

“Transiting the transition: Peer Tutoring as a Catalyst of the Bologna Process”

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CONTENTS:

1. Transition = From here to there
2. Some examples of unsuccessful transitions
3. The Peer-Tutoring transiting experience at UGR:
 - A. Objective and hypothesis
 - B. Method
 - Participants
 - Materials
 - Methodological designs
 - Procedure
 - Data analysis
 - C. Results and Conclusions
4. Transferring Knowledge

1. TRANSITION: FROM HERE TO THERE

HERE:

THERE:

NATIONAL EDUCATIONAL POLICIES



EUROPEAN COORDINATED ED. POLITICES

LOCAL MOVILITY



INTERNATIONAL MOVILITY

TEACHING METHODOLOGIES



LEARNING METHODOLOGIES

KNOWLEDGE BASED EDUCATION



COMPETENCIES BASED EDUCATION

EXTERNAL DRIVEN LEARNING



SELF-REGULATED LEARNING

LECTURING



SEMINARS

RESULTS



QUALITY CHANGE INDICATORS

NON-ACCOUNTABILITY



ACCOUNTABILITY

EXAMPLE # 1

UNEVEN START

Inclusiveness: The ability of a country's tertiary education system to graduate large numbers of students relative to the size of its population. To measure this, we looked at the number of graduates a country produces as a percentage of the

Access: The ability of a country's tertiary system to accept and help advance students with low levels of scholastic aptitude from secondary schools. To measure this, we compared countries based on the skill threshold of students entering universities derived from recent OECD data.

Age-Range: The ability of a country's tertiary system to function as a lifelong learning institution. Here, we looked at the share of 30-39 year olds enrolled in tertiary education institutions.

Effectiveness: The ability of a country's educational system to produce graduates with skills relevant for the country's labour market. Here, we compared the average wage premia a university graduate can expect, after adjusting for labour-market characteristics which might affect wage premia independent of university education.

Attractiveness: The ability of a country's system to attract a diverse range of foreign students. To measure this, we looked at the percentage of foreign students coming to each country from their 10 top source countries, hoping to show whether a tertiary system merely attracts foreign students from neighbouring countries or whether the country has a wider appeal among the international student community.

Responsiveness: The system's ability to reform and change. Here, we measured the speed and effectiveness with which countries have adapted their education system to the criteria laid down in the Bologna Declaration, signed in 1999, which seeks to harmonise and improve cross-border recognition of degree courses and qualifications among its 29 signatories.³ Fifteen of the 17 countries surveyed in this study have formally accepted the criteria, though progress in implementing them has varied widely.⁴



Table 1: University systems ranking
Accumulated relative ranking of sub-indicators

Rank	Country	Score
1	Australia	30.6
2	UK	31.1
3	Denmark	39.1
4	Finland	40.8
5	USA	49.0
6	Sweden	49.2
7	Ireland	49.2
8	Portugal	54.3
9	Italy	60.9
10	France	62.2
11	Poland	64.4
12	Hungary	64.5
13	Netherlands	69.6
14	Switzerland	70.3
15	Germany	72.5
16	Austria	76.4
17	Spain	79.4

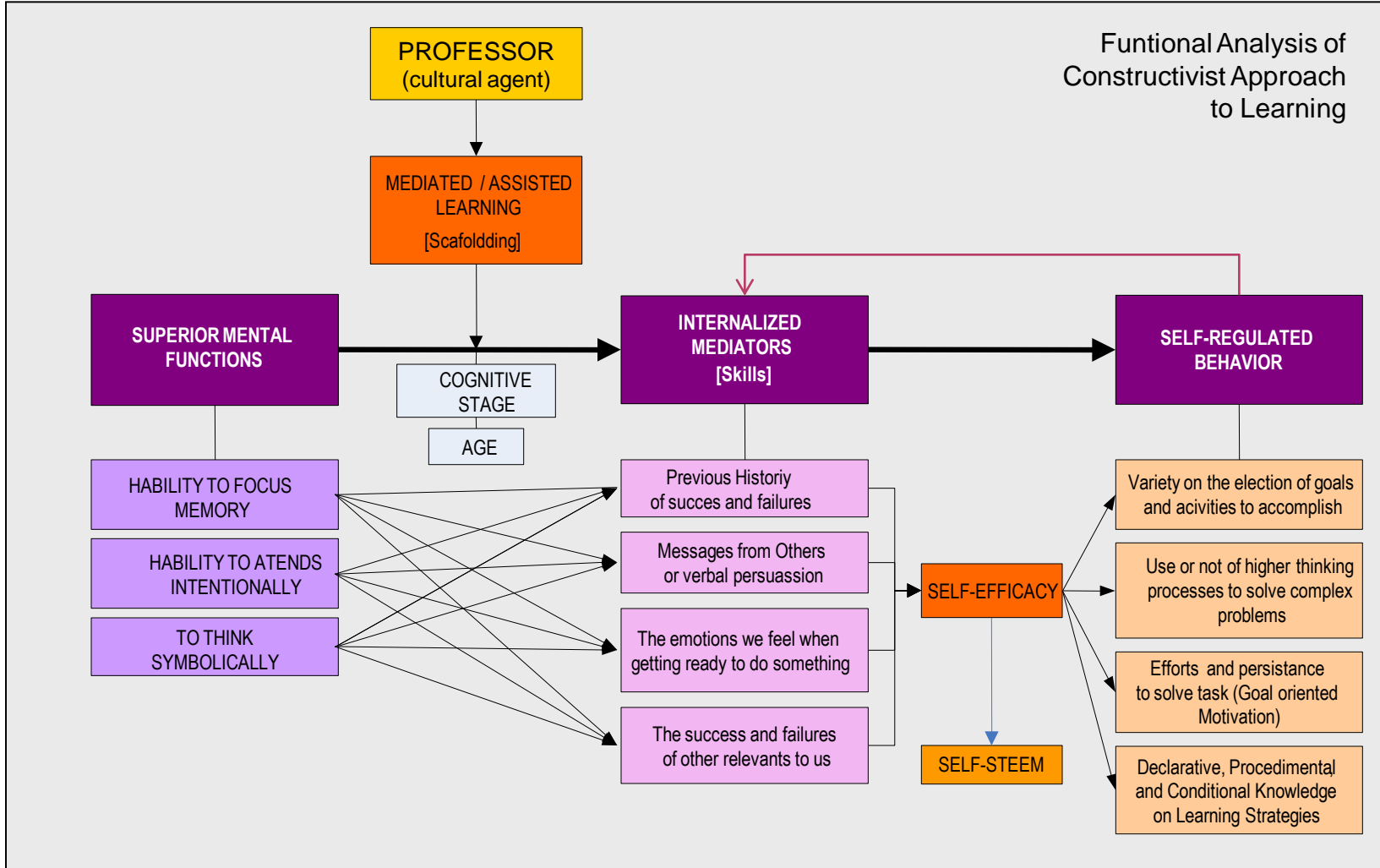
EXAMPLE # 2

UNCERTAIN WORKING CONDITIONS

ESTIMATION OF UNIVERSITY PROFESSORS' DEDICATION TO NEW GRADES' DUTIES			
(Estimation made for a course with 30% ratio of physical attendance)			
PREVIOUS LAW	OFFICIALLY	CONCEPT	IN FACT
24 (LRU)	22,5 (ECTS)	TEACHING LOAD	?
	3 G	# GROUPS	3 (or more)
	2 H	WEEKLE CLASS HOURS (Large Group)	2 H (or 5 H x 3 Differente Groups)
	3 H	WEEKLY CLASS HOURS (Small Group)	3 H x 9 G = 27 H
	6 H	WEEKLY TUTORING HOURS	?
	65 S x 3 G = 195 S	# STUDENTS / GROUP	?
	?	REVIEW OF PAPERS	195 x 10' (x paper) = 32.5 H
	?	GUIDANCE + TUTORING	195 x 10' (x student) = 32.5 H
	?	RESEARCH	20 H/W
	?	MASTERS / THESIS Direction	?
	?	PAPERWORK	2 H/W
40 H/W	40 H/W	TOTAL H/W	

EXAMPLE # 3

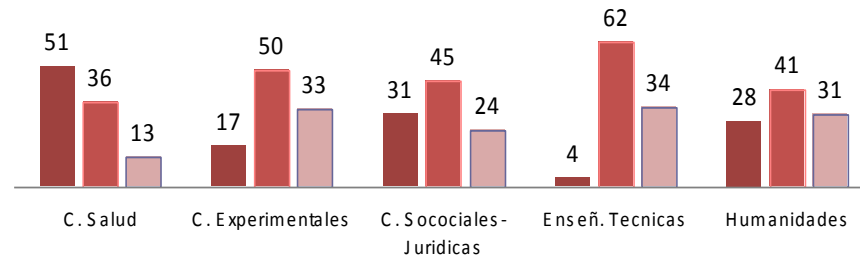
UNFINISHED LEARNING MODELS



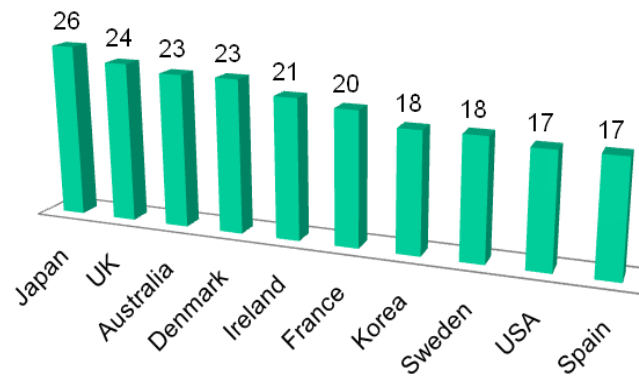
SOME UNBELIEVEABLE DATA

Productividad Enseñanza Universitaria (CRUE, 2002)

■ T. éxito ■ Retraso acum ■ Abandono

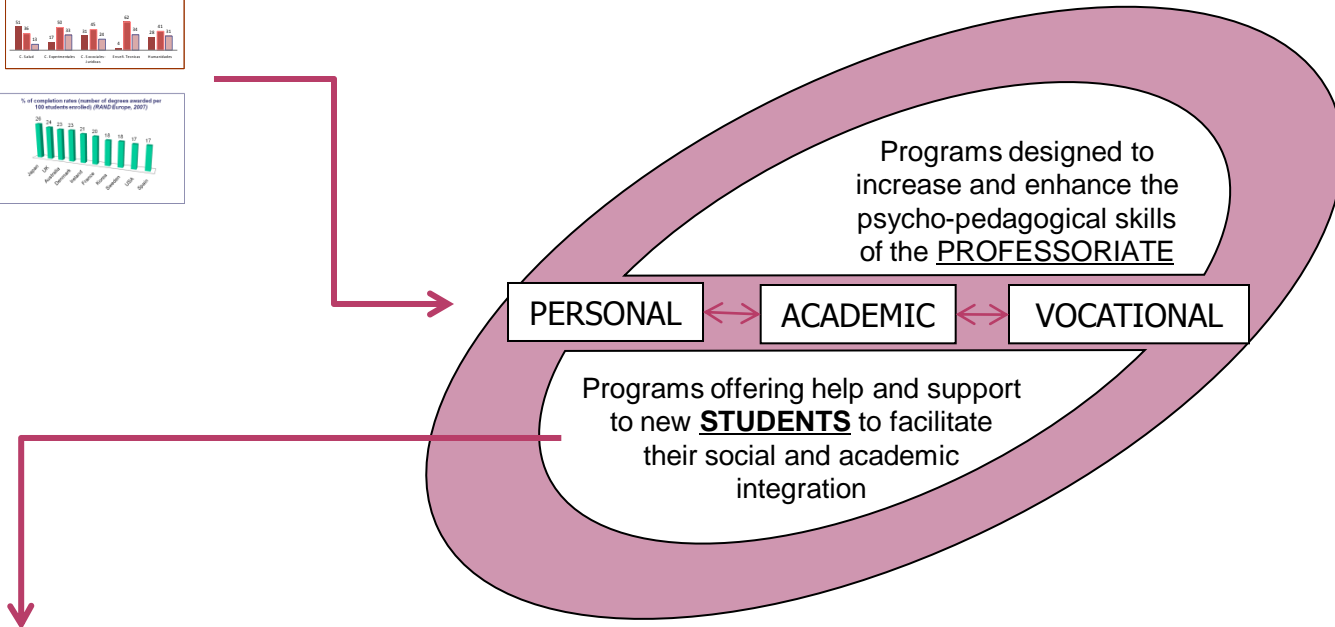
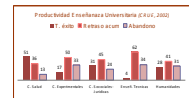


% of completion rates (number of degrees awarded per 100 students enrolled) (RAND Europe, 2007)



- High registration rate; drop-outs (26%); academic delay (48%); only 26% of students finishing on time
- Particularly, the worse situation is concentrated on 5 year Engineering with a 61% rate of academic delay and another 33% of drop-out.
- Other reports: 65% of drop-out first year.
- On technical careers about 30% repeat the first course and the percentage of students showing up on exams is under 30%.

OUR APPROACH TO THE BOLOGNA TRANSITION



PTP is a process of psycho-pedagogical intervention based on weekly peer tutoring sessions whereby older, more experienced students (seniors, Master's) undergo a tutoring training seminar taught by the University's professional staff ("*dyadic cross-year fixed-role peer tutoring*"). This assistance process, drawing upon counseling approaches, enables students to know, understand, and make decisions upon issues like spending time on task, engaging in quality of effort and/or participating more actively in learning. All this seems to foster greater student autonomy and engagement

PLENTY OF EVIDENCES: Several studies and reports show that these programs tend to achieve higher levels of efficacy and efficiency

PRE-HIGHER EDUCATION:

PTP has a long-standing tradition in secondary schooling (Ej., Durán, 2002; Durán y Vidal, 2004; Kalkowski, 1995; McKinstery y Topping, 2003; Nazzal, 2002; Robinson, Schofield y Steers, 2005; Rohrbeck, Ginsburg, Fantuzzo y Miller, 2003; etc.)

INTERNATIONAL HIGHER EDUCATION:

Several studies show improvements in addressing diverse problems, such as academic failure, cognitive and metacognitive strategies deficit, and difficulties in social integration (Ej., Arendale, 2003; Blowers, Ramsey, Merriman y Grooms, 2003; Falchikov, 2001; Higgins, 2004; Kear, 2004; Lamy y Hassan, 2003; Mynard y Almarzouqi, 2006; Nestel y Kidd, 2003; Topping, 1996; etc.)

SPANISH HIGHER EDUCATION:

- “Mentoring system” US (Valverde, García y Romero, 2003)
- “Student-tutor programa” UPV (Rodríguez, Cáceres y García, 2003)
- “Velero program” ULA (Álvarez, 2002)
- “Mentor proyect” UPM (UPM, 2004)
- “Tutor program” UCA (García, Rodríguez y Pajares, 1999)
- “Peer Tutoring Program” UGR (Fernández and Arco, 2007)

OBJECTIVE AND HYPOTHESIS

- The objective of our study was to determine the impact of a peer tutoring program to *prevent academic failure* and *drop out* among first year students, and also to identify the *potential benefits* on students from last course or postgraduate students.

- The following hypotheses were established:
 1. As a result of the PTP, there will be a statistically significant improvement in the freshmen treatment group's Grade Point Average (GPA), *Performance Rate* (PR) (measured by the coefficient of the number of credits passed divided by the number of credits registered) and *Success Rate* (SR) (measured by the coefficient of the number of credits passed divided by the number of credits examined), as compared to that of the freshmen control group.

OBJECTIVE AND HYPOTHESIS

2. As a result of the PTP, there will be a statistically significant improvement in the freshmen treatment group's cognitive and metacognitive strategies (measured by the Pozar's Study habits inventory, 2002), as compared to those of the freshmen control group.
3. As a result of the PTP, there will be a statistically significant pre- and post-test differences within the freshmen treatment group's cognitive and metacognitive strategies, as measured by the Pozar's Study Habits inventory (2002).
4. As a result of the PTP, there will be a statistically significant difference in the cognitive and metacognitive strategies of the tutors' group, as measured by Pozar's Study Habits Inventory (2002).
5. As a result of the PTP, there will be a statistically significant difference in the social skills of the tutors' group, as measured by Gismero' Social Skills Scale (2000).

PARTICIPANTS: SAMPLING PROCEDURE

NON-PROBABILISTIC SAMPLING TECHNIQUE “Purposeful sampling”

STAGE 1

Selecting the field of study

UGR was chosen as the field of study due to the fact that it was wherein the PTP was located

STAGE 2

Inviting participation

4 UGR degree programs with the lower rates of academic success were asked permission to allow the students in their respective colleges to participate in the PTP

STAGE 3

Tentative sampling

Difussion Plan: 9 groups of doctoral and senior students and 10 groups of freshmen were visited

45 doctoral and senior students and 197 freshmen

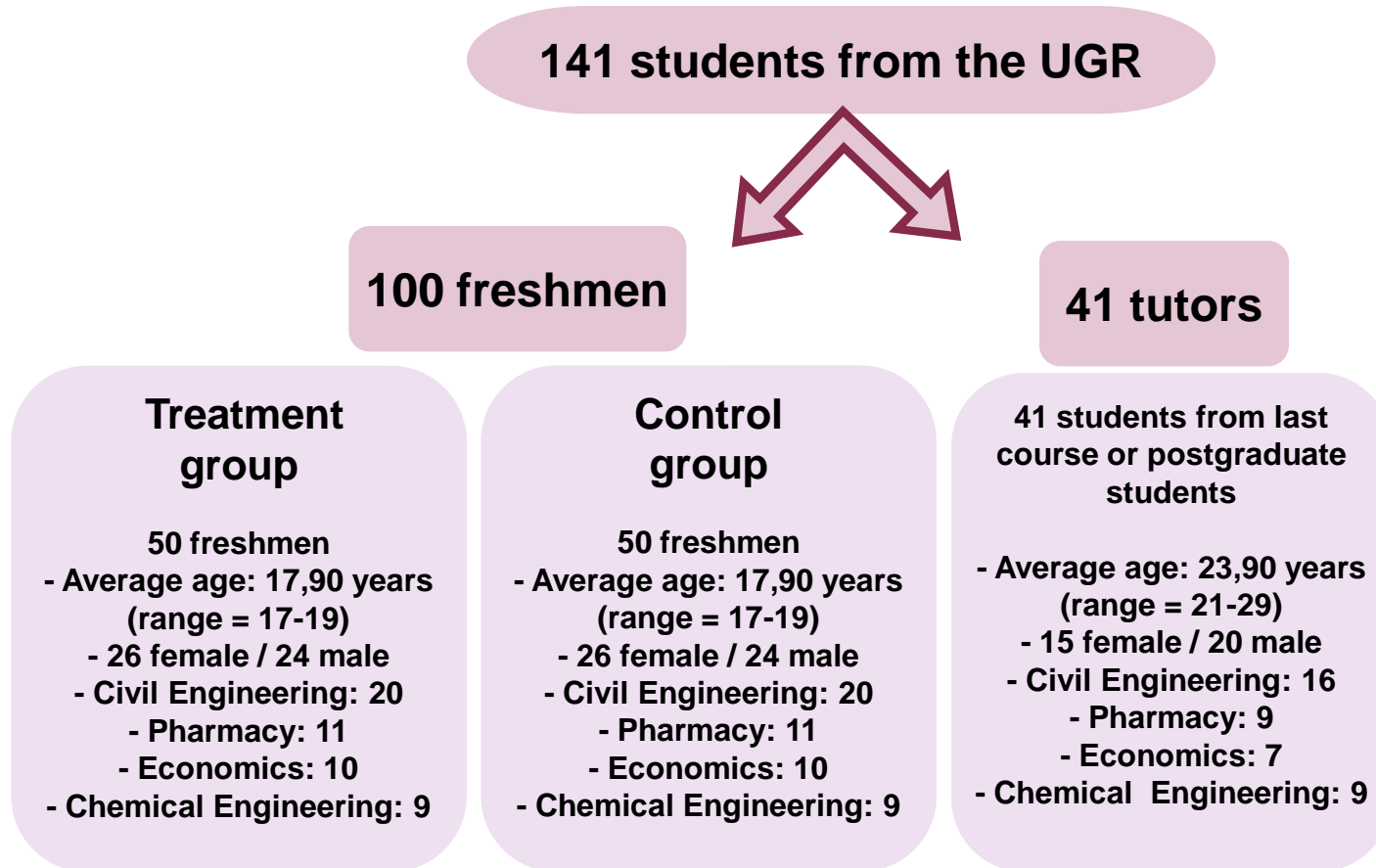
Contract agreement
Self-evaluation report
Study habits inventory
Social skills scale
copies of academic report

STAGE 4

Definite sampling

Tutors selection
Freshmen selection

PARTICIPANTS: GROUPS COMPOSITION



PARTICIPANTS: MATCHING PROCEDURE(STAGE 4)

Tutors

- Of the 45 doctoral and senior students with initially volunteered, 41 were selected as tutors according to the following criteria:
- Having a GPA higher than 1,5 (in a scale from 0 to 4).
- Having an enneatype whose score was higher than 4 points on each one of the scales of the Pozar's Study habits inventory.
- Scoring 25 points or higher in 4 of the subscales and the overall direct score on Gismero's Social skills scale.
- Having positive scores on the rest of the areas of the Self-evaluation reports.
- Attending the four PTP training sessions.
- Passing the practical PTP training tests.

Freshmen

Concerning the 197 freshmen who initially volunteered, 110 were finally selected and paired up according to equivalences in two sets of variables (the remaining 87 students were discarded due to the lack of an appropriate match):

- Demographic (e.g., age, gender, nationality)
- Academic (e.g., degree program, program year, schedule, etc.).

Furthermore, 5 of the 55 initial pairs of freshmen were discarded due to the lack of available tutors (of the 41 tutors, nine agreed to tutor two freshmen)

Parametric and non-parametric analyses did not reveal significant statistical differences between the groups, thus proving their equivalence

Each member of each pair was randomly assigned to either the treatment group or the control group

MATERIALS I

MATERIALS	STAGE						PURPOSES
	PRE	INTERVENTION				POST	
		TRAINING	M1	M2	M3		
R E S E A R C H	Observation report		X				Monitor tutors training course
	Monitoring report 1			X			Monitor tutoring session
	Monitoring report 2				X		Monitor tutoring session
	Diary	X	X	X	X	X	Report information about the program
	Database Access y SPSS	X	X	X	X	X	Register information
T U T O R S	Contract agreement	X					Define the rights and obligations
	Self-evaluation report	X					Report relevant information
	MSLQ (Pintrich <i>et al.</i> , 2002)	X				X	Assess learning and motivation strategies
	SSS (Gismero, 2000)	X				X	Assess social skills
	Academic report	X					Report academic information to selection
	Training course evaluation questionnaire		X				Assess training course
	Program manual		X	X	X		Monitor tutoring session
	Monitoring questionnaire				X	X	Monitor tutoring session
	Discussion group report					X	Monitor tutoring session

MATERIALS II

MATERIALS		STAGE					PURPOSES
		PRE	INTERVENTION			POST	
			TRAINING	M1	M2		
TREATMENT GROUP	Contract agreement	X					Define the rights and obligations
	Self-evaluation report	X					Report relevant information
	MSLQ (Pintrich <i>et al.</i> ,1991)	X				X	Assess learning and motivation strategies
	Academic report	X				X	Report academic information // Assess GPA, SR and PR
	SSS (Gismero, 2000)	X				X	Assess social skills
	Program manuals			X	X	X	Monitor tutoring session
	Monitoring questionnaire				X	X	Monitor tutoring session
CONTROL GROUP	Contract agreement	X					Define the rights and obligations
	Self-evaluation report	X					Report relevant information
	MSLQ (Pintrich <i>et al.</i> ,1991)	X				X	Assess learning and motivation strategies
	Academic report	X				X	Report academic information // Assess GPA, SR and PR
	SSS (Gismero, 2000)	X				X	Assess social skills

METHODOLOGICAL DESIGNS

A static-group comparison design for hypotheses 1

Sample	Group	Pretest	Treatment	Posttest
Freshmen	Treatment	--	X	O ₁
	Control	--	--	O ₂

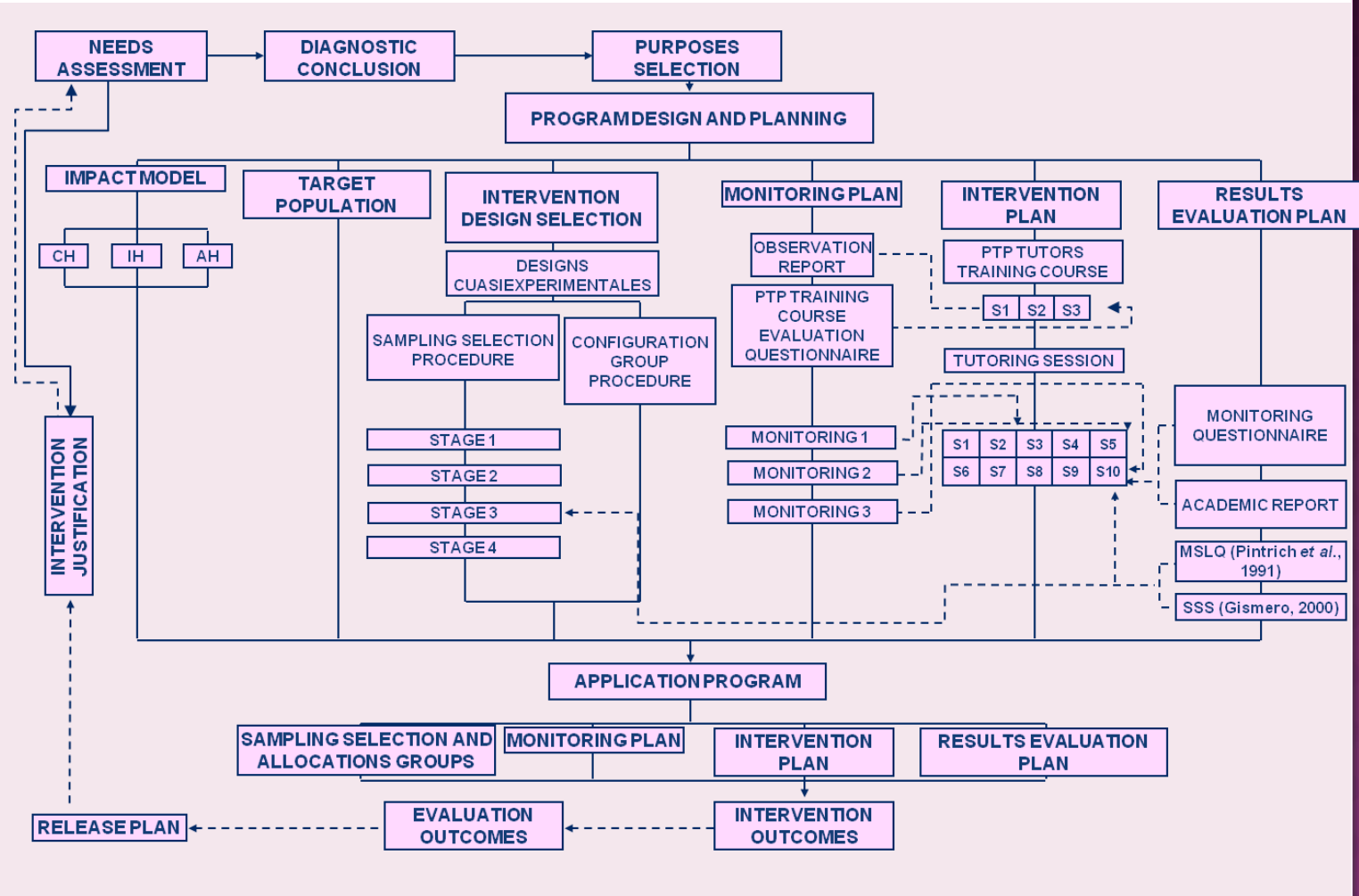
A pretest-posttest control group design for hypotheses 2 y 3

Sample	Group	Pretest	Treatment	Posttest
Freshmen	Treatment	O ₁	X	O ₂
	Control	O ₃	--	O ₄

A one-group pretest-posttest design for hypotheses 4 y 5

Sample	Group	Pretest	Treatment	Posttest
Tutors	Tutors	O ₁	X	O ₂

PROCEDURE: LOGIC MODEL & ACTION PLAN



TUTORS TRAINING COURSE

- **Session 1**, besides providing an introduction and the justification of the PTP, dealt with the use of the tutors' field note diary, the development of the first tutoring session, and the evaluation of the freshmen's needs.
- **Session 2**, aimed at sleeping habits, eating habits, and intellectual work habits (e.g., self-regulation, goal setting, time management).
- **Session 3**, focused on strategies for classroom note taking and assignment completion) and intellectual work techniques (e.g., strategies for accessing information databases, organizing, and exam preparation).
- **Session 4**, tackled basic social skills.

TUTORING SESSIONS



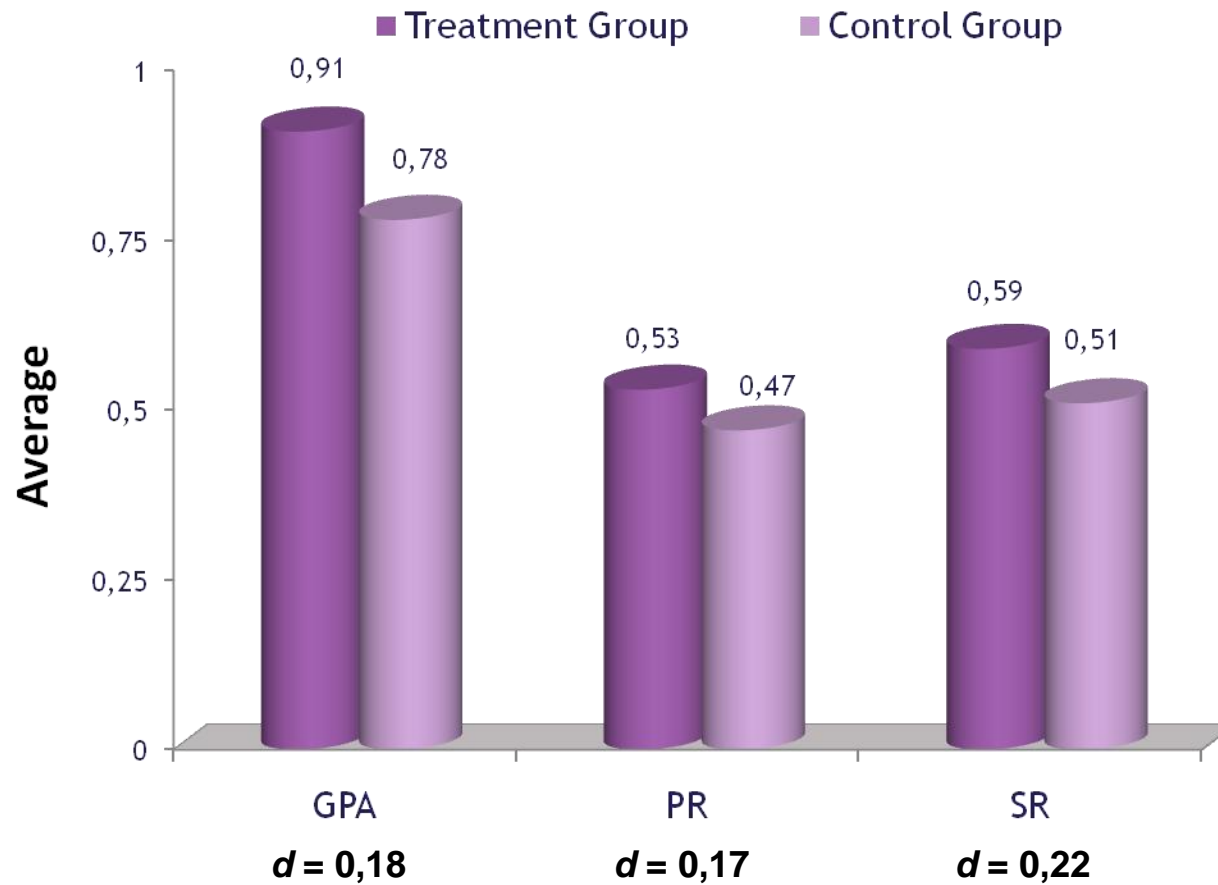
Nº sesión	Fecha	Hora	Lugar de realización
1			
Objetivos para la primera sesión de tutoría			
<ol style="list-style-type: none"> 1. Realizar la presentación del alumno y tutor PTEC. 2. Anotar datos de contacto del alumno y tutor PTEC. 3. Completar la tabla de asignaturas, créditos, profesores, tutorías y nº de despacho. 4. Establecer los horarios y lugares de las sesiones de tutoría y las fechas de exámenes y trabajos u otras fechas a tener en cuenta en el calendario habilitado para ello. 5. Leer y comentar los derechos y deberes de alumno y tutor PTEC. 6. Realizar la descripción de los servicios, información académica del centro y UGR. 7. Realizar una descripción breve de lo aprendido en esta sesión. 			
1. Presentación del alumno y el tutor PTEC.			
<ol style="list-style-type: none"> 1. Breve reseña personal del tutor y alumno PTEC (E), edad, procedencia, intereses, hobbies, etc.). 2. Breve reseña académica del tutor y del alumno PTEC (E), curso o estudios que realiza en ese momento, tiempo en la titulación, asignaturas o áreas curriculares de interés, proyectos académicos o profesionales, etc.). 3. Algunos temas sobre los que conversar: <ol style="list-style-type: none"> (a) Razones por las que has decidido estudiar en la Universidad. (b) Similitudes y diferencias entre la Universidad y el Bachillerato / Formación Profesional: Aspectos positivos y negativos a destacar. (c) Expectativas de futuro académico y profesional. (d) Objetivos para este curso académico. (e) Instalaciones y servicios de la Universidad y tu Facultad. (f) En su opinión qué variables influyen más en el éxito o fracaso en la Universidad. (g) Expectativas respecto a las sesiones de tutorización. 			
2. Anota los datos de contacto en la siguiente tabla.			
Datos del alumno PTEC		Datos del tutor PTEC	
Nombre y apellidos:		Nombre y apellidos:	
Teléfono/s de contacto:		Teléfono/s de contacto:	
E-mail:		E-mail:	

DATA ANALYSIS

Hypotheses	Data analysis
<p>Hypotheses 1</p> <p>(re: Freshmen's GPA, PR and SR)</p>	<p>U of Mann-Whiney and value d of Cohen</p>
<p>Hypotheses 2</p> <p>(re: Freshmen's intergroup cognitive and metacognitive strategies)</p>	<p>ANOVA, since the assumptions for using parametric test were met in this case (Kolmogorov-Smirnov to check for normal distribution and the Levene Test to calculate the variance equality for the independent means)</p>
<p>Hypotheses 3, 4 y 5</p> <p>(re: Freshmen's intragroup cognitive and metacognitive strategies, Tutors' cognitive and metacognitive strategies, Tutors' social skills)</p>	<p>t-test dependent, both after applying Kolmogorov-Smirnov to check for normal distribution</p>

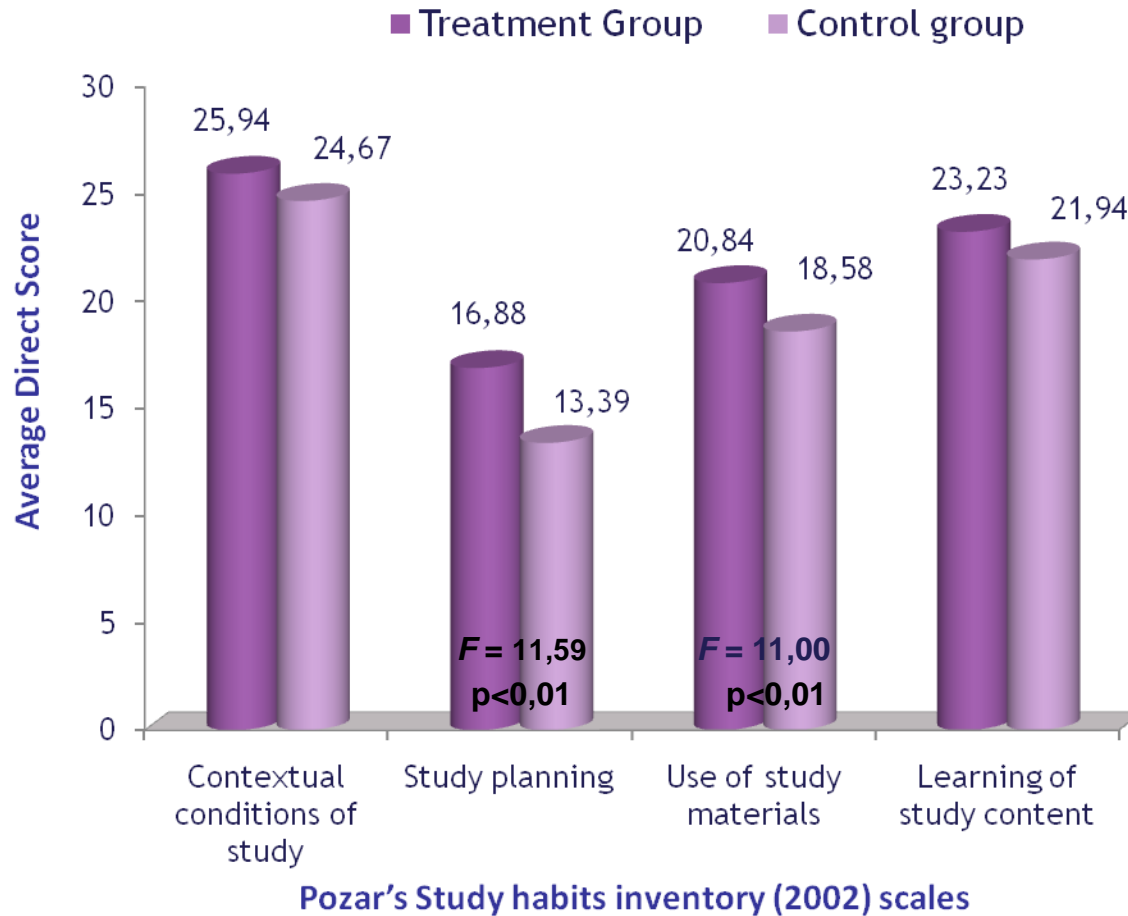
RESULTS AND CONCLUSIONS

Hypothesis 1 (re: Freshmen's GPA, PR and SR)



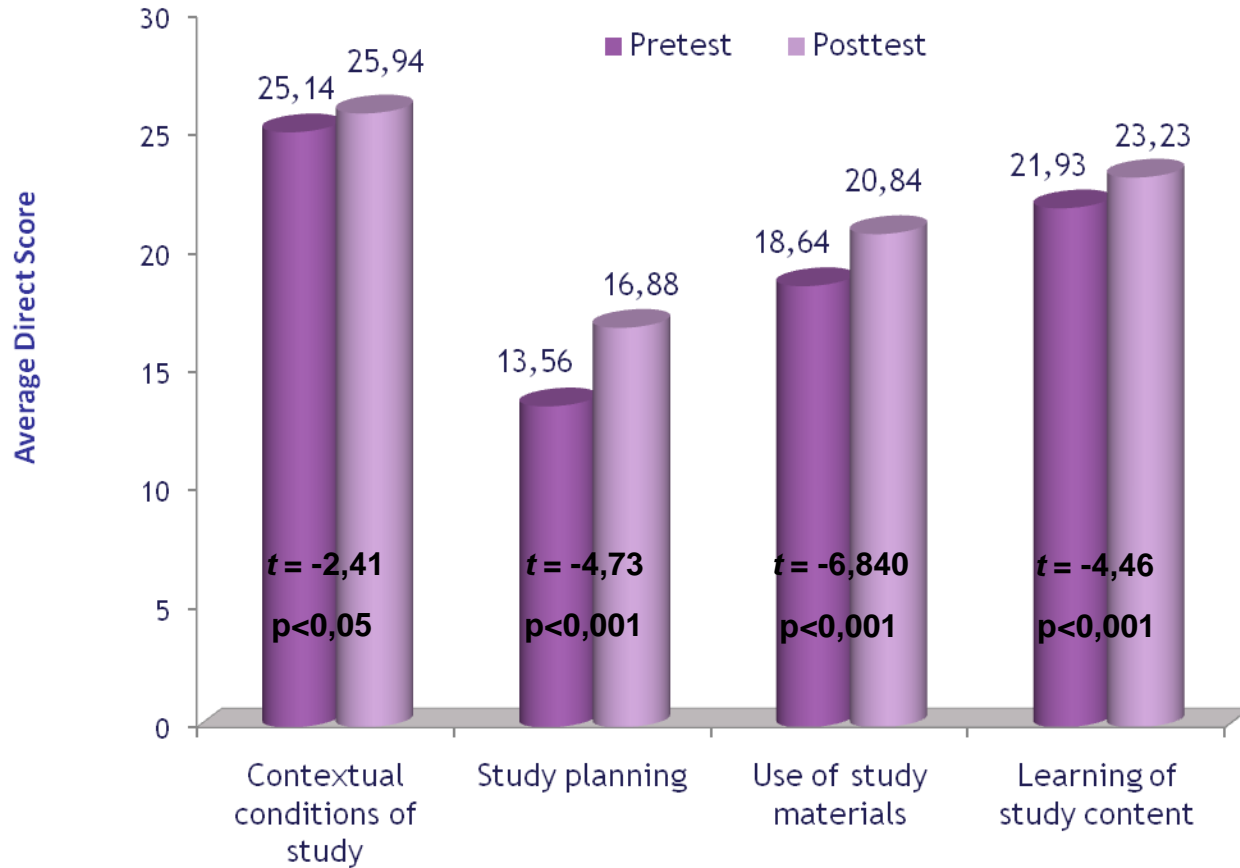
RESULTS AND CONCLUSIONS

Hypothesis 2 (re: Freshmen's intergroup cognitive and metacognitive strategies)



RESULTS AND CONCLUSIONS

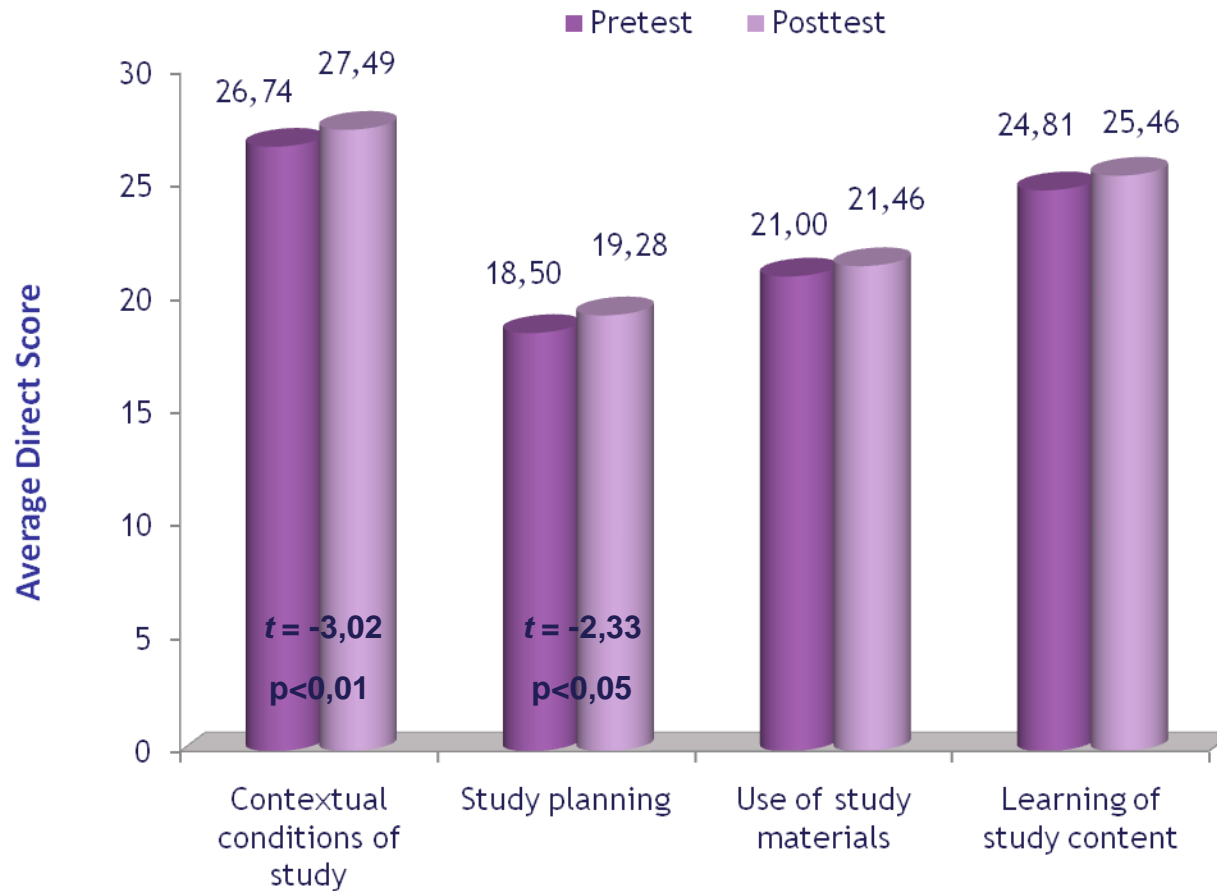
Hypothesis 3 (re: Freshmen's intragroup cognitive and metacognitive strategies)



Pozar's Study habits inventory (2002) scales

RESULTS AND CONCLUSIONS

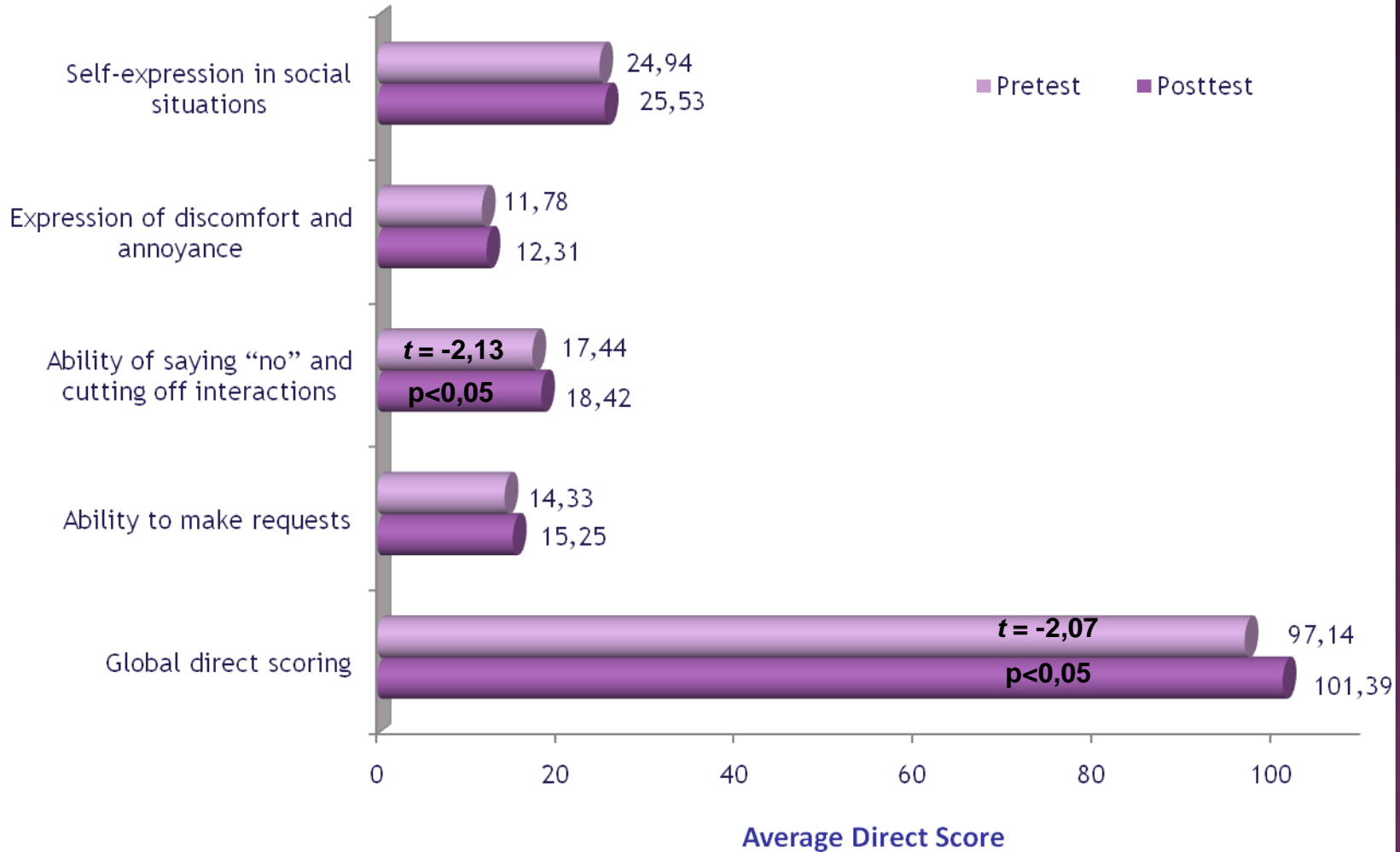
Hypothesis 4 (re: Tutor's intragroup cognitive and metacognitive strategies)



Pozar's Study habits inventory (2002) scales

RESULTS AND CONCLUSIONS

Hypothesis 5 (re: Tutor's intragroup social skills)



TRANSFERRING KNOWLEDGE

These results are particularly relevant for Academic and Student Affairs professionals, since they can champion and consistently use this research-based innovative practice to **improve critical current indicators of quality** in higher education (e.g., course completion rates, success rates, student retention, graduation rates)

Academic and Student Affairs professionals could also take the lead in **monitoring student participation** in these and other **high-impact educational activities**, while working with academic administrators and faculty to find ways to create effective and efficient opportunities for students, especially for those who start college with two or more “risk” factors (e.g., be academically underprepared, be the first in the family to go to college, or come from low-income backgrounds)

The PTP also offers a model to institutions of higher learning as to how to **allocate their resources** and **organize their student support services** in order to foster student participation in activities positively associated with persistence, satisfaction, learning and graduation

TRANSFERRING KNOWLEDGE

The PTP also proves to be useful in the sense that it capitalizes on existing human (student) resources at **low or no cost** and **without extensive involvement of additional staff**.

Many... older students orient their careers toward teaching, either within the university (e.g., as teaching assistants, young professors, tutors) or outside of higher education (e.g., as school teachers, organization managers). Hence, in addition to compensating for some of their **shortcomings in their academic and professional preparation**

In view of this, it is reasonable to suggest that if institutional development is to begin to influence curriculum delivery, it will be necessary to **reassess the higher education tutor's role** as well as to reappraise the interrelatedness between what, in the past, have been considered to be separate areas (i.e., student guidance and the curriculum itself)

TRANSFERING KNOWLEDGE

Academic and Student Affair units will have to draw upon examples of educational practices that include purposeful student-faculty contact; collaboration among faculty and staff; and active and collaborative peer-learning strategies in order to produce programs and provide services that engage students in the learning process.

Also, we are still committed to the notion of deliberately embedding the PTP project within the institutional agenda, so that it is not seen as a **marginal activity** with limited ability to leverage significant institutional change concerning student success

Terms such as “student centredness” and “learner autonomy” may have little meaning to students entering higher education; therefore, these terms may need to be **made explicit** at the start of the study program. The emphasis here needs to be on how guidance at an early stage may foster the development of autonomy

Academic and Student Affairs professionals need to play a **key role** in that process



THANK YOU!

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