

VOLUME I | Issue 3 | 2013 | CIEO

Guest Editor: Saul Neves de Jesus

Editor: Teresa de Noronha

Journal of Spatial and Organizational Dynamics

Well-being in Contexts and Organizations

Effectiveness of a Stress Management Training on Motivation and Well-being

Saul Neves de Jesus, Claudia Rus and Juan Tobal

Organizational Culture and Subjective and Work Well-being. The Case of Employees of Portuguese Universities

Joana Santos, Gabriela Gonçalves and Alexandra Gomes

Organizational Well-Being Factors. Determinants of Entrepreneurship in Small and Medium Companies of the Defense Sector

Helena de Almeida and Briones Peñalver

The Effects of Work Values and Work Centrality on Job Satisfaction. A Study with Older Spanish Workers

Alejandro Orgambidez-Ramos, M. Isabel Mendoza-Sierra and Jean-Christophe Giger

Social Care and Well-being. Experiences and Perspectives of an Old-aged Group

José de São José, Rosanna Barros, Sanda Samitca and Ana Teixeira

Quality of Life and Stressful Life Events in First and Second Generation Immigrant Adolescents

Ida Lemos, Cristina Nunes and Lara Ayala Nunes

Subjective Well-being and Social Integration of College Students

Susana Imaginário, Luís Sérgio Vieira and Saul Neves de Jesus

TECHNICAL INFORMATION

Volume I, Issue 3, 2013

JOURNAL OF SPATIAL AND ORGANIZATIONAL DYNAMICS

Well-being in Contexts and Organizations

Authors:

Alejandro Orgambidez-Ramos
Alexandra Gomes
Ana Teixeira
Briones Peñalver
Claudia Rus
Cristina Nunes
Gabriela Gonçalves
Helena de Almeida
Ida Lemos
Jean-Christophe Giger
Joana Santos
José de São José
Juan Tobal
Lara Ayala Nunes
Luís Sérgio Vieira
M. Isabel Mendoza-Sierra
Rosanna Barros
Sanda Samitca
Saul Neves de Jesus
Susana Imaginário

Guest Editor: Saul Jesus

Editor-in-chief: Teresa de Noronha

Publisher:

Research Centre for Spatial and Organizational Dynamics - CIEO
Campus de Gambelas, Faculdade de Economia, Edifício 9
8005-139, Faro
cieo@ualg.pt
www.cieo.pt

Editorial Board:

Teresa de Noronha, Faculty of Economics, University of Algarve, Portugal (mtvaz@ualg.pt)
André Torre, Institut National de la Recherche Agronomique, Agro Paris Tech, France (andre.torre@wanadoo.fr)
Charlie Karlsson, Jönköping International Business School, Jönköping University, Sweden (Charlie.Karlsson@ihh.hj.se)
Eric Vaz, Department of Geography, Ryerson University, Canada (evaz@GEOGRAPHY.Ryerson.Ca)
Helen Lawton Smith, Department of Management - Birkbeck, University of London, U.K (helen.lawtonsmith@ouce.ox.ac.uk)
Jafar Jafari, School of Hospitality Leadership, University of Wisconsin-Stout, USA (jafari@uwstout.edu)
Purificación Galindo, Department of Statistics, University of Salamanca, Spain (purivic@yahoo.com)
Rafael Alberto Peres, Universidad Complutense de Madrid, Spain (estrategia@rafaelalbertoperez.com)
Saul Neves de Jesus, Faculty of Human and Social Sciences, University of Algarve, Portugal (snjesus@ualg.pt)
Thomas Panagopoulos, Faculty of Sciences and Technology, University of Algarve, Portugal (tpanago@ualg.pt)

Open Access Policy:

This is a blind peer-reviewed journal.
Articles submitted to this journal should not have been published before in their current or substantially similar form.
The JSOD is diffused by all links related to the Research Center for Spatial and Organizational Dynamics and is continually online (http://www.cieo.pt/discussion_papers_editions.php)
This journal is supported by the Portuguese Foundation for Science and Technology (FCT).

Networking and Indexing:

Silvia Fernandes

Page Layout:

Marlene Fernandes

Design and Cover Concept:

Bloco D, Design e Comunicação

Quarterly Edition
ISSN: 2183-1912
CIEO, Faro, Portugal

TABLE OF CONTENTS

Effectiveness of a Stress Management Training on Motivation and Well-being	143
--	-----

Saul Neves de Jesus

Claudia Rus

Juan Tobal

1. Introduction	143
2. Methodology	145
3. Results	147
4. Discussion.....	148
5. Conclusion	149

Organizational Culture and Subjective and Work Well-Being. The case of employees of portuguese universities	153
---	-----

Joana Santos

Gabriela Gonçalves

Alexandra Gomes

1. Introduction	153
2. Methodology	154
3. Results	156
4. Discussion / Conclusion	158

Organizational Well-Being Factors. Determinants of entrepreneurship in small and medium companies of the defense sector	162
---	-----

Helena de Almeida

Briones Peñalver

1. Introduction	162
2. Collaborative Entrepreneurship.....	163
3. Network of Enterprises	165
4. Technological Innovation and Creativity	167
5. Method.....	168
6. Data Presentation	170
7. Conclusions	172
8. Practical Implications.....	173

The Effects of Work Values and Work Centrality on Job Satisfaction. A study with older spanish workers.....	179
---	-----

Alejandro Orgambidez-Ramos

M. Isabel Mendoza-Sierra

Jean-Christophe Giger

1. Introduction	179
2. Methodology	181

3. Results	182
4. Discussion	183
5. Conclusion	184

Social Care and Well-Being. Experiences and perspectives of an old-aged group	187
---	-----

José de São José
Rosanna Barros
Sanda Samitca
Ana Teixeira

1. Introduction	187
2. A Brief Incursion into the Literature	188
3. Adopted Definitions of “Well-Being” and “Social Care”	190
4. Data and Methods	190
5. Main Results	192
6. Discussion and Implications for Social Policy and Professional Practice	197

Quality of Life and Stressful Life Events in First and Second Generation Immigrant Adolescents	202
--	-----

Ida Lemos
Cristina Nunes
Lara Ayala Nunes

1. Introduction	202
2. Method	204
3. Results	206
4. Discussion	209
5. Conclusion	211

Subjective Well-Being and Social Integration of College Students	215
--	-----

Susana Imaginário
Luís Sérgio Vieira
Saul Neves de Jesus

1. Introduction	215
2. Subjective Well-Being and Social Integration	216
3. Methodology	217
4. Results	218
5. Discussion	220
6. Conclusion	221

EFFECTIVENESS OF A STRESS MANAGEMENT TRAINING ON MOTIVATION AND WELL-BEING

Saul Neves de Jesus
Claudia Rus
Juan Tobal

ABSTRACT

This study investigated the immediate influence of a stress management training on teachers' and physicians' motivational (professional objective, intrinsic motivation, efficacy expectancies) and well-being related outcomes (positive well-being, emotional exhaustion, work distress, irrational beliefs) using meta-analytical techniques.

In an action-research perspective, the stress management training program was implemented in several groups of physicians and teachers, in Portugal and in Brazil ($n=144$).

It was found that, at all the samples where this intervention was implemented, an increase occurred on all motivational indicators and on positive well-being, and a decrease on negative well-being outcomes; nevertheless, not all obtained results are statistically significant. The largest impact of the implemented training program was at positive well-being at work, with a large effect size ($d+=.81$), and at the irrational beliefs, with a medium effect size ($d+=.61$). These results suggest the short-term benefits of this intervention on teachers' and physicians' motivation and well-being.

Keywords: Stress Management Intervention, Teachers, Physicians, Meta-analysis.

JEL Classification: I38

1. INTRODUCTION

Occupational stress is a significant problem throughout the modern world and a concern for many organizations (Flaxman & Bond, 2010). It has been shown that it does not affect in the same manner the numerous existing occupations (Michie & Williams, 2003). Previous research has revealed that human services occupations, including teaching and health-care providing, are prone to high stress levels (Bermejo-Toro & Prieto-Ursúa, 2010; Lens & Jesus, 1999; Lim, Bogossian, & Ahern, 2010; Moya-Albiol, Serrano, & Salvador, 2010; Skaalvik & Skaalvik, 2011). Occupational stress has implications in terms of its negative consequences for individuals (Mark & Smith, 2012) and, subsequently, for their organizations and societies in which they are embedded (Edwards & Burnard, 2003).

One way to prevent and surpass its negative consequences is to design and implement stress management interventions targeting different levels, including person-focused and organization-focused interventions, or both (Semmer, 2010). Additionally, these interventions can be used to improve and optimize employees' aspects that denote positivity such as motivation and well-being at work. In the light of the changing "lens" through which the individuals and organizations are studied, researchers and practitioners have given more attention to positivity in human resource management, also including the issue of occupational stress (Avey, Luthans, & Jensen, 2009). Consideration of positivity,

as a complement to the negative and deficiency oriented approach, can lead to an effective management regarding the occupational health issues, such as stress (Nelson & Simmons, 2003).

In a previous review of the occupational stress management programs (Jesus, 1996), it was found that these programs have some limitations such as a lack of their development on a strong theoretical background and their focus on using only one technique such as relaxation techniques (e.g. Bamford, Grange, & Jones, 1990), mindfulness strategies (e.g. Kabat-Zinn, 1982) or coping strategies (e.g. Esteve & Fracchia, 1986). In general, the results of occupational stress management interventions in health care workers show a limited influence on psychological variables. In the reviews conducted by Routsalainen, Serra, Marine and Verbeek (2008) on occupational stress management interventions in health care workers, limited evidence was found that person-directed intervention can reduce stress, emotional exhaustion, lack of personal accomplishment, and anxiety. Similarly, Van der Hek and Plomp (1997) conducted a review of the published effect sizes of the occupational stress management programs, providing evidence that there is an urgent need to acquire a better conceptualization and theoretical reflection on the analyzed interventions.

Concerning the need for a better conceptualization in this field, an integrative model of stress, motivation and well-being was formulated to serve as a theoretical background to design and implement further stress management interventions (Jesus, 1996; Jesus, 2003; Jesus & Lens, 2002; Jesus & Lens, 2005). This model was built on several theories of motivation: intrinsic motivation theory (Deci, 1975), self-efficacy theory (Bandura, 1977), social learning theory (Rotter, 1982), relational theory (Nuttin, 1984), and attributional theory (Weiner, 1986).

To measure the variables considered in this model, a self-report instrument was developed (Jesus, 1996). It included several scales measuring some psychological indicators of the employees' motivation (professional project, intrinsic motivation and efficacy expectancies) and positive and negative well-being (work distress, emotional exhaustion and irrational beliefs). Empirical studies have revealed that all its comprising scales had reliability higher than .70 (Jesus, 1996; Jesus & Conboy, 2001).

This integrated model of stress, motivation and well-being served as a foundation for the development of a stress management intervention training combining different person-focused interventions including relaxation, cognitive-behavioral skills training and several specific approaches (Jesus, 1998). It emphasized the acquisition of coping skills to ensure a better positive well-being and motivational outcomes, and to decrease the negative well-being related outcomes. Its sessions were organized during 30h and conducted around the following topics: (1). sharing of professional experiences; (2). management of professional stressors and symptoms; (3). coping strategies and resilience; (4). irrational beliefs management; (5). relaxation exercises; (6). time management; (7). team work; (8). assertiveness and conflict management; (9). healthy life styles and quality of life; and (10). perspectives for the implementation of the taught strategies in their personal and professional life. The description of the sessions was presented in previous papers (e.g. Jesus, 2011).

This stress management training was empirical and has been examined in several studies using a pre- and post-measurement research design (e.g. Jesus & Conboy, 2001). To evaluate the effectiveness of this intervention, it is necessary to meta-analytically integrate the results of the empirical studies that have examined it. As suggested by Giga, Noblet, Faragher and Cooper (2003), without having a greater clarity about the effectiveness of different types of job stress interventions, the "efforts to minimise the human and economic costs of stress will be limited by a lack of sound evidence on the effectiveness of stress management strategies" (pp. 158). Thus, this study aims to collect and meta-analytically integrate the results of the studies that have empirically examined the influence of this intervention on employees'

motivational and well-being related outcomes immediately after its implementation. It is expected that: (1). the stress management intervention training will have a positive impact on motivational outcomes including professional project, intrinsic motivation and efficacy expectancies (first hypothesis); (2). the stress management intervention training will increase the positive well-being (second hypothesis); and (3). the stress management intervention training will decrease the negative well-being including work distress, emotional exhaustion and irrational beliefs (third hypothesis).

2. METHODOLOGY

2.1. Sample of studies and selection criteria

The relevant studies for this meta-analysis were searched using two methods. First, a computerized search was performed in Web of Science®-with Conference Proceedings and PsychInfo® databases. This search was conducted using the following keywords: stress management program and motivational program. The search period was limited to studies published from 1996 until 31st December 2010. Second, the published and unpublished papers that have empirically examined this stress management training and were known by the first author of the present study were also considered.

To be included in the analysis, the studies had to meet the following criteria: (1) to be published in the English, Spanish or Portuguese language; (2) to examine the full version of this stress management program, in terms of sessions (10) and hours (30); (3) to collect data from employees working in the field of human services; (4) to include a measurement of at least one variable related to professional motivation (professional project, intrinsic motivation, and efficacy expectancies), positive well-being, and negative well-being (work distress, emotional exhaustion and irrational beliefs), before and shortly after the implementation of this intervention; and (5) to report an effect size or other statistics that could be transformed into a size effect. Cohen's *d* effect size in terms of the standard deviation of raw-scores was chosen for use.

Considering these criteria, five studies were selected. These are marked with an asterisk (*) in the references list. The number of the independent samples and participants extracted from these five studies varies for the outcome variables considered in the subsequent analysis.

2.2. Coding of characteristics

For each independent sample, the following information was coded: references of the study in terms of author(s) and year of publication, sample size, sample type (teachers, health professionals), means and standard deviations in the pre-test and post-test measurements and the value of the effect size. This coding was conducted independently by the two authors for each outcome variable. The inter-reliability between the coders was 100%.

The results of this coding are presented in Table 1.

2.3. Analysis of the effect sizes

The meta-analytical procedures using the fixed-effect models were applied given that this paper aims to make inferences about the effect-size parameters in the set of studies that are observed (Hedges & Vevea, 1998). First, the differences between pre-test and post-test measurements in each sample were expressed using the standardized effect size Cohen's *d* (Cohen, 1988). Based on these individually studied effect sizes, in the case of each outcome variable, the unweighted average effect size (*d*) and weighted-mean effect size (*d₊*) were computed. The weighting variable is the reciprocal number of the sampling variance for each effect size estimate. The values of the weighted-mean effect sizes were compared with the

cut-off values proposed by Cohen (1988): a small (.20), medium (.50) and a large (.80) effect size. For each weighted-mean effect size, the confidence interval, 95% *CI*, was computed.

Next, the effect sizes across the sample of the studies were tested for homogeneity using: (1). Hunter and Schmidt's 75% rule (1990) in terms of the percentage of the observed variance explained by the error sampling variance and (2). *Q* test (Morris & DeShon, 2002).

Table 1 – Descriptive statistics of the studies included in the meta-analysis that examined the short-term influence of the stress management program on teachers' and physicians' motivational and well-being-related outcomes

Reference	Sample type	<i>N</i>	m_1	sd_1	m_2	sd_2	$m_2 - m_1$	<i>ES (d)</i>
1. Professional project								
Jesus (2002)	Teachers	26	4.02	1.66	4.09	1.66	.07	.04
Jesus (2006)	Teachers	28	4.08	1.90	4.19	1.90	.11	.06
Jesus & Costa (2004)	Physicians	50	3.10	1.41	3.30	1.41	.20	.14
Sampaio et al. (2008)	Teachers	15	5.17	1.66	5.58	1.66	.41	.25
2. Well-being at work								
Jesus (2002)	Teachers	26	3.50	1.23	4.86	.83	1.36*	1.11
Jesus (2006)	Teachers	28	3.95	.89	4.65	.93	.70*	.79
Jesus & Conboy (2001)	Teachers	25	4.20	1.57	5.47	.74	1.27*	.81
Jesus & Costa (2004)	Physicians	50	3.80	1.23	4.20	.83	.40*	.65
3. Intrinsic motivation								
Jesus (2002)	Teachers	26	19.64	4.95	21.00	4.13	1.36*	.27
Jesus (2006)	Teachers	28	21.10	4.46	22.79	4.20	1.69*	.38
Jesus & Conboy (2001)	Teachers	25	20.13	5.57	21.73	3.63	1.60*	.29
Sampaio et al. (2008)	Teachers	15	24.67	4.95	26.75	4.13	2.08*	.42
4. Efficacy expectancies								
Jesus (2002)	Teachers	26	30.36	4.82	31.00	4.18	.64	.13
Jesus (2006)	Teachers	28	31.25	3.70	31.36	3.97	.11	.03
Jesus & Conboy (2001)	Teachers	25	27.13	6.02	28.40	3.66	1.27	.21
Sampaio et al. (2008)	Teachers	15	35.50	4.82	34.42	4.18	1.08	-.22
5. Work distress								
Jesus (2002)	Teachers	26	19.02	11.23	18.36	10.57	-.66	-.06
Jesus (2006)	Teachers	28	19.68	9.73	19.02	10.10	-.66	-.07
Jesus & Conboy (2001)	Teachers	25	19.09	12.73	17.66	11.05	-1.43*	-.11
Sampaio et al. (2008)	Teachers	15	18.85	11.23	17.15	10.57	-1.70	-.15
6. Emotional exhaustion								
Jesus (2002)	Teachers	26	23.00	20.14	19.11	17.76	-3.89*	-.19
Jesus (2006)	Teachers	28	21.59	18.24	20.15	17.49	-1.44	-.08
Jesus & Conboy (2001)	Teachers	25	24.43	22.05	23.54	18.03	-.89	-.04
Jesus & Costa (2004)	Physicians	50	26.30	20.14	22.10	17.76	-4.20*	-.21
Sampaio et al. (2008)	Teachers	15	20.97	20.14	16.90	17.76	-4.07*	-.20
7. Irrational beliefs								
Jesus (2002)	Teachers	26	47.07	5.24	46.93	4.25	-.14	-.03
Jesus (2006)	Teachers	28	42.22	4.28	41.96	4.34	-.26	-.06
Jesus & Conboy (2001)	Teachers	25	45.20	6.20	40.53	4.16	-4.76*	-.75
Jesus & Costa (2004)	Physicians	50	47.20	5.24	39.30	4.25	-7.90*	-1.51
Sampaio et al. (2008)	Teachers	15	47.08	5.24	42.83	4.25	-4.25*	-.81

* $p < .05$

Note. *N*: the sample size. m_1 : the mean of the pretest measurement. sd_1 : the standard deviation of the pre-test measurement. m_2 : the mean of the post-test measurement. sd_2 : the standard deviation of the post-test measurement. *ES (d)*: the *d* effect size.

3. RESULTS

In the present study, five studies were considered in the subsequent analyses. Four of them have used teachers as participants to the stress management training, and one has used physicians. All these participants were included voluntarily in the training sessions without being selected on their level of outcome variables or on the basis of a diagnostic of clinical occupational stress. The studies included in this meta-analysis used a single sample pre- and post-test measurement design.

It was found that at all the samples where this intervention was implemented an increase occurred on all motivational indicators and on positive well-being, and a decrease on negative well-being outcomes; nevertheless, not all obtained results are statistically significant. For instance, it was found that this intervention does not significantly influence the employees' professional project and efficacy expectancies. Furthermore, the intervention increased employees' intrinsic motivation and their positive well-being at work, but the impact of this training on teachers' and physicians' positive well-being varies from a medium to a very large impact (from .65 to 1.11), while in the case of intrinsic motivation its impact is ranged from a small to a medium effect size (from .27 to .42).

In terms of negative well-being related outcomes such as work distress, emotional exhaustion and irrational beliefs, the studies found that this training decreased the intensity of these negative consequences of the occupational stress; nevertheless, it was not significant in all the studies. The influence seems to be higher on the decrease of irrational beliefs, but the results vary from almost no impact to a very large impact (from -.03 to -1.51).

The results of the meta-analysis for each outcome variable are presented in Table 2.

Table 2 – Overall results of the meta-analysis that examined the short-term influence of the stress management training on teachers' and physicians' motivational and well-being-related outcomes

Outcome variable	<i>N</i>	<i>k</i>	<i>d</i>	<i>d</i> ₊	95% <i>CI</i>	% variance	<i>Q</i>	Fail safe <i>N</i>
1. Professional project	119	4	.12	.11	[-.18; .39]	19.71	.20	0
2. Well-being at work	129	4	.84	.81	[.26; 1.36]	12.20	.33	6
3. Intrinsic motivation	94	4	.34	.33	[-.07; .72]	48.86	.08	1
4. Efficacy expectancies	94	4	.04	.06	[-.26; .38]	5.73	.70	0
5. Work distress	94	4	-.10	-.09	[-.40; .22]	88.63	.05	0
6. Emotional exhaustion	144	5	-.14	-.14	[-.41; .13]	18.50	.27	0
7. Irrational beliefs	144	5	-.63	-.61	[-.63; .05]	.75	6.63	0

Note: *N* = the total number of the participants in the *k* samples; *k* = the number of independent samples; *d* = the averaged observed effect size; *d*₊ = the mean observed weighted effect size; 95% *CI* = 95% confidence interval of the *d*₊ effect size; % variance = theoretical variance due to sampling error/ observed variance of the effect size; *Q* = the value of the *Q* test; Fail-safe *N*s = the number of additional studies with null results needed to reduce mean size effect to a small effect of .20.

The results reveal that the stress management intervention training has no influence on employees' professional project immediately after its implementation (*d*₊ = .11). Also, this lack of a significant influence is reflected by the limits of the confidence interval of the

weighted effect size d (95% $CI = [-.18; .19]$). Hunter and Schmidt's rule ($19.71 > .75$) and the value of the Q test ($Q(3) = .20, p > .05$) indicate that there is no heterogeneity of the effect sizes across the sample of the studies included in the analysis. Also, the influence of this training on teachers' and physicians' intrinsic motivation ($d_+ = .33$) is not statistically relevant as shown by the 95% CI that includes the null value (95% $CI = [-.07; .72]$). The two heterogeneity tests indicate that the effect sizes across the sample of the studies included in the analysis are not heterogeneous ($48.86 > .75$ and $Q(3) = .08, p > .05$). Also, based on data driven from four independent samples that comprised 94 participants in total, it was found that this training had no influence on efficacy expectancies ($d_+ = .06$ and 95% $CI = [-.26; .38]$). As is the case of the previous two motivational outcomes, the results of the homogeneity tests suggest that the effect sizes across the sample of the studies included in the analysis are not heterogeneous ($5.73 > .75$ and $Q(3) = .70, p > .05$).

On the other hand, the data driven from four independent samples (129 participants) reveal that the stress management training has a significant, large influence on employees' positive well-being ($d_+ = .81$, 95% $CI = [.26; 1.36]$). Also, the homogeneity tests indicate that effect sizes across the sample of the studies included in the analysis are homogenous ($12.20 > .75$; $Q(3) = .33, p > .05$).

In terms of the negative well-being, it was found that this training does not significantly reduce the teachers' and physicians' work distress ($d_+ = -.09$, 95% $CI = [-.40; .22]$) and emotional exhaustion ($d_+ = -.14$, 95% $CI = [-.41; .13]$). Also, in the case of these negative well-being related outcomes, the results of the two heterogeneity tests indicate that the effect sizes are homogenous across the studies included in each set of the studies ($88.63 > .75$, $Q(3) = .05, p > .05$ and $18.50 > .75$, $Q(4) = .27, p > .05$, respectively). Furthermore, the employees' irrational beliefs are not significantly modified at the end of this training ($d_+ = -.61$, 95% $CI = [-.63; .05]$). The percentage of the observed variance explained by the error sampling variance suggests some heterogeneity across the effect sizes of the studies included in the analysis (.75).

To examine the likelihood of whether this meta-analysis may have overestimated the true size of the stress management training effects on employees' outcomes because of publication bias, a fail-safe N_s was computed using Orwin's (1983) formula, where the effect size criterion was chosen to be .20 and the value of the d_{fc} was set to zero. The number of studies with null findings that would be needed to obtain the mean effect of .2 for the well-being is 6. Given that the value of this number is larger than the number of the analyzed independent samples, it indicates that the results of the meta-analysis may be little influenced by the "file-drawer problem".

4. DISCUSSION

This study aimed to collect and to meta-analytically integrate the results of the empirical studies that have examined the influence of stress management training on teachers' and physicians' work motivation and positive and negative well-being related outcomes immediately after its implementation. It has been found that this type of training has significantly increased the employees' positive well-being at work; nevertheless, the influence on their motivational and negative well-being related outcomes is not significant.

A lack of significant effects of this stress management training on the motivational and the negative well-being related outcomes may be due to the fact that it is a multimodal one, comprising different intervention techniques or components. Using a multicomponent training makes it difficult to assess whether the specificity, mixture, number, or a combination of the training components is causing the intervention effect (Richardson and Rothstein,

2008). Thus, it is difficult to say which component of the examined stress management training had or did not have an influence on teachers' and physicians' motivational and well-being related outcomes. In terms of the effect of the multimodal stress management interventions, the existing literature provides inconsistent results. For example, Werneburg et al. (2011) verified the effectiveness of a 12-session multidisciplinary stress reduction program, incorporating group support, skill building and cognitive behavioral and relaxation techniques, on reducing perceived stress and improving health behaviors and quality of life. But other researches point out a different way. For instance, Richardson and Rothstein (2008) found that the multimodal stress management interventions had no significant influence on distress and other work-related outcomes including work motivation. The lack of significant effects of this multimodal stress management training can also be due to other factors that may mediate or moderate its influence (Biron, Cooper, & Bond, 2008). These factors can be intrinsic, external to participants training, or at the interface of the participants with the context in which the training was conducted, such as participants' appraisal of the stress management intervention (Nielsen, Randall, & Albertsen, 2007).

5. CONCLUSION

The present meta-analysis provides the first quantitative summaries of the effectiveness of this stress management training shortly after its implementation to the groups of teachers and physicians. Also, it contributes to the extension of the current knowledge of stress management interventions implemented with employees' from the human services field, such as teachers and physicians. As shown, this intervention can be used in the worksites to improve the employees' positive well-being. From a practical point of view, the results can be useful to specialists responsible for human resources management, particularly on occupational stress issues.

One limitation of the present study regards the nature of the data included in the analysis. In the case of all examined outcomes, the effect sizes were computed based on data collected through one single sample pre- and post-measurement design. Given the weaker causality nature of this type of design (Montero & León, 2007), it is difficult to infer that there were no intrinsic or extrinsic factors to this intervention that might influenced the employees' outcomes during its implementation. Nevertheless, a previous study observed an increase in intrinsic motivation and well-being at work for an experimental group of teachers, but any significant difference also occurred at an equivalent control group (Jesus, 2010); further studies are needed to evaluate the effectiveness of this multimodal stress management training in comparison to single techniques, in order to determine which is the most effective in different work settings. Qualitative data could also give additional information (Torsney, 2011). Furthermore, the inferences about the effectiveness of this stress management training are restricted to the employees' psychological outcomes. Future studies that will investigate the effects of this intervention can include different types of outcomes such as physiological (e.g. diastolic and systolic blood pressure) or organizational measures (e.g. absenteeism). Future studies also should combine the efficacy of the stress management program with some other personal variables, such as creativity and leadership (Quintas & Gonçalves, 2010; Sousa, Monteiro & Pellissier, 2009).

Furthermore, the effectiveness of this stress management intervention can be examined in studies that can include larger samples from the same population of teachers and physicians, as well as other specific profession from human services such as nurses or other social care provider professions (Almeida, Faísca & Jesus, 2009).

Considering that this study analyzed only the short-terms effects of this stress management training on motivational and well-being related outcomes, it can be complemented by a meta-analysis of the studies that have examined the long-term impact of the training program (e.g. Jesus, 2002; Jesus & Costa, 2004; Jesus & Rus, 2011). As suggested by Richardson and Rothstein (2008), little is known about the long-term effects of the stress management interventions, and this limits knowledge about how long their effects last.

ACKNOWLEDGEMENTS

This paper was partially financed by FCT – Foundation for Science and Technology.

REFERENCES

- Almeida, H., Faísca, L. M., & Jesus, S. N. (2009). Operational Management of customer service. *Spatial and Organizational Dynamics*, 2: 42-68.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*. 48(5): 677-693.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*. 29: 147-154.
- Bamford, J., Grange, J., & Jones, P. (1990). An experimental stress management course for teachers. *Educational Psychology in Practice*. 6(2): 90-95.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. 84: 191-215.
- Bermejo-Toro, L. & Prieto-Ursúa, M. (2010). Teachers' irrational beliefs and their relationship to distress in the profession. *Psychology in Spain*. 10: 88-96.
- Biron, C., Cooper, C. L., & Bond, F. W. (2008). Mediators and moderators of organizational interventions to prevent occupational stress. In S. Cartwright and C. L. Cooper (Eds.), *The Oxford handbook of organizational wellbeing* (pp. 441-465). Oxford University Press. Oxford.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. 2nd Edition, Erlbaum. Hillsdale, NJ.
- Deci, E. L. (1975). *Intrinsic motivation*. Plenum Press. New York.
- Edwards, D., & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Integrative Literature Reviews and Meta-analysis*. 42(2): 169-200.
- Esteve, J. M., & Fracchia, F. B. (1986). Inoculation against stress: A technique for beginning teachers. *European Journal of Teacher Education*. 9: 261-269.
- Giga, S. I., Noblet, A. J., Faragher, B., & Cooper, C. L. (2003). The UK perspective: A review of research on organizational stress management interventions. *Australian Psychologist*. 38(2): 158-164.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*. 3(4): 486-504.
- Hunter, J. E., & Schmidt, E. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Sage. Newbury Park, CA.

- Jesus, S. N. (1996). A motivação para a profissão docente. Estante Editora. Aveiro.
- Jesus, S. N. (1998). Bem-estar dos professores. Estratégias para realização e desenvolvimento profissional. Porto Editora. Porto.
- *Jesus, S. N. (2002). Teachers' well-being by a training program. A longitudinal approach. Paper presented at the 16th Conference of the European Health Psychology Society, Lisbon, Portugal.
- Jesus, S. N. (2003). La motivación de los profesores. Revisión de la literatura. In D. García-Villamizar & T. Freixas (Eds.), *El estrés del profesorado* (pp.116-139). Promolibro. Valência.
- *Jesus, S. N. (2006). Bem-Estar em Psicologia da Saúde. In I. Leal (Ed.), *Perspectivas em Psicologia da Saúde* (pp.81-97). Quarteto Editora. Coimbra.
- Jesus, S. N. (2010). Teacher stress management by a program of motivation and skills training. In P. Buchwald, K. Moore, and T. Ringeisen (Eds.), *Proceedings of the 31st Stress & Anxiety Research Society Conference* (pp.55-60). Logos Verlag. Berlin.
- Jesus, S. N. (2011). Training intervention to promote motivation and well-being. *Análisis y Modificación de Conducta*. 37(155-156): 31-41.
- *Jesus, S. N., & Conboy, J. (2001). A stress management course to prevent teacher distress. *The International Journal of Educational Management*. 3(15): 131-137.
- * Jesus, S. N., & Costa, L. (2004). A stress management prevention program for teachers and health professionals. Paper presented at the 25th International Conference for Stress and Anxiety (STAR Conference), Amsterdam, Holland.
- Jesus, S. N., & Esteve, J. M. (2000). Programa de formación para la prevención del mal estar docente. *Revista Galego-Portuguesa de Psicoloxía e Educación*. 4(5): 43-54.
- Jesus, S. N., & Lens, W. (2002). An integrated model for the study of teacher motivation and burnout. *Research Reports* (Department of Psychology, University of Leuven), 112 (33p.)
- Jesus, S. N., & Lens, W. (2005). An integrated model for the study of teacher motivation. *Applied Psychology: An International Review*. 54(1): 119-134.
- Lens, W., & Jesus, S. N. (1999). A psycho-social interpretation of teacher stress and burnout. In R. Vandenberghe and M. Huberman (Eds.), *Understanding and prevention teacher burnout: A sourcebook of international research and practice* (pp.192-201). Cambridge University Press. Cambridge.
- Lim, J., Bogossian, F., & Ahern, K. (2010). Stress and coping in Singaporean nurses: A literature review. *Nursing and Health Sciences*. 12(2): 251-258.
- Mark, G., & Smith, A. P. (2012). Effects of occupational stress, job characteristics, coping, and attributional style on mental health and job satisfaction of university employees. *Anxiety, Stress & Coping*. 25(1): 63-78.
- Montero, I., & León, O. G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology*. 7(3): 847-862.
- Morris, S. B., & DeShon, R. P. (2002). Combining effect-size estimates in meta-analysis with repeated measures and independent-groups designs. *Psychological Methods*. 7(1): 105-125.
- Moya-Albiol, L., Serrano, M., & Salvador, A. (2010). Burnout as an important factor in the psychophysiological responses to a work day in Teachers. *Stress and Health*. 26(5): 382-393.

- Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick and L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 97-119). American Psychological Association. Washington, DC.
- Nielsen, K., Randall, R., & Albertsen, K. (2007). Participants' appraisals of process issues and the effects of stress management interventions. *Journal of Organizational Behavior*. 28: 783-810.
- Nuttin, J. (1984). *Motivation, planning, and action. A relational theory of behavior dynamics*. Leuven University Press and Erlbaum. Leuven and Hillsdale, NJ.
- Orwin, R. G. (1983). A fail-safeN for effect size in meta-analysis. *Journal of Educational and Behavioral Statistics*. 20(8): 157-159.
- Pacheco, J. E., & Jesus, S. N. (2009). Burnout and lifestyles in health professionals. In K. Moore and P. Buchwald (Eds.), *Stress and Anxiety Application to Adolescence, Job Stress and Personality* (pp. 111-118). Logos Verlag. Berlin.
- Quintas, H., & Gonçalves, A. (2010). The leadership of schools in three regions in Portugal based on the findings of external evaluation. *Spatial and Organizational Dynamics*, 5: 42-67.
- Richardson, K. M., & Rothstein, H. R. (2008). Occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*. 13(1): 69-93.
- Rotter, J. B. (1982). *The development and applications of social learning theory*. Praeger. New York.
- Routsalainen, J., Serra, C., Marine, A., & Verbeek, J. (2008). Systematic review of interventions for reducing occupational stress in health care workers. *Scandinavian Journal of Work and Environmental Health*. 34(3): 169-178.
- *Sampaio, A., Jesus, S., Stobaus, C., & Mosquera, J. (2008). Promoção do bem-estar através de programa de formação continuada. *Polimorfia*. 5: 83-88.
- Semmer, N. K. (2010). Stress management and wellbeing interventions in the workplace. In C.L. Cooper, J. Field, U. Goswami, R. Jenkins, and B.J. Sahakian (Eds.), *Mental capital and wellbeing* (pp. 681-688). Wiley-Blackwell. West Sussex.
- Skaalvik, E. M., & Skaalvik, S. (2011). Teachers' feeling of belonging, exhaustion, and job satisfaction: the role of school goal structure and value consonance. *Anxiety, Stress & Coping*. 24(4): 369-385.
- Sousa, F., Monteiro, I., & Pellissier, R. (2009). Creativity and Problem Solving in the Development of Organizational Innovation. *Spatial and Organizational Dynamics*, 1: 29-41.
- Torsney, K. (2011). Impact of participation in team meetings on the stress and coping of lower status nursing employees in long-term care. *Stress and Health*. 27(3): 256-262.
- Van der Hek, H., & Plomp, H. N. (1997). Occupational stress management programmes: A practical overview of published effect studies. *Occupational Medicine*. 47: 133-141.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- Werneburg, B. L., Herman, L. L., Preston, H. R., Rausch, S. M., Warren, B. A., Olsen, K. D., & Clark, M. M. (2011). Effectiveness of a Multidisciplinary Worksite Stress Reduction Programme for Women. *Stress and Health*. 27(5): 353-440.

ORGANIZATIONAL CULTURE AND SUBJECTIVE AND WORK WELL-BEING. THE CASE OF EMPLOYEES OF PORTUGUESE UNIVERSITIES

Joana Santos
Gabriela Gonçalves
Alexandra Gomes

ABSTRACT

This study investigated the determination of Organizational Culture on the Well-Being at Work and determination on the Subjective Well-being of employees of Public Institutions of Higher Education in Portugal.

The final total sample had 635 participants, employees of Portuguese Public Higher Education Institutions. The hierarchical regression shows a significant effect of Organizational Culture on the criterion variable, Subjective Well-Being. By adding Well-Being at Work, it increased the explanatory power of the model. It was still possible to establish a structural equation model, which considers the determination of Support Organizational Culture on Well-being at Work and this on Well-being Professional. These results reveal the importance of organizations implementing a culture of support, particularly in ensuring the Well-being of its employees.

Keywords: Organizational Culture, Subjective Well-Being, Well-Being at Work.

JEL Classification: L32, M14

1. INTRODUCTION

In the globalized economy of the twenty-first century society, companies find themselves compelled to systematically raise their performance in order to ensure a competitive presence in the markets they serve. For this, they modernize their activities. However, only investing in new technologies is not enough to modernize an organization, public or private. One factor that differentiates companies with greater success is the combination of technology with human resource strategies.

In a macro prospective analysis of organizations, organizational culture can be considered a set of values, behavioral norms, artifacts and patterns of behavior that govern how people interact and are committed to the work and the organization (Schein, 1992). The wealth of Organizational Culture can be characterized by different typologies. In this study the model was privileged contrasting values of Quinn and Cameron (1983); it constitutes an important aspect in the essence of organizational functioning, which results in tension between opposites, and the structures typically being sought (Neves, 2000). Research has shown the influence of organizational factors (e.g. organizational culture) on employees, particularly in terms of their Well-Being (Miles & Mangold, 2007; Stark, Shaw, & Duffy, 2007; Zempetakis, Beldekos, & Moustaris, 2009).

After some initial crisis in the definition of Subjective Well-being, it is now more or less agreed that the concept consists of a cognitive dimension, where there is an evaluative judgment, usually exposed in terms of satisfaction with life, and an emotional dimension, positive or negative. The life satisfaction is a cognitive evaluation of positive personal life as a whole; the positive effect refers to the frequency of positive emotions in an individual, the negative effect is the frequency of negative emotions (McCullough, Heubner & Laughlin, 2000). Thus, people who demonstrate a positive wellness experience a preponderance of positive emotions in relation to negative emotions and positively evaluate their life as a whole. The subjective well-being is structured so that the components form a global factor or interrelated variables (Diener, Suh, & Oishi, 1997; McCullough, Heubner, & Laughlin, 2000).

Research on the topic of Subjective Well-being seeks, essentially, to understand what is affecting the well-being of an individual and what makes us really happy. According to theorists, the best way to do this is by asking people how they feel (Powdthavee, 2008). In a professional context, the senses of belonging and togetherness, as well as identification with the organizational culture, have a positive impact on Subjective Well-being, and specifically in Life Satisfaction (Blanchflower & Oswald, 1998). Similarly, Ryan and Deci (2001) note that professional autonomy reflects positively on Subjective Well-being. Specifically at the level of consequential professionals, the Subjective Well-being has a positive impact on productivity levels, both individual and organizational (Harter, Schmidt, & Hayes, 2002; Helliwell & Putnam, 2005; MacCallum, Browne, & Sugawara, 1996).

For Conrad (1998), professionals spend at least a third of their waking hours at work and do not necessarily leave the tasks when they leave these places. In fact, personal life and work life are not separate entities; in contrast, they are interrelated domains that have reciprocal effects. The recent trend of organizational literature, in considering their affection of the workplace, not just satisfaction, has influenced studies on Well-being in the organizational context. Despite the similarity with the approach of Subjective Well-being, Daniels (2000) does not consider the Job Satisfaction of the defining Well-being. Recently, Warr (2007, 2009) advocates for a more complete conceptualization of Well-being at Work, compatible with efforts to establish the limits of the construct. The Well-being at Work can be considered, therefore, as the prevalence of positive emotions on the job and the individuals' perceptions that, in their work, they express and develop their potential / skills and progress in achieving their life goals. In this perspective, the Well-being at Work includes both affective aspects (emotions and moods) and cognitive (perception of achievement).

Regarding antecedents of Well-being at Work, the professional environments through flexibility and autonomy (Mendes & Tamayo, 2001), or organizational support (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Siqueira, Padovam, Chiuzi, & Covacs, 2006) passed on to employees, can lead to increased levels of Well-Being at Work. Thus, in the central role that work has on society in general, and in people's lives, in particular, the Well-being assumes professional repercussions both for the person (individual Well-Being) and for work (productivity and income) (Huppert & Whittington, 2003). This study aims to analyze the determination of Organizational Culture on Well-Being, Subjective and at work, of employees of universities.

2. METHODOLOGY

In this study we focus on a quantitative methodology for analyzing and gathering information.

2.1. Sample

Our convenience sample was selected from the population that integrates the employees, teachers and staff, of Portuguese Public Higher Education Institutions. The final total sample consists of 635 participants: the employees of Portuguese Public Higher Education Institutions. We used as inclusion criteria the answer to all questions of the questionnaire. The respondents were predominantly female ($n = 375$, 60%), with a mean age of 39.77 ($SD = 9.13$); ages varied between 23 and 64 years.

2.2. Instruments

Regarding the instruments for gathering information to measure organizational culture, First Organizational Culture Unified Search (FOCUS) (VanMuijen, Papalexandris, Branyiscki, Spaltro, Jesuino, & Neves, 1999; Neves, 2000) was used, which is divided into two parts that reflect aspects of organizational life, the internal and external aspects. The first part, descriptive in nature, is intended to assess the organizational climate (behavioral aspects of culture). The respondent has a six-level scale to rule on the different questions (1 = never / none to 6 = all / always). The second part contains questions of evaluative content that intend to evaluate the guidelines of Organizational Culture (deeper aspects of culture) (Neves, 2000). This time, there are thirty-five different statements that constitute it, and the response scale has six levels (1 = not at all to 6 = extremely). The investigation of Neves (2000) showed that only thirty-four items of Focus would be relevant for a reliable evaluation of the four directions.

Well-Being at Work Scale (Warr, 1990): The Affective Well-being at Work was measured by validated instrument by Warr (1990), with a sample of 1686 individuals employed. The version used refers to the Portuguese adaptation of Santos and Gonçalves (2010). The scale consists of two dimensions, anxiety / depression and contentment / excitement, distributed along six items each on a scale of type Rating Scale consisting of six levels (1 = Never, Always = 6). The first three items in each dimension are reversed. Regarding internal consistency, both dimensions have rates above 0.70, i.e. 0.76 to 0.80 for the first and second.

Satisfaction with Life Scale (Diener et al., 1985; Simões, 1992): The Satisfaction with Life Scale (SWLS), developed by Diener and colleagues (Diener et al., 1985), had the latest revision of the translation and validation to the Portuguese population by Simões (1992). In the study of Simões (1992) with a sample of 203 participants, an alpha was found of 0.77. The Satisfaction with Life Scale is one of the most used tools in assessing the cognitive component of Subjective Well-being. The scale consists of five items, for which it offers five levels of response (1: strongly disagree, 5: strongly agree).

The Positive and Negative Affect Scale (PANAS) developed by Watson, Clark and Tellegen (1988) was adapted for the Portuguese population by Simões (1993). For the authors, the aim is to evaluate the affective dimension of Subjective Well-being. In our study we considered the temporal reference “last week”; individuals were asked to indicate to what extent they experienced the feelings or effects listed on each item on a scale with 22 items, consisting of five levels: 1 = very little or nothing to 5 = very much. The original version of alphas ranging was, for positive effects between 0.86 and 0.90, and, for negative effects, between 0.84 to 0.87 for NA depending on the temporal directions.

2.3. Procedure

Data collection was conducted online, which gives greater autonomy to participating in the response. The clarity in the presentation of the online questionnaire was tested with fifteen employees of public institutions of higher education (8 teachers, 7 non-teaching) who completed the questionnaire and gave some suggestions (presentation of the scale items, simplifying the presentation). These participants were not included in the final sample.

Then there were the requests to Rectories of Portuguese Public Universities and Presidencies of Public Portuguese, Polytechnics, the possibility to request disclosure of the study, and respective application for collaboration among human employees of that institution. This contact was established through registered post and email. The questionnaire was available for three months, so that the human assets of the institutions could access and respond.

3. RESULTS

Our purpose was to establish a relationship model between variables, based on the theoretical principles. Thus, the model considers the relationship between the orientations of organizational culture and Well-Being at Work and its impact on Subjective Well-Being. Statistical software, (SPSS 20.0) and Amos (version 20.0), was used for data analysis. The main outcomes were explored through: a) a statistical description that included, mean, standard deviation, skewness and kurtosis; b) Pearson correlations for each of the four scales; c) hierarchical regression analysis between variables; and d) testing the model observed through structural equations. The method of maximum likelihood estimation was used, which assumes multivariate normal distribution, and is robust when this assumption is not met (Schermelleh-Engel, Moosbrugger, & Müller, 2003), which occurred in our data.

Description of items: Table 1 presents descriptive statistics, mean, standard deviation, skewness and kurtosis, for each dimension. The minimum and maximum guidelines of organizational culture are located at 1 and 6, so the observed means are always above the midpoint, with greater emphasis on the dimension rules. The Well-Being at Work presents an average slightly above the midpoint. The Subjective Well-Being was analyzed by measuring the resulting composite sum of life satisfaction and value subtraction between positive effect minus negative. As regards the asymmetry, some variables have positive skewness.

Table 1: Descriptive statistics of items (n = 635)

Variables	M	SD	Skewness	Kurtosis	Normalcy ^a
Support OC	3.27	0.837	0.233	0.185	0.000
Innovation OC	3.44	0.791	0.334	-0.332	0.000
Objectives OC	3.19	0.969	0.241	-0.481	0.000
Rules OC	3.61	0.707	0.105	0.852	0.000
Subjective WB	0.86	2.182	-0.431	0.029	0.000
WB at Work	3.84	0.932	-0.453	-0.212	0.000

Legend: Support OC - Support Organizational Culture, Innovation OC – Innovation Organizational Culture, Objectives OC- Organizational Culture Objectives, Rules OC - Rules Organizational Culture; BES - Subjective Well-Being; BET – Well-Being at Work.

^a the p value obtained using the Kolmogorov-Smirnov test, with correction Lilliefors

Descriptive statistics and Pearson correlation matrix: The correlation matrix, for each variable in the analysis, appears in Table 2. Most organizational variables considered are significantly correlated with each other ($p = 0.01$). In general, each instrument within the different dimensions correlate only moderately, thus justifying the differentiation of these conceptual same dimensions. The four dimensions of organizational culture (Support, Innovation, Objectives and Rules) have moderate values of correlation between them (values between 0.40 and 0.50). The Organizational Culture and Subjective Well-Being correlations are mostly not significant, as they are moderate to weak. Dimensions of Organizational

Culture and Well-Being at Work also have moderate and weak correlations. The correlation between Well-Being at Work and Subjective Well-Being is moderate.

Table 2: Pearson correlations between the variables

	1	2	3	4	5	6
1. Support OC	1	0.520**	0.502**	0.489**	0.311**	0.471**
2. Innovation OC		1	0.544**	0.449**	0.182**	0.263**
3. Objectives OC			1	0.447**	0.155**	0.259**
4. Rules OC				1	0.073	0.128**
5. Subjective WB					1	0.647**
6. WB atWork						1

**p < 0.01 Legend: Support OC - Support Organizational Culture, Innovation OC – Innovation Organizational Culture, Objectives OC- Organizational Culture Objectives, Rules OC - Rules Organizational Culture; BES - Subjective Well-Being; BET – Well-Being at Work.

Hierarchical regression: The following analyzes the power of determining variables Organizational Culture and Well-Being at Work on Subjective Well-Being. The first model shows a significant effect of Organizational Culture on the criterion variable ($r^2 = 11\%$, $p = 0.000$). In the second model, adding Well-Being at Work increases the explanatory power of the model ($\Delta r^2 = 31\%$, $p = 0.000$). Table 3 allows us to observe the contributions of each variable.

Table 3: Summary of hierarchical regression for variable Subjective Well-Being

Modelo	Variáveis	β	t	p
1.	S OC	0.336	6.971	0.000
	I OC	0.056	1.155	0.248
	O OC	0.010	0.210	0.834
	R OC	-0.121	-2.653	0.008
2	S OC	0.017	0.390	0.697
	I OC	0.027	0.693	0.489
	O OC	-0.026	-0.673	0.501
	R OC	-0.018	-0.481	0.631
	W WB	0.641	18.375	0.000

In the first model there is a determination of Culture Organizational Support on Subjective Well-Being. However, in the second model to be introduced, Well-Being at Work, this becomes more of an explanatory contribution in determining the Subjective Well-Being. Thus, in both models, the variables that significantly contribute to the explanation of the dependent variable are those with a strong affective character.

Confirmatory Analysis Model: In this section our aim is to establish an explanatory model of relations between the concepts studied, leaving much of its theoretical principles previously analyzed as relations between variables. Inferential statistical tests performed, including regression analysis, allowed us to provide an explanatory model which attempts to assess adjustment through structural equations. The model considers the determination of

Culture Organizational Support on Well-Being at Work on this and Subjective Well-Being. To assess the adjustment, different parameters were utilized. The reason χ^2 for the degrees of freedom (χ^2/df 0.052) between two and three indicates a good fit. A χ^2 not significant ($p = 0.051$) indicates a good fit (Byrne, 2001). The CFI (comparative fit index) and GFI (good adjustment index) of 0.987 and 0.998, respectively, by presenting values close to 1 represent a reference for a good fit (Bentler, 1992; Joreskog, 1996). With regard to measures of error, the SRMR (standardized residual square root) and RMSEA (root square error of approximation) should have values less than 0.05 to be considered a good fit, although values below 0.08 may yet be considered if it is a reasonable adjustment (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996). Thus, the value of SRMR 0.025 and 0.001 RMSEA are indicative of good / fair adjustment.

4. DISCUSSION / CONCLUSION

Empirical research shows that organizational variables, namely Organizational Culture (Brian Stanley, Achilles, & Christopher, 2009), have an impact on the performance of individual human assets. The Organizational Culture predicts organizational outcomes such as performance, satisfaction and Well-Being at Work (Wright & Davis, 2001; Wright & Bonett, 2002). For the central role that work has on society, in general, and in people's lives, in particular, the Well-Being at Work assumes repercussions both for the person and for the work (income and productivity) (Huppert & Whittington, 2003).

For the mean of the cognitive dimension of Subjective Well-Being, Life Satisfaction is also located above the center point, and there is a prevalence of experience of positive situations (McCullough, Heubner, & Laughlin, 2000). Similarly a higher mean of Positive Effects was also observed, which seems to reflect an enthusiasm for life, a tendency to experience pleasant emotions and feelings. Such emotions promote wakefulness and motivate individuals to avoid potentially threatening situations (Watson, Wiese, & Tellegen, 1999).

In terms of Well-Being at Work, values above the midpoint are a very positive indicator. Studies have shown the benefits of increased Well-Being at Work at various levels such as: reducing costs in health care (Whire & Jacques, 2007) and the decreased level of stress and frustration (Furnham & Walsh, 1991). The variables under study are correlated. It is common knowledge that people ensure the organization's survival. Thus, it is crucial that there is a clear union of quality of life of their employee's productivity with the purpose of the organization to achieve its objectives, implying an organization-employee relationship more carefully and closely related.

Although our purpose was to establish a model of relationship between variables, based on the theoretical principles and the results of the observed relationships, the proposed model shows that the Culture Support predicts Well-Being at Work. Simultaneously, the Well-Being at Work also contributes positively to the prediction of Subjective Well-Being.

Despite the importance of studying Well-Being at Work, theoretical models and empirical studies on the construct are scarce. The main research area refers to the general Well-being; studies that focus on teachers are fewer, and those who portray other professional schools are far fewer. Thus, there seems to be a need for a deeper understanding of the educational reality, particularly in the portrayal of several professionals who make up the school context. In the future it would be interesting, from the observed results, to develop an action inquiry, in order to enhance Well-Being at Work through strategic human resource management. Simultaneously, it would be able to reconcile a quantitative methodology with other qualitative ones, in order to better understand the needs of different professionals in the educational context. Only knowledge will allow the establishment of local initiatives, so

they can have a full coverage. In this sense, for Sequeira and Marques (2011) the knowledge management is a set of processes that, through the dissemination of knowledge, maintains or improves the performance of organizations.

REFERENCES

- Barreira, A. P. (2011). Spatial Strategic interaction non public expenditures of the northern portuguese local governments. *Spatial and Organizational Dynamics*, 6: 23-36.
- Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, 112: 400-404.
- Blanchflower, D. G., & Oswald, A. J. (1998). What makes an entrepreneur? . *Journal of Labor Economics*, 16(1): 26-60. doi:10.1086/209881.
- Brian, T. G., Stanley, G. H., Achilles, A. A., & Christopher, L. S. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. *Journal of Business Research*, 62(7): 673-679.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long, *Testing structural equation models* (pp. 445-455). Sage. Newbury Park.
- Byrne, B. M. (2001). Structural equation modeling: Perspectives on the present and the future. *International Journal of Testing*, 1(3-4):327-334.
- Conrad, L. (1998). Enhancing research through academic staff development. *International Journal for Academic Development*, 3(2):114-124. doi:10.1080/1360144980030204.
- Daniels, K. (2000). Measures of five aspects of affective well-being at work. *Human Relations*, 53: 275-294.
- Diener, E., & Suh, M. E. (1997). Subjective well-being and age: an international analysis. *Annual Review of Gerontology and Geriatrics*, 17: 304-324.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1):71-75. doi:10.1207/s15327752jpa4901_13.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3): 500-507. doi:10.1037/0021-9010.71.3.500.
- Furnham, A., & Walsh, J. (1991). Consequences of person environment incongruence: absenteeism, frustration and stress. *Journal of Social Psychology*, 131: 187-204.
- Harter, J. K., Schmidt, F., & Hayes, T. L. (2002). Business- unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2): 268-279. doi:10.1037/0021-9010.87.
- Helliwell, J., & Putnam, R. D. (2005). The social context of well-being. In F. A. Huppert, B. Keverne, & N. Baylis, *The science of well-being* (pp. 435-459). Oxford University Press. Oxford.
- Hofstede, G. (1997). *Culturas e Organizações: compreender a nossa programação mental*. Edições Sílabo. Lisboa.
- Huppert, F. A., & Whittington, J. E. (2003). Evidence for the independence of positive and negative well-being: implications for quality of life assessment. *British Journal of Health Psychology*, 8(1): 107-122. doi:10.1348/135910703762879246.

- Jorekog, K. G. (1996). Testing a simple structure hypothesis in factor analysis. *Psychometrika*, 34:165-178.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of size sample for covariance structure modeling. *Psychology Methods*, 1(2): 130-149. doi:10.1037/1082-989X.1.2.130.
- McCullough, G., Heubner, E. S., & Laughlin, J. (2000). Life events, self-concept and adolescents' positive subjective well-being. *Psychology in Schools*, 37(3): 281-291.
- Mendes, A. M., & Tamayo, A. (2001). Valores organizacionais e prazer sofrimento no trabalho. *PSICO*, 6(1): 39-46.
- Miles, S., & Mangold, M. (2007). Growing the employee brand at ASI. *Journal of Leadership & Organizational Studies*, 14(1): 77-85.
- Neves, J. (2000). *Clima Organizacional, Cultura Organizacional e Gestão de Recursos Humanos*. RH Editora. Lisboa.
- Quinn, R. E., & Cameron, K. (1983). Organizational life cycles and shifting criteria of effectiveness: some preliminary evidence. *Management Science*, 29(1): 33-51. doi:10.1287/mnsc.29.1.33.
- Ryan, R. M., & Deci, E. L. (2001). To be happy or to be self-fulfilled: a review of research on hedonic and eudaimonic well-being. In S. Fiske, *Annual Review of Psychology*, 52: pp. 141-166.
- Santos, J., Gonçalves, G. (2010). Contribuição para a adaptação portuguesa da escala de Bem-estar no Trabalho de Warr (1990). *Psicologia, Educação e Cultura*, XIV(2):285-300.
- Schein, E. H. (1992). *Organizational Culture and Leadership*. Josey-Bass. San Francisco.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Test of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research - Online*, 8(2): 23-74.
- Sequeira, B. & Marques, J. F. (2011). Knowledge management in tourism organisations: Proposal for an analytical model. *Spatial and Organizational Dynamics*, 7: 7-32.
- Simões, A. (1992). Ulterior validação de uma escala de satisfação com a vida (SWLS). *Revista Portuguesa de Pedagogia*, XXVI(3): 503-515.
- Siqueira, M. M., Padovam, V. A., Chiuze, R. M., & Covacs, J. M. (2006). A interface Bem-estar subjectivo e Bem-estar no Trabalho. In I. Leal, J. L. Pais Ribeiro, & S. N. Jesus, *Actas do 6º Congresso Nacional de Psicologia da Saúde* (pp. 23-28). Instituto Superior de Psicologia Aplicada. Lisboa.
- Stark, E. M., Shaw, J. D., & Duffy, M. K. (2007). Preference for Group Work, Winning Orientation, and Social Loafing Behavior in Groups. *Group Organization Management*, 32(6): 699-723. doi:10.1177/1059601106291130.
- Van Muijen, J. K., Papalexandris, N., Branyiscki, I., Spaltro, E., Jesuino, J., & Neves, J. (1999). Organizational Culture: The Focus Questionnaire. *European Journal of Work and Organizational Psychology*, 8(4): 551-568. doi:10.1080/1359432.
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63(3):193-210.
- Warr, P. (2008). Environmental vitamins, personal judgments, work values and happiness. In S. Cartwright, & C. L. Cooper, *The Oxford Handbook of Organizational Well-being* (pp. 57-85). Oxford University Press. Oxford.

- Warr, P. B. (1987). *Work, unemployment and mental health*. Oxford University Press. Oxford.
- Warr, P. B. (2007). *Work, Happiness and Unhappiness*. Routledge. New York.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54(6):1063-1070.
- Watson, D., Wiese, D. V., & Tellegen, A. (1999). The two general activation systems of affect: structural findings, evolutionary considerations and psychological evidence. *Journal of Personality and Social Psychology*, 76(5): 820-838. doi:10.1037/0022-3514.76.5.820.
- Whire, K., & Jacques, P. (2007). Combined diet and exercise intervention in the workplace. *American Association of Occupational Health Nurses*, 55(3): 109-114.
- Wright, B. E., & Davis, B. S. (2001). Job satisfaction in public sector: The role of work environment. *American Review of Public Administration*, 33(1): 70-90.
- Wright, T., & Bonett, D. (2002). The moderating effects of employee tenure on the relations between organizational commitment and job performance: a meta analysis. *Journal of Applied Psychology*, 87(6):1183-1190. doi:10.1037/0021-9010.87.6.1183.
- Zempektakis, L. A., Beldekis, P., & Moustaris, V. S. (2009). "Day-to-day" entrepreneurship within organisations: the role of trait Emotional Intelligence and Perceived Organizational Support. *European Management Journal*, 27(3): 165-175.

ORGANIZATIONAL WELL-BEING FACTORS. DETERMINANTS OF ENTREPRENEURSHIP IN SMALL AND MEDIUM COMPANIES OF THE DEFENSE SECTOR

*Helena de Almeida
Briones Peñalver*

ABSTRACT

All over the world, the small and medium enterprises are more and more organized in consortia, cooperation networks, joint-ventures and strategical alliances allowing not only the reduction of uncertainty and turbulence of the markets but also the gathering of advantages which may make them more competitive. It is worth considering that the results of these relationships are affected by determinant factors which may inhibit or facilitate the entrepreneurship. Our aim is to evaluate the relationship between some of those determinants, association, inter-company cooperation, innovation in the methods of work and creativity—about the entrepreneurship in 236 small and medium enterprises of the national defence. One of the questions initially posed is if there is a significant relation between corporation, innovative methods of work, creativity and entrepreneurship. Secondly, if being creative is an attribute of the entrepreneur, can it have a mediator effect between innovative methods of work and entrepreneurship? A factorial exploratory analysis was made in main components (varimax rotation) and multiple linear regression. The results show the direct relationship of the evaluated determinants and entrepreneurship and the partial mediator effect of the creativity between the innovation in the methods of work and entrepreneurship. These enterprises may expect to develop new methods of work as a high differential component concerning the competition and the more efficient use of knowledge and of the skills of the people who make part of the work team in order to increase their competitiveness.

Keywords: Cooperation, Creativity, Motivation, Entrepreneurship.

JEL Classification: L26

1. INTRODUCTION

Most of the new enterprises which have greatly developed after the industrial revolution in the globalized economy now derive from corporate entrepreneurship (Covin & Slevin, 2002; Dess, Ireland, Zahra, Floyd, Janney, Lane, 2003; Dreneker, 2007; Kuratko, 2009; Hornsby, Holt & Kuratko, 2008; Ireland, Covin & Kuratko, 2009; Stevenson & Jarillo, 1990;). The small and medium enterprises have had a growing importance, showing different scenarios, which have been presented in literature (Antoncic & Hisrich, 2001, 2003; Burgelman, 1984; Covin & Slevin, 1991; Devaraj, Hollingworth & Schroeder, 2004; Getz & Tuttle, 2001; Goodale, Kuratko & Hornsby, 2008; Hornsby, Kuratko & Goldsby, 2004; Krajewski, Ritzman & Malhotra, 2010; Kuratko & Zaheer, 2002; Martinez, Rodriguez & Vazquez,

2010; Pinchot, 1985). The Corporate Entrepreneurship is like a new strategy that creates new businesses and instigates renewal or innovation and creativity within an organization.

The challenge is to adapt the company to changing conditions by integrating people, processes and structure (Robbins, 2004, 2007).

The Corporate Entrepreneurship, which covers entrepreneurial behavior and its implementation in organizations as a way of fostering innovation, motivation to creative work and new perspectives of the same organization and business processes, aims to contribute to the development of companies that integrate greater Welfare. DeMasi (1999, p.330) states that "It's like inventing and spreading a new organization capable of raising the quality of life and work, leveraging on the quiet force of desire for happiness," and this will only become possible if an enterprising company promotes organizational Well-being.

Although the scholars, who have approached corporate entrepreneurship, have contributed a lot to the theory of its development, there is still room for an exploration more centered on the small and medium companies, especially because there is a growing need for corporate entrepreneurship and innovation in the organizations (Camp & Sexton, 2001; Hornsby, Kuratko, Zahra, 2002; Kuratko, Hornsby, Naffziger, & Montagno, 1993; Sexton & Upton, Bowman, 1991; Zahra, 1995) that are crucial to the well-being of companies. SMEs show a lower internal capacity of technological development and diffusion of I & D due to their lower capacity of expansion and external connection (Rothwell & Dodgson, 1991; Vaz & Nicolas, 2000 in Fernandes, 2009). It was supposed that they always innovate less than large enterprises, but, although they fall short in terms of internationalization of their innovation, there are recorded cases of great success at a regional level (Fernandes, 2009).

In this article about entrepreneurship and concerning the networks of inter-companies cooperation, more precisely the small and medium enterprises, it is intended to go further towards a better understanding of the influence of the internal cooperation, the use of innovative methods of work and creativity, in entrepreneurship, as a result of processes of reorganization of the enterprises and the intensification of the inter-company links, focusing the different approaches in literature which explain the phenomenon of the networks of the enterprise.

First, in this article, we intend to clarify the concepts of collaborative entrepreneurship, networks, innovative methods and creativity. Then, we will present the method we have adopted where we present the participants, the methodological procedure, the way the variables operate and the data processing. Finally, we present the results, conclusions and practical implications for the small and medium companies.

The philosophy behind this approach which combines the Entrepreneurship Innovation, Creativity and Competitiveness is based on the principle that the viability of a company relies on the following two major objectives:

An economic development to reflect an effective exploitation of resources, preserving the environment and generating welfare (health, employment, wealth and valuing individual);

An Environmental sustainability that does not hamper economic development while building the Well-being of its employees.

2. COLLABORATIVE ENTREPRENEURSHIP

The different fields of research which were developed have expanded the traditional entrepreneurship in areas like the intra-entrepreneurship or corporative entrepreneurship and, more recently, the collaborative entrepreneurship. In the collaborative entrepreneurship, the investigators (Hornsby, Holt & Kuratko, 2008; Kuratko, 2009; Ireland, Covin & Kuratko, 2009; Miles, Miles, & Snow, 2006; Pinchot, 1985; Zahra, 1995, among others) note that

the organizations look for more collaborative relationships in a world network of companies, leading to a continuous innovative strategy. They defend that the small and medium enterprises mainly act in a collaborative way, as they do not have the resources to participate in a continuous innovation by themselves; they see the network as an essential means to do business. Gray and Wood (1991) define collaboration and its occurrence in the following way: “collaboration is a process through which different parts, when they see different aspects of a problem, may, in a constructive way, explore their differences and look for limited visions”. The collaboration happens when a group of “autonomous stakeholders,” that dominate a problem, involve themselves in an interactive problem using role division, norms and structures to act or decide questions related to the problem”. For these authors (Gray & Wood, 1991), all the organizational theories emphasize that the environmental complexity, uncertainty and turbulence are among the problems faced by an organization, and one of their main tasks is to reduce such problems to controllable situations. The authors defend that, in some theories, the organizations collaborate to reduce and control the problems, but none of them offer a model of cooperation. A second explanation is that working from a vision based on resources of the enterprise suggests that the human capital is a unique, inimitable resource which may lead to competitive advantages in the long term (Hatch & Dyer, 2004; Hitt, Bierman, Shimizu, & Kochhar, 2001; Hornsby, Holt & Kuratko, 2008; Ireland, Covin & Kuratko, 2009; Lepak & Snell, 1999; Kuratko, 2009; Wright, McMahan, & McWilliams, 1994). Ahuja (2000) indicates two large classes of explanations from the perspective based on resources, reflecting incentives from the enterprises or incentives to cooperate; he states that the enterprises form connections as a way of having access to the necessary goods (Hennart, 1988; Hagedoorn & Schakenraad, 1990; Nohria & Garcia-Pont, 1991), learn new abilities (Baum, Calabrese & Silverman, 2000; Hennart, 1988; Kogut, 1988; Powell, Koput, & Smith-Doerr, 1996;), and manage their dependence in relation to other enterprises (Garcia-Pont & Nohria, 1999).

A second set of explanations about the network resources is that an enterprise must collaborate, once it has a position in the network which was previously a structure, suggesting that the patterns of negotiation and collaboration observed in the enterprises reflect the previous patterns of inter-organization relationships (Gulati, 1995, 1999; Gulati & Gargiulo, 1999; Walker et al., 1997) to support the dependence of the trajectory of the vision of collaboration suggested by the vision based on resources, influencing the entrepreneurship in a positive way. However, it is not the human capital but the relationships that the human beings establish that are the most important and inimitable capital. Therefore, the enterprises which can go beyond the human capital and develop the high value relational capital will succeed, especially because the variation rate increases business.

We think that the small and medium companies are today the best prepared group of enterprises to take advantage of the relational capital. It is known that all organizations need coordination (Van de Den Delberg, 1976). The internal coordination is inherent to the organization, once it identifies and establishes work priorities and integrates the different parts and tasks to reach collective aims. Besides the external barriers, these companies also aim at removing barriers among the internal sources of skilled knowledge. So, the inter-department integrations are attractive. At the structural inter-department level, they are also interesting. At the structural level they create a series of mechanisms of coordination and multi-functional teams which promote the collective knowledge and creative skills. The model of relational vision of Dyer and Singh (1998) suggests that the potential that an enterprise has to create a competitive advantage does not depend only on its resources, but also on its relational assets, that is, on its relationship with other key companies. On the sequence of the language based on resources, the inter-organizational links can also be idiosyncratic and, therefore, they can be a competitive added value advantage. The relational

capital is defined as the set of all the market relations, relations of power and cooperation established between companies, institutions and people, which results from a strong feeling of belonging and a highly developed capacity of cooperation typical from the culturally similar peoples and institutions (Capello & Faggian, 2005).

The concept of cooperation can be translated as the concept of mutual help between two or more parts which follow a common objective. The generic concept also applies to economy and to the business world. Cooperation consists of an agreement which establishes strategical alliances which allow the different actors not only to reduce uncertainty and turbulence but also to conjugate advantages in a perspective in which the global benefit is superior to the individual action. The most recent western business organizations reinforce models of cooperation, alliances, strategies and internal and external networks in the companies as it already happens in the Japanese “Keiretsu”, in the South Korean “charbol” or in the “quaxi” (Chinese networks). The flexible company, where the borders of the organization are less clear, is more valued (Schwartz, 1997). For some authors like Piore and Sabel (1984) and DeSousa (1993), the new relations between the companies represent a paradigm of “flexible link”, sometimes through non-institutional mechanisms, not only with relations of competence in regional markets but also with the development of ways of cooperation in more vast, national or international markets. The literature about networks also deals with this subject from the studies that show the usefulness of a social network in order to support the new companies (Birley, 1986), to those that analyze the way an efficient network can be supported in the long term (Birley & Lawrence, 1988; Jarillo & Ricart, 1987, 1988). Certainly, because the networks can be the way to facilitate opportunities, generating capacity to get access to the resources scattered in the organization, with no need of installing a previous thorough process of appropriations, this literature can now be considered as relevant to the entrepreneurship.

3. NETWORK OF ENTERPRISES

How to be competitive in a more and more globalized world which is, simultaneously, more regionalized and localized? – This is the main question to be answered by the theoretical approaches of innovation and competitiveness, while driving forces of the development strategies (Cabaço, 2009).

The small and medium companies have become more and more important in the pursuit of the world economic and social development (Nassif, Ghobril, & Silva, 2010). Besides being an important source of creation of employment, the small and medium companies are also a powerful source of innovation. The companies of a small and medium dimension are more frequently organizing themselves in trusts, networks of cooperation, joint-ventures and strategical alliances. These arguments represent a bigger occupation of the spaces and an increase of the degree of entrepreneurship. Traditionally, the sector of the small and medium companies is considered important due to its capacities to generate employment or to contribute to the industrial production. During the 1980s, the interest in studying the small and medium companies increased because of the difficulties of the big ones in supporting the level of employment in most of Western Europe (Sebrae, 1996). The phenomenon of the network of companies is not exclusively from the developed nations; the same happens in countries where industrialization is recent like in Southern Asia and Latin America. A change in the industrial organization has been verified since the 1970s. For example, there was the creation of industrial districts of the so called “third Italy”, the local productive systems in France, Germany, the United Kingdom, and Silicon Valley in the USA and the networks of enterprises in Japan, Korea, and Taiwan (Sebrae, 1996). The small and medium companies

started to incorporate state of the art technologies in the productive processes, to modify internal organizational structures and to look for new links with the social and economic context, in order to find a way of industrial restructuration which might compete in some sectors like the big companies. This is strictly related to the character of the technological innovations of the last years, in particular with the electronic industry, robotics, and computers. The entrepreneurs tend to initiate their new companies in the area where they live. They develop networks strongly rooted in the regional context. The limited empirical literature clearly shows that the entrepreneurs present a geographical inertia (Sorenson & Audia, 2000) and defends the hypothesis of the “regions subject” to the investigation of entrepreneurship. According to Leon (1998), the networks of enterprises are initially formed with the aim of reducing uncertainty and risks, organizing economic activities, and from the coordination of networks between enterprises (small and medium enterprises) there is the possibility of these becoming flexible networks of small and medium enterprises as clusters of enterprises or as networks of cooperation, usually as virtual organizations or even as the so called “supply chain management”. According to Powell (1990), many authors have agreed that there is a new way of economic organization; others admit that a new social organization is emerging. For him, the economic exchanges are involved in a particular context of social structure, depending on connections, mutual interests and reputation and with little guidance of a formal structure of authority.

To Ribault and his collaborators (1995), the society of companies, sometimes called network of companies, is a way of gathering companies aiming at favouring the activity of each of them even if they do not have financial connections. The network companies complement each other in the technical plans (productive means) and commercial plans (networks of distribution) and decide to support one another without any priority, but the constitution of a network may also be translated by the creation of a central of purchase common to the enterprises of the network. It is, therefore, an affinity model of association of informal nature which makes each company responsible for its own development. It is a choice of structure which adapts well to the small and medium companies to which this type of association is a way of fulfilling the motto “many hands make light work”. Casarotto (2001) defends that the small companies may benefit from the scale of regional branding, scale of production, scale of technology, scale of logistics and from their inclination and region to become competitive. Casarotto (2001) states that it is usually romantically said that the companies of the same segment and of the same region are not competitors, but sisters, and as sisters they should collaborate with each other. According to him, this cultural process is of long maturation. Even if the entrepreneurs take the initiative of creating their networks of cooperation, success will only be reached if there is a model of local development, as it is the case of the enterprises of this study, with the participation of the whole society.

In the specific case of the enterprises which were targeted by this study, they belong to the same economic sector related to the industry of defence and have their origin and incitement in the policy of modernization of the armed forces and of the systems of defence. They develop a concerted collaborative work, where the performance of any partner helps the whole network and the global increase of entrepreneurship. In this context, the present work aims at analyzing the role of a network of small and medium companies of the sector of activity of national defence as agents of promotion of cooperation, creativity and motivation influencing entrepreneurship. Furthermore, the relational capital is the dependent path, and the enterprises are limited by the limits of their network, in a way that they can be unable to take advantage of some opportunities because their relationships do not give them access to appropriate resources to do it. So, the limits of the social capital also create costs of opportunity (Hitt, Lee & Yucel, 2002).

Summarizing, the organizations may establish inter-organizational relationships as a way of becoming more stable when facing the environmental uncertainties, that is, they use the relationships as an adaptive answer to the uncertain environment. The environmental uncertainty is created by the shortage of resources, and this motivates the organizations to establish relationships in order to reach stability and predictability in the relationship with other organizations (Brass, Galaskiewics, Greve & Tsai, 2004; Galaskiewics, 1985; Nassif, Ghobril, & Silva, 2010; Whetten & Leung, 1979).

4. TECHNOLOGICAL INNOVATION AND CREATIVITY

The ability to innovate is today recognized as one of the main strands of competitive advantage in the enterprises. The innovation does not appear at random in the society, and, if certain measures were taken and certain environments created, the Innovation starts to become more easily real (Pinto, 2009). Becattini (1999) states that, in today's market characterized by the fast growth of saturation of demand, the competitiveness of the enterprises has the tendency to be more determined by the innovative capacity than by the productivity. The only common feature to all the definitions concerning technological innovation is that to innovate implies novelty, and the world acts as a regulating agent and as a booster of innovation; however, it demands knowledge and dexterity which can become a sustainable competitive advantage (Hornsby, Kuratko, Zahra, 2002; Ireland, Hitt, Camp & Sexton, 2001; Tidd, 2001).

Innovation is a breakthrough applied according to the technological development, which may involve a new product, a new service or new practices in processes and new technologies (Shumpeter, 1939), as well as the contribution or certain sources of knowledge. In innovative processes, technology is considered as one of the production inputs, which allows adaptation, a better position in the market and the preservation of a sustainable competitive advantage, at least temporarily (Chiva & Camisón, 2001; Hornsby, Kuratko, Zahra, 2002; Ireland, Hitt, Camp & Sexton, 2001). The enterprises which need to reach a certain growth in their activities and dimension do not disappear in situations of recession such as the present one; they must opt for innovations based on their own inventions, aiming at making the difference from their competitors (Carbonell, Rodríguez, & Munuera, 2004).

There are case studies like the ones from Urbano and Toledano (2008, p. 219), which analyze the creation, development and implementation of innovation in the small and medium companies. Specifically, it is analyzed that the small and medium companies which operate in the technological sectors have more chances of generating innovative projects, finding evidence that the entrepreneur and manager are the main catalysts and inhibitors of these innovative processes. It can be stated that the competition of the company sees itself reinforced because of its capacities of technological innovation in companies related to its industry. Despite the risk and uncertainty, innovation, when successful, may give origin to a relevant impact in the economic outcome of the companies. In the companies, innovation is more and more a key factor of business competitiveness. Companies which are aware of this should make an effort in order to innovate, and, consequently, they should try to create a sustainable competitive advantage; this is why it is crucial to study it. Porter (1996) states that a company can only succeed in creating better results than its competitors if it manages to create a differentiating factor which is kept over time, with innovation or the acts of innovation being the main instrument of creation of that competitive advantage.

Mollón and Vaquero (2004) still note that there are more and more companies which, being aware of the fact that the accomplishment of the innovative activities contributes to a source of competitive advantages, make an effort to innovate. They defend that the

systematic observation of the company which has competitive success has shown that such companies base their competitiveness on an innovative capacity supported by an accumulation of resources and capacities which are difficult for competitors to reproduce and imitate. To Schumpeter, innovation is something intrinsic and spontaneous to the entrepreneur. He defends that the entrepreneur has a well defined role, which is shown when he makes changes or revolutions in the patterns of production when he creates new possibilities, transforming something that is already known, breaking in new sources of supply, and creating new products. This process, which can make new combinations, becomes faster and faster through the improvement of products and services, making the obsolescence more and more accelerated. In Schumpeter's approach, only the one who can make new combinations can be considered an entrepreneur; when he only runs the business he loses that position being only a manager. For the author, understanding and management are two different functions. The difference between entrepreneur and non-entrepreneur in the act of innovating. It is believed that this approach takes into consideration the fact that, when the entrepreneur starts managing the company and dealing with bureaucratic processes associated to management, he stops performing new combinations, a function which characterized him, and he becomes only a manager. To Cário and Pereira (2001), "innovations disrupt this picture of a slowly changeable balance providing the opportunity for the economic expansion". That is why, to Schumpeter, the entrepreneur is an agent of balance in the economy, the agent of "creative destruction", who innovates, imposes changes and breaks routines.

On the other hand, once creativity becomes an inherent characteristic of people, inevitably it converts into an element which horizontally affects the set of processes which are specific to the business activity. So, creativity must become one more asset, in a transversal way in the whole chain of value, within the culture of the company. The most creative and innovative companies, besides an efficient management, are characterized by the systematic use of the creative perspectives and techniques, which allows them to feed the continuous process of innovation and creation of ideas and to stand out in the competition. The creative process follows a scheme, looks for alternatives to an existing situation or the finding of solutions which provide an answer to problems which may occur. The predisposition to find solutions and to change (seeing it as positive) also implies the existence of a creative attitude. Creativity is associated to the use of methods which do not respond to logical and traditional schemes. For the organizations to use creativity in a more efficient way, it is necessary that they know the process of innovation in the organizations, and that they take measures to encourage this process. Given this, the investigation should develop around a set of questions of investigation, namely: is there a significant relationship between cooperation, innovative methods of work, creativity and entrepreneurship? With creativity being a characteristic of the entrepreneur, will he have the capacity of performing a mediator effect between innovative methods of work and entrepreneurship? It is thus intended to evaluate the relationship between the variables cooperation intra-enterprises, innovation of the methods of work, and creativity in the entrepreneurship.

5. METHOD

5.1. Participants and Procedure

A population of enterprises related to the Spanish industry of defence has participated in the present study, considering the criterion that they are important entities concerning their relation with the defence while keeping routine commercial relations with the ministry of defence. The data base that was used concerning the year 2003 was offered by the Direccin

General de Asuntos Económicos del Ministerio de Defensa with the general aim of knowing the strategical determinants focusing the organization of defence, based on the training and modernization strategy of the Spanish Armed Forces and of the Systems of Defence and the analysis of the processes of cooperation of companies related to defence. The present study corresponds to a part of the central study trying to focus on modernization in companies associated to the national defence.

The participating companies have answered a questionnaire that was sent by mail between February and August of 2004. Two hundred and thirty six people completed questionnaires that were sent back, corresponding to an answer rate of 52.44% with a percentage of error of 4.4% to $p = q = 50\%$ and a level of trust of 95.5. Concerning legal training, 57.6% of the participating companies in the present study have formed cooperative societies and business societies (42.4%). Although they develop processes of cooperation related to the defence, they mostly belong to the tertiary sector (68.2%), followed by the secondary sector (28.8%) and, lastly, by the primary sector (1%) (missing system = 1.5%).

5.2. Operationalization of the Variables and Data Processing

The indicators were created for the present study by the collaboration between the department of Economics of the enterprise of the Polytechnic University of Cartagena and the Ministry of Defence concerning the needs presented by this ministry and based on the literature about this subject. All the indicators were answered on a Likert scale of 5 points in which 1 corresponds to the value people disagree more with each item and 5 to the value people agree more with each item. Alfa of Cronbach was calculated as a measure of evaluation of the internal consistency of the scales. Factorial analysis was used as a technique of reduction of the dimensionality of the data. We have applied as a method the extraction of factors in the Analysis of Main Components, and the items with a charge equal or superior to .50 were elected, applying the test of Kaiser Meyer Olkin (KMO) and the proof of sphericity of Bartlett. To determine how the independent variables included in the hypothesized model influence the criterion variable Transfer of Training, the procedure of analysis of the Linear Multiple Regression of the programme Statistical Package for the Social Sciences (SPSS) version (17.0) was adopted. On the evaluation of the mediator effect of the creativity variable, the test of the effects of mediation was adopted, following the procedures recommended by Baron and Kenny (1986). Specifically, on the evaluation of the simple mediation effect (the effect of X on Y is measured by M) the following steps were observed: (1) showing that X (predictor) relates to M (mediator)—consists of estimating the coefficient of regression of M in X in a model of simple regression (Model 1); (2) showing that X (predictor) relates to Y (result variable)—consists of estimating the coefficient of regression of Y in X in a model of simple regression (Model 2); and (3) showing that M relates to Y when X is constant—consists of estimating the coefficients of regression of Y on M and of Y on X in a model of multiple regression (Model 3). If the data suggest that the coefficient of regression estimated in step (1) is not null, but that its similar model of multiple regression estimated in step (3) is not different from zero, then we should conclude that the effect of X on Y is totally mediated by M (complete mediation). If the coefficient of regression estimated in step (1) is not null and its similar in the model of multiple regression estimated in step (3) softens but continues being different from zero, then we should conclude that the effect of X on Y is partially mediated by M (partial mediation). The calculation tests of Sobel of Preacher and Leonardelli (Retrieved from <http://people.ku.edu/~preacher/sobel/sobel.htm>) are also made in order to verify whether or not the obtained paths in the structural equations are significant.

6. DATA PRESENTATION

In this section, the results are presented that were obtained through the analysis of the given answers by the 206 companies inquired by the instrument used to operationalize the variables being studied. We now begin the presentation of the results with an exploratory factorial analysis of the different variables of the study made, and then a descriptive analysis of the different variables for the whole of the respondents.

First, an Exploratory Factorial analysis was conducted in principal components (varimax rotation) of the indicators which constitute the variables of the model of analysis. This analysis allowed extracting four independent factors which correspond to the variables we intend to study and which explain 68.9% of the variance. Indexes for each variable were created, while retaining the indicators with a higher weight in each factor, according to the described operationalization (see Table 1).

Table 1 - Results of the Factorial Analysis in Main Components (Varimax Rotation) (N = 236)

Indicators	Factorial weight				
	Commonalities	1	2	3	4
Intra- company cooperation					
Opportunist behaviours	.79	.87	.12	.09	.07
Lack of confidence and commitment	.74	.82	.06	.12	.22
Motivation, conciliation and commitment	.75	.78	.31	.11	.01
Negotiation and coordination of efforts	.67	.77	.35	.18	-.04
Information, dedication and working time	.57	.73	.37	.07	.03
Lack of appropriateness to the interests	.71	.71	.04	.24	.03
Innovation in working methods					
Access to segments of the market	.71	.19	.81	.14	.06
Skilled workers	.77	.14	.80	.19	.18
New products and services	.71	.30	.79	.24	.10
Investigation and development of technologies	.68	.08	.77	.30	.00
Ability to adapt	.45	.29	.56	-.02	.16
Entrepreneurship and creation of companies	.				
Spin-off	.70	.00	.30	.77	.04
Cooperation with companies	.68	.13	.35	.71	.25
Business previous failure	.57	.30	.07	.69	.08
Lack of information	.31	.31	.11	.62	.28
Creativity					
Fulfilment	.79	.12	.27	-.05	.84
Creative personality	.76	.05	.17	.20	.83
Restless spirit	.79	.02	-.09	.37	.81

Note. The higher factorial weights in each factor are (in bold) KMO = 0.82.

Table 2 presents the average, standard deviations, correlations and the internal consistency of the variables which constitute the analyzed model.

We also conduct a co-relational and regression analysis to evaluate the two raised questions about whether there is a significant relation between cooperation, innovative methods of work, creativity and entrepreneurship, and, if being creative is an attribute of

the entrepreneur, will it have the capacity of having a mediator effect between innovative methods of work and entrepreneurship, trying to proceed to its validation?

Table 2 - Average, Standard Deviations, Correlations and the Internal Consistencies (N = 66)

Variable	N	M	DP	1	2	3	4
Intra-company cooperation	236	3.2 ^a	1.0	(.90) ^b			
Innovation in working methods	236	2.9 ^a	1.1	.50**	(.87)		
Entrepreneurship and creation of companies	236	1.9 ^a	1.0	.44**	.52**	(.78)	
Creativity	236	3.1 ^a	1.3	.21*	.30*	.42**	(.82)

Notes. ^a Scale 1 to 5; ^b the diagonal presents the values of alpha of cronbach; * $p < 0.05$, ** $p < 0.01$.

Concerning the correlations, we can see that all the variables are positively and significantly associated. The variable which is the most strongly correlated to entrepreneurship is innovation in the methods of work ($r = (.52) **$), followed by intra-company Cooperation ($r = (.44) **$). The variable which is the least correlated to the result variable is Creativity ($r = (.21) *$). All the analyzed variables show good psychometric qualities expressed by the values of internal consistency of alpha of cronbach (values equal or superior to 0.78).

With the aim of testing the mediator effect of Creativity, we analyzed the models of regression in which we included, besides the antecedents, the intermediate variable. Furthermore, the demographic variables were also included in the analysis, but they were later removed once they failed to show any predictive power in Entrepreneurship. With the aim of understanding if each antecedent has a significant contribution in the intermediate variable, we analyzed Model 1 (see Table 3).

Table 3 - Standardized Coefficients of Regression Referring to the Antecedent Variables Over the Variables of Result When the Effect of Intermediate Variable is Included (N = 66)

	Model 1	Model 2	Model 3
	Creativity and motivation	Antecedents	Antecedents + Creativity
	Entrepreneurship		
Intra-company cooperation	$\beta = 0.28$ $p = 0.01$	$\beta = 0.43$ $p = 0.000$	$\beta = 0.36$ $p = 0.000$
Innovation methods of work	$\beta = 0.35$ $p = 0.02$	$\beta = 0.47$ $p = 0.000$	$\beta = 0.43$ $p = 0.000$
Creativity		$\beta = 0.31$ $p = 0.000$	
Intra-company cooperation and innovation in the methods of work		$\beta = 0.34$ $p = 0.002$	$\beta = 0.26$ $p = 0.05$

Notes. * $p < 0.05$, ** $p < 0.01$.

The results show that the intermediate variable Creativity relates with the antecedent variables intra-company cooperation ($\beta = 0.28$, $p < 0.01$) and with Innovation in the methods of work ($\beta = 0.35$, $p < 0.02$) in a positive and very significant way, accomplishing the first step of the mediation of Baron and Kenny (1986).

As we can see in Model 2 of Table 3, the analysis of the estimates of the coefficients of regression, when only the antecedents are considered, allows us to state that both intra-company cooperation ($\beta = 0.43$, $p = 0.000$) and Innovation in the Methods of Work ($\beta = 0.47$, $p = 0.000$), influence in a positive way the variable of result (Entrepreneurship). The

same happens with creativity whose effect on entrepreneurship is also significant ($\beta = 0.31$, $p = 0.000$). These results are consistent with step (2) of the model of mediation suggested by Baron and Kenny (1986).

With the aim of understanding if the intermediate variable specifically mediates the effect of the antecedents on the variable of result, we analyzed the models of regression in which we included first each of the antecedent variables in an isolated way and then together, followed by the intermediate variable. In Model 3 we can see that, in the presence of the variable creativity, the direct effect initially performed by the intra-company cooperation on entrepreneurship ($\beta = 0.43$, $p = 0.000$) and by the Innovation of the methods of work ($\beta = 0.47$, $p = 0.000$) is significantly maintained ($p < 0.01$) although it gets slightly lower in magnitude (from $\beta = 0.43$ to $\beta = 0.36$ to intra-company cooperation; and from $\beta = 0.47$ to $\beta = 0.43$ to innovation of the methods of work, suggesting the existence of a partial mediation between these two antecedents and the criterion variable. Nevertheless, the test of Sobel only showed significance of the effect of innovation in the methods of work on entrepreneurship ($Z = 2.05$; $p < 0.01$). Thus, we may conclude that creativity has a partial mediator effect only on one antecedent (innovation in the methods of work) managing to diminish the magnitude of the direct relation between innovation in the methods of work and entrepreneurship.

Model 3 (see Table 3) still shows that, in the simultaneous presence of both antecedents— intra-company cooperation and innovation—the intermediate variable C—can diminish the magnitude of this relationship (from $\beta = 0.34$, $p = 0.002$ to $\beta = 0.26$, $p = 0.05$). According to the test of Sobel, this result shows the presence of a significant partial mediation ($Z = 1.4$, $p < 0.01$). Summarizing, the joint presence of both antecedents is important so that creativity can have a partial effect between these and the criterion variable (entrepreneurship).

7. CONCLUSIONS

It is absolutely important to point out that, with the growing productive restructuration and the movements of “cooperation”, the pressures for cost reduction and the increase of productivity are giving origin to the formation of new arrangements between companies, especially in the small and medium companies. These groups are focused on further cooperation between them, offering new elements to a possible formulation of industrial policies. The results of the study allow us to confirm the direct relation of intra-company cooperation with entrepreneurship, suggesting that a higher degree of understood cooperation within intra-companies increases entrepreneurship. It also found support for the influence of innovation in the methods of work on entrepreneurship, signaling that when the participating companies understand the existence of innovative methods they are more willing to venture. Therefore, the answer to one of the questions initially posed, if there is a significant relation between cooperation, innovative methods of work, creativity and entrepreneurship, is affirmative. Concerning the mediator effect which was tested, the results show that creativity can have a partial mediator influence on the innovation of the methods of work. This result allows us to conclude that the innovation of the methods of work act at the level of the creativity which determines the level of entrepreneurship of the company, meaning that when these companies understand that there are innovative methods of work, they stimulate creativity and innovation in order to increase their entrepreneurship. The results also allow us to infer that these companies develop creativity when they understand that there is intra-company cooperation and innovative methods of work at the same time. Thus, we may conclude that the existence of cooperation and innovative methods of work is fundamental to stimulate creativity which, in turn, triggers entrepreneurship. It means that the answer to the second

question, if being creative is an attribute of the entrepreneur, can it have a mediator effect between innovative methods of work and entrepreneurship, is affirmative, once creativity can have a partial mediator effect. The results show an empirical evidence of what was referred by Nunamaker, Romano, and Briggs (2002) in the revision of the literature, which noted that the concerted collaborative work, where the performance of any partner helps the entire network, produces a global increase in performance. It suggests that the patterns of the observed collaboration between the companies reflect the previous patterns of relations between inter-companies (Gulatti, 1995; 1999; Walker et al., 1997; Guleti & Garginha, 1999) supporting the dependence of the trajectory of vision of collaboration suggested by the vision based on resources, positively implying the entrepreneurship. The results which were obtained are according to diverse authors (Sexton & Upton Bowman, 1991; Hornby et al., 1993; Kuratko et al., 1993; Zahia, 1995; Hosbyand et al., 2002; Ireland, 2002) who remark on the growing need of exploring corporate entrepreneurship and innovation in the organizations. The results are according to what was referred in the literature, that human capital is a unique, inimitable resource, which may lead to the competitive advantage in the long term (Wright et al., 1994; Lepak & Snill, 1999; Hitt, Bierman, Shimizu, & Kochhar, 2001; Hatch & Dyer, 2004).

Summarizing, the analyses which were conducted show that the intra-company cooperation, innovation in the methods of work and creativity influence the entrepreneurship both positively and significantly.

Concerning the effect of mediation of the intermediate variable creativity and Innovation, we may state the following:

Concerning the intra-company cooperation, its isolated presence (without the effect of innovation in the methods of work) is insufficient to produce a mediator effect. Concerning innovation in the methods of work, its isolated presence (without the effect of the inter-company cooperation) is enough to produce a partial mediator effect, once it can reduce its effect on the variable of result, although it continues to be very significant. In the joint presence of the intra-company cooperation and Innovation in the methods of work, the reduction of its effect on the criterion variable, in the presence of the intermediate variable, shows the existence of the partial mediator effect. This means that the presence of both antecedents is decisively important to show the partial mediator effect of creativity.

8. PRACTICAL IMPLICATIONS

The present study establishes the importance of entrepreneurship as a factor of development in the management of the networks of the companies, and it points out the findings that investing in the development of the entrepreneurial spirit and in the characteristics necessary for a good management is fundamental. It shows that some entrepreneurial characteristics should be present such as cooperation, innovative methods of work, creativity and motivation. A more demanding environment in the global markets is forcing companies, and particularly the small and medium companies, to be almost compelled to cooperate in networking. This cooperation develops into a long term relationship of more trust between the partners of the network, allowing a sharing of knowledge to improve and innovate. The demand of networking by the small and medium companies is due, in part, to the need to reduce uncertainty and increase stability, to obtain opportunity when being associated to the network, to gain benefits from the network and because they need help to grow.

The network provides new knowledge at a lower cost. The mechanisms of control of the network prevent opportunist actions of some members. That is why the formation of the networks is important, because it provides a means of exchange of information and the

articulation of business among the enterprises, making the promotion of consortia easier, with the aim of stimulating strategies and preventing the disappearance of ventures which cannot survive alone. At the same time that entrepreneurs defend that the enterprises should outline their strategies only to gain profit, others put into practice the fact that the local development is their responsibility. Besides, the development of the entrepreneurship gains great proportions in an environment of network articulation. The small and medium enterprises have conditions to participate in the innovative process and, as a consequence, in the local economic development. The small and medium enterprises may develop processes of creation, apprehension transformation, accumulation and dissemination and sharing of knowledge, fundamental elements for the technological development and stimulation of development. Through the social knowledge produced in the network, the emphasis goes to the ability to learn and innovate, which are also considered important to ensure the competitiveness of the companies. The more advanced the practices of the companies in their activities of innovation, the more ability they will have to apply innovations. Success does not depend only on having or not having the most recent technologies, but on having the most productive technologies, which can be used in a large number of applications. No less essential is to take advantage of the opportunities created by the technologies which were developed in other places by the regulatory framework. Nevertheless, the results of investigation and technology do not automatically translate into new commercial activities or into an increase in productivity.

The use of technology often demands that the company has highly skilled workers. The intellectual capital and the investments to promote it should be more effectively used. The companies have not yet understood how much they can earn with innovation which results from the improvement of the professional skills of the workforce. Unfortunately, according to an inquiry of Eurofound (European Foundating for the Improvement of living and working conditions) about the conditions of work and a study of CEDEFOP (The Learning continuity: European inventory on validating non-formal and informal learning), the European companies continue to invest too little on intellectual capital. Only 26% of the companies which train their workforce can foresee the Professional skills which will be necessary in the future. The interest in work, the creative skills and the initiative of the workers are fundamental (80%) for the success and position of the companies and organizations. Only now are we beginning to understand these factors and to take advantage of them with competitive tasks, due to the fact that the directors are rarely well informed about their importance. Nevertheless, this study, because of the growing interest in the study of the capacities of the processes of innovation, tried to provide an answer to why the innovative methods, cooperation and creativity can be a tool to success'; their use gives the opportunity of venturing, succeeding in making the company different from its competence, because it is more efficient in the productive process via technological methods. It would be desirable, in future studies, to develop comparative studies with small and medium companies from other sectors of activity.

Only in this competitive environment can the challenges presented to us be met, since it is the only one that promotes its major pillars of support:

- An Entrepreneurial ability profitable and widespread, giving the company all goods and services required;
- An Innovative and Creative capacity that encourages Entrepreneurial ability, ensuring quality levels of goods and services in society and ensuring a competitive basis to companies.

Nevertheless, this work has raised the interest in studying the capabilities of innovation processes, tried to respond to why the innovative methods, cooperation and creativity can be a tool for success, and also showed that their use engages the ability to undertake new

opportunities, differentiating the company to achieving its mission by becoming more efficient in the production process via technological methods. It would be desirable in future studies to develop comparative studies with SMEs from other sectors of activity.

ACKNOWLEDGEMENTS

This paper was partially financed by FCT, Foundation for Science and Technology.

REFERENCES

- Antonic, B. & Hisrich, R. D. (2001). Intrapreneurship: Constructive refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5): 495–527.
- Antonic, B. & Hisrich, R. D. (2003). Clarifying the Intrapreneurship Concept. *Journal of Small Business and Enterprise Development*, 10(1): 7–24.
- Baum, J. A. C.; Calabrese, T. & Silverman, B. S. (2000). Don't go it alone: alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, March Special Issue 21(3): 267–294.
- Birley, S. (1986). The role of networks in the entrepreneurial process. *Journal Business Venturing*: 107–117.
- Bisbe, J. & Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. *Accounting, Organizations and Society*, 29(8): 709–732.
- Brass, B.; Galaskiewicz, J.; Greve, H. & Tsai, W. (2004). Taking stock of networks and organizations: a multilevel perspective. *Academy of Management Journal*, 47(6): 795–817.
- Burgelman, R. A. (1984). Designs for Corporate Entrepreneurship, *California Management Review*, 26: 154–166.
- *Cabaço, S. (2009). Sustainable development and innovation – insight from regional stakeholders in the Algarve. *Spatial and Organizational Dynamics*, 0, Capítulo VI: 119–139.
- Capello, R. & Faggian, A. (2005). Collective learning and relational capital in local innovation processes. *Reg Stud*, 39(1): 75–87.
- Carbonell, F. P.; Rodríguez, E. A. & Munuera, A. J. L. (2004). Technology Newness and Impact Go/No Go Criteria on New Product Success. *Marketing Letters*, 15(3-3): 81–91.
- Casarotto Filho, N. & Pires, L. (2001). *Redes de pequenas e médias empresas e De souza, M. (1993). Cooperação Inter-empresas e difusão das inovações Organizacionais. SCTDE/Desenvolvimento Regional: Estratégias para a conquista da competitividade global com base na experiência italiana. 2 ed. São Paulo: Editora Atlas.*
- Covin, J. G. & Slevin, D. P. (2002). The entrepreneurial imperatives of strategic leadership. In: Hitt, M Ireland, R.D., Camp, M., Sexton, D. (Eds.), *Strategic Entrepreneurship: Creating a New Mindset*. Blackwell Publishers, Oxford, UK.
- Das, S. R. & Joshi, M. P. (2007). Process innovativeness in technology services organizations: Roles of differentiation strategy, operational autonomy and risk-taking propensity. *Journal of Operations Management*, 25(3): 643–660.
- Dess, G. G.; Ireland, R. D.; Zahra, S. A.; Floyd, S. W.; Janney, J. J. & Lane, P. J. (2003). Emerging issues in corporate entrepreneurship. *Journal of Management*, 29 (3): 351–78.

- Devaraj, S., Hollingworth, D. G. & Schroeder, R. G. (2004). Generic manufacturing strategies and plant performance. *Journal of Operations Management*, 22(3): 313–333.
- Drucker, P. (2007). *Innovation and Entrepreneurship: Practice and Principles*. Elsevier B.V., New York.
- Drucker, P. F. (1985). Entrepreneurial strategies. *California Management Review*, 27(2): 9-25.
- *Fernandes, S. (2009). The importance of SMEs to innovation. *Spatial and Organizational Dynamics*, 0, Capítulo 1: 14-39.
- Friedman, A. & Miles S. (2002). SMEs and the Environment: Evaluating Dissemination Route and Handholding Levels. *Business Strategy and the Environment*, 11: 324–341.
- Galaskiewicz, J. (1985). Inter-organizational relations. *Annual Review of Sociology*, 11: 281-304.
- Getz, G. & Tuttle, E. G. (2001). A comprehensive approach to corporate venturing. *Handbook of Business Strategy*, 2(1): 277–279.
- Goodale, J. C., Kuratko, D. F. & Hornsby, J. S. (2008). Influence factors for operational control and compensation in professional service firms. *Journal of Operations Management*, 26(5): 669–688.
- Gray, B. & Wood, J. (Ed.). *Collaborative alliances: Moving from practice to Theory*. *Applied Behavioral Science*, vol. 27, number 1.
- Gulati R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38(1): 85–112.
- Gulati R. (1998). Alliances and networks. *Strategic Management Journal*, April Special Issue 19: 293–317.
- Gulati, R. & Gargiulo, M. (1999). Where do inter-organizational networks come from? *The American Journal of Sociology*, 104 (5): 1439–1493.
- Hagedoorn J. & Schakenraad J. (1990). Inter-firm partnerships and cooperative strategies in core technologies. In: Freeman C, Soete L (eds) *New explorations in the economics of technical change*. Pinter, New York.
- Hatch, N. W. & Dyer, J. H. (2004) Human capital and learning as a source of sustainable competitive advantage *Strategic Management Journal*, 25(12): 1155–1178.
- Hennart J. F. (1988). A transaction costs theory of equity joint ventures. *Strategic Management Journal*, 9(4): 361–374.
- Hitt M. A.; Bierman L.; Shimizu K. & Kochhar R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: a resource-based perspective. *Academic Management Journal*, 44: 13–28.
- Hitt, M. A.; Lee H. & Yucel E. (2002). The importance of social capital to the management of multinational enterprises: relational networks among Asian and Western firms. *Asia Pac J Manage*, 19:353–372.
- Holt, D. T., Rutherford, M. W. & Clohessy, G. R. (2007). Corporate entrepreneurship: An empirical look at individual characteristics, context, and process. *Journal of Leadership and Organizational Studies*, 13(4): 40–54.
- Hornsby, J. S., Holt, D. T. & Kuratko, D. F. (2008). The dynamic nature of corporate entrepreneurship: Assessing the CEAI. *Best Paper Proceedings: National Academy of Management (CD Rom)*.
- Hornsby, J. S., Kuratko, D. F. & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale. *Journal of Business Venturing*, 17(3): 253–273.

- Hornsby, J. S., Kuratko, D. F., Shepherd, D. A. & Bott, J. P. (2009). Managers' corporate entrepreneurial actions: Examining perception and position. *Journal of Business Venturing*, 24(3): 236–247.
- Hornsby, J. S.; Kuratko, D. F. & Zahra, S. A. (2002). Middle managers perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, Vol. 17(3): 253-273.
- Hornsby, J. S.; Naffziger, D. W.; Kuratko, D. F. & Montagno, R.V. (1993). An interactive model of the corporate entrepreneurship process. *Entrepreneurship: Theory and Practice*, Vol. 17(2): 29-37.
- Ireland, R. D., Covin, J. G. & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, 33(1): 19–46.
- Ireland, R. D., Kuratko, D. F. & Morris, M. H. (2006a). A health audit for corporate entrepreneurship: Innovation at all levels: Part I. *Journal of Business Strategy*, 27(1): 10–17.
- Ireland, R. D., Kuratko, D. F. & Morris, M. H. (2006b). A health audit for corporate entrepreneurship: Innovation at all levels: Part II. *Journal of Business Strategy*, 27(2): 21–30.
- Ireland, R. D.; Hitt, M. A.; Camp, M. & Sexton, D. L. (2001). Integrating entrepreneurship and strategic management actions to create firm wealth. *Academy of Management Executive*, Vol. 15(1): 49-63.
- Jarillo, J. C. & Ricart, J. E. (1987). Sustaining networks. *Interfaces*, 17: 82–91.
- Jarillo, J. C. (1988). On strategic networks. *Strategic Management Journal*, 9(1): 31–41.
- Khazanchi, S., Lewis, M. W. & Boyer, K. K. (2007). Innovation-supportive culture: The impact of organizational values on process innovation. *Journal of Operations Management*, 25(4): 871–884.
- Kogut, B. (1988). A study of the life cycle of joint ventures. *Manage Int Rev*, 28: 39–52.
- Krajewski, L. J., Ritzman, L. P. & Malhotra, M. K. (2010). *Operations Management: Processes and Supply Chains*, 9th Ed. Prentice Hall, Upper Saddle River, NJ.
- Kuratko, D. F. & Goldsby, M. G. (2004). Corporate entrepreneurs or rogue middle managers? A framework for ethical corporate entrepreneurship. *Journal of Business Ethics*. 55(1): 13-30.
- Kuratko, D. F. (2009). The entrepreneurial imperative of the 21st century. *Business Horizon*, 52(5): 421–428.
- Kuratko, D. F., Hornsby, J. S. & Bishop, J. W. (2005). An examination of managers' entrepreneurial actions and job satisfaction. *International Entrepreneurship and Management Journal*, 1(3): 275–291.
- Kuratko, D. F.; Hornsby, J. S.; Naffziger, D. W. & Montagno, R. V. (1993). Implementing entrepreneurial thinking in established organizations". *SAM Advanced Management Journal*, Vol. 58(1): 28-39.
- Leon, M. E. (1991). Uma Análise de Redes de Cooperação das Pequenas e Médias Empresas do Setor das Telecomunicações. Dissertação Mestrado, Engenharia de Produção da Escola Politécnica da Universidade de São Paulo, Dez., 1998.and 2, March/June.
- Lepak, D. P. & Snell, S. A. (1999). The human resource architecture: toward a theory of human capital allocation and development. *Academic Management Review*, 24(1): 31–48.

- Martinez, A.; Rodriguez, Z. & Vazquez, E. (2010). Exploring corporate entrepreneurship in privatized firms. *Journal of World Business*, 45:3: 547-555.
- Miles, R. E.; Miles, G. & Snow, C. C. (2006). Collaborative Entrepreneurship: a business model for continuous innovation. *Organ Dyn* 35(1): 1-11.
- Nassif, V. M. J.; Ghobril, A. N.; Castilho, A. F.; Silva, N. S., & Guardani, F. R. (2004). Contribuição para o entendimento das competências do empreendedor: a derivação de um esquema a partir de relatos de trajetórias empresariais em pequenas empresas. *Anais do Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Administração*, Setembro, Curitiba, PR, Brazil.
- Nohria, N. & Garcia-Pont, C. (1991). Global strategic linkages and industry structure. *Strategic Management Journal*, 12: 105-124.
- Nunamaker, J. F.; Romano, N. C. & Briggs, R. O. (2002). Increasing intellectual bandwidth: generating value from intellectual capital with information technology. *Group Decis Negot*, 11: 69-86.
- Pinchot G III. (1985). *Intra preneuring*. Harper & Row, New York.
- *Pinto, H. (2009). Challenges for innovation in the Algarve: Contribution to understand the regional innovation system. *Spatial and Organizational Dynamics*, 0, Capítulo II: 40-57.
- Piore, M. & Sabel, C. (1984). *The second Industrial Divide: Possibilities for prosperity*. New York, Basic Books, ageement leveraged buyo.
- Powell, W. (1990). Neither Market for Hierarchy network forms of organization. *Research in Organizational Behavior*, vol.12: 295-336.
- Powell, W. W.; Koput, K. W. & Smith-Doerr, L. (1996). Inter-organizational collaboration and the locus of innovation: networks of learning in biotechnology. *Adm Sci Q*, 41(1): 116-145.
- Sexton, D. & Bowman-Upton, N. B. (1991). *Entrepreneurship: Creativity and Growth*, Macmillan, New York, NY.
- Sorenson, O.; Pino G. & Audia. 2000. The social structure of entrepreneurial activity: Geographic concentration of footwear production in the United States, 1940-1989. *American Journal of Sociology*. 106(2): 424-462.
- Stevenson, H. H. & Jarillo, J. C. (1990) A paradigm of entrepreneurship: entrepreneurial management. *Strategic Management. J* 11: 17-27.
- Tidd, J.; Bessant, J. & Pavitt, K. (2001). *Managing Innovation: Integrating Technological Market and Organizational Change*. 2nd Ed. John Wiley & Sons, Chichester.
- Wegner, D. & Dahmer, L. V. (2004). Ferramenta para avaliação de desempenho em redes de empresas: uma proposta metodológica. *Anais do Seminário de Administração FEA/USP*, São Paulo, SP, Brasil, 7.
- Whetten, D. A. & Leung, T. K. (1979). The instrumental value of interorganizational relations: antecedents and consequences of linkage formation. *Academy of Management Journal*, 22(2): 325-344.
- Wright P. M.; McMahan G. C. & McWilliams A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *International Journal Human Resource Manager*, 5(2): 301-326.

THE EFFECTS OF WORK VALUES AND WORK CENTRALITY ON JOB SATISFACTION. A STUDY WITH OLDER SPANISH WORKERS

Alejandro Orgambidez-Ramos
M. Isabel Mendoza-Sierra
Jean-Christophe Giger

ABSTRACT

Since workforces are ageing throughout Europe, interest in the role of age in the workplace is increasing. Older workers with high work centrality are more likely to negotiate a relational contract and express higher levels of job satisfaction than older workers with low work centrality (Armstrong-Stassen and Schlosser, 2008). This study examines the role of work centrality and valued work outcomes as antecedents of job satisfaction. A cross sectional study using questionnaires was conducted. The sample consisted of 203 Spanish employees ($M_{age} = 55.78$, $SD = 3.01$). Hierarchical multiple regression analyses have revealed that job satisfaction was significantly predicted by needed income and work centrality. When work is not an important part of older workers' lives, they will prefer extrinsic outcomes and will not invest in the relationship with their organization (Grant & Wade-Benzoni, 2009). Implications for research and theory are explored in the conclusion.

Keywords: Job Satisfaction, Work Values, Ageism, Work Centrality.

JEL Classification: I10

1. INTRODUCTION

Work centrality has been explored by a variety of researchers across a number of cultural settings, and the finding that work plays a central and fundamental role in the life of a individual has been supported empirically in most industrialized countries (Mannheim, Baruch, & Tal, 1997). In addition, work has been found to be of relatively high importance compared with other important life areas such as leisure, community, and religion and has been found to rank second in importance only to family (Harpaz, 1999; MOW, 1987). Research has also conducted exploring the antecedents and consequences of work centrality, showing that work centrality is related to a number of personal, demographic, job, and organizational characteristics such as job satisfaction or psychological contract (Mannheim, et al., 1997; Sverko & Vizek-Vidovic, 1995).

Furthermore, since workforces are ageing throughout Europe (Schalk, et al. 2009), interest in the role of age in the workplace is increasing (Barreira, 2011; Sequeira & Marques, 2011). For instance, Armstrong-Stassen and Schlosser (2008) found that work centrality is related to development orientation (i.e., the propensity to engage in development activities) among older workers, suggesting that older workers with high work centrality are more likely to negotiate a relational contract and express higher levels of job satisfaction than older workers with low work centrality. Therefore, the present study investigates how valued work

outcomes and work centrality are related to job satisfaction in a sample of older Spanish workers.

The theoretical framework for this study was the work by England and colleagues, focusing on eight countries – Belgium, Britain, Germany, The Netherlands, Yugoslavia, USA, Japan and Israel – and supported through follow-up studies to detect longitudinal trends in MOW indices (Harpaz, 1999; MOW, 1987). According to this literature, working carries both instrumental and expressive meanings – work is necessary to procure the means to satisfy physical needs but is also directly linked to a person's self-concept, identity and social standing. Ruiz Quintanilla and Wilpert (1988) described five dimensions of meaning of working: subjective work definitions, work motivation, work centrality, social work norms and dominant work roles. The MOW project (MOW, 1987) and most follow-up studies concentrated on four primary domains: work centrality, social norms about working, importance of work goals, and valued work outcomes.

Within the MOW framework (MOW, 1986), work centrality is measured by the absolute value of working as a life role. In addition, the importance of work can be indirectly assessed by looking at responses to the classic “lottery question”, which assess the respondents' willingness to work without the need for income (England & Harpaz, 1990). It determines how one acts both at the workplace and outside of it (Alvensson, Ashcraft, & Thomas, 2008).

People with high work centrality are willing to invest their valuable resources of time and energy in work, and to invest in the relationship with their organization. As a consequence, these people are more likely to negotiate relational psychological contracts, resulting in positive attitudes (Bal & Kooij, 2011). Empirical evidence for positive relations between work centrality and job attitudes (job satisfaction, organizational commitment) were found in a study of Aryee and Luk (1996), who showed that work centrality was positively related to career and job satisfaction. Similarly, Diefendorff and colleagues (2002) found positive relations between work centrality and organizational citizenship behaviors, and Witt, Patti, and Farner (2002) found positive relations between work centrality and organizational commitment.

A second important dimension of the meaning of working relates to systematic information about the outcomes that individuals seek from working and the functions served through the process of work. Answers to these questions can inform the more fundamental question of why people work, why they extend more or less effort at work, why they intend to remain or consider leaving their place of work, and why they may or may not go beyond the “call of duty” and perform tasks that are outside of their prescribed role yet advance the overall direction of the organization or lead to greater fulfillment of individual goals at work (Mannheim, et al., 1997; MOW, 1987).

Following the original MOW research project (MOW, 1986), six domains were identified: a) needed income, b) status and prestige, c) time absorption (“work keeps me busy”), d) interesting contacts established and maintained at work, and e) professional interest and satisfaction. These elements are also present in Herzberg's theory as motivators and hygiene factors. According to Herzberg (1966), hygiene factors (i.e., interpersonal relations, salary) prevent dissatisfaction, but they do not lead to satisfaction. On the other hand, motivators (i.e., interesting work, achievement) are the real factors that generate higher levels of satisfaction and motivation at work.

Moreover, values work outcomes can be seen as work values, in other words, as end states that guide individuals' work-related preferences that can be attained through the act of working (Nord, Brief, Atieh, & Doherty, 1990). In this sense, some researchers express that work values (i.e., values work outcomes) are an important determinant of work centrality. The variance of work values among individuals creates differences on the importance of

single attributes to working (Hirschfeld and Feild, 2000). On the other hand, work centrality is affected by values and is formed by the person's beliefs toward working (MOW, 1987).

Inspired by the MOW project and due to the lack of research on work centrality in older workers, this study aims to understand the relationship between valued work outcomes, work centrality, and job satisfaction. Thus, it is hypothesized that:

H1: Valued work outcomes will positively predict work centrality.

H2: Valued work outcomes and work centrality will positively predict job satisfaction.

2. METHODOLOGY

2.1. Sample and procedures

The field research was conducted over a two month period from April to June 2010. Our sample consisted of 203 Spanish employees from five multinational organizations operating in the Spanish industrial sector. As for the sample's sociodemographic characteristics, 63.8% were men, with an average age of 55.78 years old ($SD = 3.01$). 78.1% of the sample were married. Respondents were fairly evenly distributed by professional category: 53.9% were blue workers, and 46.1% were administrative and laboratory staff.

A cross sectional study using questionnaires was conducted. A three-page survey questionnaire in Spanish was utilised as the survey instrument. The human resource department in each department randomly selected participants from their employees list and invited them to participate in our research. All participants were full-time employees. They were informed of the study's objective and the confidentiality of their data, and they were asked to verbally consent to participate. In order to guarantee anonymity, each was given an envelope in which the finished instruments could be kept; they were asked to deposit the envelope in a box placed *ad hoc*. However, to resolve any possible doubts about completing the instrument, the researcher and participants agreed the researcher would pass by their unit in two or three days' time after the scales were turned in.

2.2. Measures

All the constructs included in the analysis were assessed with perceptual self report measures based on multi-item scales whose psychometric properties are well established.

Work Centrality

A one item scale from MOW (1986) was used to measure the importance of work: "How important is work for you?", using a ten-point Likert scale (1 = Not at all to 10 = Very Important). The alpha coefficient for this scale was .675.

Valued Work Outcomes

Five items from MOW (1986) were used to measure valued work outcomes. A sample item is "work keeps me busy". Responses to all items were made on a ten-point Likert scale (1 = strongly disagree and 10 = strongly agree). The alpha coefficient for this scale was 0.785.

Job satisfaction

Job satisfaction was measured, but the seven-item scale was taken from Meliá et al. (1990). An example is "I am satisfied with current job". Responses to all items were made on a ten-point Likert scale (1 = strongly disagree and 10 = strongly agree). In the current study the alpha reliability was 0.883.

3. RESULTS

3.1. Preliminary analysis

First of all, before testing the regression models, we examined the measurement models with all study variables: work centrality, valued work outcomes and job satisfaction. Harman's one-factor test was conducted to test the presence of the common method effect. All the variables were entered into an exploratory factor analysis, using unrotated principal components factor analysis, and forcing the extraction of one factor. The factor that emerged accounted for less than 50% of the variance (33.1%). Thus, no general factor is apparent (Podsakoff et al., 2003; Podsakoff and Organ, 1986). While the results of this analysis do not preclude the possibility of common method variance, they do suggest that common variance is not a great concern and thus is unlikely to confound the interpretations of results.

3.2. Descriptive statistics

Table 1 shows the means, standard deviations and intercorrelations of all study variables. Status and prestige, interesting contacts, interesting work, and time absorption were positively related to work Centrality ($p < .05$) so that the higher the valued work outcomes related to status, contact, interesting work and time absorption, the higher the work centrality. Also, status and prestige, needed income and interesting work were positively related to job satisfaction ($p < .05$).

3.3. Testing the hypothesis

To test our hypothesis we conducted a series of multiple and hierarchical regression analyses. Multiple regression was used to assess the ability of valued work outcomes (needed income, status and prestige, time absorption, interesting contacts, interesting work) to predict levels of work centrality. Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The total variance explained by the model as a whole was 25.9%, $F(5, 149) = 10.41$, $p < .01$. Only two of the valued work outcomes measured were statistically significant, with interesting work recording a higher beta value ($\beta = .36$, $p < .001$) than needed income ($\beta = -.17$, $p < .05$). Thus, hypothesis 1 was partially supported.

Table 1: Means, standard deviations and correlations of all scales

	1	2	3	4	5	6	7
1. Status and prestige	1						
2. Needed income	.25**	1					
3. Interesting contacts	.34**	.01	1				
4. Interesting work	.48**	.08	.32**	1			
5. Time absorption	.15	-.15	.42**	.34**	1		
6. Work centrality	.31**	-.10	.21**	.44**	.27**	1	
7. Job satisfaction	.17*	.24**	.11	.22**	.12	.21**	1
Mean	6.20	7.51	7.77	6.07	6.94	7.57	3.13
Standard Error	0.04	0.04	0.06	0.06	0.07	0.08	0.08
Standard Deviation	1.80	1.80	1.42	2.05	1.93	1.44	0.89

* $p < .05$ ** $p < .01$

Finally, hierarchical multiple regression was used to assess the ability of work centrality to predict levels of job satisfaction after controlling for the influence of valued work outcomes (Table 2). Preliminary analysis was conducted to ensure no violation of the assumptions of

normality, linearity, multicollinearity and homoscedasticity. Valued work outcomes (needed income, status and prestige, time absorption, interesting contacts, interesting work) were entered at Step 1, explaining 10.8%. After entry of work centrality at Step 2, the total variance explained by the model as a whole was 12.8%, $F(6, 148) = 3.62$, $p < .01$. Work centrality explained an additional 2% of the variance in job satisfaction, after controlling valued work outcomes, R squared change = .02, F change (1, 148) = 0.07, $p < .01$. Work centrality was statistically significant, recording a beta value of .16 ($p < .05$). Thus, hypothesis 2 was partially supported.

Table 2: Hierarchical Regression Results for Job Satisfaction

	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Step 1			
Cte	1.38	0.50	
Status and prestige	0.01	0.04	0.03
Needed income	0.11	0.04	0.22**
Interesting contacts	0.01	0.05	0.03
Interesting work	0.06	0.04	0.15
Time absorption	0.04	0.04	0.08
Step 2			
Cte	0.79	0.59	
Status and prestige	0.01	0.04	0.01
Needed income	0.12	0.04	0.25**
Interesting contacts	0.02	0.05	0.03
Interesting work	0.04	0.04	0.09
Time absorption	0.03	0.04	0.07
Work centrality	0.10	0.06	0.16*

Note: $R^2 = 10.8\%$ for Step 1, $\Delta R^2 = 2\%$ for Step ($p < .01$)

4. DISCUSSION

The current study investigated the relationship between valued work outcomes and work centrality, and their role as antecedents of job satisfaction.

In relation to Hypothesis 1, valued work outcomes were found to be related to work centrality, specifically interesting work and needed income. People with interesting tasks at work are more likely to attach higher meaning to the role of work in their lives, and consequently invest time and effort in their jobs. By contrast, needed income had a negative effect on the individuals' identification with the work. These results can be explained according to the distinction of intrinsic work values and extrinsic work values (Nord, et al., 1990). Intrinsic work values, such as interesting work, refer to end-states that occur through work or in the course of people engaging in work activities such as a sense of accomplishment and dependence on the content of work. Experiencing autonomy and interesting tasks at work would lead people to consider that work has a positive impact on their lives, giving it more importance. On the other hand, extrinsic work values, such as salary, refer to end-states that occur as a consequence of work, the instrumental outcome of work (MOW, 1997; Nord, et al., 1990).

In relation to Hypothesis 2, salary was the best job satisfaction predictor. Needed income, as a valued work outcome, seems to more heavily influence job satisfaction. Work centrality

has a significant influence, but it explains very little of the levels of jobs satisfaction in the participants. The relevance of needed income, as an extrinsic work value, is clearly supported by the current findings. Previous studies generally found that job satisfaction is not only associated with salary but also with achievement, personal growth or relationship with others (Robbins, 2001). The lack of relationship between intrinsic work outcomes and job satisfaction can be explained by the age of the participants. It seems possible that older workers, at the end of their professional career, give more relevance to extrinsic outcomes (salary, work conditions) than to interesting work. According to Super (1980), between 50 and 65 years (maintenance), workers will be worried about work conditions to prepare themselves for retirement (i.e., a good salary). Intrinsic elements from job design (i.e., interesting work) would lose their importance in this stage. Also, many older employees disengage more from work when getting closer to their planned retirement age. This disengagement process implies that work centrality decreases in a similar way.

5. CONCLUSION

This research contributes to the literature on work centrality, valued work outcomes, job satisfaction and ageing at work. First, by showing that intrinsic work values are related to work centrality, this study contributes to the literature on work centrality. In addition to organizational citizenship behavior, career satisfaction, and organization commitment (Diefendorff, et al., 2002), extrinsic work values were found to relate to job satisfaction in older workers. Thus, values work outcomes is an important concept to include in studies on work behavior.

Subsequently, we contributed to the literature on ageing by examining the impact of age on the relation between values work outcomes, work centrality, and job attitudes. When work is not an important part of older workers' lives, they will prefer extrinsic outcomes and will not invest in the relationship with their organization (Grant & Wade-Benzoni, 2009). Since there are more older workers active on the labour market, organizations may benefit by employing older workers with intrinsic work values, since these older workers are more willing to invest in their work and relationship with the organization (Bal & Kooij, 2011).

There are limitations to the study that have to be addressed. First, the cross-sectional nature of the study limited the findings in that we could not show evidence of causal relationships. Although we could test for the likelihood of the direction of the relationships, it is still possible that the concepts of the study are reciprocally related. Further longitudinal research is needed to investigate these reciprocal relationships over time. Moreover, because all variables were measured from one source, the employee, there is a chance of a common method bias (Podsakoff, MacKenzie, Lee, Podsakoff, 2003). Theoretically, concepts like work centrality and job satisfaction exist in the "eye of the beholder", and therefore self-reports are deemed appropriate to measure these concepts (Pratt, Rockmann, & Kaufmann, 2006).

ACKNOWLEDGEMENTS

This paper was partially financed by FCT - Foundation for Science and Technology.

REFERENCES

- Alvesson, M., Aschcraft, K. L., & Thomas, R. (2008). Identity matters: Reflection on the construction of identity scholarship in organization studies. *Organization*. **15**: 528-542.
- Armstrong-Stassen, M., & Schlosser, F. K. (2008). Benefits of a supportive development climate for older workers. *Journal of Managerial Psychology*. **23**: 419-437.
- Aryee, S., & Luk, V. (1996). Work and nonwork influences on the career satisfaction of dual-earner couples. *Journal of vocational Behavior*. **49**: 38-52.
- Bal, P. M. & Kooij, D. (2011). The relations between work centrality, psychological contracts, and job attitudes: The influence of age. *European Journal of Work and Organizational Psychology*. **20**(4): 497-523.
- Barreira, A. P. (2011). Spatial Strategic Interaction on Public Expenditures of the Northern Portuguese Local Governments. *Spatial and Organizational Dynamic*, **6**: 23-36.
- Diefendorff, J. M., Brown, D. J., Kamin, A. M., & Lord, R. G. (2002). Examining the roles fo job involvement and work centrality in predicting organizational citizenship behaviors and job performance. *Journal of Organizational Behavior*. **23**: 93-108.
- England, G. W., & Harpaz, I. (1990). How working is defined: National contexts and demographic and organizational role influences. *Journal of Organizational Behavior*. **11**: 253-266.
- Grant, A. M. & Wade-Benzoni, K. A. (2009). The hot and cool of death awareness at work: Mortality cues, aging, and self-protective and prosocial motivations. *Academy of Management Review*. **34**: 600-622.
- Harpaz, I. (1999). The transformation of work values in Israel: Stability and change over time. *Monthly Labor Review*. **122**: 46-50.
- Herzberg, F. (1966). *Work and the nature of man*. World Publishing Company. Cleveland.
- Hirschfeld, R. R. & Feild, H. S. (2000). Geeral commitment to Work. *Journal of Organizational Behavior*. **21**: 789-800.
- Mannheim, B., Baruch, Y., & Tal, J. (1997). Alternative models for antecedents and outcomes of work centrality and job satisfaction of hi-tech personnel. *Human Relations*. **50**: 1537-1562.
- MOW (1987). *The meaning of working*. Academic Press. London.
- Nord, W. R., Brief, A. P., Atieh, J. M., & Doherty, E. M. (1990). Studying meanings of work: The case of work values. In A. Brief & W. Nord, (Eds.), *Meaning of occupational work: A collection of essays*. Lexington Books. Lexington.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*. **88**: 879-903.
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. b. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medial residents. *Academy of Management Journal*. **49**: 235-262.
- Robins, S. P. (2001). *Organizational Behavior* (9th ed.). Prentice Hall. New Jersey.
- Ruiz-Quintanilla, S. A. & Wilpert, B. (1988). The meaning of working - scientific status of a concept. In V. de Keyser, T. Qvale, B. Wilpert, & S. A. Ruiz-Quintanilla (Eds.), *The meaning of work and technological options*, (pp.3-14). John Wiley. New York.

- Schalk, R., Van Veldhoven, M., De Lange, A. H., De Witte, H., Kraus, K., Stamov-Rossnaghe, C., et al. (2010). Moving European research on work and ageing forward: Overview and agenda. *European Journal of Work and Organizational Psychology*. **19**: 76-101.
- Sequeira, B. & Marques, J. F. (2011). Knowledge Management in Tourism Organisations: Proposal for an analytical model. *Spatial and Organizational Dynamic*, **7**: 23-36.
- Super, D. E. (1980). A Life-Span, Life-Space Approach to Career Development. *Journal of Vocational Behavior*. **16**: 282-298.
- Sverko, B. & Vizek-Vidovic, V. (1995). Studies of the meaning of working: Approaches, models, and some of the findings. In D. E. Super, B. Sverko (Eds.), *Life Roles, Values, and Careers: International Findings of the Work Importance Study*, (pp.3-21). Jossey-Bass Publishers. San Francisco, CA.
- Witt, L. A., Patti, A. L., & Farmer, W. L. (2002). Organizational politics and work identity as predictors of organizational commitment. *Journal of Applied Social Psychology*. **32**: 486-499.

SOCIAL CARE AND WELL-BEING. EXPERIENCES AND PERSPECTIVES OF AN OLD-AGED GROUP

José de São José
Rosanna Barros
Sanda Samitca
Ana Teixeira

ABSTRACT

This paper intends to undertake an initial/preliminary exploration of the subjective well-being regarding the reception of social care and other domains of life in a group of older people. It is, therefore, a descriptive paper that raises more questions than offers answers. Data was collected in the scope of a larger qualitative research project through the conduction of a focus group with elders receiving some kind of social care. The collected data was analysed according to the basic procedures of Grounded Theory with the help of the software NVivo 9. The results reveal different sources of well-being and ill-being. The former are satisfaction with the social care services, satisfaction with the daily life, and satisfaction with living arrangements. In turn, the latter are dissatisfaction with the Day Care Centre, dissatisfaction with the daily life, dissatisfaction with living arrangements, and transition to widowhood. These results and their implications for social policy and professional practice are discussed in the context of existing literature.

Keywords: Subjective Well-being, Older People, Social Care, Social Policy.

JEL Classification: I31

1. INTRODUCTION

This paper focuses on the well-being of older people who are receiving formal care. Its main objective is to report a preliminary analysis of the sources of well-being for a small group of older people receiving social care, and to identify some possible avenues for future research. Consequently, it should be seen as an initial exploration of this theme, more specifically of the sub-theme concerning the sources of subjective well-being of elders who receive some kind of social care. This does not mean that we solely address well-being related with the reception of social care, as the elders spontaneously talked about other sources of well-being not related with it.

The issue of well-being of the aged population, especially of those who have social care needs, is nowadays a priority in the policy agenda of global organizations (e.g., European Union), as well as national governments.¹ Recently, The European Older People's Platform (AGE) created "The European Charter of the Rights and Responsibilities of Older People in Need of Long-term Care and Assistance" which puts a high emphasis on the well-being of this population (AGE, 2010). In Portugal, the quality of life of older people, mainly of

¹ The articulation between family care and other providers of social care is another priority issue of political and social research agendas (see São José, 2012a and 2012b).

those who receive social care services, has also been a priority of the successive governments during the last decades.²

From the sociological and social policy points of view, it is important to understand the dimensions or sources of well-being which are valued by older people, as well as the way in which they interconnect to each other. However, the voices of the older people have been rarely heard in social science research (Holstein and Minkler, 2007). In this context, this paper could make a small contribution to a better understanding of the views of older people regarding well-being. Some authors (e.g., Diener, 2006; Veenhoven, 2000) argue that the well-being indicators should be used in the discussions about social policy and in the evaluation of specific social policy measures.

This paper starts by a brief (non-exhaustive) literature review, and then it clarifies the definitions of “well-being” and “social care” which were adopted in the analysis. Next, it describes the sample and the methods which were used to collect and analyze data. In another section the main results are revealed, and finally the results and their implications for social policy and professional practice are discussed.

2. A BRIEF INCURSION INTO THE LITERATURE

Given that this literature review is not exhaustive, probably there are some aspects of this research topic that are not mentioned here. In this brief incursion into the literature on this topic we identified some of the key domains of well-being in later life. We also became aware that the concepts of “well-being” and “quality of life” are defined and operationalized in multiple ways.

2.1. Key domains of well-being in later life

The literature review identified some domains (and the particular factors in each domain) which are relevant for well-being in later life. Some of the identified domains are: physical health, contact with social care services, participation in decisions regarding social care, physical environment, control over daily life, and social relationships.

Physical health is, understandably, one of the key domains of well-being for older people, as it significantly determines their activities in several domains of life (Bowers et al., 2009; Katz et al., 2013). Most of the elders, especially those who have high support needs, are conscious and concerned about their physical health (Katz et al., 2013). Preserving their independence is a priority for most of the elders, an area in which the health and social care services can make a significant contribution (Katz et al., 2013).

For the older people who receive social care services, contact with professionals plays an important role in their levels of well-being. Several studies have shown that older people identify certain characteristics/attitudes of the formal care services (mainly regarding to home care) which contribute to their well-being and quality of life, including the following: attendance and punctuality (Francis and Netten, 2004); flexibility (Francis and Netten, 2004); continuity, i.e., being cared for by the same carers over time (Francis and Netten, 2004; Gantert et al., 2008); good communication, i.e., being informed of delays and absences/replacements of carers (Francis and Netten, 2004); confidence (Francis and Netten, 2004); mutual respect, understanding and friendship (Francis and Netten, 2004; Graham and Bassett, 2006; Gantert et al., 2008); balanced power and reciprocity between elders and carers (Andrews et al., 2003; Lewinter, 2003; Gantert et al., 2008); and motivation and professional experience demonstrated by carers (Francis and Netten, 2004).

² In 2003, “The Program of Cooperation for the Development of Quality and Security of the Social Services” was approved with the aim of defining norms of quality for the management and delivering of social care services. In 2009, “The System of Qualification of Social Services” was created with the purpose of certifying the social services.

There is also empirical evidence that most older people want to participate in decisions with respect to their lives, including the decisions regarding care arrangements (Dunér and Nordström, 2010). Nevertheless, while some participate effectively in these decisions, others have a minimal participation or do not participate at all (Efraimsson et al., 2006; Janlöv et al., 2005; Dunér and Nordström, 2010). The non-participation of the elders in these kinds of decisions produces negative impacts on their well-being, given that it produces a destitution of their autonomy (capacity to decide), i.e., disempowerment (Janlöv et al., 2005).

Concerning the physical environment, older people value safe local neighbourhoods (Peace et al., 2011), good housing arrangements (Bowers et al., 2009) and good natural environments (Katz et al., 2013).

Another important domain for the well-being of older people is the control they can exert over the daily life. For many elders, keeping the capacity to control their daily lives, that is, retaining some routines and doing some “normal things”, albeit with adjustments in relation to the past, is very important because it sustains their self-esteems and personal identities and, consequently, their levels of well-being (Bowers et al., 2009; Tanner, 2010; Katz et al., 2013).

Regarding social relationships, to have a good relationship with formal carers (Potter, 2009), a meaningful personal relationship (Bowers et al., 2009; Williamson, 2010) or other types of positive social interactions, such as participating in volunteer organizations (Gabriel and Bowling, 2004), constitute positive social interactions which older people normally value in terms of well-being (Katz et al., 2013).

Lastly, it should be added that some authors identify and explain the life transitions which are particularly striking for older people. For example, Caradec (2010) identifies the following transitions: retirement, widowhood, and institutionalization.

2.2. The concept of “well-being”

The concept of “well-being” and the related concept of “quality of life” suffer from a definitional fragmentation. There are multiple definitions of both concepts, even within a single discipline (Veenhoven, 2000; Galloway, 2006). Concerning the concept of “well-being”, there is some discussion around three axes (Galloway, 2006). The first axis discusses whether the concept is uni-dimensional or multi-dimensional. The second axis focuses on the differentiation between “well-being” and “subjective well-being”. Finally, the third axis addresses the similarities/differences between “well-being” and “quality of life”.³

Veenhoven (2000) proposes four dimensions of “quality of life”. One of these dimensions is the “subjective appreciation of life”, which corresponds to “subjective well-being” (the dimension that is addressed in this paper). According to this author, the “subjective appreciation of life” is the evaluation which is undertaken by the individuals with respect to different domains of their lives (e.g., satisfaction with job) and/or to their lives taken as a whole (overall evaluations). This author also stresses that this “appreciation of life” includes not only cognitive processes (appraisals of life domains or entire life) but also emotional processes (prevailing moods). Other authors define “subjective well-being” in the same terms (e.g., VittersØ, 2004). The other dimensions of “quality of life” proposed by Veenhoven (2000) are: livability of environment, life-ability of the person, and objective utility of life.

³ For a review of the literature on the concepts of “quality of life” and “well-being”, please refer to Veenhoven (2000), Galloway (2006), Diener (2006) and Camfield and Skevington (2008).

3. ADOPTED DEFINITIONS OF “WELL-BEING” AND “SOCIAL CARE”

In this paper we focus on the “subjective appreciation of life” undertaken by older people who receive different kinds of social care in the community. We adopt the definition of “subjective appreciation of life” proposed by Veenhoven (2000) that is described above.

Social care is different from health care and is here defined as “[...] the assistance and surveillance that is provided in order to help children or adults with the activities of their daily lives. Formal service provisions from public, commercial and voluntary organizations, as well as informal care from family members, relatives and others, such as neighbours and friends, are here included [...]” (Sipilä and Kröger 2005: 2).

4. DATA AND METHODS

This paper is based on data collected in the scope of a qualitative research project funded by the Portuguese Foundation for Science and Technology, named “The other side of the caring relation: the views of the older person”. This project is focused on the elders’ experiences and perspectives of receiving care.⁴

Data was collected through a focus group undertaken in September 2011 at one of the facilities of a non-profit institution which provides social care services for older people in the Algarve region (Portugal). As initially planned, this focus group intended to make a first contact with the research population in order to identify the first themes which would be further explored in the next stages of the research project. As argued by some authors, qualitative techniques (Gómez, 2010), particularly focus groups (Barbour, 2007; Krueger and Casey, 2009), are suitable to gather initial or exploratory information about an issue.

Therefore, it should be emphasized that this focus group was not initially planned to explore specifically the issue of well-being, but this issue was spontaneously addressed by the participants. It was considered that the amount and richness of the participants’ accounts on the theme of well-being would deserve to be analysed in order to get a preliminary outlook on this theme that could be further explored in future studies.

The focus group was conducted with minimal intervention from the part of the moderator. He opened the discussion asking the participants to talk about their typical days. During the focus group, the moderator used probes to clarify and explore some themes and sub-themes. He asked another question during the session: How do the elders experience the (present or future) reception of personal care?

The focus group session lasted 1 hour and 20 minutes and it was completely recorded in audio format. The audio was fully transcribed. This transcription was analysed according to the basic procedures of Grounded Theory (Charmaz, 1990 and 2006) with the help of Nvivo 9.

Given the exploratory status of this focus group, we sought to select a diversified group of participants, namely in terms of gender, age, social class, level of disability and type of social services received. The selection of the participants was based on the procedures of purposive sampling, a process which had the precious collaboration of the main person in charge of the facility belonging to the non-profit institution. The elders had to satisfy the following basic inclusion criteria: being a user of the non-profit institution; attending the Day Care Centre or receiving home care; being able to move to the facility and staying there during the conduction of the focus group; and being able to have a fluent conversation. The selected elders were contacted by the person in charge of the facility in order to obtain their informed consent and to fix the day and hour of the focus group.

⁴ The information about this research project can be found on the following website: <http://elderviews.info/website/index.php>.

The focus group session had the participation of the seven elders previously selected plus three researchers. The following table presents a brief characterization of the elders.

Table 1 – Brief characterization of the research participants

Name ⁵	Age	Marital status	Level of schooling	Living arrangement	Level of disability	Last job	Carers
Evaristo	81	Widower	Unable to read and write	Living alone (in his own home)	Difficulty taking off shoes and socks; Blindness in an eye	Bricklayer	Home care (helping to take off shoes and socks; meals)
Gerónimo	82	Widower	Undergraduate degree (not completed)	Living alone (in his own home)	Physical mobility (minimal limitations)	Manual worker at an advertising firm	Home care (meals and laundry)
Ivete	89	Widow	Undergraduate degree	Living with her daughter, son-in-law and grandchildren (in the daughter's house)	Hearing problems; Difficulty moving an arm	Owner of a pharmacy	Day Care Centre and her daughter
Rui	86	Widower	Unable to read and write	Living, by rotation, with his children (in the children's houses)	Physical mobility (minimal limitations)	Farmhand	Day Care Centre and his children
Almerinda	72	Widow	Primary school (4 years)	Living alone (in her own home)	Physical mobility (using a walker)	Manual worker at a hotel laundry	Home care (body hygiene; meals; laundry; cleaning)
Ludovice	80	Married	Unable to read and write	Living with her daughter, son-in-law and grandchildren (in the daughter's house)	Physical mobility (minimal limitations)	Farmhand	Day Care Centre and her daughter
Anastácia	74	Married	Primary school (4 years)	Living with her husband (in her own home)	Physical mobility (using a wheelchair)	Disabled when she was 31 years old	Day Care Centre and her relatives (mainly her husband)

The table shows that three participants are male and four are female, all of them with ages above 70 years.

The participants are widowed, with the exception of two who are married. Four of them are living with relatives – three at their children's houses and one in her own house – and three are living alone in their own houses.

Concerning the level of schooling, there is great amplitude: from “unable to read and write” to “undergraduate degree”. This great amplitude is also found with respect to the last job.

Only two participants have significant incapacities, more concretely in the domain of physical mobility. The remaining ones have lower levels of incapacity.

Lastly, four participants attend a Day Care Centre and also have the support of their relatives, while the others receive regular care only from the home care services. Interestingly, these last three participants are living alone.

⁵ The names are fictitious.

5. MAIN RESULTS

The presentation of the main results is structured by the themes and sub-themes that we identified in the analysis. In each theme/sub-theme, we use some quotations in order to support the main analytical ideas. Five main themes were identified: being inevitable to receive formal care; assessing the social care services; assessing the daily life; assessing the living arrangements; and responding to certain events and transitions (in the past and in the future).

5.1. Being inevitable to receive formal care

As we had the opportunity to see in the methods section, the elders' needs vary considerably. Some only need support to carry out instrumental activities of daily living (e.g., meals, house cleaning and laundry) while others need support to carry out activities of daily living such as toileting and bathing. These kinds of needs could be satisfied, potentially, by different types of carers (relatives, home care workers, etc.), but in these cases the elders recognize that receiving care from formal carers is inevitable. They offer one main reason for this inevitability: they are conscious that their relatives have their own lives and, consequently, they expect that their relatives do not have the time and energy to provide all the care they need.

My relatives have their own lives

The elders who participated in the focus group do not perceive their relatives (mostly their children) as their potential primary carers:

“(...) I have family, cousins, nephews and godchildren, but all of them have their own lives, they have their own duties, they have no time to assist me in anything, and I'm not even expecting it” (Evaristo).

“(...) I have two children, but they are married. They have their own wives, they have their own children, they have their own lives” (Almerinda).

Five elders are widowed, and two are married. In these two latter cases the elders do not receive regular care from their spouses: in one case the husband is completely blind and, consequently, cannot provide care, and in the other case the elder benefits from a moderate participation of her husband in the provision of care because she does not want to “sacrifice him”.

The desire of not wanting to sacrifice the relatives' lives is also explicitly mentioned by Gerónimo:

“I do not want that my daughters stop making their lives because of me. I have to be on my own. (...) they [the daughters] were in my house but then they left home, they left to live their lives”.

5.2. Assessing the social care services

The elders who have participated in the focus group made some spontaneous appreciations about the services they receive from the non-profit organization. Some attend the Day Care Centre (four elders) of that organization, and the remaining ones receive home care provided by the same organization.

Being satisfied with the Day Care Centre

All the elders who attend the Day Care Centre identified several positive aspects related to this attendance (although one identifies negative aspects as well). The positive aspects identified by these elders are: having company; being occupied; being well treated; and going in and out (of the Centre) whenever they want.

While “having company” and “being occupied” are two perceived personal benefits derived from the attendance of the Day Care Centre, “being well treated” and “going in and out whenever I want” are two perceived positive features of the service. “Having company” is the most cited positive aspect:

“My children have a job; my grandchildren are in the school. I was there (at her daughter’s house) alone and here one day I laugh, another day I cry, and another day I talk” (Ludovice).

“I feel good because I have company. I did not like being home alone (...). I feel good because here there is a lot of companionship; we help each other a lot” (Ivete).

Anastácia also stated that attending the Day Care Centre allows her to give more freedom to her husband.

Having some dissatisfaction with the Day Care Centre

One elder (Rui) said that he is well treated in the Day Care Centre but, at the same time, he admits that he spends too much time doing nothing. This inactivity is very unsatisfying for him, which makes him dream almost every night of a garden:

“Almost every night I dream of a garden; I dream that I have a garden to produce lettuces, carrots and green beans and bring them here to the Centre. (...) I would like to have a garden to entertain me, to avoid being here just sitting or eating and doing nothing. I was accustomed to work in a garden with my son” (Rui).

Another elder (Ludovice), despite not explicitly identifying any negative aspect of the Day Care Centre, expressed some “annoyance” because she feels that she “has to be” at the Centre for lack of alternatives.

Irrespective of the assessments of the Day Care Centre, all the elders who attend it live with relatives: three live with a daughter plus the respective son-in-law and grandchildren (in the daughters’ houses)⁶, and one lives with her husband in her own house.

Being satisfied with the home care

The elders who receive home care emphasise that the home care service provides all they need:

“It is this institution that gives me all I need, all. It is the meals, house cleaning, laundry and medical assistance if I need” (Evaristo).

“I’m satisfied. They are good persons, they are friendly and the food is also good. I’m happy. The clothes are also washed here. Everything is ok”.

⁶ Rui rotates through his children’s houses (daughters and sons).

These elders additionally identify positive attributes of the home care workers: they are “friendly and sweet” and “polite”. Here are two testimonies:

“They are well educated, they are sweet. I’m happy. I pay but I’m satisfied with the service” (Evaristo).

“They are good persons; they are friendly (...)” (Almerinda).

It is important to add that all the elders who receive home care live alone in their own houses.

5.3. Assessing the daily life

When asked to speak about their daily lives (their typical days), some elders reported satisfaction (most of them) and others dissatisfaction. Let us see what the sources of satisfaction and dissatisfaction are.

Being satisfied with the daily life

Four elders (Evaristo, Gerónimo, Almerinda and Ivete) mentioned that they are satisfied with their daily lives because they can do normal things, although different things to those done in the past (e.g., during their working lives). This is particularly clear in Gerónimo’s statement:

“My daily live is normal; normal days as if I had another life. It is not, for example, waking up, prepare myself, and go to work. That is over” (Gerónimo).

The capacity to do “normal things” is a source of satisfaction with the daily life, to which other sources are added: “being occupied” and “retaining routines”. Here are some statements illustrating this:

“In my daily life, I wake up in the morning, and then I go to the beach; I have my sea bathing, and then my sunbathing. After this I go home. After lunch I get sleepy and I have a nap. If I do not have a nap, I take a walk; I entertain myself. I entertain myself playing cards or reading, or watching TV” (Gerónimo).

“I crochet, I read, I watch TV; I’m always occupied” (Ivete).

“I have lots of friends, they come to my home. On Sunday I go to mass. I’m always occupied” (Almerinda).

In the case of Anastácia the satisfaction with daily life comes, essentially, from the family support she receives whenever she needs it, rather than from “doing normal things”.

Having some dissatisfaction with the daily life

Rui and Ludovice demonstrated some dissatisfaction with respect to their daily lives. Rui would like to do something that allows him to be more occupied. As we mentioned above, he complains that he spends many hours in Day Care Centre doing nothing. In turn, Ludovice identifies positive aspects in attending the Day Care Centre (going in and out whenever she wants), but at the same time she shows some resignation because of needing to attend it:

“I have to come here (Day Care Centre). I can do nothing about it” (Ludovice).

5.4. Assessing the living arrangements

The level of (dis)satisfaction regarding the living arrangements certainly has its role in the global assessment of the daily life. Nevertheless, we decided to present this issue separately in order to make it easier to describe the results. The following two themes were pointed out by some elders.

I live with my daughter, but I would prefer to live in my own home

Ludovice, Ivete, Rui and Anastácia live with relatives: the first three in the house of a child, and the latter in her own house with her husband. The first three recognize that they could not live alone in their own houses. However, Ludovice and Ivete would prefer to continue living in their own houses. Living in their daughters' houses has some considerable costs for them, namely loss of autonomy and, in the case of Ivete, also loss of privacy:

“(...) I live in the house of one of my daughters. It is my daughter who rules the house. I have this life; I can do nothing about it” (Ludovice).

“I would like to have fewer 15 years, having my own house and my children and grandchildren around me. It would be a paradise” (Ivete).

“My daughter is always afraid that I fall in the bath; I even cover the door lock because I do not want onlookers. I want to be at my own will” (Ivete).

It is good to live in my own home

Interestingly, the elders who live alone in their own houses (Evaristo, Gerónimo and Almerinda) value this living arrangement. This valorization is justified by the autonomy that derives from living in one's own house:

“I live alone in my sweet home; it is mine” (Evaristo).

“The house is mine; I'm at my own will” (Almerinda).

5.5. Responding to certain events and transitions (in the past and in the future)

In the discourse of the elders, we also found how they have dealt with some past events and transitions, and how they expect to deal with future events and transitions.

I miss my wife in her absence

Two elders (Evaristo and Rui) mentioned that they miss their wives, who deceased recently:

“I'm widowed for eight months. This upset me a lot. I'm immersed in it. I only think of it; it is a bit confusing” (Evaristo).

“I really miss my wife in her absence” (Rui).

The other widowed elders did not mention this issue because, as Gerónimo said, the death of his wife was “a page turned” in a distant past.

I felt inferiority when I started needing personal care

Anastácia is the only elder who already made a transition to “high dependency”. It happened when her daughter was 10 years old. She was very upset, and she felt inferior in relation to others:

“I felt inferiority. Inferiority, I do not know the right word, because we fall. Do not forget that we fall. We fall a lot in our way of being, in our way of acting, due to strong suffering and due to the fact we are always asking (help). It is a great suffering, and I felt like this for a while” (Anastácia).

However, Anastácia told us that she “has learned to live” with her condition, and today she feels happy (also because she feels that her relatives give her support whenever she needs).

Anticipating a resigned acceptance of a transition to “high dependency”

Rui and Benvinda expect to deal with an eventual future transition to “high dependency” with resignation. In their points of view, it is something that will “naturally” happen and that they cannot do anything against it. Rui is the one who expressed this more explicitly:

“For now I still have a bath without help; I still do things by myself. When I do not, then someone will have to help me. (...) I cannot do anything about it” (Rui).

Anticipating a difficult acceptance of a transition to “high dependency”

While Almerinda does not think of the possibility of getting “highly dependent”, Ivete, António and Evaristo expect to deal poorly with an eventual transition to “high dependency”. António and Evaristo identify the physical decay as the most problematic aspect of dealing with “high dependency”:

“When a person is dependent on another, it is very sad. We want to do something and we cannot, it seems that everything lasts an eternity. To remember the past and realize how we are today...this is very demoralizing. (...) A person who arrives at that point is a finished person. The person is finished. It is better God calls for this person and have things finish there” (Evaristo).

“Thinking about the life that one has (compared to) the sport that one did, the life that one had... My life was full of sport, from when I was a child until recently. (...) When we arrive at that point (high dependency), it is the same to say ‘I had this agility in the past, and now I’m in this situation...’ (...) It is the same to say ‘I’ve managed to do it, but now I can’t’” (Gerónimo).

For Ivete an eventual transition to “high dependency” will be very painful because it would be very difficult for her to receive personal care (e.g., body hygiene). It seems that for Ivete it will be problematic losing privacy rather than losing physical strength/agility.

6. DISCUSSION AND IMPLICATIONS FOR SOCIAL POLICY AND PROFESSIONAL PRACTICE

As mentioned in the introduction, this paper constitutes an initial exploration of the topic of subjective well-being of the older population who receive social care. Therefore, it is not the end product of a full research project on this topic. Consequently, it is mainly descriptive, and it raises more questions for future research than offers solid answers.

Firstly, the results reveal that all the elders perceive the reception of formal care as inevitable, mainly because family support is not seen as viable. This raises a question: Does this perceived inevitability lead to satisfaction with formal care and, consequently, to the elders' well-being? Probably yes. But to obtain a more secure answer to this question, we would need to inquire of elders who conceive that receiving formal care is not inevitable.

Most of the results are related to the sources of "well-being" and also "ill-being" (term used by Diener, 2006) from the perspective of the elders.

The identified sources of well-being are: satisfaction with the social care services; satisfaction with the daily life; and satisfaction with living arrangements.

The satisfaction with the Day Care Centre is based on "having company" and, to a lesser extent, on "being occupied", while the satisfaction with the home care is associated with its capacity to satisfy different types of the elders' needs, on one hand, and with the friendship, affection and politeness of the home care workers, on the other. The finding regarding home care is supported by some literature mentioned in the literature review section (e.g., Francis and Netten, 2004; Graham and Bassett, 2006; Gantert et al., 2008). This shows that what is valued regarding the Day Care Centre is not exactly the same as what is valued regarding home care, although there are some valued aspects which are common to both services (e.g., friendship, affection and politeness of the care workers). We will return to this issue later when we look at the sources of ill-being.

In turn, satisfaction with the daily life is, in general, anchored in "doing normal things" and "being occupied" (perhaps except in the case of Anastácia). These aspects are inter-related and, in our opinion, they can be conceptualized as proprieties of a broader category named "having a life" (although different from the past life). "Having a life" includes the capacity to be independent (although with some restrictions and adjustments) associated to the capacity to sustain some daily routines. The sense of having a structured day based on some "normal" routines is particularly important to the sense of "having a life". This is confluent with the findings of some studies previously reviewed (e.g., Bowers et al., 2009; Tanner, 2010; Katz et al., 2013).

Anastácia, due to her disability (she uses a wheelchair), does not have the capacity to do certain "normal things" that the remaining elders can do; consequently, her satisfaction with daily life derives mainly from other factors, namely, from the family support that she can get whenever she needs it.

The importance that "having a life" or "having control over the daily life" can have for many elders is particularly relevant from the point of view of social policy and professional practice. In these cases, social policy and professional practice should promote this source of well-being.

The third source of well-being that we found is satisfaction with the living arrangements. We had the opportunity to find out that the elders who express this satisfaction are living (alone) in their own houses. Living at one's home is valued because it guarantees autonomy (ruling the house) and also privacy.

Concluding, our findings contribute to confirm the importance of two domains of well-being already identified in the literature: contacts with social care services and control over the daily life. However, we identified another relevant domain not found in the review,

namely, the living arrangements, although we should remember that the literature review is non-exhaustive.

Looking now to the sources of “ill-being”, we identified the following ones: dissatisfaction with the Day Care Centre, dissatisfaction with the daily life, dissatisfaction with the living arrangements, and transition to widowhood.

The dissatisfaction with the Day Care Centre is found, mainly, in one case (Rui); as we saw, it derives from his excessive inactivity (too many hours doing nothing). Rui would like to have more physical activity (he dreams of working in a garden). Although there was no other man in the focus group attending the Day Care Centre, this raises the following questions to be explored in future studies: Do men attending a Day Care Centre value activities of physical nature more than women? Do the preferences regarding the activities offered by a Day Care Centre vary by gender?

Being idle for too many hours at the Day Care Centre (Rui) and having to attend the Centre because of no alternatives (Ludovice) are the main causes of dissatisfaction with the daily life. This shows that the assessment of the social care services can determine, in a considerable way, the assessment of the daily life. In these two cases, the existence of some dissatisfaction regarding the attendance of the Day Care Centre contributes, due to the same reasons, to some dissatisfaction with the daily life. This interconnection is understandable, as both elders spend many hours per day in the Centre.

This is relevant from the point of view of social policy and professional practice. As many of the elders spend the most part of their days in a Day Care Centre, the level of satisfaction with its services will have a significant impact on the level of satisfaction with their daily lives and, consequently, on their levels of well-being. This does not have the same probability of happening in the case of home care, given that, at least in Portugal, this service occupies just around 30 minutes per day of the elders’ time. This may mean that there will be more chances to compensate an eventual dissatisfaction with a home care service rather than with a Day Care Centre. This is an interesting issue that deserves to be further explored in future research.

Dissatisfaction with the living arrangements is another source of “ill-being”. This dissatisfaction, expressed by two elders (Ivete and Ludovice), is a result of living in their daughters’ homes. This living arrangement implies, for both elders, less autonomy and, in the case of Ivete, also less privacy. Rui also lives, rotationally, in his children’ homes, but, contrarily to Ivete and Ludovice, he does not complain about it. Does gender play a role regarding this issue? This is another issue that could be further explored in future research.

Lastly, we found that a recent transition to widowhood is also a source of “ill-being”, which is in line with other studies (e.g., Caradec, 2010).

Looking at these results, it is tenable to state that Evaristo, Gerónimo and Almerinda are those who will have the highest levels of well-being. They are satisfied with the home care, they are satisfied with their daily lives and they are satisfied with their living arrangements. In other words, they have their basic needs satisfied by the home care services, they have a sense of “having a life” and they feel happy to live in their own homes. If future studies conclude that most of the elders who have minimal/moderate levels of incapacity value their independence (doing normal things, being occupied, preserving certain routines), their autonomy (living in their own houses, spaces where they can exercise power) and the satisfaction of their basic needs, the social policies should offer to older people the opportunity to continue in the community, inclusively in their own houses, through the support of home care. The maintenance of the elders in their own houses requires the contribution of other public policies, such as housing policies (promoting age friendly houses). In turn, the expansion of home care has been a priority in several countries, including Portugal (Huber et al., 2009; GEP, 2011). Nevertheless, in Portugal there is still a good margin available to

improve home care, as it operates for short periods of time in a day, and the package of services is limited. An expansion of home care in Portugal should take into account the different facets of regional disparities, a phenomenon that persists in Portugal (Noronha, 2011; Barreira, 2011).

To finish, it is also important to emphasize that some elders expect to have many difficulties in dealing with a future situation of “high dependency”, more concretely with the physical decay (two men) and with loss of privacy (a woman). This is particularly relevant from the point of view of professional practice, in the sense that this practice should be aware of these issues in order to preserve the elders’ dignity.

ACKNOWLEDGEMENTS

This paper was partially financed by FCT – Foundation for Science and Technology.

REFERENCES

- AGE – The European Older People’s Platform (2010). European Charter of the rights and responsibilities of older people in need of long-term care and assistance. Accessed 10 January 2013, http://www.age-platform.eu/images/stories/22204_AGE_charte_europeenne_EN_v4.pdf.
- Andrews, G. J.; Gavin, N.; Begley, S. and Brodie, D. (2003). Assisting friendships, combating loneliness: users’ views on a ‘befriending’ scheme. *Ageing & Society*. 23(3): 349–362.
- Barbour, R. (2007). *Doing Focus Groups*. Sage. London.
- Barreira, A. P. (2011). Spatial Strategic Interaction on Public Expenditures of the Northern Portuguese Local Governments. *Spatial and Organizational Dynamics*, 6, CIEO. Faro.
- Bowers, H. et al. (2009). Older people’s vision for long-term care. Joseph Rowntree Foundation. York.
- Camfield, L. and Skevington, S. M. (2008). On Subjective Well-Being and Quality of Life. *Journal of Health Psychology*. 13(6): 764-775.
- Caradec, V. (2010). *Sociologie de la Vieillesse et du Vieillissement*. 2d edition. Armand Colin. Paris.
- Charmaz, K. (1990). ‘Discovering’ chronic illness: using Grounded Theory. *Social Science & Medicine*. 30(11): 1161-1172.
- Charmaz, K. (2006). *Constructing Grounded Theory. A Practical Guide Through Qualitative Analysis*. Sage. London.
- Diener, ED. (2006). Guidelines for National Indicators of Subjective Well-Being and Ill-Being. *Journal of Happiness Studies*. 7(4): 397-404.
- Dunér A. and Nordström, M. (2010). The desire for control: Negotiating the arrangement of help for older people in Sweden. *Journal of Aging Studies*. 24(4): 241–247.
- Efraimsson, E.; Sandman, P. and Rasmussen, B. H. (2006). ‘They were talking about me’ – elderly women’s experiences of taking part in a discharge planning conference. *Scandinavian Journal of Caring Sciences*. 20(1): 68–78.
- Francis, J. and Netten, A. (2004). Raising the Quality of Home Care: A Study of Service Users’ Views. *Social Policy & Administration*. 38(3): 290–305.

- Gabriel, Z. and Bowling, A. (2004). Quality of life from the perspectives of older people. *Ageing & Society*. 24(5): 675-691.
- Gantert, T. W.; McWilliam, C. L.; Ward-Griffin, C. and Allen, N. J. (2008). The Key to Me: Seniors' Perceptions of Relationship-Building with In-Home Service Providers. *Canadian Journal on Aging / La Revue canadienne du vieillissement*. 27(1): 23 – 34.
- Gabinete de Estratégia e Planeamento – GEP (2011). CARTA SOCIAL – REDE DE SERVIÇOS E EQUIPAMENTOS 2011. Ministério da Solidariedade e da Segurança Social. Lisboa.
- Galloway S. (2006). A Literature Review, in Scottish Executive, Quality of Life and Well-being. Measuring the Benefits of Culture and Sport: Literature Review and Thinkpiece. Scottish Executive Education Department. Edinburgh.
- Gómez, J. A. D., Merino, B. R. and Tur, A. A. (2010). The Identity of Sociology or what to do when the Universe is Unknown: qualitative solutions against the quantitative obsession. *Spatial and Organizational Dynamics*, 5, CIEO. Faro.
- Graham, J. E. and Bassett, R. (2006). Reciprocal relations: The recognition and co-construction of caring with Alzheimer's disease. *Journal of Aging Studies*. 20(4): 335–349.
- Holstein, M. B. and Minkler, M. (2007). Critical gerontology: reflections for the 21st century. In: M. Bernard and T. Scharf (eds.), *Critical Perspectives on Ageing Societies*. The Policy Press. Bristol.
- Hubber, M., Rodrigues, R., Hoffmann, F., Gasior, K., and Marin, B. (2009). Facts and Figures on Long-Term Care. Europe and North America. European Centre. Vienna.
- Janlöv, A.; Hallberg, I. R. and Petersson, K. (2005). Older persons' experience of being assessed for and receiving public home help: do they have any influence over it?. *Health and Social Care in the Community*. 14(1): 26–36.
- Katz, J., Holland, C. and Peace, S. (2013). Hearing the voices of people with high support needs. *Journal of Aging Studies*. 27(1): 52-60.
- Krueger, R. A. and Casey, M. A. (2009), *Focus Groups. A Practical Guide for Applied Research*. 4th edition. Sage. London.
- Lewinter, M. (2003). Reciprocities in caregiving relationships in Danish elder care. *Journal of Aging Studies*. 17(3): 357–377.
- Noronha, T. (2011). The Impacts of Public Policies for Regional Development in Portugal. *Spatial and Organizational Dynamics*, 6, CIEO. Faro.
- Peace, S., Holland, C., and Kellaher, L. (2011). Option recognition in later life: Variations in ageing in place. *Ageing & Society*. 31(5): 734-757.
- Potter, C. (2009). What quality health care means to older people: Exploring and meeting their needs. *Nursing Times*. 105: 49-50.
- São José, J. (2012a). Logics of structuring the elder care arrangements over time and their foundations. *Sociological Research Online*. 17 (4) 1.
- São José, J. (2012b). A Divisão dos Cuidados Sociais Prestados a Pessoas Idosas: Complexidades, Desigualdades e Preferências. *Sociologia – Problemas e Práticas*. 69: 63-85.
- Sipillä, J. and Kröger, T. (2005). Editorial Introduction: European Families Stretched between the Demands of Work and Care. In: T. Kröger and J. Sipilä (eds.), *Overstretched European Families Up Against the Demands of Work and Care*. Blackwell Publishing. Malden, MA.

- Tanner, D. (2010). Managing the Ageing Experience. Learning from older people. The Policy Press. Bristol.
- Veenhoven, R. (2000). The Four Qualities of Life. Ordering concepts and measures of the good life. *Journal of Happiness Studies*. 1: 1-39.
- VittersØ, J. (2004). Subjective Well-Being versus Self-Actualization: Using the Flow-Simplex to Promote a Conceptual Clarification of Subjective Quality of Life. *Social Indicators Research*. 65: 299-331.
- Williamson, T. (2010). My name is not dementia: People with dementia discuss quality of life indicators. Alzheimer's Society. London.

QUALITY OF LIFE AND STRESSFUL LIFE EVENTS IN FIRST AND SECOND GENERATION IMMIGRANT ADOLESCENTS

Ida Lemos
Cristina Nunes
Lara Ayala Nunes

ABSTRACT

The aim of this study was to examine differences in quality of life and stressful life events, in first and second generation immigrant adolescents living in Algarve. A total of 172 immigrant adolescents participated in the study, completing the kidscreen-52, the stressful and negative life events inventory and a socio-demographic questionnaire. Results suggest that younger immigrant adolescents report more physical well-being and a higher mood level. Concerning gender differences, girls scored higher than boys in physical well-being, mood and self-perception, but no differences were found on the other kidscreen subscales. First generation immigrants scored significantly higher than second generation ones on the general quality of life index, psychological well-being, autonomy, financial resources and school environment. However, the second-generation immigrants did not seem to be more exposed to stressful life events than the first-generation group.

When selecting relevant variables for well-being promotion and for intervention, we must consider that immigrants are more exposed to economic vulnerability, may experience difficulties in adapting to a different school context, and are at higher risk of social exclusion.

Keywords: Quality of Life, Stressful Life Events, Immigrants, Adolescence.

JEL Classification: I00

1. INTRODUCTION

In the last decades empirical work with large samples of children and adolescents has strengthened a developmental-contextual perspective of human development, focused on the study of interactions between the individual and contextual factors.

In this perspective, as Rutter and Sroufe (2000) advocate, in order to understand the psychosocial adaptation of adolescents, it is important to study the relationships between developmental outcomes in the teenagers and environmental factors that may act as protective factors or as risk or vulnerability factors. Therefore, it is relevant to understand which contextual processes may enhance, regulate or weaken the individual's developmental outcomes (Garmezy, 1996; Rutter, 1991; Rutter and Taylor, 2005).

The presence of several risk conditions or negative events acting together in the adolescent's life, such as low socio-economical resources, parental conflict, illness of a caregiver or lack of support from peers, may lead to psychological problems and to engagement in risky behaviours resulting in health related problems (Harland et al., 2002; Lerner, Walsh and Howard, 1998).

Also, it has been found that the loss of a primary caregiver, parental divorce and academic problems are amongst the major life events experienced as stressful situations by adolescents (Anderson, Jimerson and Whipple, 2005; Bru, Murberg and Stephens, 2001; Harland et al., 2002).

On the other hand, characteristics such as gender, personality traits and a high quality of parenting have been pointed out as buffers of the impact of stressful or negative life events (SLE), diminishing the internalization of psychopathological problems of adolescents (Deković et al., 2008; Oliva, Jiménez and Parra, 2009; Oliva et al., 2008; Wyman et al., 1992). Thus, these characteristics have a significant impact on well-being and, consequently, on the appraisal of quality of life (QoL).

Several studies with large community samples underline the fact that perceived QoL is related with physical aspects, such as health, individual aspects such as self-esteem, positive and negative emotions, self-perception and autonomy, and social aspects such as satisfaction with social support, family relations, school, peers and health-related behaviours (Gaspar et al., 2009; Ravens-Sieberer et al., 2007).

The effect of contextual factors on the QoL of adolescents is a current issue addressed by different investigations (e.g., Drukker et al., 2006; Oberle, Schonert-Reichl and Zumbo, 2011; Villalonga-Olives et al., 2010). For instance, Villalonga-Olives et al. (2010) assessed the relationship between recent life events and QoL using the kidscreen-27 in a sample of 840 Spanish adolescents. Results of this study pointed out an impact of life events on perceived QoL for those adolescents who had experienced several undesired life events. Also, Oberle, Schonert-Reichl and Zumbo (2011) examined perceived satisfaction with life (an indicator of health related quality of life) and environmental aspects of the school (school connectedness), neighbourhood (perceived neighbourhood support), family (perceived parental support), and peer group (positive peer relationships) in a sample of 1,402 Canadian adolescents. Results suggested that all of the contextual aspects studied significantly predicted the adolescents' satisfaction with life.

Evidence has been accumulating about the families' contextual factors that affect children's development (Holden and Edwards, 1989). One of the important questions concerns the role that financial and social resources play in promoting health. Indeed, the way adolescents perceive their own well-being, satisfaction with health, and their engagement in risk and protective behaviours is related to their socio-economic status (Morgen et al., 2010).

If well-being and quality of life are major subjects on research in child and adolescent psychology, a current important topic is the study of the relationship between psychological difficulties following immigration and well-being on this target population (e.g., Brindis et al., 1995; Phinney and Ong, 2007; Mendoza, Javier and Burgos, 2007; Walsh, Shulman and Maurer, 2008).

The fact that the number of international migrants increased by 11 million between 2005 and 2010, as referred to in the 68th session report of the General Assembly of the United Nations for International Migration and Development (2013), partially explains the interest of researchers in the study of immigrant families and children.

Families migrate to developed countries in search of better living conditions, and immigration is a source of economic, social and cultural empowerment for the hosting countries. Nevertheless, immigration has an impact on not only the social structures of those countries (Dias and Gonçalves, 2007) but also the process of acculturation, which involves affective, behavioural and cognitive components and raises health and economic concerns (Lansford, Deater-Deckard and Bornstein, 2007; Stefanek et al., 2012).

Due to their various strains, immigrants represent a vulnerable group for developing health related problems. Immigrants face multiple challenges in acculturation within a new dominant society: for instance, they must frequently learn different languages

and acknowledge new cultures, and parents and children must adapt to new contexts at professional and academic levels (Fragoso and Lucio-Villegas, 2011; Landsford et al., 2007; Hernández, Denton and Macartney, 2007). In the specific case of Portugal, immigrants have to adapt to a European Union country struggling to become economically competitive at a regional and national level (Noronha, 2011).

Particularly for adolescents, social pressures may be intensified both by the demands of the developmental phase and by acculturation issues, leading to conflicting changes in the individual's social identity and self-concept (Brindis et al., 1995). Moreover, immigrant adolescents have to deal with several challenges regarding the adaptation to school context, peer group, and a new cultural and social environment (Pavlopoulos et al., 2008). All these stressors have an impact on their social and psychological identities.

However, studies are not unanimous about the negative impact of the acculturation process during adolescence. Studies comparing first-generation and second-generation immigrants have indicated better outcomes amongst first-generation immigrant adolescents in terms of psychosocial adjustment (Brindis et al., 1995; Sam et al., 2008; Gonzalez et al., 2007; Phinney and Ong, 2007). These results highlight the complexity of variables associated with family and individual factors that moderate the process of adaptation and acculturation (Sam et al., 2008).

In Portugal, research has been conducted mainly on the quality of life and on health related behaviours of general population samples of adolescents, (e.g., Gaspar et al., 2008a; Gaspar et al., 2008b). However, from our point of view, research on the subject of developmental psychology and psychopathology concerning immigrant adolescents and their developmental contexts is scarce (e.g., Gaspar, 2008). Specifically, the study of QoL of immigrant adolescents must address contextual risk factors that put them at risk for negative developmental outcomes, as well as factors that may have a buffer or protective effect on experiencing negative outcomes in the presence of SLE.

The aim of the present study was to analyze relationships between SLE and perceived QoL in first-generation and second-generation immigrant adolescents. Consequently, identifying stressful and negative life events and its relation with perceived QoL may enhance the probability of identifying those immigrant youngsters at increased risk for psychosocial problems.

2. METHOD

2.1. Participants

The sample consisted of 172 immigrant adolescents attending elementary schools and high schools. The mean age was 14.88 years ($SD = 1.78$; range: 12, 18); 57.56% ($n = 99$) were girls and 42.44% ($n = 73$) were boys.

From the total sample, 72.05% of the adolescents were first-generation immigrants and 27.95% were second-generation immigrants. Their countries of origin were Africa (29.19%), Brazil (16.77%), Eastern European countries (20.50%) and other European countries (33.54%).

2.2. Measures

Socio-demographic data: A questionnaire was developed *ad hoc* to collect the following data: adolescents' age and gender, mother's and father's ages, work status, labour qualification and educational level. Type of family, immigrant status, country of origin, and school

information (number of school failure years, school absences and average grades) for the adolescent were also included.

Perceived quality of life (QoL): The kidscreen-52 child self-report was used to evaluate the perceived quality of life of children and adolescents between the ages of 8 and 18 years (Gaspar et al., 2008). The instrument consists of 52 items to be rated on a scale from 1 (no/never) to 5 (very much/always), and it is grouped according to the following dimensions:

Physical Wellbeing: It refers to physical activity levels, energy and fitness and includes five items (e.g., “Did you feel well and fit?”) ($\alpha = .825$).

Psychological Wellbeing: This dimension evaluates the psychological wellbeing, including positive emotions and life satisfaction. It consists of 6 items (e.g., “Did you feel satisfied with life?”) ($\alpha = .874$).

Mood: This scale includes seven items concerning negative experiences, depressive mood and feelings of distress (for example: “Did you feel sad?”) ($\alpha = .862$).

Self-perception: It evaluates the adolescent’s perception of self, physical appearance and satisfaction related to these aspects. It includes five items (e.g., “Were you concerned about your appearance?”) ($\alpha = .617$).

Autonomy: It includes five items that inquire about opportunities to enjoy their leisure time (e.g., “Were you able to choose what to do in your spare time?”) ($\alpha = .829$).

Relationships with parents and family life: This dimension examines the relationship with parents and the family atmosphere. It consists of six items (e.g., “Do your parents understand you? Are you able to talk to your parents whenever you want?”) ($\alpha = .915$).

Financial Resources: It assesses the perception of the adolescents’ family financial capacity. It includes three items (e.g., “Have you had enough money to do what your friends do?”) ($\alpha = .915$).

Social support and support from peers: This dimension reflects the nature of the adolescent’s social relations with others. It consists of six items (e.g., “Have you been able to talk about everything with your friends?”) ($\alpha = .853$).

School Environment: This dimension includes six items that assess the perception of the boy or girl on their aptitude for learning, concentration and feelings about school (e.g., “Have you done well in school?”) ($\alpha = .810$).

Social Acceptance (Bullying-rejection): It assesses feelings of rejection by peers. It includes three items (e.g., “Have you been bullied or threatened by other girls or boys?”) ($\alpha = .793$). The General-QoL Index score is the mean of all items ($\alpha = .949$).

Stressful life events (SLE): We used a short version of the Stressful Life Events Inventory (Oliva et al., 2008) consisting of a list of 25 negative events, concerning the individual or significant others, likely to be experienced by the adolescent in family, peer or school-related contexts (e.g., parental divorce, death of a family member, etc.). Each item was scored “1” if the specific event had occurred and “0” if the event had not occurred in the last 5 years. A total score was composed by adding up all negative events experienced. In the present study, internal consistency measured by Cronbach’s alpha was .784.

2.3. Procedure

First, school boards were asked and agreed to participate in this study. Informed consent forms were requested and obtained from parents and adolescents. The data collection in the school context took place after having obtained permission from the Directorate General of Innovation and Curricular Development, Ministry of Education. Participation was voluntary and no compensation was offered. The instruments were completed in the classroom context with the presence of a trained interviewer.

2.4. Statistical analysis

Missing data at the item level were extrapolated using the missing value analysis of SPSS. If more than 10% of the items were missing, the questionnaire was removed from the analyses. Statistical assumptions for parametric analyses were checked following Tabachnick and Fidell's (2007) recommendations, with satisfactory results. Statistical analyses were performed with SPSS software v-18. Snedecor's F test was used to compare quantitative variables, and a Chi-square test was performed for qualitative variables.

3. RESULTS

3.1. Socio-demographic data

The majority of adolescents lived in a two-parent family (74.85%). The mean age of the adolescents' mothers was 41.54 years ($SD = 5.42$; Range: 30, 57) and the mean age of fathers was 44.40 years ($SD = 6.46$; Range: 33, 71). 39.61% of mothers had completed studies at middle or secondary school and 30.50% of fathers had completed primary school level. The majority of mothers and fathers had untrained or semi-skilled jobs (see Table 1).

Regarding the years of school failure, 59.54% of the participants had no reports of school failure, 22.29% had failed one year, 11.45% had failed two years, and the remaining participants (6.63%) had between three to five years of school failure.

No significant differences were found between first and second generation immigrants on school failure ($F(1, 160) = 2.68, n.s.$), average school grades ($F(1, 160) = 1.74, n.s.$) and school absences ($F(1, 160) = 1.15, n.s.$).

Table 1. Parents' academic qualifications and present labour qualifications

<i>Educational level</i>	<i>Father</i>		<i>Mother</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Primary level not completed	38	26.95%	34	22.08%
Primary school level completed	43	30.50%	34	22.08%
Completed studies at middle or secondary school	36	25.53%	61	39.61%
University degree completed	24	17.02%	25	16.23%
<i>Labour qualification (present job)</i>				
Untrained	66	50.77%	71	54.62%
Semi-skilled	44	33.85%	41	31.54%
Skilled	20	15.38%	18	13.85%

3.2. Quality of life

All subscales of the Kidscreen-52 were significantly related between them (see Table 2) with correlations ranging from .15 to .83.

Table 2. Means, standard deviations and correlations between QoL and SLE (n = 166)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Physical Wellbeing	-	.504***	.340***	.280***	.362***	.307***	.356***	.470***	.223**	.263**	.613***	-.261**
2. Psychological Wellbeing		-	.714***	.396***	.528***	.631***	.382***	.615***	.453***	.347***	.833***	-.158*
3. Mood			-	.410***	.469***	.536***	.320***	.430***	.424***	.302***	.741***	-.280***
4. Self-perception				-	.367***	.266**	.348***	.302***	.221**	.337***	.576***	-.076
5. Autonomy					-	.465***	.389***	.510***	.298***	.239***	.704***	-.152
6. Parents and family life						-	.428***	.482***	.368***	.193*	.718***	-.067
7. Financial Resources							-	.458***	.216**	.269***	.647***	-.120
8. Social Support Peers								-	.404***	.401***	.761***	-.101
9. School Environment									-	.153*	.559***	-.190*
10. Social Acceptance										-	.500***	-.172*
11. QoL total											-	-.233**
12. Number of SLE												-
<i>M</i>	3.84	3.98	3.93	3.82	3.92	4.03	3.99	4.06	3.63	4.33	3.95	5.65
<i>(SD)</i>	(.77)	(.75)	(.84)	(.71)	(.85)	(.88)	(.96)	(.78)	(.74)	(.81)	(.53)	(4.06)

* $p < .05$, ** $p < .01$, *** $p < .001$

First generation immigrants scored significantly higher than second generation on general-QoL index ($F(1,160) = 6.28, p = .013, \eta^2 = .04$), psychological well-being ($F(1,160) = 3.99, p = .048, \eta^2 = .02$), autonomy ($F(1,160) = 5.63, p = .019, \eta^2 = .03$), financial resources ($F(1,160) = 9.15, p = .003, \eta^2 = .05$), and school environment ($F(1,160) = 7.09, p = .009, \eta^2 = .04$) (see Table 3).

Table 3. Differences according to immigration status in QoL and SLE

	1 st generation		2 nd generation		<i>F</i> (<i>df</i> , <i>N</i>)	<i>p</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Physical Wellbeing	3.88	0.69	3.67	0.94	2.37 (1,160)	.126	.01
Psychological Wellbeing	4.06	0.69	3.80	0.86	3.99 (1,160)	.048	.02
Mood	4.04	0.76	3.80	0.90	2.93 (1,160)	.089	.02
Self-perception	3.82	0.67	3.88	0.83	0.25 (1,160)	.618	.00
Autonomy	4.03	0.80	3.68	0.94	5.63 (1,160)	.019	.03
Parents and family life	4.08	0.89	3.86	0.90	2.12 (1,160)	.147	.01
Financial Resources	4.16	0.86	3.66	1.14	9.15 (1,160)	.003	.05
Social Support Peers	4.11	0.77	3.91	0.83	1.94 (1,160)	.166	.01
School Environment	3.71	0.69	3.37	0.84	7.09 (1,160)	.009	.04
Social Acceptance	4.43	0.61	4.39	0.72	0.10 (1,160)	.753	.00
General-QoL Index	4.03	0.50	3.80	0.57	6.28 (1,160)	.013	.04
Number of SLE	5.61	4.15	5.88	4.06	0.13 (1,150)	.722	.00

No associations were found between age and QoL except for physical well-being ($r = -.301$; $p = .000$) and mood ($r = -.160$; $p = .039$).

Girls scored higher than boys on physical well-being ($F(1, 160) = 8.48$, $p = .004$, $\eta^2 = .05$), mood ($F(1, 160) = 5.09$, $p = .025$, $\eta^2 = .03$) and self-perception ($F(1, 160) = 5.93$, $p = .016$, $\eta^2 = .03$) (see Table 4).

Table 4. Differences according to gender in QoL and SLE

	Girls		Boys		F (df, N)	p	η^2
	M	SD	M	SD			
Physical Wellbeing	3.68	.81	4.02	.67	8.48 (1, 160)	.004	.05
Psychological Wellbeing	3.92	.83	4.09	.59	2.05 (1, 160)	.155	.01
Mood	3.86	.84	4.14	.73	5.09 (1, 160)	.025	.03
Self-perception	3.73	.71	3.99	.68	5.93 (1, 160)	.016	.03
Autonomy	3.82	.87	4.08	.81	3.67 (1, 160)	.057	.02
Parents and family life	3.97	.96	4.12	.79	1.09 (1, 160)	.296	.01
Financial Resources	3.99	.99	4.05	.89	.16 (1, 160)	.691	.00
Social Support Peers	4.11	.79	4.03	.78	.36 (1, 160)	.548	.00
School Environment	3.61	.76	3.64	.73	.09 (1, 160)	.769	.00
Social Acceptance	4.47	.64	4.40	.65	.12 (1, 160)	.727	.00
QoL total	3.92	.58	4.06	.43	3.06 (1, 160)	.082	.02
Number of SLE	6.12	3.52	4.95	4.70	3.13 (1, 156)	.079	.02

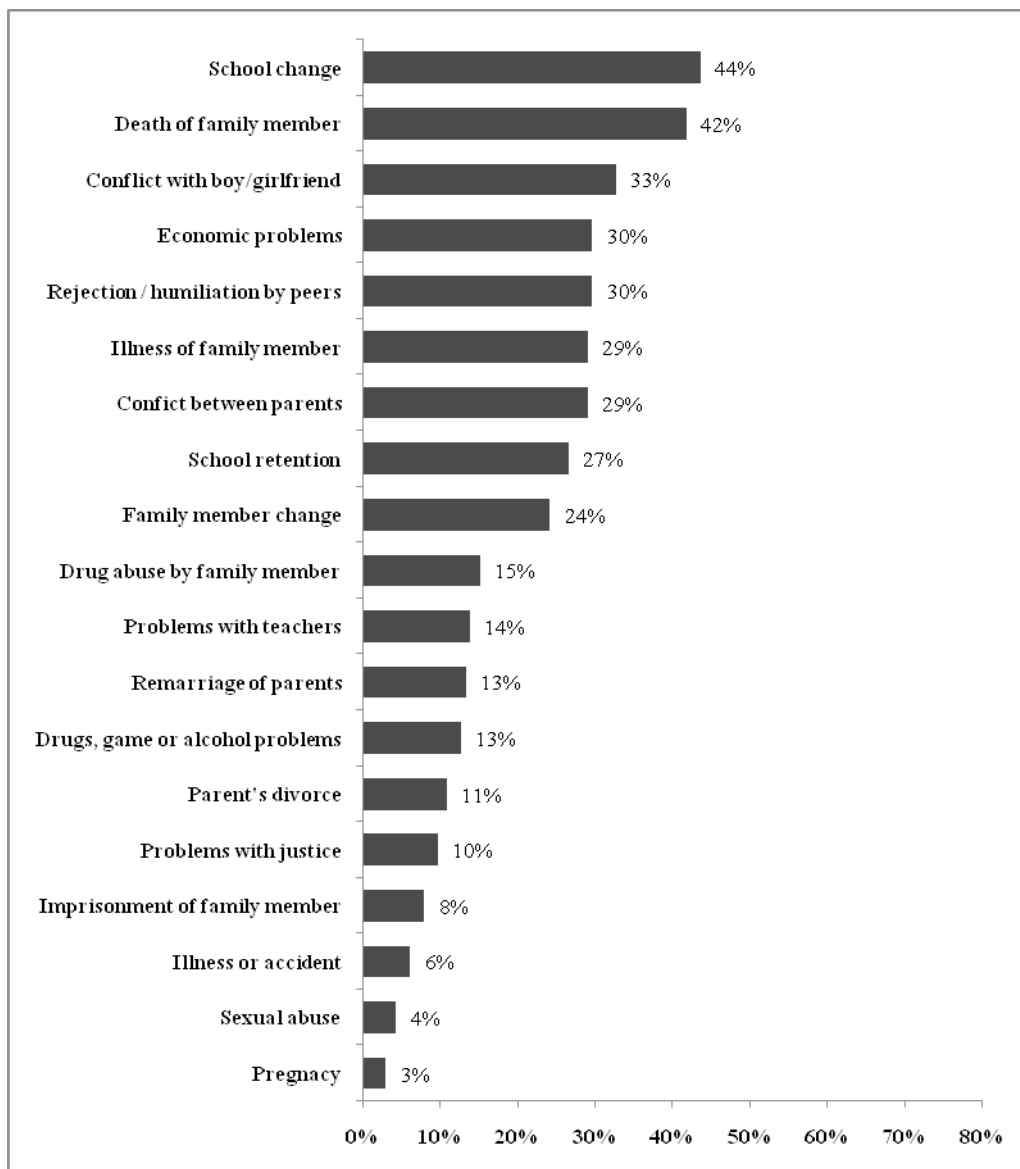
3.3. Stressful life events

In figure 1 we can observe that the most reported stressful events in the last five years were school change (44%), death of a family member (42%), conflict with boy/girlfriend (33%), economic problems and rejection / humiliation by peers (30%). The report of illness of a family member and conflicts between parents (29%) were also relevant.

Regarding the number of stressful life events, we found no significant differences between first ($M = 5.61$, $SD = 4.15$) and second generation ($M = 5.88$, $SD = 4.06$) ($F(1, 150) = 0.127$, $n.s.$) (see Table 3). Also, we found no significant differences between boys ($M = 4.95$; $SD = 4.70$) and girls ($M = 6.12$; $SD = 3.52$) on the number of stressful events ($F(1, 156) = 3.127$; $p = 0.079$) (see Table 4).

Moreover, significant and negative correlations were found between SLE and the General-QoL Index ($r = -.233$, $p = .003$), Physical Wellbeing ($r = -.261$, $p = .001$), Psychological Wellbeing ($r = -.158$, $p = .049$), Mood ($r = -.280$, $p = .000$), School Environment ($r = -.190$, $p = .018$) and Social Acceptance ($r = -.172$, $p = .031$) (see Table 2).

Figure 1. Stressful life events in last 5 years



4. DISCUSSION

Studies conducted on quality of life in the last decade with community samples of adolescents suggest that the perception of QoL is influenced by factors such as gender and age, individual and family characteristics and by socio-economic status (Gaspar et al., 2008a; Gaspar et al., 2008b; Michel, Bisegger, Fuhr, Abel and The Kidscreen Group, 2009).

In the last decade, empirical work conducted in European countries on children and adolescents' perceived QoL suggests that it tends to decline with increasing age (Michel et al., 2009). As expected from a developmental perspective, this result is confirmed by the present study but only for physical well-being and mood scales, suggesting that younger participants in our study have better QoL on these two dimensions. Thus, whereas younger immigrant adolescents report more Physical well-being and higher level in Mood, no differences were found according to age in the dimensions Feelings, Self-perception, Autonomy, Relations with parents and family life, Financial Resources, Social Support, School Environment, and Social Acceptance/Bullying Rejection.

Concerning gender differences, we found that girls scored higher than boys in physical well-being, mood and self-perception, but no differences were found according to gender on the other KIDSCREEN subscales in our sample. In what concerns mood and self-perception our results are similar to those reported by Gaspar et al. (2008a, 2008b) in the responses to this scale by female adolescents of the Portuguese general population. However, the result obtained in the physical well-being, suggesting that girls have a higher QoL, differs from the result obtained in these studies. So, we would expect immigrant boys to report higher levels on QoL related to physical well-being. As Michel et al. (2009) pointed out, reports in the kidscreen according to age and gender vary from country to country. The kidscreen European studies' results clearly indicate that we must consider not only developmental related differences in the adolescents' health related behaviors but also social and cultural related health behaviours, and perceived QoL must be regarded as crucial variables. Also, we must take into account that in the Portuguese validation studies (Gaspar et al., 2008a, 2008b) age comparisons were performed between the group of children (i.e., participants 10-11 years) and adolescents (participants 12-18 years), and that, in our study, participants' ages ranged from 12 to 18 years, restricting comparisons with results obtained in these general community studies on QoL.

Another noteworthy result on QoL measures lies in the comparison between first and second generation immigrant adolescents: first generation immigrants scored significantly higher than second generation on the general QoL index, psychological well-being, autonomy, financial resources, and school environment. This result corroborates the studies that indicated that first generation immigrant adolescents tend to report better outcomes in QoL indicators, and that second generation immigrants (born in the hosting country) tend to engage in more high-risk behaviors, despite being in an overall better economic situation than the first generation immigrants (Mendoza et al., 2007; Sam et al., 2008; Chang and Le, 2010). As Sam et al. (2008) pointed out, because family and individual factors moderate the process of adaptation and acculturation, future studies should analyse second-generation immigrants' acculturation processes and psychosocial resources, both in a family and school context and at community level.

The main aim of our study was to analyze relationships between stressful life events and perceived quality of life in first-generation and second-generation immigrant adolescents.

Overall, the most reported stressful events by the immigrant adolescents were: school change, death of a family member, conflict with boy/girlfriend, economic problems and rejection/humiliation by peers. Also relevant were reports of illness of a family member and conflicts between parents. We must note that all these events are cumulative risk factors, which, when acting together, significantly increase the risk of engagement in a psychopathological or deviant developmental path (Langille et al., 2003; Rutter, Giller and Hagell, 1998).

One interesting finding, although not corroborative of the literature (e.g., Stefanek et al., 2012), is that the second immigrant generation of participants did not seem to be more exposed to stressful life events than the first immigrant generation group. This lead us to suggest that the subsample of immigrant adolescents born in Portugal are not at increased risk for adaptation problems in family, school context, with the peer group, or in psychological and physical related issues, when compared to first generation immigrants.

Moreover, the significant and negative correlations found between the number of SLE and the General QoL Index, and the subscales Physical Wellbeing, Psychological Wellbeing, Mood, School Environment and Social Acceptance indicate that, as most studies conducted either with general population samples of adolescents (e.g., Anderson et al., 2005; Bru et al., 2001; Harland et al., 2002), or with immigration samples (e.g., Pavlopoulos et al., 2008; Landsford et al., 2007; Hernández et al., 2007) found, SLE have a significant impact on QoL.

Additionally, this significant and negative association between QoL and the stressful risk factors that these immigrant adolescents have been exposed to suggest that, overall, they may be lacking psychosocial factors that operate as buffering of protective factors, that minimize or lessen negative outcomes, such as internalizing and externalizing disorders, and interpersonal problems that may undermine QoL (Harland et al., 2002; Oliva et al., 2008; Oliva, et al., 2009).

5. CONCLUSION

Some limitations and weaknesses of our study need to be considered. One major limitation is the absence of a comparative study with a sample of native adolescents, matched for socio-demographic variables, which would allow us to analyze eventual specificities of the immigrant adolescents in what concerns associations between SLE and QoL. In addition, the type of sampling and the fact that data collection was limited geographically does not allow us to generalize the findings. Despite these limitations some implications of the present study can be drawn.

Firstly, as several authors have suggested (Berry, 2001; Brindis et al., 1995; Gaspar et al., 2008a), well-being promotion and intervention in this target group must take into account multiculturalism, and consider that immigrants are more exposed to economic vulnerability, may experience difficulties in adapting to different school contexts and peers, and are at higher risk of social exclusion.

Secondly, a positive approach of immigrant adolescents must consider the empowerment of their personal and cultural identity, namely, the involvement of families and community when interventions are conceived. In this line of thought, as Phinney and Ong (2007) and Mendoza et al. (2007) state, in order to promote the psychological well-being of immigrant adolescents, it is necessary to help them to develop a strong feeling of identification with their ethnic or cultural group of origin and, simultaneously, to promote their involvement with the members of the society that hosts them.

ACKNOWLEDGEMENTS

This study was partially financed by Fundação para a Ciência e Tecnologia of Portugal.

REFERENCES

- Anderson, G.E., Jimerson, S.R. and Whipple, A.D. (2005). Student Ratings of Stressful Experiences at Home and School, *Journal of Applied School Psychology*. 21(1): 1-20.
- Berry, J. (2001). A Psychology of immigration. *Journal of Social Issues*, 57(3): 615-631.
- Brindis, C., Wolfe, A., McCarter, V., Ball, S. and Starbuck-Morales, S. (1995). The associations between immigrant status and risk-behaviors patterns in Latino adolescents. *Journal of Adolescent Health*. 17: 99-105.
- Bru, E., Murberg, T.A. and Stephens, P. (2001). Social support, negative life events and pupil misbehaviour among young Norwegian adolescents. *Journal of Adolescence*. 24: 715-727.
- Chang, J. and Le, T.N. (2010). Multiculturalism as a dimension of school climate: the impact on the academic achievement of Asian American and Hispanic youth. *Cultural Diversity Minor Psychology*. 16(4): 485-492.

- Deković, M., Koning, I.M., Stams, G.J. and Buist K.L. (2008). Factors associated with traumatic symptoms and internalizing problems among adolescents who experienced a traumatic event. *Anxiety, Stress & Coping: An International Journal*. 21: 4, 377-386.
- Dias, S. and Gonçalves, A. (2007). Imigração e Saúde. *Revista Migrações ACIDI*. 1: 15-26.
- Drukker, M., Kaplan, C., Schneiders, J., Feron, F. and van Os, J. (2006). The wider social environment and changes in self-reported quality of life in the transition from late childhood to early adolescence: a cohort study. *BMC Public Health*. 6:133.
- Fragoso, A. and Lucio-Villegas, E. (2011). Looking back through a new pair of glasses: Conflict and mediation in local development. *Spatial and Organizational Dynamics*, 5: 68-79
- Garmezy, N. (1996). Reflections and commentary on risk, resilience, and development. In: R. J. Haggerty, L. R. Sherrod, N. Garmezy and M. Rutter (Eds.), *Stress, Risk, and Resilience in Children and Adolescents: Processes, Mechanisms, and Interventions*. Cambridge: Cambridge University Press.
- Gaspar, T. (2008). Promoção do bem-estar na adolescência: Impacto do estatuto socio-económico e do estatuto migrante. *Análise Psicológica*. 2(XXVI): 265-279.
- Gaspar, T., Gaspar, M., Pais, R., José, L., Leal, I. and Ferreira, A. (2009). Health-related quality of life in children and adolescents and associated psychosocial factors. *J Cogn Behav Psychother*. 9(1): 33-48.
- Gaspar, T., Matos, M.G., Ribeiro, J.L.P., Leal, I., Ferreira, M., Tomé, G., Erhart, M. and Ravens-Sieberer, U. (2008a). Instrumentos KIDSCREEN-52 – Versão Portuguesa (KIDSCREEN-52 Crianças e Adolescentes e KIDSCREEN-52 Pais). In: T. Gaspar and M. Matos (coords.). (2008). *Qualidade de Vida em Crianças e Adolescentes – Versão Portuguesa dos Instrumentos KIDSCREEN-52*. Cruz Quebrada: Aventura Social & Saúde.
- Gaspar, T., Ribeiro, L.P., Matos, M. and Leal, I. (2008b). Promoção de Qualidade de Vida em Crianças e Adolescentes. *Psicologia, Saúde & Doenças*. 9(1): 55-71.
- Gonzalez, N.A. , Dumka, L.E., Mauricio, A.M. and Germán, M. (2007). Building bridges. Strategies to promote academic and psychological resilience for adolescents of Mexican origin. In: J. Lansford, K. Deater-Deckard and M. Bornstein (Eds). *Immigrant families in contemporary society*. New York: The Guilford Press.
- Harland, P., Reijneveld, S.A., Brugman, E., Verloove-Vanhorick, S.P. and Verhulst, F.C. (2002). Family factors and life events as risk factors for behavioural and emotional problems in children. *European Child & Adolescent Psychiatry*. 11: 176-184.
- Hernández, D., Denton, N. and Macartney, S. (2007) Family circumstances of children in immigrant families: Looking to the future of America. In: J. Lansford, K. Deater-Deckard and M. Bornstein (Eds). *Immigrant families in contemporary society*. New York: The Guilford Press.
- High Level Dialogue on International Migration and Development United Nations General Assembly (2013). Sixty-eighth session. Concept Note. Accessed in 9th of January 2013, on the Web site of: <http://www.un.org/esa/population/migration/hlmimd2013/highlevelmim2013.htm>.
- Holden, G.W. and Edwards, L.A. (1989). Parental attitudes towards child rearing: instruments, issues, and implications. *Psychological Bulletin*. 106(1): 29-58.
- Koivusilta, L.K., Rimpelä, A.H. and Kautiainen, S.M. (2006). Health inequality in adolescence. Does stratification occur by familial social background, family affluence, or personal social position? *BMC Public Health*. 6: 110.

- Langille, D., Curtis, L., Hughes, J. and Murphy, G. (2003). Association of socio-economic factors with health risk behaviors among high school students in rural Nova Scotia. *Canadian Journal of Public Health*. 94(6), 442-447.
- Lansford, J.E., Deater-Deckard, K. and Bornstein, M.H. (2007). *Immigrant families in contemporary society*. New York: Guilford Press.
- Lerner, R.M., Walsh, M.E. and Howard, K.A. (1998). Developmental- contextual Considerations: Person-Context Relations as the Bases for Risk and Resiliency in Child and Adolescent Development. In: A. Hersen (Ed.), *Comprehensive Clinical Psychology*. New York: Pergamon.
- Mendoza, F., Javier, J. and Burgos, A. (2007) Health of children in immigrant families. In: J. Lansford, K. Deater-Deckard and M. Bornstein (Eds), *Immigrant families in contemporary society*. New York: The Guilford Press.
- Michel, G, Bisegger, C., Fuhr, D. C., Abel, T. and The KIDSCREEN GROUP (2009). Age and gender differences in health-related quality of life of children and adolescents in Europe: a multilevel analysis. *Quality of Life Research*. 18: 1147-1157.
- Morgen, M.S., Mortensen, L.H., Rasmussen, M., Andersen, A.N., Sørensen, T.I. and Due, P. (2010). Parental socioeconomic position and development of overweight in adolescence: longitudinal study of Danish adolescents. *BMC Public Health*. 10: 520.
- Noronha, T. (2011). The impacts of public policies for regional development in Portugal. *Spatial and Organizational Dynamics*, 6: 39-51.
- Oberle, E., Schonert-Reichl, K.A. and Zumbo, B.D. (2011). Life satisfaction in early adolescence: personal, neighborhood, school, family, and peer influences. *Journal of Youth and Adolescence*. 40: 889-901.
- Oliva, A., Jiménez, J. and Parra, A. (2009). Protective effect of supportive family relationships and the influence of stressful life events on adolescent adjustment. *Anxiety, Stress & Coping: An International Journal*. 22(2): 137-152.
- Oliva, A., Jiménez, J., Parra, Á. and Sánchez-Quejiga, I. (2008). Acontecimientos vitales estresantes, resiliencia y ajuste adolescente. *Revista de Psicopatología y Psicología Clínica*. 13: 53-62.
- Pavlopoulos, F., Obradavic, J., Dalla, M., Takis, N., Papathanassiou, A. and Masten, A. (2008). Immigration as a risk factor for adolescent adaptation in Greek urban schools. *European Journal of Developmental Psychology*. 5(2): 235-261.
- Phinney, J. and Ong, A. (2007) Ethnic identity development in immigrant families. In: J. Lansford, K. Deater-Deckard and M. Bornstein (Eds), *Immigrant families in contemporary society*. New York: The Guilford Press.
- Ravens-Sieberer, U. et al. (2007). The KIDSCREEN-27 quality of life measure for children and adolescents: psychometric results from a cross-cultural survey in 13 European countries. *Quality of Life Research*. 16: 1347-1356.
- Rutter, M. (1991). *Childhood Experiences and Adult Psychosocial Functioning*. Ciba Foundation Symposia. 156: 189-208.
- Rutter, M., Giller, H. and Hagell, A. (1998). *Antisocial behavior by young people*. Cambridge: Cambridge University Press.
- Rutter, M. and Sroufe, L.A. (2000). Developmental psychopathology: Concepts and Challenges. *Development and Psychopathology*. 12: 265-296.
- Rutter, M. and Taylor, E. (2005). *Clinical Assessment and Diagnostic Formulation*. In: M. Rutter and E. Taylor (Eds.), *Child and Adolescent Psychiatry*. Oxford: Blackwell Publishing, Ltd.

- Sam, D., Vedder, P., Liebkind, K., Neto, F. and Virta, E. (2008). Immigration, acculturation and the paradox of adaptation in Europe. *European Journal of Developmental Psychology*. 5(2): 138-158.
- Stefanek, E., Strohmeier, D., Fandrem, H. and Spiel, C. (2012). Depressive symptoms in native and immigrant adolescents: the role of critical life events and daily hassles. *Anxiety, Stress & Coping: An International Journal*. 25(2): 201-217.
- Tabachnick, B.G. and Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Pearson Education.
- Villalonga-Olives, E., Rojas-Farreras, S., Vilagut, G., Palácio-Vieira, J., Valderas, MJ., Herdman, M. et al. (2010). Impact of recent life events on the health related quality of life of adolescents and youths: The role of gender and life events typologies in a follow-up study. *Health and Quality of Life Outcomes*. 8(71): 1-9.
- Walsh, S., Shulman, S. and Maurer, O. (2008). Immigration distress, mental health status and coping among young immigrants: A 1-year follow-up study. *International Journal of Intercultural Relations*. 32: 371–384.
- Wyman, P.A., Cowen, E.L., Work, W.C., Raoof, A., Gribble, P.A., Parker, G.R., et al. (1992). Interviews with children who experienced major life stress - family and child attributes that predict resilient outcomes. *Journal of the American Academy of Child and Adolescent Psychiatry*. 31(5): 904-910.

SUBJECTIVE WELL-BEING AND SOCIAL INTEGRATION OF COLLEGE STUDENTS

*Susana Imaginário
Luís Sérgio Vieira
Saul Neves de Jesus*

ABSTRACT

The student's transition from secondary school to higher education consists of a series of changes that can have serious consequences if not satisfactorily overcome, including academic failure and college dropout.

There are many variables that can influence this process of adjustment to higher education, with a particular emphasis given to social integration, especially because, often, this transition involves a change of residence.

Using a sample of 339 students from the University of Algarve, this study aims to deepen our understanding of the relationship between student's subjective well-being and their social integration in higher education.

The results show that the variables of social integration in higher education, interpersonal relationship, personal well-being and emotional balance are predictors of the level of subjective well-being experienced by the students. On the other hand, a significant relation between socio-demographic variables and the student's happiness was not obtained.

Keywords: Students, Higher Education, Social Integration, Subjective well-being.

JEL Classification: I23

1. INTRODUCTION

Over the last 30 years there has been a noticeable growth of candidates in higher education (Fernandes & Almeida, 2005), while the rates of academic failure and college dropout have been growing worse in the developed countries (Almeida, Soares & Ferreira, 2002).

Therefore, there are several variables that can promote or constrain the student's academic adjustment and their transition from the secondary school to higher education, and consequently their happiness. These include, for instance, the student's integration and adjustment to the new institution and its characteristics (e.g. Quintas & Gonçalves, 2010); their necessity to move from home and far away from family, friends and peers (Costa & Leal, 2006); their absence of life goals (Oishi, Diener, Suh & Lucas, 1999; cit in Diener & Biswas-Diener, 2000); and even the developmental changes required by the transition from adolescence to early adulthood (Diniz & Almeida, 2006; Soares, Almeida, Diniz & Guisande, 2006).

This transition, and adjustment, needs to be solved in the most adaptive way, in order to minimize the effect of negative consequences for the students. These consequences can occur on different levels (Costa & Leal, 2004), such as academic (low academic performance and/or academic failure, change of course and/or university and even the abandonment of the

course attended and subsequent college dropout), physical, psychological and behavioural (e.g. clinical pathologies such as depression and anxiety disorders).

On the other hand, according to Faria and Carvalho (2006), there are several college students that manage to successfully develop on a personal, academic and professional level, students that the authors describe as “Super-Higher Education Students”. These students are able to manage their stress in a positive way, reconciling their academic lives with their social lives, handling their finances and their academic work. Additionally, they are also adapted to the separation from their family, friends and peers and, when necessary, deal adequately with the required public displays. On the other hand, when these students are confronted with problems regarding their academic life, they express a good behavioural organization, a willingness to make an assertive change and a perception of self-control, as well as an academic and professional independence, professional knowledge and career goals.

Therefore, these students often need to adopt creative and individual strategies, and even innovative techniques (Sousa, Monteiro & Pellissier, 2009), on their higher education attendance to be able to adjust, as well as possible, to these changes and challenges, as in any other strategy. This personal motivation, as well as the attempt to successfully overcome the challenges arising from transitioning from secondary education to higher education, promotes, as Almeida, Faísca and Jesus (2009) argue, not only a sense of belonging to the institution attended but also the development of personal skills, the versatility of skills, the availability to perform different functions/papers, and the ability to respond to changes and deal with them successfully.

2. SUBJECTIVE WELL-BEING AND SOCIAL INTEGRATION

From this perspective, the evaluation the student make of their subjective well-being while attending a higher education institution seems to have an important role on their adjustment to the institution attended. On the other hand, the academic adjustment also seems to play an important role in the evolution that the students experience in their lives.

The concept of subjective well-being, also known as happiness and satisfaction (Giacomoni, 2004), was used for the first time by Wilson in 1960 (Galinha & Pais-Ribeiro, 2005a) in an economic context and with the denomination of Material Well-Being, the evaluation that the individual makes regarding well-being related to goods and services that can be acquired with their earnings. Therefore, according to this author (Wilson, 1967; Diener & Biswas-Diener, 2000) a happy person is an individual who is young, male or female, healthy, well educated, well paid, extroverted, optimistic, worry-free, religious, married, with high self-esteem and realistic aspirations.

The use of the concept of subjective well-being in Psychology went through two distinct phases (Diener & Biswas-Diener, 2000). The first phase was more focused on the construction of evaluation instruments of happiness and satisfaction, resulting in several descriptive studies. The focus of the second phase was on the testing of theories about the changes on subjective well-being in different individuals.

Today, we are in a sophisticated phase (Diener & Biswas-Diener, 2000), resulting in the combination of process approaches with the evaluation theories of subjective well-being, aimed at inferring the psychological processes that interfere with this process. This phase is composed of several elements, such as longitudinal studies, experimental manipulation and multiple assessment measures.

Generally speaking, the concept of subjective well-being refers to the assessment that individuals make of their own lives at all levels (Diener, Suh & Sapyta, 1998), including happiness, pleasant emotions, life satisfaction and lack of humour and/

or unpleasant emotions (Diener & Biswas-Diener, 2000). Therefore, this is a multidimensional construct (Diener & Biswas-Diener, 2000; Diener, Sapyta, & Suh, 1998; Diener, Suh, & Oishi, 1997; Oishi, Diener, Lucas & Suh, 1999), relatively stable (Compton, 2005), and composed of two dimensions: one cognitive (life satisfaction) and the other affective (distributed by two independent factors: positive affect and negative affect) (Diener & Biswas-Diener, 2000; Diener, Oishi & Suh, 1997; Oishi, Diener, Lucas & Suh, 1999).

According to this perspective, subjective well-being influences and can even interfere with all dimensions of our life and, therefore, with social integration, even being conditioned by the individual's culture, values, life goals and personality (Diener & Lucas, 2000; cit in Diener & Biswas-Diener, 2000). For college students, social integration is a sensitive subject, especially for those who need to move away from their family, friends and peers to attend their courses (Ferraz & Pereira, 2003).

In a study developed by Zheng, Sang & Wang (2004), the authors concluded that college students who were dislocated from their habitual residences showed higher values of subjective well-being when they felt socially integrated at the attended institution.

The support of peers, family, faculty and staff is crucial for the students' personal and interpersonal adjustment to the attended institution (Costa & Leal, 2004). However, more importantly than the quality and dimension of the social network, the way that the student perceives their social support plays the most important role in their social integration (Pinheiro & Ferreira, 2005).

In fact, social integration is one of the most important key-problems that the students need to overcome when they enter the higher education system; that is why, for the first months of their college attendance, students are more focused on the establishment of interpersonal relations, then later shifting their focus to the responsibilities of higher education attendance (Diniz & Almeida, 2006; Ferreira, Almeida & Soares, 2001).

Moreover, social integration in college education also presents a close relation with the student's well-being; in fact, according to Diniz and Almeida (2005), personal well-being can be considered as one of the dimensions of this adjustment.

The theory developed by these authors (Diniz & Almeida, 2005) assumes that the social integration of college students is influenced by three variables: interpersonal relationship, emotional balance and personal well-being. The interpersonal relation refers to the establishment of all type of relations along with higher education attendance, including peers, colleagues, faculty members, and staff members. On the other hand, emotional balance relates to the emotional equilibrium showed by the students while they interrelate with other persons. Finally, personal well-being refers to a general evaluation that students conduct of their own welfare, regarding positive and negative emotions.

Therefore, this study aims to deepen the knowledge about the relation between social integration in higher education and the student's subjective well-being.

3. METHODOLOGY

3.1. Sample

A total of 339 students from the University of Algarve participated in this study; 67% (N=226) of those were female. The mean age of the sample was 21.83 years old ($M=$, $SD=5.794$), ranged between 18 and 62 years old. Most participants attended the 1st grade (N=194, 57.2%) or the 3rd grade (N=80, 23.6%), while only 19.2% (19.2%) were from the 2nd grade.

Although a large number of students are natives from the Algarve region (57.9%, N=197), for the majority, entrance to the University of Algarve required the displacement from their usual residence (50.7%, N=172).

3.2. Measurements

The subjective well-being was measured through two different and complementary instruments: Satisfaction With Life Scale (SWLS; Diener et al., 1985; validated for Portuguese by Simões, 1992) and Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988; validated for Portuguese by Galinha & Pais-Ribeiro, 2005a; 2005b).

The Satisfaction With Life Scale evaluates the cognitive dimension of subjective well-being, namely, the global assessment of life made by adults, youth and seniors (Giacomoni, 2004). This scale is composed of five items evaluated on a 7 point Likert Scale.

On the other hand, the Positive and Negative Affect Schedule measures the individual's positive and negative affect, being composed of 20 items evaluated on a 5 point Likert scale.

The evaluation of social integration in higher education was accomplished through the use of the Escala de Integração Social no Ensino Superior (Social Integration on Higher Education Scale), EISES (Diniz & Almeida, 2005), developed especially for Portuguese college students. This scale is composed of 14 items evaluated on a 5 point Likert scale and divided into three variables: interpersonal relationship, emotional balance and personal well-being.

3.3. Procedures

Faculty members from different schools and faculties were contacted through e-mail explaining the purpose of the study and asking for some time for the application of the instruments. They were applied collectively and self-administered in a period of time, between 10 and 20 minutes in length.

For the statistical treatment of the data, we used the Statistical Package for Social Sciences (SPSS), version 17.0.

4. RESULTS

In order to analyze the influence of the students' subjective well-being and their social integration in higher education, we present the obtained results in the following order: descriptive analysis, correlation analysis and regression analysis.

The results from the descriptive statistics are presented in table 1. According to the analysis of this table, it is possible to notice that the students present good indicators of social integration (Interpersonal relationship $M=11.91$, Personal well-being $M=14.51$ and Emotional Balance $M=11.26$), as well as subjective well-being ($M=.00$, $SD=2.08$).

It is also important to relate these variables (subjective well-being and social integration in higher education) with the socio-demographics variables (sex, attended year and change of residence).

Regarding the sex variable, a significant difference regarding personal well-being was found, favouring the male students ($M=15.11$, $DP=3.25$; $F=5.47$, $p=.020$), while the female students had a mean of 14.22 ($SD=3.33$), as well as for emotional balance, also favouring the male students ($M=11.97$, $SD=2.70$; $F=12.33$, $p=.001$).

Regarding the year attended, the only significant difference obtained concerns subjective well-being, whereas the students present higher values when they advance through their academic course ($F=2.784$, $p=.041$). For the 1st year, the students present a subjective well-

being mean of .07 (SD=2.17), while those attending their last year demonstrate a mean of 0.34 (SD=1.81).

Finally, the students that did not have to change from their habitual residence to attend higher education present higher values of personal well-being (M= 14.91, SD=3.16; F=4.896, p=.028), while the students who had to change report lower values (M=14.12, SD=3.44).

Through the analysis of the relation between variables, it is possible to notice that all of them are positively correlated at a significance level of .01. Furthermore, the correlations obtained oscillate between .390 (between the variables interpersonal relationship and personal well-being) and .603 (between the dimensions personal well-being and emotional balance).

Table 1: Minimum, maximum, average and standard deviation of variables and correlations among them

	1	2	3	4
Minimum	-8.06	4.00	4.00	3.00
Maximum	5.90	15.00	20.00	15.00
Mean	.00	11.91	14.51	11.26
Std. Deviation	2.08	2.23	3.32	2.69
1. Subjective Well-being	1			
2. Interpersonal Relationship	.412**	1		
3. Personal Well-being	.394**	.390**	1	
4. Emotional Balance	.509**	.580**	.603**	1

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed)

In order to deepen the relations between the variables evaluated, we resorted to the performance of hierarchical multiple regression with the enter method (table 2). In the regression equation, we consider the subjective well-being as the dependent variable and the other variables as predictors and introduced by blocks.

As the first step, we insert the socio-demographic variables assessed, including sex, attended year and change of residence. For the second step, we used the dimensions of social integration in higher education (interpersonal relationship, personal well-being and emotional balance).

Table 2: Variables socio-demographics and social integration predictive of subjective well-being (values β , t and significance)

Dependent variable	Predictive variable	β	t	Sig.
Step 1 Subjective well-being	Sex	-.026	-.479	.632
	Attended year	.026	.477	.634
	Change of residence	-.016	-.297	.767
R2 adjusted .007 (F=.174, p=.914)				
Step 2 Subjective well-being	Sex	.061	1.291	.197
	Attended year	-.028	-.600	.549
	Change of residence	.012	.254	.800
	Interpersonal Relationship	.163	2.845	.005
	Personal Well-being	.135	2.290	.023
	Emotional Balance	.346	5.195	.000
R2 adjusted .281 (F=23.037, p=.000)				

Table 2 shows the regression coefficients of the equations. Through analysis of this table, it is possible to notice that none of the variables from the 1st step has statistically significant predictive power on the student's positive affect.

When we introduced the 2nd step in the equation, social integration in higher education, it was observed that all of its dimensions explain 28% of the subjective well-being variability, namely emotional balance ($\beta=.346$, $t=5.195$, $p\leq.000$), interpersonal relationship ($\beta=.163$, $t=2.845$, $p=.005$) and personal well-being ($\beta=.135$, $t=2.290$, $p=.023$).

5. DISCUSSION

The entrance and adjustment to higher education is a very emotional moment for students, generating positive emotions, as well as negative manifestations. Thus, it is assumed that the more the students feel integrated and happy in higher education, the more they will try to avoid and to minimize the consequences associated with those negative emotions, which can, in most cases, be the origin of, or contribute to, academic failure and academic dropout, a problem that is affecting more and more Portuguese universities and higher education institutions.

To face this educational problem, it is crucial to deepen the knowledge about the factors that can interfere with the students' adjustment to higher education. Therefore, this study aims to analyze the existent relation between the socio-demographic variables (sex, attended year and change of residence), social integration on higher education and students' subjective well-being.

The results show that the participants present positive indicators of social integration and subjective well-being. However, through our analysis, we found several statistically significant differences regarding the socio-demographic variables, subjective well-being and the dimensions of social integration in higher education.

We found that male students present higher values of social integration than female students, namely on personal well-being and emotional balance, showing that these students are more concerned about their social integration than the women.

On the other hand, the results also show that students' subjective well-being tends to increase over the course of their academic careers, which can be explained by their motivation for the attended course, as well as their setting of personal, professional and academic goals. Contrary to what was expected, the participants did not report significant differences regarding their social integration in higher education. Several authors (e.g. Diniz & Almeida, 2005) argue that the social concerns of the students are different according to their attending year, focusing initially on the establishment of relationships with their peers and colleagues; as they advance in their course, they try to establish relationships with friends, faculty and staff members, while also focusing more on their academic goals.

It was also possible to notice higher values of personal well-being from the students that are still living in their habitual homes. This result shows that these students were able to maintain their previous social relations, not feeling the crucial need to establish new relations with their institutional peers, faculty and staff.

Our results also demonstrate that subjective well-being and social integration in higher education, as expected, are closely related, requiring the development of more research to deepen this relationship. Therefore, our findings suggest that all the dimensions from social integration in higher education (interpersonal relationship, personal well-being and emotional balance) play an important rule on the evaluation that the students make of their happiness, especially for emotional balance.

Although significant differences were obtained regarding the evaluated socio-demographic variables of sex, attended year and change of residence, these variables do not seem to influence subjective well-being, as they did not emerge as predictive variables.

6. CONCLUSION

The transition from secondary education to higher education and the adjustment to the higher education institution is a very emotional moment for students, generating positive emotions, as well as negative manifestations.

Therefore, it is assumed that the more the students feel integrated and happy in higher education, the more they will avoid and minimize the consequences associated with those negative emotions, which can originate or contribute to academic failure and even to academic dropout.

This study aimed to analyze the relations between social integration in higher education (interpersonal relationship, personal well-being and emotional balance) and the students' subjective well-being, also taking into account some socio-demographic variables such as sex, attended year and change of residence.

Through the analysis of our results, we were able to conclude that male students are more focused on their social integration in higher education, presenting higher values of personal well-being and emotional balance than female students. On the other hand, our findings also suggest that students' happiness tends to increase with the advance of their academic careers, while the students who did not have to change homes for their attendance in higher education present higher values of personal well-being.

All the dimensions from social integration in higher education, including interpersonal relationship, personal well-being and emotional balance, seem to play an important role on the students' subjective well-being, although there was no observed influence of the evaluated socio-demographic variables (sex, attended year and change of residence).

However, it is not possible to generalize the obtained results; therefore, in future researches, data should be collected from students of other higher education institutions, and the analysis should take into account other socio-demographic variables, such as attended course and institution and type of education, as well as other relevant variables, such as coping strategies, motivation and life goals.

On the other hand, our sample did not take into account the students' nationalities; therefore, a similar study should be developed with the students that come to the country for a specific semester, or several semesters, from the ERASMUS programmes or other similar programmes.

ACKNOWLEDGMENTS

The development of this study was funded by the Fundação para a Ciência e a Tecnologia (FCT) research project SFRH/BD/76044/2011 "Motivação para Criar e Empreender em Estudantes do Ensino Superior: Influência das Práticas Docentes e das Vivências Acadêmicas".

REFERENCES

- Almeida, H., Faísca, L. & Jesus, S.S. (2009). Gestão Operacional do Serviço a Clientes [Operational Management of Customer Service]. *Spatial and Organizational Dynamics*, 2, 42-68.
- Almeida, L., Soares, A. & Ferreira, A. (2002). Questionário de Vivências Académicas (QVA-r): Avaliação do Ajustamento dos Estudantes Universitários [Academic Experiences Questionnaire (QVA-r): Assessment of Adjustment of University Students]. *Avaliação Psicológica*, 2, 81-93.
- Compton, W. (2005). *An Introduction to Positive Psychology*. Belmont: Thomson Wadsworth.
- Costa, E. & Leal, I. (2004). Estratégias de Coping e Saúde Mental em Estudantes Universitários de Viseu [Coping Strategies and Mental Health in University Students from Viseu]. In J. Pais-Ribeiro & I. Leal, *Actas do 5º Congresso Nacional de Psicologia da Saúde* (pp. 157-162). Lisboa: Fundação Calouste Gulbenkian.
- Diener, E. & Biswas-Diener, R. (2000). New Directions In Subjective Well-Being Research: The Cutting Edge. *Indian Journal of Clinical Psychology*, 27, 21-33.
- Diener, E., Suh, E. & Oishi, S. (1997). Recent findings on subjective well-being. *Indian Journal of Clinical Psychology*, 24, 25-41.
- Diener, E., Sapyta, J. & Suh, E. (1998). Subjective Well-Being is Essential to Well-Being. *Psychological Inquiry*, 9 (1), 33-37.
- Diniz, A. & Almeida, L. (2006). Adaptação à Universidade em Estudantes do Primeiro Ano: Estudo Diacrónico da Interação entre o Relacionamento com Pares, o Bem-Estar Pessoal e o Equilíbrio Emocional [Adjustment to Higher Education on 1st Year Students: Diachronic Study of the Interaction between the Peer's Relationship, Personal Well-Being and Emotional Balance]. *Análise Psicológica*, 1 (XXIV), 29-38.
- Diniz, A. & Almeida, L. (2005). Escala de Integração Social no Ensino Superior (EISES): Metodologia de Construção e Validação [Social Integration in Higher Education Scale (EISES): Construction and Validation Methodology]. *Análise Psicológica*, 4 (XXIII), 461-478.
- Faria, M. & Carvalho, S. (2006). Perfil Psicológico do Super-Estudante do Ensino Superior [Psychological Profile of Higher Education's Super-Student]. In I. Leal, J. Pais-Ribeiro & S. Neves de Jesus, *Actas do 6º Congresso Nacional de Psicologia da Saúde* (pp. 761-767). Faro: Universidade do Algarve. Fernandes & Almeida, 2005;
- Fernandes, E. & Almeida, L. (2005). Expectativas e Vivências Académicas: Impacto no Rendimento dos Alunos do 1º ano [Expectations and Academic Experiences: Impact on the Performance of 1st Year Students]. *Psychologica*, 40, 267-278.
- Ferraz, M. & Pereira, A. (2003). A Dinâmica da Personalidade e o Homesickness (Saudades de Casa) dos Jovens Estudantes Universitários [The Dynamics of Personality and Homesickness on Youth College Students]. *Psicologia, Saúde & Doenças*, 3 (2), 149-164.
- Ferreira, J., Almeida, L. & Soares, A. (2001). Adaptação Académica em Estudantes do 1º Ano: Diferenças de Género, Situação de Estudantes e Curso [Academic Adjustment of 1st Year's Students: Differences in Gender, Student's State and Course]. *PsicoUSE*, 6 (1), 1-10.
- Galinha, I. & Pais-Ribeiro, J. (2005a). História e Evolução do Conceito de Bem-Estar Subjetivo [History and Evolution of the Subjective Well-being Concept]. *Psicologia, Saúde & Doenças*, 6 (2), 203-214.

- Galinha, I. & Pais-Ribeiro, J. (2005b). Contribuição para o Estudo da Versão Portuguesa da Positive and Negative Affect Schedule (PANAS): II – Estudo Psicométrico [Contribution to the Study of the Portuguese version of the Positive and Negative Affect Schedule (PANAS): II - Psychometric Study]. *Análise Psicológica*, 2 (XXIII), 219-227.
- Giacomoni, C. (2004). Bem-Estar Subjectivo: em Busca da Qualidade de Vida [Subjective Well-being: Serching for the Quality of Life]. *Temas em Psicologia da SBP*, 12 (1), 43-50.
- Oishi, S., Diener, E., Lucas, R. E. & Suh, E. (1999). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. *Personality and Social Psychology Bulletin*, 25, 980–990
- Pinheiro, M. & Ferreira, J. (2005). A Percepção do Suporte Social da Família e dos Amigos como Elementos Facilitadores da Transição para o Ensino Superior [Perception of Family and Friends Social Suport as Facilitating Factors for the transition to Higher Education]. *Actas do VIII Congreso Internacional Gallego-Portugués de Psicopedagogía*, 467-485.
- Quintas, H. & Gonçalves, J. (2010). The Leadership of Schools in Three Regions in Portugal Based on the Findings of External Evaluation. *Spatial and Organizational Dynamics*, 5, 42-67.
- Simões, A. (1992). Ulterior Validação de uma Escala de Satisfação com a Vida (SWLS) [Ulterior Validation of Satisfaction With Life Scale (SWLS)]. *Revista Portuguesa de Pedagogia*, XXVI (3) 503-515.
- Soares, A., Almeida, L., Diniz, A. & Guisande, M. (2006). Modelo Multidimensional de Ajustamento de Jovens ao Contexto Universitário (MMAU): Estudo com Estudantes de Ciências e Tecnologias versus Ciências Sociais e Humanas [Multidimensional Model of Adjustment to University Context (MMAU): Study with Student from Science and Technology versus Social and Humanities Sciences]. *Análise Psicológica*, 1 (XXIV), 15-27
- Sousa, F., Monteiro, I. & Pellissier, R. (2009). Creativity and Problem Solving in the Development of Organizational Innovation. *Spatial and Organizational Dynamics*, 1, 29-41.
- Zheng, X., Sang, D. & Wang, L. (2004). Acculturation and Subjective Well-Being of Chinese Students in Australia. *Journal of Happiness Studies*, 5, 57-72.

EDITORIAL NORMS
JOURNAL OF SPATIAL AND ORGANIZATIONAL DYNAMICS

In order to simplify the editors' task, authors are urged to **adopt the norms listed below** for the Journal publication. Please note that the article should be sent in its final version.

Being so, the final document should have the following editorial norms:

Page layout:

Paper size A4, 2,5cm left, right, bottom and top margins.

Document Format:

Manuscripts should be submitted in Word file using font Times New Roman and single line spacing. The document should not have more than 25 pages (including bibliography), and a PDF version of the document must be provided.

Biographical Authors' note:

The text must be in English, on a single page, with a text up to 100 words. The information given should include academic career, present professional position and research interests, if applicable. Should also mention affiliation and personal e-mail address. Use size 11, regular, justified.

Title:

Should be concise and informative with size 15, bold, left aligned and in capital letters. After title add author(s) name(s) in size 11, italic, left aligned.

Abstract:

The abstract should have between 150 to 200 words and should not contain any undefined abbreviations.

Use size 11, regular, justified.

Keywords:

Must be provided up to 4 keywords separated by coma (,) at the end of the abstract.

An appropriate **JEL code(s)** must be provided with minimum of 3 digits, for example Q21. This classification system is prepared and published by the *Journal of Economic Literature*. For more information, please visit the website at <http://www.aeaweb.org/econlit/jelCodes.php?view=jel>.

Plain Text body:

For plain text body use size 11, regular, justified.

Subtitles 1st level - size 11, bold, capital letters, left aligned;

Subtitles 2nd level - size 11, bold, low case, left aligned;

Subtitles 3rd level - size 11, italic, low case, left aligned.

Table of Contents:

A Table of Contents should be provided at the beginning of the manuscript. Use size 11, regular, left aligned.

Abbreviations:

Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes:

Footnotes can be used to give additional information. They should not contain any figures or tables and should be in size 8, regular, left aligned.

Footnotes to the text are numbered consecutively.

Footnotes to the title of the article are given with the reference symbol (*).

Endnotes can not be used.

Acknowledgments:

Acknowledgments of people, grants, funds, and others, should be placed in a separate section before the reference list. The names of funding organizations should be written in full.

Citations:

After quoting a text extract, cite the reference giving only the author's name and publication year in parentheses. Ex: (Flores *et al.*, 1988; Winograd, 1986; Cunha and Cintra, 1996)

But if you are citing the author inside the text, add only the publication year between parentheses.

Ex: Winograd (1986) describes ...

References List:

The list of references should only include works that are cited in the text.

Do not use footnotes or endnotes as a substitute for a reference list.

Reference list entries should be alphabetized by the last name of the first author of each work.

To format reference list use size 11, regular, left aligned.

Ideally, the names of all authors should be provided, but the usage of *et al.* in long authors list will also be accepted.

Ex: Pierzynski, G. *et al.* (1994). *Soils and environmental quality*. Lewis Publishers. Florida.

Scientific Article:

Last name of the author, First initial. (Publication year). Article title. *Title of the Journal or Review*.

Volume(Issue): first page-last page.

Ex: Sadiq, M. and Alam, I. (1997). Lead contamination of groundwater in an industrial complex. *Water, Air and Soil Pollution*. **98(2)**: 167-177.

Book:

Last name of the author, First initial. (Publication year). *Book title*. Additional information. Edition number, Publishing house. Publishing place.

Ex: Costa, J. (1995). *Caracterização e constituição do Solo*. 5th edition, Foundation Calouste Gulbenkian. Lisbon. ISBN: 000 000 000 0000

Book Chapter:

Ex: Silko, L.M. (1991). The man to send rain clouds. In: W. Brown and A. Ling (eds.), *Imagining America: Stories from the promised land*. Persea. New York.

Online Document:

Last name of the author, First initial. (Publication year). *Document title*. Accessed in: day, month, year, in: URL.

Ex: Chou, L., McClintock, R., Moretti, F. e Nix, D.H. (1993). *Technology and education: New wine in new bottles – Choosing pasts and imagining educational futures*. Accessed in 24th of August 2000, on the Web site of: Columbia University, Institute for Learning Technologies: <http://www.ilt.columbia.edu/publications/papers/newwine1.html>.

Dissertation:

Ex: Tingle, C.C.D. (1985). *Biological control of the glasshouse mealybug using parasitic hymenoptera*. Ph.D. Thesis. Department of Biological Sciences, Wye College, University of London. 375 pp.

Tables, Figures, Graphics and Boards:

All tables, figures, graphics and boards are to be numbered using Arabic numerals and should have a title explaining its components above the body, using size 9, bold, centred.

The source and year of the information given in tables, figures, graphics and boards should be included beneath its body, centred, size 8, regular. For tables and boards contents use size 8.

Figures and graphics must be in JPEG format (image).



ISSN: 2183-1912

Authors

Alejandro Orgambídez-Ramos

Alexandra Gomes

Ana Teixeira

Briones Peñalver

Claudia Rus

Cristina Nunes

Gabriela Gonçalves

Helena de Almeida

Ida Lemos

Jean-Christophe Giger

Joana Santos

José de São José

Juan Tobal

Lara Ayala Nunes

Luís Sérgio Vieira

M. Isabel Mendoza-Sierra

Rosanna Barros

Sanda Samitca

Saul Neves de Jesus

Susana Imaginário

