



VOLUNTARY OR FORCED ASSIGNMENT TO WORK GROUPS IN UNIVERSITY STUDENTS: EFFECTS ON TEAM ROLES

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INTRODUCTION

The productivity of future professionals is usually conditioned by their ability to work in groups. Therefore, the EHEA has promoted various forms of teaching methodologies that require group activities by the university student. However, the consequences of a voluntary or forced assignment of students to such activities are still not well known.

In addition to the type of assignment to the group, various variables intervene conditioning the proper functioning and didactic effectiveness of these activities. These variables can be of individual or collective type. The variables of individual type used in this study are: peer attachment, characterized by the person's way of bonding (Bowlby, 1969; Leiter, Day and Price, 2015); the expectation of self-efficacy, considered as confidence in one's ability to achieve the intended results (Ormrod, 2006); and the attitude toward collaborative learning, understood as the attitude towards working in small groups based on participation and positive interdependence. The collective variables selected are the team roles that make up the different work groups (Belbin, 2015). Each student can play several roles depending on the needs of the team and, also, according to their own interests. A team role is the commitment that the individual acquires to perform a certain function, adjusting their skills to the needs of the team.

OBJETIVE

Analyze the relationships between attachment, self-efficacy, attitude toward collaborative learning and team role, as well as the effect of voluntary or random training of work groups on team roles.

METHOD

Participants	N=286 84,2 % Women	Age M=19,94 SD=2,47
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Instruments	Peer attachment: 21 items (5-point Likert scale) adapted from Amrden and Greenberg (1987). Self-efficacy: 4 items (Likert scale of 9 points), subscale of the Battery of Generalized Control Expectations (BEEGC) (Palenzuela et al, 1992). Self-perception of the team role (APRE27): 27 items (Likert scale of 10 points) inspired by Belbin (1987) and Simón (2015). Attitude towards collaborative learning: 20 items (5-point Likert scale) developed specifically for this study. Academic performance (RA): Academic grade (from 0 to 10) of group work.
	Procedure 1st and 2nd grade students of Psychology, Pedagogy and Occupational Therapy. Working groups of four components were created, through voluntary or forced assignment procedures. Their task consisted in carrying out and exposing a research work on topics chosen by them and related to the subjects in which they are enrolled. The following statistical tests were performed: Pearson correlations, MANOVAs.

RESULTS

Correlation matrix					
	Academic performance	Self-efficacy	Attachment	Collaborative learning attitude	APRE27
Academic performance	1				
Self-efficacy	-.09	1			
Attachment	.03	.24**	1		
Collaborative learning attitude	-.03	.20**	.42**	1	
APRE27	.06	.38**	.20**	.13*	1

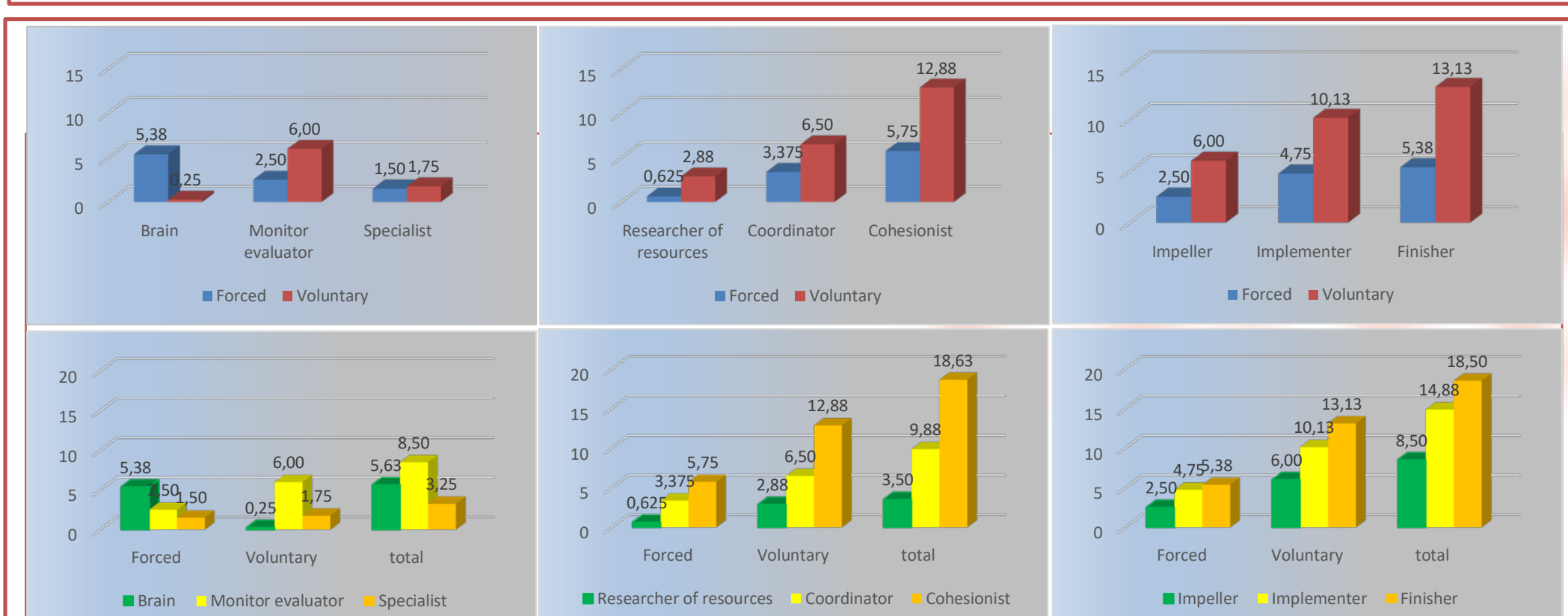
(Bilateral Test). Signification: * $\alpha < .05$; ** $\alpha < .01$; *** $\alpha < .001$

The performance in group work is not related to any of the individual variables. However, if there were interesting relationships among all the others. Thus, for example, the attachment for their classmates is directly and moderately high related to the attitude towards collaborative learning.

Means and difference Means according to the type of group assignment						
	Assignment to the group	N	Mean	SD	TE	Difference of means: t
Academic performance	Voluntary	173	8.86	.76	.06	1.21
	Forced	87	8.25	6.63	.71	
Self-efficacy	Voluntary	176	24.52	5.45	.41	-.79
	Forced	109	25.02	4.76	.46	
Attachment	Voluntary	176	51.51	11.74	.89	4.28**
	Forced	109	45.53	11.03	1.06	
Collaborative learning attitude	Voluntary	176	32.62	11.17	.84	.46
	Forced	109	32.01	10.16	.97	
APRE27	Voluntary	176	197.84	19.24	1.45	-1.09
	Forced	109	200.49	21.10	2.02	

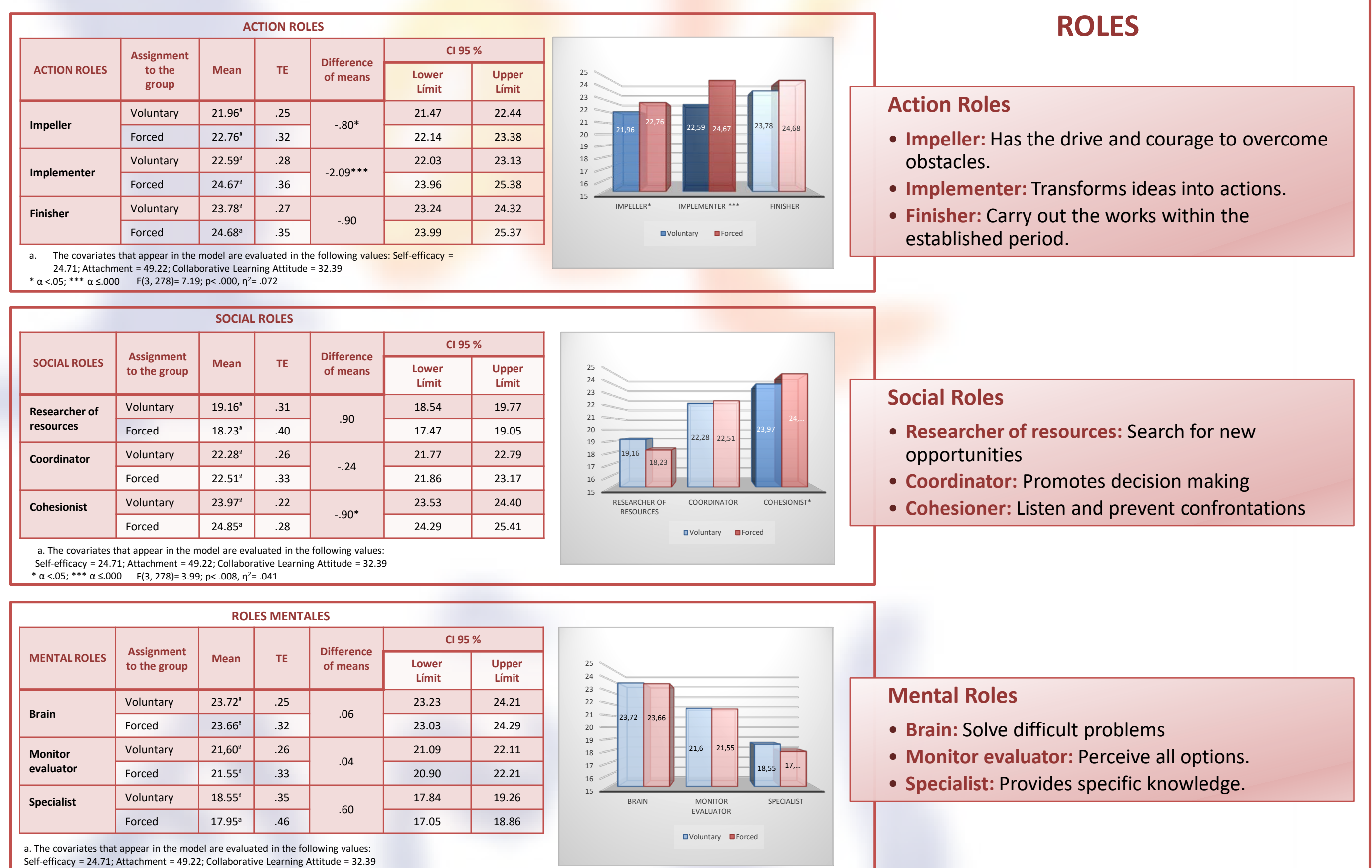
(Prueba bilateral). Significación: * $\alpha < .05$; ** $\alpha < .01$; *** $\alpha < .001$

The attachment to peers is greater when the group assignment is voluntary. There are no differences between voluntary and forced in any other variable



Only 0.25% of the work groups reported the brain role in their group, when the assignment is voluntary. Depending on the type of assignment, we find differences in the profiles of team roles. For mental roles, under forced assignment, the brain is the most frequent role and for the volunteer it is the evaluating monitor. For the other profiles, the pattern is the same, being less frequent in the forced assignment.

Due to the previous results it was decided to perform a MANOVA considering covariables to the individual variables and as a factor the group assignment on the self-perception of the role in the team. The team roles were grouped following the model of Belbin (1987).



The effect of the assignment is significant for the self-perception of two roles of action (Implementer and Impeller) and a social role (Cohesivist). There are no effects on the self-perception of mental roles.

DISCUSSION AND CONCLUSIONS

The relationship detected between the personal variables and the self-perception of roles in the work groups suggests that university students tend to perceive themselves with characteristics derived from their personality. This explains the lack of effect of team roles on academic performance. Voluntary assignment favors the cohesion in the work groups because their members have a greater attachment to each other. When it comes to voluntary assignment, very few work groups incorporate the brain role, but the cohesive and finalizing role. While when forced, there is less quantity and variety of roles in the work groups. We can assume that the best team is not composed of the best individuals, but the team made up of the best coordinated and complemented individuals (Simón, 2015).

REFERENCES

- Amrden, G. C. y Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. <https://doi.org/10.1007/BF02202939>
- Belbin, R. M. (2010). *Roles de equipo en el trabajo* (Edición: 2). Amsterdam: Routledge.
- Palenzuela, D. L., Prieto, G., Barros, A. M., & Almeida, L. S. (1997). Una versión española de una batería de escalas de expectativas generalizadas de control (BEEGC). *Revista Portuguesa de Educação / Portuguese Journal of Education*, 10(1), 75-96.
- Ormrod, J. E. (2006). *Educational psychology: Developing learners* (5th ed.). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.
- Simón, A. (2015). *Estudio de los roles de equipo*. Recuperado de <https://riunet.upv.es/bitstream/handle/10251/53309/SIM%20C3%93N%20-%20ESTUDIO%20DE%20LOS%20ROLES%20DE%20EQUIPO%20EN%20UNA%20EMPRESA%20DEL%20SECTOR%20DE%20LA%20AUDITOR%20C3%8DA%20CONTABLE.pdf?sequence=4>