so important to stick to the original pairing.

Tr (16) Working by sharing. This idea... Opening the door and seeing two kids from different classes working on their own (...) They were organising themselves very responsibly, managing themselves and the task very well, with great involvement and motivation. And to think that they are learning without your direct influence! It is amazing.

Table 8
*Distribution of frequency according to dimensions and categories in segment 1.
 Before reading.*

1. Before reading	f	%
1.1. CWE 1.1.1 The Tutor initiates the activity by creating a safe and trusted environment.	2	3.34
1.1.2 The Tutor and tutee start the activity creating a safe and trusted environment.	2	3.34
1.1.3 The tutee starts the activity creating a safe and trusted environment.	2	3.34
Total	6	100
1.2 ATQ 1.2.1 The Tutor dismisses the tutee’s attitude and/or response with some negative gesture or comment.	0	0
1.2.2 The Tutor praises the tutee and/or confirms the tutee’s response with some encouraging gesture or comment.	37	100
1.2.3 The tutee dismisses the Tutor’s attitude and/or response with some negative gesture or comment.	0	0
1.2.4 The tutee praises the tutor and/or confirms the Tutor’s response with some encouraging gesture or comment.	0	0
Total	37	100

With regards to the dimension of “assessment of the task quality” (ATQ), we can observe that all the registrations made are concentrated around the category in which the tutor renders a positive assessment of the task performed by the tutee. It is also worth drawing attention to the fact that there is no negative performance or any praise to tutors from the tutees. The

unilateral quality task assessment from the tutors may reinforce the notion of the tutor's role as a reading expert and may also foster their Reading Self-Concept.

For segment 2, *during reading* (Table 9), we present, on the one hand, the observed performances of the tutor's reading, considered to be the model reading (TMR). In this case, the performances centre around the tutor's correct reading accompanied by the tutee's attentive listening. Only 10.17% of tutors make some mistakes whilst reading, a fact which confirms the tutor's role as a correct reading model. In this regard, tutors (*T*) express their progress in reading and how they feel during their performance:

T (14) You also read and you have to do it well, so I prepare at home and I have improved a lot.

T (16) I never thought I read well enough to be a tutor, and I feel proud.

T (8) Different, confident, I had never taught anyone before and I feel important and bearing great responsibility.

The tutors' perception of self-confidence and improvement in reading, as well as their acknowledgement of their own limitations and their efforts to overcome them may have well contributed positively to the development of their Reading Self-Concept.

In the same segment, we can also observe some performances related to the assessment of the task quality (ATQ), which are distributed among 2 categories only, both referring to the tutor's assessment of the tutee. The highest frequency is achieved by the tutor when referring to the tutee's effort to correct their mistakes and perform their first reading with the greatest accuracy possible.

Table 9
*Distribution of frequencies according to dimensions and categories segment 2.
 During reading*

2. During reading		f	%
2.1. TMR	2.1.1 The Tutor reads correctly and the tutee listens attentively.	49	83.05
	2.1.2 The Tutor reads correctly and the tutee is distracted.	4	6.78
	2.1.3 The Tutor reads making some errors and the tutee listens attentively.	6	10.17
	2.1.4 The Tutor reads making some mistakes and the tutee corrects him/her.	0	0
	2.1.5 The Tutor reads making some mistakes and the tutee is distracted.	0	0
Total		59	100
2.2 ATQ	2.2.1 The Tutor dismisses the tutee’s reading quality with some negative gesture or comment.	0	0
	2.2.2 The Tutor assesses the tutee’s reading quality positively with some encouraging and approving gesture or comment.	12	22.64
	2.2.3 The tutee dismisses the Tutor’s reading quality with some negative gesture or comment.	0	0
	2.2.4 The tutee assesses the Tutor’s reading quality positively with some encouraging and approving gesture or comment.	0	0

2.2.5 The Tutor appreciates the tutee's efforts in correcting their mistakes and performing an accurate first reading of the text.	41	77.36
Total	53	100

Finally, in the third segment, *after reading* (Table 10), we record the performances related to the assessment of the task quality by carrying out a final expressive reading by the tutee and the pair's self-evaluation (which is performed every four sessions). In the dimension of the assessment of the task quality (ATQ), we can see a repeat of the higher number of performances by the tutor in relation to the tutees' answers.

In the dimension related to the tutee's final and expressive readings, we can observe that around 20% of tutees read the text correctly, whereas just under 80% still make some mistakes (with or without tutors' correction). However, many tutees (*t*) declare they notice improvement in their reading: *t* (2) *I can now read faster*; *t* (39) *at first I couldn't read very well but now I can see I have improved*; and some even highlight the results of their efforts: *t* (45) *if you try hard, you become a better reader. Now I'm reading more and learning new things*. Conversely, some tutees don't notice any improvements: *t* (10) *I am reading the same way as before*; *t* (16) *I used to read slowly before and now I have improved, but I don't seem to enjoy reading more*; or simply attribute their progress to the tutors' effort and dedication, and not to their own effort: *t* (20) *I am reading better thanks to my tutor's help*; *t* (12) *my tutor has really helped me a lot*. In this regard, the development of the tutees' Reading Self-Concept may be hindered, since the tutees seem to either play down their improvement or attribute their achievement to external factors.

Table 10

Distribution of frequencies according to dimensions and categories segment 3. After reading.

3. After reading		f	%
3.1 ATQ	3.1.1 The Tutor dismisses the tutee’s attitude and/or response with some negative gesture or comment.	0	0
	3.1.2 The Tutor praises the tutee’s attitude and/or confirms their response with some encouraging gesture or comment.	130	100
	3.1.3 The tutee dismisses the Tutor’s attitude and/or response with some negative gesture or comment.	0	0
	3.1.4 The tutee praises the Tutor’s attitude and/or confirms their response with some encouraging gesture or comment.	0	0
Total		130	100
3.2 tER	3.2.1 The tutee reads, Tutor listens to it and intervenes when there errors or queries.	28	59.57
	3.2.2 The tutee reads (with some difficulty) and the Tutor listens to it without intervening.	9	19.15
	3.2.3 The tutee reads and corrects his/her mistakes autonomously.	0	0
	3.2.4 The tutee reads the text correctly (intonation, pronunciation, rhythm and fluency).	10	21.28
Total		47	100

3.3 PSE	3.3.1 Before reading: assessment of pair's performanc	60	18.63
	3.3.2 During reading: assessment of the tutee's use and command of reading skills and strategies.	90	27.95
	3.3.3 After reading: assessment of tutee's comprehens	45	13.98
	3.3.4 Tutee's expressive reading	15	4.66
	3.3.5 Assessment of tutor's performance	90	27.95
	3.3.6 Objectives and improvement proposal: pair	14	4.35
	3.3.7 Teacher intervention	8	2.48
Total		322	100

The third dimension included in this segment is related to the pair's self-evaluation, which the two partners perform every four sessions and in which they assess the tutor's performance, the use of reading strategies, the tutee's reading and comprehension level, as well as other elements related to the pair's performance and any proposals for improvement. In this regard, it is worth noting that most of the interventions (around 46%) happen during the analysis of the tutees' reading progress, according to the categories previously described, corresponding to 3.3.2, 3.3.3 and 3.3.4. It is likely that an exhaustive analysis of the tutees' reading progress may highlight some of the limitations they haven't overcome yet and that these observations may obscure the achievements they have actually made. The tutors' attitudes regarding their role performance (not regarding tutee's progress on the reading elements) total almost 28% of the performances registered under 3.3.5. They are closely followed by the pairs' attitudes (approximately 23%), concentrated under categories 3.3.1 and 3.3.6. Finally, it is worth mentioning that teachers' interventions are also registered under this dimension (3.3.7), with few performances relating to the programme development and the

metacognitive reflection undertaken, with a total frequency of approximately 2.5%.

Discussion

The quantitative results obtained show that the Reading Self-Concept in all the *Leemos en pareja* participants evolves in a statistically significant manner. These results are in line with findings from other research focused on reviewing elements for the improvement of self-concept and self-esteem in peer learning contexts (Duran *et al.* 2011a; Ginsburg-Block, Rohrbeck & Fantuzzo, 2006) and others reviewed within the framework of peer tutoring and peer reading, (Miller *et al.*, 2010; Topping *et al.*, 2011).

In a more in-depth analysis, significant improvement was observed among the tutors participating in fixed-role tutoring. These improvements may be in tune with role theories (Robinson, Schofield, & Steers-Wentzell, 2005), which are grounded on the adopted attitude, dependant on the adjudicated role. In this regard, the tutors may well have increased their feelings of academic competence and effort because they are good reading models; and when they return to their natural student role, they may focus on learning with the same attitudes and behaviour expected of their tutees. Thus, any improvements in this group of students may be brought about by performing their role and because of the possibilities the roles offer them to perceive and evaluate themselves as good readers.

Similarly, from the qualitative results, four dimensions were identified, which may have influenced the positive construction of the Reading Self-Concept. The first one, a positive work environment, generated within a peer-tutoring framework, allows for maximum capacity development and fosters improvement, from recognising their own limitations to the work undertaken to improve them.

The second dimension relates to the evaluations made during the tasks. In this regard two regularities are observed, which may shed some

light in interpreting the observed performances: all the evaluations come from the tutor towards the tutees and all of them are positive. There is wide acknowledgment of the importance of peer reference for the formation of the Reading Self-Concept (Park, 2011), as well as for learning achievement in cooperative environments (Seligman, 2003; Murray, 1994). Therefore, the task assessment is regarded as a key element to consider in the improvement of the Reading Self-Concept.

The third dimension includes the readings made by both pair members, which seek to show the students' command of the task. In their initial reading, the tutors assert themselves as model readers. However, in their final expressive reading, the tutees seem unable to achieve recognition as expert readers, given that the majority of tutors were still seen to correct tutees' mistakes in this final task. This makes it difficult for the tutees to show progress in the quality of their reading and it may even hinder their self-concept's positive construction.

Lastly, and taking into account the possibilities accorded by self-evaluation in reflection on the progress and difficulties in the reading and comprehension process itself, self-evaluation may make students more aware of their reading level and their progress, and so they can implement strategies for improvement, which according to Esnaola, Goñi & Madariaga (2008) are crucial elements for the modification of the self-concept.

Conclusion

As a final conclusion, it is our belief that participation in the *Leemos en pareja* programme may have contributed to the positive development of the Reading Self-Concept in those students taking up the tutor role. Among the factors that may explain this positive development are: the act of taking on the role in itself, a favourable working climate, the positive assessment of the efforts made for improvement, reading-aloud tasks in combination with active listening from a peer, and inter-peer metacognitive reflections on the

progress made and the limitations in their reading and comprehension. Similarly, the challenge facing tutees and those performing reciprocal tutoring is that of taking responsibility for the observed reading improvement instead of ascribing it to the tutors. Metacognitive reflection is seen as a key factor which may boost development of the Reading Self-Concept by making students aware of their abilities and their likelihood of improvement according to the effort put in.

These results are an incentive to keep enquiring and delving into the processes or conditions which may be responsible for boosting the Reading Self-Concept in those students taking part in the programme, as well as in other peer-learning practices.

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