

CORRELATION BETWEEN LEARNING STRATEGIES, MOTIVATION AND ACADEMIC GOALS OF SECOND YEAR PHYSIOTHERAPY STUDENTS' AT UNIVERSITY OF VIGO

KEYWORDS: Academic Goals, Learning Strategies, High Education, Physiotherapy.

INTRODUCTION

Several are the aspects that could influence the teaching-learning process. Furthermore, those aspects should not be seen only as strict compartments, but also as communicating vessels between themselves, something that could lead to a modification in the degree of influence of each aspect on the total process.

OBJECTIVE

To analyse the correlation between the learning strategies used, motivation and academic goals of second year Physiotherapy at University of Vigo.

METHODOLOGY

Timing and design	A cross-sectional descriptive study was developed. The study has been carried out at the beginning of the first semester of the academic course 2014-2015 in the Faculty of Physiotherapy, University of Vigo, Spain.
Subjects	48 second year Physiotherapy students' have participated in the study. All the participants were voluntary and the average age was 20.28 ± 2.26 years.
Instruments	The Spanish versions of the Skaalvik goals questionnaire (SGQ) [1] and the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich, Smith, García and McKeachie [2] have been used. SGQ has 22 items which are scored in a five-point Likert scale from 1 being "Never" to 5 being "Always". The questionnaire incorporates four dimensions: task goals (TG), self-enhancing goals (SEG), self-defeating goals (SDG), and work avoidance goals (WAG) [1]. MSLQ is a self-report instrument designed to assess college students' motivational orientations and their use of different learning strategies for a college course. There are 81 items on the 1991 version of the MSLQ. The items of the MSLQ are scored in a seven-point Likert scale from 1 being "not at all true of me" to 7 being "very true of me" [2].
Statistical analysis	The descriptive statistical analysis was done using SPSS. Results are expressed in absolute frequencies and proportions or percentages, and in means and standard deviations. To compare variables, the Pearson index and the T-student test were used. Significant differences were calculated for a p value of <0.05.

RESULTS

The main results are shown in tables 1 and 2.

		IGO	EGO	TV	CLB	SELP	TA	REH	ELA	ORG	CT	MSR	TSE	ER	PL	HS
IGO	Pearson	1	-.173	.523**	.256	.292*	-.048	-.041	.330*	.248	.221	.359*	.076	.329*	.064	.158
	Sig. (bilateral)		.240	.000	.079	.044	.746	.784	.022	.089	.131	.012	.606	.022	.666	.283
EGO	Pearson	-.173	1	-.046	.011	-.015	.255	.420**	-.015	-.047	.102	.052	-.054	-.075	.069	.135
	Sig. (bilateral)	.240		.756	.940	.920	.081	.003	.917	.752	.491	.726	.713	.611	.641	.361
TV	Pearson	.523**	-.046	1	.340*	.386**	-.227	.065	.544**	.365*	.268	.575**	.265	.571**	.139	.241
	Sig. (bilateral)	.000	.756		.018	.007	.120	.661	.000	.011	.065	.000	.069	.000	.347	.100
CLB	Pearson	.256	.011	.340*	1	.286*	-.275	-.156	.175	.182	.016	.095	.056	.048	.123	.114
	Sig. (bilateral)	.079	.940	.018		.048	.059	.290	.234	.215	.913	.520	.707	.745	.406	.440
SELP	Pearson	.292*	-.015	.386**	.286*	1	.403**	.037	.433**	.270	.291*	.358*	.055	.328*	.195	.236
	Sig. (bilateral)	.044	.920	.007	.048		.005	.803	.002	.063	.045	.012	.712	.023	.184	.106
TA	Pearson	-.048	.255	-.227	-.275	.403**	1	.077	-.116	-.029	-.111	-.112	.063	-.006	-.106	-.035
	Sig. (bilateral)	.746	.081	.120	.059	.005		.602	.434	.843	.453	.449	.669	.969	.474	.815
REH	Pearson	-.041	.420**	.065	-.156	.037	.077	1	.159	.196	.323*	.224	.023	-.061	.162	.320*
	Sig. (bilateral)	.784	.003	.661	.290	.803	.602		.280	.182	.025	.127	.878	.680	.272	.026
ELA	Pearson	.330*	-.015	.544**	.175	.433**	-.116	.159	1	.757**	.607**	.678**	.236	.506**	.352*	.445**
	Sig. (bilateral)	.022	.917	.000	.234	.002	.434	.280		.000	.000	.000	.106	.000	.014	.002
ORG	Pearson	.248	-.047	.365**	.182	.270	-.029	.196	.757**	1	.408**	.563**	.191	.328*	.459**	.375**
	Sig. (bilateral)	.089	.752	.011	.215	.063	.843	.182	.000		.004	.000	.194	.023	.001	.009
CT	Pearson	.221	.102	.268	.016	.291*	-.111	.323*	.607**	.408**	1	.516**	-.016	.228	.273	.612**
	Sig. (bilateral)	.131	.491	.065	.913	.045	.453	.025	.000	.004		.000	.917	.119	.060	.000
MSR	Pearson	.359*	.052	.575**	.095	.358*	-.112	.224	.678**	.563**	.516**	1	.366*	.482**	.243	.379**
	Sig. (bilateral)	.012	.726	.000	.520	.012	.449	.127	.000	.000	.000		.011	.001	.096	.008
TSE	Pearson	.076	-.054	.265	.056	.055	.063	.023	.236	.191	-.016	.366*	1	.433**	-.232	-.167
	Sig. (bilateral)	.606	.713	.069	.707	.712	.669	.878	.106	.194	.917	.011		.002	.112	.258
ER	Pearson	.329*	-.075	.571**	.048	.328*	-.006	-.061	.506**	.328*	.228	.482**	.433**	1	.198	.168
	Sig. (bilateral)	.022	.611	.000	.745	.023	.969	.680	.000	.023	.119	.001	.002		.177	.255
PL	Pearson	.064	.069	.139	.123	.195	-.106	.162	.352*	.459**	.273	.243	-.232	.198	1	.577**
	Sig. (bilateral)	.666	.641	.347	.406	.184	.474	.272	.014	.001	.060	.096	.112	.177		.000
HS	Pearson	.158	.135	.241	.114	.236	-.035	.320*	.445**	.375**	.612**	.379**	-.167	.168	.577**	1
	Sig. (bilateral)	.283	.361	.100	.440	.106	.815	.026	.002	.009	.000	.008	.258	.255	.000	

* Significant correlation for the level 0,05 (bilateral). ** Significant correlation for the level 0,01 (bilateral). IGO: intrinsic goal orientation. EGO: extrinsic goal orientation. TV: task value. CLB: control of learning beliefs. SELP: self-efficacy for learning and performance. TA: test anxiety. REH: rehearsal. ELA: elaboration. ORG: organization. CT: critical thinking. MSR: metacognitive self-regulation. TSE: time and study environment. ER: effort regulation. PL: peer learning. HS: help seeking.

Table 1. Correlations between the different dimensions of the MSLQ.

		IGO	EGO	TV	CLB	SELP	TA	REH	ELA	ORG	CT	MSR	TSE	ER	PL	HS
TG	Pearson	.542**	.129	.451**	.200	.198	.140	.082	.350*	.343*	.258	.285*	.119	.271	.260	.372**
	Sig. (bilateral)	.000	.384	.001	.174	.177	.342	.579	.015	.017	.076	.050	.420	.063	.074	.009
SEG	Pearson	.026	.405**	-.062	.002	.000	.253	.235	.109	.008	.336*	.137	.080	.161	.118	.147
	Sig. (bilateral)	.859	.004	.676	.989	.999	.082	.107	.461	.957	.020	.352	.587	.275	.425	.318
SDG	Pearson	.031	.107	-.129	.020	-.246	.641**	-.073	.021	.145	-.231	-.150	.080	-.070	.006	-.099
	Sig. (bilateral)	.832	.470	.382	.891	.092	.000	.623	.888	.326	.114	.310	.587	.635	.968	.504
WAG	Pearson	-.441**	.310*	-.411**	.005	-.443**	.342*	.059	-.383**	-.204	-.122	.357*	.174	-.513**	.008	.017
	Sig. (bilateral)	.002	.032	.004	.973	.002	.017	.689	.007	.165	.408	.013	.236	.000	.955	.910

* Significant correlation for the level 0,05 (bilateral). ** Significant correlation for the level 0,01 (bilateral). TG: task goals. SEG: self-enhancing goals. SDG: self-defeating goals. WAG: work avoidance goals. IGO: intrinsic goal orientation. EGO: extrinsic goal orientation. TV: task value. CLB: control of learning beliefs. SELP: self-efficacy for learning and performance. TA: test anxiety. REH: rehearsal. ELA: elaboration. ORG: organization. CT: critical thinking. MSR: metacognitive self-regulation. TSE: time and study environment. ER: effort regulation. PL: peer learning. HS: help seeking.

Table 1. Correlations between the scales of SGQ and MSLQ.

56.25% of the participants were female (see figure 1). The average age was 20,31±2,67 years. Significant differences were observed by gender for the "Self-efficacy for learning and performance" (SELP) dimension of the motivation scale of the MSLQ (F: 5,00±0,47 and M: 5,53±0,85 p<0,05), and for SDG of the SGQ (F: 2,79±1,09 and M: 2,09±0,79 p<0,05).

Regarding the SGQ, no significant correlation was observed between the scores achieved for any of the scales. In relation to the motivation scale of the MSLQ, significant positive correlation were observed between the scores achieved for "intrinsic goal orientation" (IGO) and "task value" (TV), IGO and SELP, TV and "control of learning beliefs" (CLB), TV and SELP, CLB and SELP and significant inverse correlation was observed between "test anxiety" (TA) and SELP. In relation to the learning strategies scale of the MSLQ, significant positive correlations were observed for multiple dimensions (see table 1).

Significant correlations were observed between the scales of the SGQ and different dimensions of the MSLQ (see table 2).

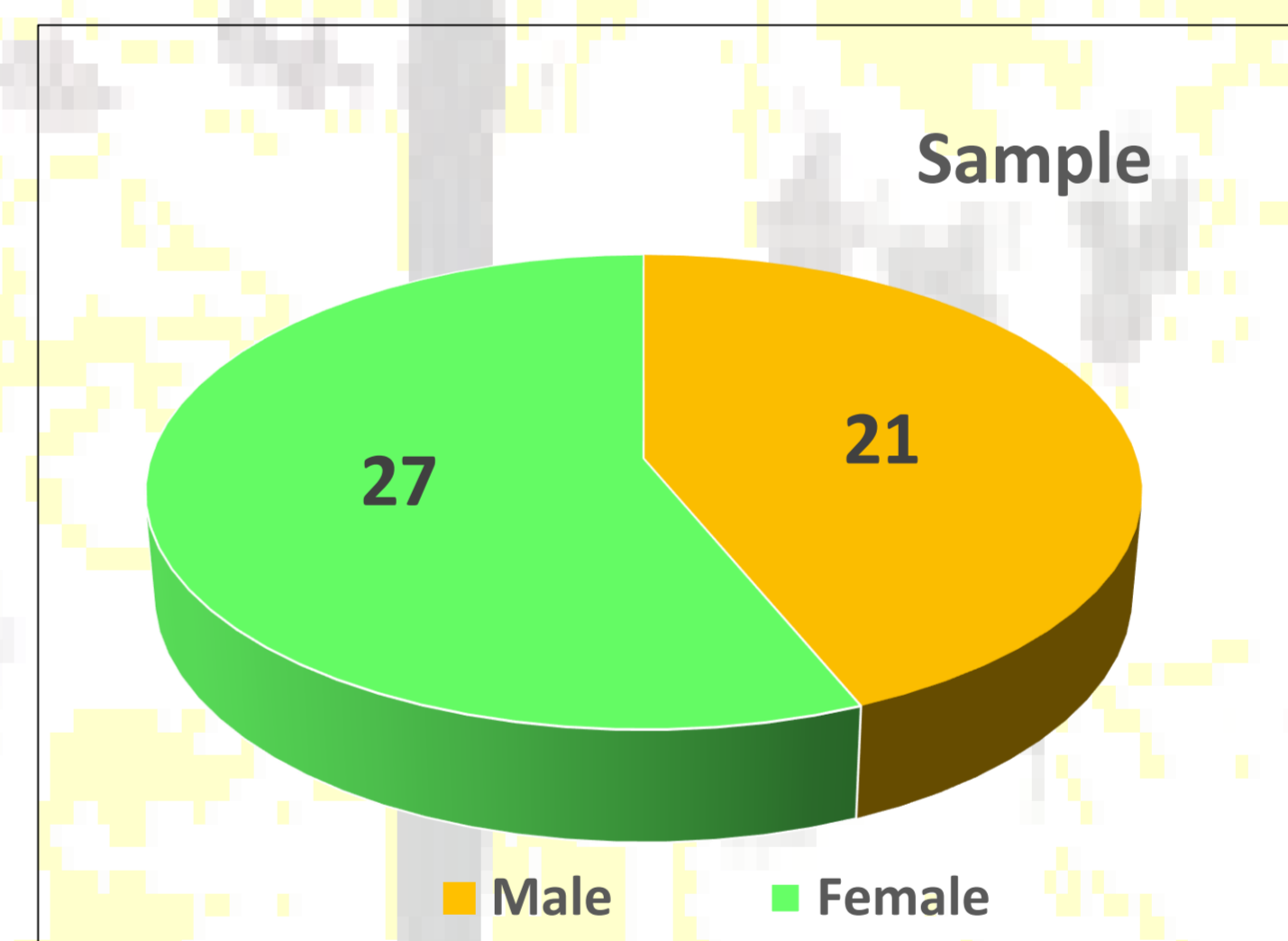


Table 1. Sample.



Table 1. Second year Physiotherapy students' of the academic course 2014-2015.

CONCLUSION

As could be expected, on one hand, those second year Physiotherapy students at University of Vigo who appear to score high in motivation also do in learning strategies. Additionally, there seem to be high positive correlation between "task goals" and "intrinsic goal orientation", "self defeating goals" and "test anxiety", and high inverse correlation between "work avoidance goals" and "effort regulation". The results observed seem to require more studies to confirm data obtained

REFERENCES

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