Available online at www.sciencedirect.com

SciVerse ScienceDirect

Procedia - Social and Behavioral Sciences 78 (2013) 718 – 722

Procedia
Social and Behavioral Sciences

PSIWORLD 2012

Adaptation and Stress for the First Year University Students

Aurel Ion Clinciu*

Transilvania University of Brasov, Faculty of Psychology and Sciences of Education, Nicolae Balcescu 56, 500019 Brasov, Romania

Abstract

This study aims to explore college adjustment and its relationship with stress for 157 students (48 males, 109 females) from humanities field of Transilvania University of Brasov. I used Baker and Siryk's Student Adaptation to College Questionnaire and Gadzella's Student-life Stress Inventory, and in addition a demographic mini-questionnaire for factual data. I anticipated narrow relationships between stress and college adaptation, and I searched for demographic determinants (gender, age and life environment) of academic adaptation and stress. The results confirm hypotheses and reveal good psychometric properties for the instruments involved in research.

Keywords: adaptation, stress, first year students, gender, age;

1. Introduction

Attending university is supposed to be a very challenging experience which could change life-course for students, providing real satisfaction. However, many studies (Tinto, 1993, 1996; Martin Jr., Swartz, & Madson, 1999; Ackermann & Morrow, 2007-2008; Chang et al., 2007) indicate that there are a large number of students who are unable to fulfill their obligations and complete their studies. Tinto's 1996 study showed that 40% of all four years students from America failed to earn a degree and an important proportion - 57% from dropouts - left to the start of their second year. First year seems to be the most critical for college adaptation because of the big numbers of possible adjustment difficulties it can generate. The review of the adjustment literature reveals numerous relevant constructs linked with university/college adjustment, like anxiety, depression, stress vulnerability, anger, mood, mental illness, indicative for negative adaptation. All of these are counterbalanced by good psychological adjustment, domain satisfaction, ability to develop new coping strategies, a better sense of ego functioning (self-efficacy, self esteem), and well-being, indicative for positive adaptation. A good first-year transition encompasses independent functioning including the ability to negotiate with a new and complex world,

* Corresponding author. Tel.: +40-268-318-149; fax: +40-268-470-190.
E-mail address: a_clinciu@yahoo.com

doi:10.1016/j.sbspro.2013.04.382

to develop internal motivation for learning, to have a good time and money management, to attend classes and keep up assignments (Mattanah, Handcock, & Brand, 2004). According to Tinto (1996) the major causes of students' dropout from universities are academic and adjustment difficulties, new and difficult goals, weak commitment, external motivation for learning, financial inadequacies, isolation. Khamis, Yaakub, Shaari, Zailani, & Yusoff (2002) found four important categories of problems generating weak adaptation for students from a local public university in Malaysia: academic problems, health problems, financial crisis, social and personal problems. Every one of them, alone or in combination, can create serious adjustment problems which could lead to students' failure to complete their studies.

From the previously outlined facts, it seems obvious that adjustment to university environment is an ample process that is mainly carried out during the first university year and especially in the first semester which implies a multitude of availabilities and personal resources. Adjustment must have in view both the final result – adapted functioning – and the process itself which means passing from an initial stage generating emotional tension and stress towards a final stage in which there prevail the state of well-being and a functioning adequate to the new requirements. That is why the present study includes both the adaptive components and the ones that are associated with the negative side of adjustment, namely stress. Hence, measurement of adjustment is related to correlative constructs of stress. One instrument which is frequently used for adaptation measurement is Baker and Siryk's (1989) Student Adaptation to College Questionnaire (SACQ). For the stress associated with student life we used Gadzella's (1991) Student-life Stress Inventory (SSI). The first objective of our study is to investigate the relation between adjustment and stress in the first year students at humanistic faculties from Transylvania University of Brasov. Secondarily we want to answer the question if Romanian versions of SACQ and SSI match the original instruments. Thirdly, we investigate the impact of some important demographic variables, like age, gender or students' rural/urban origin. In our study, we hypothesize a significant correlation between adaptation and stress. We anticipate also important gender, environment, and parental education determinants for student-life adaptation and stress in the first year students at university.

2. Materials and methods

2.1. Sample

The subjects are 157 students in the first year of humanities: Faculty of Psychology and Sciences of Education, Faculty of Law, Faculty of Sociology, Communication and Social Work. Out of them 48 are male and 109 female students; 68 from rural area and 89 from urban area. All the participants were investigated with the two instruments destined to student adjustment and stress, SACQ and SSI, doubled by a mini-questionnaire with factual data related to age, gender, parents' schooling, environment, faculty admission mark etc. Medium age and standard deviation for these students was 20.51 years with a standard deviation of 1.67. The subjects gave their informed consent to participate in the study.

2.2. Instruments

SACQ is a self-report instrument designed to assess the student's adjustment to college. Baker and Siryk (1989, 1994) assume that beginning university life requires adjustment to a variety of demands, being a multifaceted process. The participants are assessed on a Likert 9-point scale ranging from 1 (*applies very closely to me*) to 9 (*does not apply to me at all*). Four aspects of adjustment to university are measured: Academic Adjustment measures how well the freshman manages the educational demands of the university experience; Social Adjustment measures how well the adolescent deals with interpersonal experiences at university; Personal-Emotional Adjustment indicates whether the young student experiences psychological or somatic symptoms of distress; Institutional Attachment measures the student's commitment toward the university as institution. The

sum of the above four scales yields a full-scale score, which is an index of overall adjustment to university. Baker and Siryk (1989) provide reliability subscale scores: for Academic Adjustment scale (23 items) alpha is .84; for Social Adjustment (18 items) alpha is .84, for Personal-Emotional Adjustment (15 items) alpha is .81 and for Institutional Attachment (14 items) alpha is .80.

Gadzella's (1991) Student-life Stress Inventory (SSI) reflects a student's academic stress on and off campus and good measurements for academic stressors and reactions to stressors. Academic stressors dimension yields scores from five stress categories which contains 51 items in a 5-point Likert-type response format (1 = *never* to 5 = *most of the time*): frustrations, conflicts, pressures, changes, and self-imposed. Reactions to stressors yield scores from five categories describing reactions to stressors: physiological, emotional, behavioral, and cognitive. Items are summed for each subscale to obtain a total score. Cronbach's alphas were .65, .63, .71, .75, and .63 for the Frustrations, Conflicts, Pressures, Changes, and Self-Imposed subscales, respectively. Participants obtained alphas of .78, .81, .68, and .85 for the Physiological, Emotional, Behavioral, and Cognitive subscales, respectively.

3. Results

Psychometric characteristics of SACQ were analyzed by comparison with the original data and the ones provided by Waller (2009).

Table 1. Reliability for SACQ in Baker & Siryk, Waller and our study.

	Academic Adjustment 24 items	Social Adjustment 20 items	Personal-Emotional Adj. l5 items	Institutional Adjustment 15 items	Full Scale 67 items
Baker & Siryk	.84	.84	.81	.80	.92
Waller[a]	.86	.84	.83	.87	.92
Our study	.80	.73	.85	.79	.91

a = average alpha's from six American university samples (George Washington, California, Colorado, Mississippi, York University and Worcester Polytechnic Institute).

For Romanian version of SACQ the best internal consistency is for Personal-Emotional subscale, but all alphas are consistent with those provided by Baker & Siryk (1999) and Waller (2009).

In their study form 2001, Gadzella & Baloglu provided information about SSI reliability. The internal consistency for 381 subjects was .92 for the total test. In our sample we obtained a similar result: alpha .93 for the full scale, .90 for stressors subscale, and .89 for reaction to stress subscale.

Table 2. Correlations between SACQ and SSI scales.

	SACQ total	Academic Adjustment	Social Adjustment	Personal-Emotional	Institutional Adjustment
Stressors	-.28**	-.16*	-.27**	-.61**	-.31**
Reaction	-.12	.03	-.15	-.55**	-.19*
SSI total	-.22**	-.06	-.23**	-.64**	-.27**

** Correlation at the .01 level (2-tailed) * Correlation at the .05 level (2-tailed)

Table 2 indicates moderate to small correlation between SACQ and SSI stressors and reaction to stressors scales. The situation is similar for academic, social and institutional adjustment, where correlation ranges between .03 and -.31, some of them being statistically significant. A very strong relationship exists between

student-life stress, its subscales and personal-emotional dimension of university adaptation: 41% from common variance is explained by negative association between stress and personal-emotional adjustment. It seems that the main problem of adaptation which creates stress is its personal-emotional facet.

Table 3. Descriptive statistics and differences between 48 male and 109 female students at SACQ and SSI scales

	Gender	Average	SD	*t*	*p*
SACQ total	Female	359.64	52.02	1.15	.25
	Male	371.19	69.84		
Academic Adjustment	Female	132.11	18.46	1.83	.07
	Male	125.65	24.36		
Social Adjustment	Female	111.66	17.95	1.98	.05*
	Male	119.04	22.97		
Personal-Emotional Adj.	Female	80.64	20.88	3.46	.001**
	Male	92.60	17.66		
Institutional Adjustment	Female	52.59	11.14	.60	.55
	Male	51.42	11.80		
SSI total	Female	123.05	27.45	2.31	.022*
	Male	112.23	25.05		
Stressors	Female	61.67	14.09	1.83	.069
	Male	57.27	13.38		
Reaction to stressors	Female	61.38	16.47	2.29	.023*
	Male	55.06	14.47		

** Correlation at the .01 level (2-tailed) * Correlation at the .05 level (2-tailed)

Although the difference between male and female students is not statistically significant for the total score at SACQ, the formal category has a much better adaptation for social and personal-emotional dimensions. Female students compensate this gap with better scores at academic adjustment. They are more motivated ($t(109, 48) = 3.07$, $p = .003$), with more application ($t(109, 48) = 4.01$, $p < .001$) and better adapted to academic environment ($t(109, 48) = 1.97$, $p = .05$). Similar gender differences are for SSI global score, indicating big scores for female students ($t(109, 48) = 2.31$, $p = .022$), where the most important contributor is reaction to stressor, bigger at them ($t(109, 48) = 2.29$, $p = .023$).

The differences between rural-urban students are small and unimportant, with some exceptions: Nostalgia from SACQ Social Adaptation scale is greater for those from urban environment ($t(68, 89) = 2.74$, $p = .07$) and Change from Stressors subscale of SSI ($t(68, 89) = 2.09$, $p = .39$) for those from rural area. Age presents also some interesting connotations: those who are over 20 years old obtain better scores at Personal-Emotional SACQ' subscale ($t(73, 84) = 2.33$, $p = .021$), the younger students, under 20 years, report elevated scores at Pressure subscale ($t(68, 89) = 2.18$, $p = .031$) and greater scores at Emotional subscale of SSI ($t(68, 89) = 2.35$, $p = .02$). In conclusion, the most important differences in scores are associated with gender, age, and environmental area where they were born.

4. Discussion and conclusions

Following the study designed to determine the SACQ construct validity, Feldt, Graham, and Dew (2011) reach a six-dimension factorial solution. As in our study, the highest correlation (negative) between stress and

adjustment to university life was pointed out on the emotional-affective component as well. The internal consistency for the six subscales varies in the mentioned study from .78 to .91, being maximal for emotional subscale, which is found in our study as well. The psychometrical qualities (fidelity) of the two instruments used in the present research are good and close to their original variants or to the data provided by other researchers. This pleads both for the fact that the Romanian variants of SACQ şi SSI are adequate translations of the original questionnaires and that the theoretical model proposed by their authors has a largely trans-cultural validity.

Similar to Abdullah, Elias, Mahyuddin, & Uli's study (2009) we find that male students are better adjusted to university life, when compared with female students. These findings on gender differences in college adjustment are similar to many other studies (Gadzella, Masten, & Stacks, 1998; Wintre & Yaffe, 2000; Gadzella & Carvalho, 2006; Enochs & Roland, 2006). In our study we find a better personal-emotional adjustment for male students, but a compensatory better academic adjustment for female students. This fact makes gender differences in university adjustment should not be so straight. The role of age and life environment in academic adjustment is smaller than anticipated, although university adaptability is better for more mature students (over 20 years) and for those from urban area.

The study numerical extension and including in the research the students from the sciences field will make a more complete picture of the first year students' adjustment. Thus, interventions in assessment, counseling and prevention areas will have a better support from the applied psychological research.

References

Abdullah, M. C., Elias, H., Mahyuddin, R., & Uli, J. (2009). Adjustment Amongst First Year Students in a Malaysian University. *European Journal of Social Sciences, 8*(3).

Ackermann, M. E., & Morrow, J. A. (2007-2008). A principal components analysis and validation of the Coping with the Colege Environment Scale (CWCES). *Journal of College Student Retention, 9*, 133–148.

Baker, R. E., & Siryk, B. (1999). *Student Adaptation to College Questionnaire Manual*. Los Angeles, CA: Western Psychological Services.

Chang, E. C., Sana, L. J., Riley, M. M., Thornburg, A. M., Zumberg, K. M., & Edwards, M. C. (2007). Relation between problem-solving styles and psychological adjustment in young adults: Is stress a mediating variable? *Personality and Individual Differences*, *42*, 135–144.

Enochs, W. K., & Roland, C.B. (2006). Social adjustment to college freshmen: the importance of gender and living enviromnent. *College Student Journal, 40*(1), 63–72.

Feldt, R. C., Graham, M., & Dew, D. (2011). Measurement Adjustment to College: Construct Validity of the Student Adaptation to College Questionnaire. *Measurement and Evaluation in Counseling and Development*, 44–92.

Gadzella, B. M. (1991). Student-life Stres Inventory. Copyright, Commerce, Texas. Author: Gadzella, B. M. (1994). Student-life Stres Inventory: Identification of and reaction to stressors. *Psychological Reports, 74*, 395–490.

Gadzella, B. M., & Carvalho, C. (2006). Stress Differences among University Female Students. *American Journal of Psychological Research, 2*(1).

Gadzella, B. M., Masten, & W. G., Stacks, J. (1998). Students' stress and their learning strategies, test anxiety, and attributions. *College Student Journal, 32*, 416–422.

Khamis, A., Yaakub, N. F., Shaari, A., Zailani, M., & Yusoff, M. (2002). *Adjustment to college life and academic performance among Universiti Utara Malaysia Students*. Unpublished Manuscript, Universiti Utara Malaysia, Kedah, Malaysia.

Martin Jr., W. E., Swartz, J. L., & Madson, M. (1999). Psychosocial factors that predict the college adjustment of first year graduate students: implications for college counselors. *Journal of College Counseling, 2*(2), 121–133.

Mattanah, J. F., Handcock, G. R., & Brand, B. L. (2004). Parental attachment, separation-individuation, and college student adjustment: A structural equation analysis of mediational effects. *Journal of Counseling Psychology, 51*, 213–225.

Tinto, V. (1993). *Leaving College: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.

Tinto, V. (1996). Reconstructing the first year of college. *Planning for Higher Education*, *25*(1), 1–6.

Waller, T. O. (2009). *A mixed method approach for assessing the adjustment of incoming first-year students in a summer bridge program*. Blaksburg, Virginia: Disertation submitted to the graduate Faculty of the Virginia Polytechnic Institute and State University.

Wintre, M. G., & Yaffe M. (2000). First-year students' adjustment to university life as a function of relationship with parents. *Journal of Adolescent Research, 15*(1), 9–37.