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Resilience Factors in Students Presenting Depressive Symptoms During The Post-Secondary School Transition

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Abstract

Depression constitutes an important predicting factor of school dropout. The post-secondary transition represents a vulnerability period for at-risk students. The goal of this study was to identify resilience factors of depression in a sample of 389 young adults. Self-reported measures (personal, family, social and school-related) were completed. A subgroup of resilience students, who did not report depressive symptoms although they experienced low family support, was compared with a subgroup of depressive students. Results of khi 2 analyses and multiple linear regression analysis revealed that four variables characterized the subgroup of resilience students (N=42). The presence of personal goals was associated with the higher Beta value, followed by low level of dysfunctional attitudes, good emotional adjustment to college, and professional goals.

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1. Introduction

1.1 Post-secondary students: an at-risk population for depression

The mental health of post-secondary students is currently a major concern across both North America and Europe. Over the past two decades, the prevalence and complexity of mental health disorders has substantially grown within this population. Furthermore, it is more than 85% of counseling services' directors who reported an increase of severe psychological problems in college and university students (Daddona, 2011). A study by Benton et al. (2003) indicates that over a 13-year period, the proportion of depressive and anxious students doubled while the

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proportion of suicidal students tripled. Compared to the general population, students appear to exhibit greater fragility from a mental health standpoint (Roberts et al., 2001; Stewart-Brown, Evans, Patterson et al., 2000). Adjustment difficulties and mental health problems seem to be especially common among first-year college students (Boujut, Koleck, Bruchon-Schweitzer & Bourgeois, 2009). Almost 50% of students suffering from a mental disorder associate the onset of their distress with their entry into post-secondary education (Benton, Robertson, Tseng, Newton & Benton, 2003). The transition to post-secondary education represents a vulnerability period for at-risk students who sometime experience difficulties to cope with challenges associated with this adult life transition as defining professional goals, separation from the family and developing autonomy. Upon their arrival at the college level, these students find themselves faced with greater freedom (in terms of course selection and time management), which also requires greater self-control and self-discipline. Young people, who have not developed a sufficient capacity for self-control, either out of a lack of school/family supervision or to the contrary excessively rigid supervision, may experience such difficulties (Schulenberg, Sameroff et Cicchetti, 2004). The heavier workload outside the classroom, more stringent academic requirements, and the need to narrow down a career choice may also contribute to destabilizing new post-secondary students (Barnett, 2007; Schwartz, Côté & Arnett, 2005).

1.2 Resilience factors among post-secondary students at risk for a depressive disorder

Studies involving young adults have identified a great many risk factors associated with depression (gender, presence of a depressive parent, absence of affective support and encouragement to develop autonomy, low self-esteem, high levels of cognitive distortions, low social support from peers, academic difficulties, etc.). However, very few studies to date have focused on the factor of protection or resilience in the population of young adults during this academic transition. Features of resilience such as positive thinking, low anxiety levels and good interpersonal relationships have been associated with lower levels of depression in young adults, even when at risk for depression given the presence of variables such as mental health disorders in their families; their medical history and anxious or depressive disorders during childhood and the beginning of adolescence; family violence; or large families (Carbonell et al. 2002 ; Benetti et Kambouropoulos, 2006 ; Ng, Ang & Ho, 2012). The aim of this study is to identify resilience factors (socio-demographic, personal, social and school-related) in a sample of post-secondary students presenting family risk factors for depression.

2. Method

2.1 Sample and procedure

Our sample was composed of 389 1st year students in post-secondary education (average age = 18.9; standard deviation = 3.38; 59.4% girls and 40.6% boys). Of these students, 61.7% were newcomers, meaning that they had never studied at the post-secondary level. Two thirds of them (68.8%) held jobs in parallel with their studies, working an average of 10.59 hours per week (s.d.=9.28). Almost two thirds (60.9%) of the sample belonged to a traditional family (two parents living together). Approximately 15% of the youths reported that they no longer lived with their parents. Over the months of October and November 2012, twenty classes of students enrolled in their first year completed the questionnaires over a 35 to 40 minute period.

2.2 Measuring instruments

The Beck Depression Inventory, version 2 (Beck, Steer, & Brown, 1996, 1998) was used in order to measure depressive symptoms. Family risks were assessed using the *Family Environment Scale* (Moos & Moos, 1981; conflict and cohesion subscales), the *Perception of Parents Scale* (Robbins, 1994), the *Parental Monitoring Questionnaire* (Kerr & Stattin, 2000), and a questionnaire on family composition and parent income. Social variables were measured using the *Perceived Social Support from Friends Scale* (Procidano et Heller, 1983) and the *Network of Relationships Inventory* (Burmester & Furman, 1987) to measure the quality of romantic relationships. Academically speaking, the youths' attitudes toward school and teachers were assessed using the *Behavior*

Assessment System for Children (Reynolds & Kamphaus, 1992) and the *Student Adaptation to College Questionnaire* (SACQ, Baker & Siryk, 1989). Finally, personal variables were addressed by administering the *Beck Anxiety Inventory* (Beck, Epstein, Brown & Steer, 1988), the *Dysfunctional Attitude Scale* (Weissman & Beck, 1978), the *Self-Reported Delinquency Questionnaire* (LeBlanc, 1994), the *Goal Instability Scale* (Robbins, Payne & Chartrand, 1990) and the *Vocational Identity Scale* (Holland, Daiger & Power, 1980).

3. Results

Two groups of students were identified in our total sample: “depressed” students who scored 20 or above on the BDI-2 (13.4%, n=52) and “non-depressed” students who scored 11 or below on the BDI-2 (59.6%). Within the “non-depressed” group, 42 participants were considered to be “resilient” in that they presented at least three of the following risk factors: a score two standard deviations above the average score of the sample for the three measures of family adjustment and/or single-parent or stepfamily adjustment. In a first phase, the variables permitting a distinction between “resilient” and “depressed” students were identified using comparisons of averages (in the case of quantitative variables) as well as chi-squared tests (for nominal or ordinal variables). For a complete presentation of the results, see Marcotte, Villatte and Potvin (forthcoming). In a second phase, all of the variables significantly associated with resilience were entered into a multiple linear regression analysis model, with the status of resilient (or not) as a dependent variable in order to identify the most predictive factors of resilience, after having verified the absence of multicollinearity using the VIF (Variance Inflation Factor) index and having removed variables with a VIF over 3. Table 1 presents the results of this analysis.

Table 1. Socio-demographic, academic, social, family and personal variables most strongly associated with resilience (multiple linear regression analyses).

Model	Standardized coefficient			95.0% confidence intervals for B	
	Beta	t	Sig.	Lower threshold	Upper threshold
Gender	-.131	-1.503	.138	-.320	.045
Family environment	.115	1.144	.257	-.050	.184
Academic motivation	.110	1.006	.319	-.007	.022
Attachment to college	-.010	-.099	.921	-.012	.011
Emotional adjustment to college	.229	2.047	.045	.000	.026
Academic adjustment to college	-.022	-.224	.823	-.017	.013
Dysfunctional attitudes	-.241	-2.230	.029	-.026	-.001
Anxiety	-.030	-.255	.800	-.012	.010
Romantic satisfaction	.160	1.813	.075	-.002	.045
Support from friends	.002	.024	.981	-.021	.021
Personal goals	.390	2.889	.005	.005	.026
Professional goals	-.204	-1.899	.062	-.031	.001
(Constant)		.109	.913	-.820	.915

Notes. Characteristics of the model: adjusted $R^2 = .538$; $F=11,060$; $p<.001$

4. Discussion

The goal of this study was to identify resilience factors (socio-demographic, personal, social and academic) that can prevent post-secondary students from developing depressive symptoms in spite of their exposure to family risk factors. Shedding light on the experiences of these atypical students who are able to adapt in spite of a context of adversity may contribute to defining the variables to address when providing assistance to young people experiencing such difficulties. Our analyses isolated four key resilience factors in the post-secondary students who were surveyed. We will present them in decreasing order of importance, according to the Beta value associated with each of these variables. The factor that most strongly predicts resilience is the presence of personal goals, in other words knowing the values and goals that the individual wishes to pursue. An absence of dysfunctional thoughts and a sense of being emotionally adapted to college also play an important part in explaining how some students, despite their vulnerable situations, are able to avoid developing depressive symptoms. Having a professional goal is the fourth factor that, with marginal significance, may predict resilience during the secondary school - college transition. These results suggest that resilience is not the sole product of individual factors. Personal characteristics such as realistic and well-adapted ways of thinking work in conjunction with academic and social factors, jointly contributing, to varying degrees of effectiveness, to laying the groundwork for the resilience process. Investment in studies as well as effective emotional adaptation to the new setting of a post-secondary institution constitute importance components of resistance, thereby confirming the key role it plays in adaptation during the transition to adulthood.

5. Conclusion

This article, in line with current research into resilience, proposes a fresh and more nuanced look at the experiences of young adults facing family problems as a risk factor for depression. To do so, it takes into account the internal and external resources that allow these individuals to protect themselves from and mitigate the harmful impact of risks.

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References

- Baker, R.W. & Siryk, B. (1989). *Manual of the SACQ*. Los Angeles: Western Psychological Services.
- Beck, A. T., Steer, R., & Brown, G. K. (1996). *Beck Depression Inventory-II*. San Antonio, TX : The Psychological Corporation.
- Beck, A.T., Epstein, N., Brown, G. & Steer, R.A. (1988). An inventory for measuring clinical anxiety: psychometric properties. *Journal of Consulting and Clinical, 56*, 893-897.
- Benetti, C. & N. Kambouropoulos (2006). Affect-regulated indirect effects of trait anxiety and trait resilience on self-esteem. *Personality and Individual differences 41(2)*, 341-352.
- Benton, S. A., Robertson, J. M., Tseng, W.-C., Newton, F. B., et Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice 34(1)*, 66.
- Boujut, E. Koleck, M., Bruchon-Schweitzer, Bourgeois, M.-L. (2009). La santé mentale chez les étudiants: suivi d'une cohorte en première année d'université. *Annales Médico-psychologiques, revue psychiatrique 167(9)*, 662-668.
- Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. *Child Development, 58*, 1101-1113.
- Carbonell, D. M., Reinherz, H. Z., Giaconia, R. M., Stashwick, C. K., Paradis, A. D., & Beardslee (2002). Adolescent protective factors promoting resilience in young adults at risk for depression. *Child and Adolescent Social Work Journal 19(5)*, 393-412.
- Daddona, M. F. (2011). Peer educators responding to students with mental health issues. *New Directions for Student Services, 133*: 29-39.
- Holland, J.L., Gottfredson, D.C., & Power, P.G. (1980). Some diagnostic scales for research in decision making and personality: Identity, information, and barriers. *Journal of Personality and Social Psychology 39(6)*, 1191.
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology, 36*, 366–380

- LeBlanc, M. (1994). Questionnaire de la délinquance auto-révélee. Rapport de recherche. Montréal : Université de Montréal, Département de psychoéducation.
- Moos, R. H. & B. S. Moos (1994). *Family environment scale manual*, Consulting Psychologists Press.
- Ng, R., Ang, R. P., & Ho, M. H. R. (2012). Coping with Anxiety, Depression, Anger and Aggression: The Mediation Role of Resilience in Adolescents. *Child & Youth Care Forum* 41(6), 529-546.
- Procidano, M. and K. Heller (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology* 11(1), 1-24.
- Reynolds, C. R., & Kamphaus, R. W. (1992). *BASC: Behavior assessment system for children: Manual*. American Guidance Service, Incorporated.
- Robbins, R. J. (1994). An assessment of perceptions of parental autonomy support and control: Child and parent correlates. Unpublished Doctoral Dissertation, Department of Psychology, University of Rochester.
- Robbins, S. B., Payne, E. C. & Chartrand, J. M. (1990). Goal instability and later life adjustment. *Psychology and Aging* 5(3), 447.
- Schulenberg, J.E., Sameroff, A.J. & Cicchetti, D. (2004). The transition to adulthood as a critical juncture in the course of psychopathology and mental health. *Development and Psychopathology* 16(04), 799-806.
- Schwartz, S. J., Côté, J. E., et Arnett, J. J. (2005). Identity and Agency in Emerging Adulthood Two Developmental Routes in the Individualization Process. *Youth & Society* 37(2), 201-229.
- Stewart-Brown S, Evans J, Patterson J, Petersen S, Doll H, Balding J, Regis, D. (2000). The health of students in institutes of higher education: an important and neglected public health problem? *Journal of Public Health* 22(4), 492-499.
- Weissman, A. N., & Beck, A. T. (1978). *Development and validation of the Dysfunctional Attitude Scale*. Paper presented at the Annual Meeting of the Association for the Advancement of Behaviour Therapy, Chicago.