

Adolescents' vocational identity: Adaptation of the *Occupational Identity Scale (OIS)**

Feliciano H. Veiga
Hélia Moura

Resumo. O estudo apresentado vem complementar elementos que, já em anterior trabalho, havíamos apresentado (Veiga & Moura, 1999) acerca da escala de identidade ocupacional — *Occupational Identity Scale (OIS)*, de Melgosa (1987 —, agora adaptada à população portuguesa. A amostra foi constituída por 547 alunos do 7º, 9º e 11º anos de escolaridade, de ambos os sexos. O estudo psicométrico da escala abrangeu a análise factorial de componentes principais com rotação varimax — que confirmou quatro factores específicos (diffusion, foreclosure, moratorium, achievement) — e a determinação dos coeficientes de fiabilidade, para diferentes grupos de alunos. São apresentados vários elementos estatísticos de interesse, como a média e o desvio-padrão para diferentes grupos: ano de escolaridade e sexo. Relativamente à validade externa, considerou-se a relação entre os resultados obtidos na *Occupational Identity Scale* e as pontuações obtidas na escala *Dellas Identity Status Inventory Occupation*, anteriormente adaptada para Portugal (Taveira & Campos, 1987), tendo surgido elevadas correlações. Os elementos apresentados mostraram-se consistentes com os da versão original, corroboram os elementos do trabalho anteriormente referido e salientam, agora de uma forma mais ampla e consistente, as qualidades da escala OIS em diferentes grupos de sujeitos, bem como a sua utilidade para a investigação e para a intervenção educacional.

Palavras-chave. Identidade ocupacional, Escala de avaliação, Adolescência.

Abstract. The present study complements elements previously published (Veiga & Moura, 1999) about Melgosa's (1987) *Occupational Identity Scale (OIS)*, now adapted to the Portuguese population. The sample consisted of 547 7th-11th grade students of both sexes. The scale's psychometric study included the factorial analysis of its main components with *varimax* rotation — which revealed four specific factors (diffusion, foreclosure, moratorium, achievement) — and establishing reliability coefficients for different groups of students. Several relevant statistical elements are presented, such as the mean and standard deviation for different groups (school grade and sex). External validity, assessed through the relation between the results obtained on the *Occupational Identity Scale* and the scores obtained on the *Dellas Identity Status Inventory Occupation Scale* (previously adapted to Portugal) (Taveira & Campos, 1987), revealed high correlations. The elements presented were consistent with those of the original version, corroborate the elements of the previously mentioned work and highlight, now in broader and consistent manner, the qualities of the OIS scale in different subject groups, as well as its utility for research and for educational intervention.

Keywords. Vocational identity, Evaluation scale, Adolescence.

In vocational literature, we are witnessing a renewed interest in the issue of developing a vocational identity, turning to the lack of qualifications and several unsolved matters to attempt to explain how people elaborate projects and make vocational decisions. Several authors have contributed to the study of the vocational identity. In adolescence, the question of the best route to take in school and professional terms is one of the most important and difficult issues to solve, that worries a great

* Veiga, F. H., & Moura, H. (2005). Adolescents' vocational identity: Adaptation of the occupational identity scale (OIS). Actas da *International conference AIOSP 2005: Careers in context: new challenges and tasks for guidance and counseling*. Lisbon: University of Lisbon, FPCE, AIOSP. Também disponível na World Wide http://www.aiospconference2005.pt/full_works/docs/posters/p49.pdf

many individuals, particularly due to the rise in unemployment rates in the last few decades (Hartung, 2005; Taveira, 2000). It is therefore essential to analyse this matter and study valid instruments for looking into the vocational dimension of identity. The present study complements elements previously published (Veiga & Moura, 1999) about Occupational Identity Scale (OIS).

Methodology

Subjects and procedure. The sample consisted of 547 7th-11th grade students, of both sexes. Filling in the questionnaires was supervised by the teachers of the classes involved in the study. This task took place during the normal school hours and students collaborated voluntarily, taking up all the time that was necessary to fill in the questionnaires properly.

Instruments. The instrument used — *Occupational Identity Scale* — has 28 items (English version annexed) sorted into 4 statutes of vocational identity: achievement, moratorium, foreclosure, and diffusion. External validity was measured by resorting to an instrument that has already been studied in the Portuguese context (Taveira & Campos, 1987), the *Dellas Identity Status Inventory Occupation* scale (DISI-O).

Results

The most important aspects concerning the scale's fidelity and external validity are presented. Given the extent of the elements regarding the analysis of the item's discriminative power, we chose not to include this information here.

Fidelity. The *alpha* coefficients obtained in the different factors, for the whole sample, by sex and by school year exceed the number usually accepted in evaluating results in this kind of instrument (0,75). In the total sample, the coefficients were 0,81 (achievement), 0,82 (moratorium), 0,76 (foreclosure), 0,83 (diffusion) and 0,80 (total).

Construct validity. Table 1 shows the result of testing the hypothesis of the scale's multidimensionality, resorting to varimax rotation, for which 4 factors were previously defined in an attempt to approach those found in the study of the scale's construction (Melgosa, 1987). The factors obtained account for 49,14% of the total variance, thus distributed: success 18,49%, moratorium 15,41%, foreclosure 8,58%, and diffusion 6,67%. The results of the factorial analysis therefore allow us to maintain the items, as well as their distribution to the same factors of the original version, excluding the items 2 and 14. In this study, the content of items 2 and 14 of the *OIS* were replaced (see appendix). This decision concerned the items' semantic validity and the benefit of setting the same number of items per factor.

Construct validity was also the object of differential analyses, in the various factors and according to the school year (Table 2). The differences in vocational identity according to the school year showed that the: - success statute was significantly lower in the 7th grade than in the 9th grade ($T=-6,026$; $p<0,001$) and than the 11th grade ($T=-3,719$; $p<0,001$); - moratorium statute was significantly lower in the 11th grade than in the 9th grade ($T=-2,62$; $p<0,05$); - foreclosure statute was significantly lower in the 11th grade than in the 9th grade ($T=-4,30$; $p<0,001$) and than in the 7th grade ($T=-2,93$; $p<0,001$); - diffusion statute was significantly lower in the 11th grade than in the 9th grade ($T=-4,30$; $p<0,001$) and in the 9th grade than in the 7th grade ($T=-3,61$; $p<0,001$). The differences in vocational identity according to gender showed that: male subjects

and female subjects revealed no differences as regards the success and moratorium statutes; female subjects had lower scores than their male counterparts in the statutes of foreclosure (T=-2,16; p<0,05) and diffusion (T=-4,17; p<0,001).

Table 1. Factorial structure of the Scale (OIS)

Items	Factors			
	Achievement	Moratorium	Foreclosure	Diffusion
23	,735			
22	,712			
27	,664			
5	,646			
3	,559			
20	,534			
25	,405			
21		,743		
12		,697		
1		,689		
9		,617		
6		,540		
10		,388		
17		,376		
15			,709	
8			,698	
24			,604	
26			,481	
18			,471	
4			,411	
13			,326	
11				,731
28				,612
14				,550
2				,523
16				,502
7				,404
19				,377

External validity. In studying the scale's external validity, the relation of students' scores in the statutes of the *Occupational Identity Scale* (OIS) and those of the *Dellas Identity Status Inventory Occupation* (DISI-O) were analysed. Correlation coefficients are highly significant in all the cases considered (p<0.001): achievement (OIS) with achievement (DISI-O), r=0,78; moratorium (OIS) with moratorium (DISI-O), r=0,46; foreclosure (OIS) with foreclosure (DISI-O), r=0,39; diffusion (OIS) with diffusion-diffusion (DISI-O), r=0,45; diffusion (OIS) with diffusion-luck (DISI-O), r=0,63. The results corroborate those previously found with the initial adaptation version of the OIS (Veiga & Moura, 1999).

Table 2. Statistical elements according to the school year

Achievement					
Year	N	Mean	Std. Deviation	Minimum	Maximum
7 ^o	178	21,5056	6,23028	7,00	34,00
9 ^o	161	25,2547	4,86606	18,00	35,00
11 ^o	182	23,7473	5,89052	13,00	35,00
Total	521	23,4472	5,90840	7,00	35,00
Moratorium					
7 ^o	181	22,8177	4,60373	7,00	35,00
9 ^o	162	23,1914	5,27685	14,00	34,00
11 ^o	192	21,9844	6,65411	7,00	34,00
Total	535	22,6318	5,62440	7,00	35,00
Foreclosure					
7 ^o	183	18,2896	5,77397	7,00	35,00
9 ^o	169	19,0237	4,76339	9,00	28,00
11 ^o	192	16,8229	3,85875	10,00	25,00
Total	544	18,0000	4,92709	7,00	35,00
Diffusion					
7 ^o	178	19,1404	5,45111	8,00	35,00
9 ^o	169	17,3254	4,67204	9,00	27,00
11 ^o	192	14,4635	3,82178	7,00	23,00
Total	539	16,9054	5,06100	7,00	35,00

Conclusions

The Portuguese version of the *OIS* presented the same factorial structure as the original version, and is consistent with previous studies (Veiga & Moura, 1999; Raphael & Xelowsky, 1980). The results suggest the presence of some 7th and 9th graders in the success and moratorium statutes, although this does not indicate the capacity to elaborate coherent projects that will not change in the future. On the other hand, the foreclosure and diffusion found in some of the 11th graders may have to do with difficulties of students who resort to specific help, a fact that highlights the importance of guidance services, whether related to school or other fields, in the formation of vocational identity. The present study shows girls' inferiority concerning the foreclosure and diffusion statutes, and this may reflect a recent turn in the sense of dismantling traditional stereotypes. New elements on differential validity, according to variables of the family context, may be found in Moura and Veiga (2005).

Instruments concerning adolescents' vocational identity may represent a useful means for psychologists, teachers and other professionals in education to understand their students better (Hartung, 2005; Pinto *et al.*, 1995; Taveira, 2000). The *OIS* is an important research instrument because, according to the nature of the results, it helps to understand individuals who show features that are not specifically of one single statute; the scale provides the results separately in each statute for each individual. The *OIS* validity has important consequences because as this scale narrows down the nature and level of adolescents' optional compromise, it allows for better counseling in terms of their vocational calling. In short, the analyses undertaken regarding the *Occupational Identity Scale's* psychometric features present positive values in terms their use in Educational practice and research. The results proved consistent with the theory and

research on vocational identity, having taken the same direction as those previously found in the initial adaptation of the OIS (Veiga & Moura, 1999) and having added new data that allowed for improvement of the previous version of the scale.

References

- Coleman, J. (1977). Identity in adolescence—Present and future self-concepts. *Journal of Youth and Adolescence*, 6, 181-185.
- Dellas, M., & Jernigan, L. P. (1981). Development of an objective instrument to measure identity status in terms of occupation crisis and commitment. *Educational and Psychological Measurement*, 41, 1039 - 1050.
- Erikson, E. H. (1950). *Childhood and Society*. New York: Norton.
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Hartung, P. H., Porfeli, E. J., & Vondracek, F. W. (2005). Child vocational development: A review and reconsideration. *Journal of Vocational Behavior*, 66, 3, 385-419.
- Marcia, J. E. (1964). Determination and construct validity of ego identity status (Doctoral dissertation, Ohio State University, 1964). *Dissertation Abstracts*, 25, 6763.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 5, 551-558.
- Marcia, J. E. (1976). *Studies in Ego Identity*. Unpublished manuscript, Simon Fraser University, Burnaby, British Columbia.
- Marcia, J. E. (1980). Identity adolescence. In J. Adelson (Ed.) *Handbook of Adolescent Psychology*. New York: Wiley & Sons.
- Matteson, D. R. (1975). *Adolescence today; sex roles and the search for identity*. Dorsey, Homewood III.
- Melgosa, J. (1987). Development and validation of the occupational identity scale. *Journal of Adolescence*, 10, 385-397.
- Pinto, H. R., Afonso, M. J., Teixeira, O., & Ferreira-Marques, J. (1995). As dimensões da maturidade vocacional no programa de orientação da carreira. In Ferreira-Marques (Eds.), *Actas da Conferência Internacional "Serviços de Orientação para os anos 90"* (p. 426-433). Lisboa: AIOSP.
- Raphael, D., & Xelowsky, H. G. (1980) Identity status in high school students: critique and a revised paradigm. *Journal of Youth and Adolescence*. 9. 383-389.
- Rogow, A. M., Marcia, J. E., & Slugoski, B. R. (1983). The relative importance of identity status interview components. *Journal of Youth and Adolescence*, 12, 387-400.
- Savickas, M. L. (1985). Identity in vocational development *Journal of Vocational Behavior*. 27, 329-337.
- Taveira, M. C., & Campos, B. P. (1987). A identidade vocacional de jovens: Adaptação de uma escala (DISI-O). *Cadernos de Consulta Psicológica*, 3, 55-67.
- Taveira, M. C. (2000). *Exploração e desenvolvimento vocacional dos jovens*. Universidade do Minho: IEP.
- Waterman, A. S., & Geary, L. (1974). A longitudinal study of changes in ego identity status during the freshman year at college. *Developmental Psychology*, 10, 387-392.
- Veiga, F. H., & Moura, H. (1999). Identidade vocacional dos jovens: Elementos de adaptação da "Occupational Identity Scale" (OIS). In L. S. Almeida (Eds.), *Avaliação psicológica: Formas e contextos* (V e VI), pp. 692-698. Braga: Universidade do Minho.

Appendix

OCCUPATIONAL IDENTITY SCALE - REFORMULATED (OIS-R)

(1. Strongly disagree to 5. strongly agree)

1. At the present moment, I don't know exactly what I want as a career, but I am examining several occupational perspectives.
2. A person's professional life tends to solve itself on its own, so it is not worth worrying about career choices.
3. After many doubts and considerations, I have it clearly in my mind what my occupation will be.
4. The occupation I have chosen is a tradition in my family and I feel I would like to follow the family tradition.
5. After analyzing many possible occupational options, I believe I have decided on a specific career.
6. The fact of not being certain about my occupational future bothers me.
7. At this point, I am not worried about what type of job I will do most successfully; I'll think about it in the future.
8. When I was a child I decided on my career and I have never seriously considered other alternatives.
9. I am struggling with several ideas in mind for my future occupation and I feel I have to choose something specific very soon.
10. Although I am in a certain line of studies, I am still actively looking into other things for my studies and future work.
11. It is too early for me to be concerned about my professional future.
12. I am presently trying to decide about my future occupation. But nothing is resolved yet.
13. My parents' recommendations for my future occupation have helped me in deciding what my profession will be.
14. I haven't yet made any choices regarding my career because it's too early to make a decision.
15. I haven't had any problem in choosing my future occupation, since my parents gave me a good orientation long ago.
16. I don't have it clear in my mind what my professional place in society is, but I am not concerned about it.
17. I wish I could soon decide on my ultimate career goal out of the options I am considering, so that I could choose the more appropriate program of study.
18. My folk's suggestions have helped me avoid a lot of problems in picking out a career.
19. Nowadays the occupational world is so complex that I cannot commit myself to any type of occupation. I'll see what happens in the future.
20. After asking a lot of people and finding information, I am sure of what I want and I will not be comfortable until I reach that.
21. I am thinking seriously about my professional future, since I have many doubts about it.
22. I am committed to my vocation and I wouldn't easily change it, since it took me so much effort to make up my mind.
23. It was hard for me to decide on a career, but now, when I look at myself I think that I will fit the profession I've chosen.
24. In choosing a career, I didn't go through a struggle because my folks gave the right direction to me.
25. Some time ago I went through a crisis of decision, but now I can say that I have a clear goal regarding my future occupation.
26. My father/mother seem to enjoy so much in their occupation that I am going into his/her type of job.
27. I have gone through a lot of struggle to decide what my career will be, but that is not a problem anymore.
28. Although I don't have a clear idea of what my occupation will be, I don't care at this point.