

MENTAL HEALTH AND OCCUPATIONAL IDENTITY OF 1ST YEAR AGRONOMY STUDENTS IN LITHUANIA

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This study investigated the relationship between students' occupational identity statuses and their mental health. A correlation analysis and cluster analysis were performed with a sample of 167 first-year agronomy students in Lithuania. It was expected that a higher statuses of occupational identity will be related to better mental health. Expectations have been fulfilled only for achievement status, indicating that achievement (the highest identity status) is positively related with general and all components of mental health. Moreover, foreclosure identity status also was positively related with general and three components of mental health. In addition, the results indicated that diffusion identity status was negatively related with real evaluation of subjectively perceived mental health. Clustering analysis proposed two profiles: first of students with better mental health and higher achievement and foreclosure statuses, and second cluster for students with poorer mental health and higher diffusion and higher moratorium statuses. Implications of these findings for university counsellors and for faculty are presented.

Keywords: mental health, occupational identity, students.

INTRODUCTION

First-year university experience can be problematical for many students because they have always faced more complex and demanding changes than they experienced at school (Kim et al., 2013). McInnis (2001) argued that first year experience is the most vulnerable period in terms of their likelihood of academic failure, dropping out of study, potential social, emotional, health and financial problems. Entering university is by nature a stressful experience and challenging transitional step in young people's lives because of separation from family, establishment of emotional independence, etc. (Kim et al., 2013). How they subjectively perceive, adjust to and cope with various demands of university life, influence their academic success (Gan et al., 2010). Thus, the university years represent a developmentally challenging transition to adulthood, and untreated mental health problems may have significant implications for academic success, productivity, substance use and social relationships (Hunt and Eisenberg, 2010). Although some students are able to experience this transition as a challenge to personal growth, other students are overwhelmed by the changes and experience emotional maladjustment and depression.

The World Health Organization has stated that the last few years, the youth mental health problems, such as anxiety, depression, eating disorders, self-harm and substance use, were increased. These difficulties are often present as inefficiencies in coping with familial separation, time and stress management, basic study techniques, goal setting, relationship formation, handling emotions, and self-esteem crystallization. Personal, academic, social, and professional success depend on the student's ability to manage these aspects of their lives (Gilchrist, 2003). Psychosocial factors, such as educational self-efficacy and psychological coping, as well as resultant academic performance are related to mental health (Kim et al., 2013). Students' anxiety leads to poor academic adjustment and failure, because it causes to assess the situation as threatening and unmanageable (Cohen et al., 2008). Educational experiences for students have a greater influence on their well-being (Hoogstra et al., 2001).

Exploration and identity formation are primary developmental tasks during the transition to adulthood. Malanchuk and colleagues (2010) presented the complexity of career identities and the relationship between early career identity formation and psychological well-being at ages nineteen and twenty-one. Essentially, researchers examined the effects of identity formation on Dutch adolescent mental health. The results have shown that occupational identity have effects on

mental health – i.e., the more achieved the identity, the better the person's mental health. Vocational stressors lead to poorer mental health (Malanchuk et al., 2010). Hinkelman and Luzzo (2007) emphasized the need to integrate personal and mental health issues in career counseling of students.

We define the term students' occupational identity as the consistent understanding that young people have of their expected job, their educational and occupational trajectory, and work-related opportunities (Hoogstra et al., 2001). Marcia's (1966) ego identity status model which gained popularity and recognition among several other measures of ego identity, describes four different statuses (i.e., diffusion, foreclosure, moratorium, achievement). Individuals in diffusion status have no clear sense of identity. Individuals in foreclosure status adopt their attitude or values from significant others, such as parents, without deliberate exploration. Individuals in moratorium status are exploring without committing themselves to one particular dimension of identity. Individuals in achievement status have explored enough to commit themselves to a certain identity status (Kroger et al., 2010; Ahn et al., 2015). The developmental process of the identity begins with diffusion or foreclosure and then proceeds exploration in moratorium status and expires with achievement status (Kroger et al., 2010). Identity can be expanded into various domains (such as sexual, religion, lifestyle, etc.), but occupational identity formation is more critical to successfully resolving identity in general than are other identity domains (Nauta and Kahn, 2007).

Problem

First-year students at the university facing with a lot of challenges and uncertainty. However, most of the literature on the interaction between career/work and mental health has focused on adult work concerns, the unemployed or vocational rehabilitation issues. Moreover, the particular issues and corresponding needs of students in this area for the most part have been ignored. This is especially important because students seeking services in career and counseling centers at university often present both types of issues simultaneously (Hinkelman and Luzzo, 2007).

In this study, the authors expect that students whose occupational identities are more mature will demonstrate better mental health than their peers whose identities are less well developed. So, the *research question* that should be answered by this paper: does the students' mental health is related to the students' occupational identity statuses?

Research *hypothesis*: there will be significant relationship between the students' better mental health and more mature or higher identity statuses (i.e., achievement and moratorium statuses). The *object* is the relationship between students' mental health and occupational identity.

RESEARCH METHODS

Participants

The participants were 175 students from Aleksandras Stulginskis University, Faculty of Agronomy, studying in five study programs (Agronomy, Quality and Safety of Food Raw Materials, Plant Biology and Breeding, Landscaping), who enrolled in first-year Psychology course. Prior to data analysis, eight participants' questionnaires were eliminated from the sample because they failed to complete all or a major part of questionnaire, leaving a final sample of 167 (107 females, 59 males, and 1 unspecified) for analysis. The age of respondents ranges from 18 to 23 years ($M = 19.51$ years, $SD = 1.07$). The majority of respondents live in the university dormitory (51.1 %) or with their parents (22.8 %). The vast majority of surveyed students not working (86.8 %).

Materials

Occupational identity status were measured using the *Occupational Identity Scale (OIS)*; which was originally developed by Melgosa (1987), and re-formulated by Veiga and Moura (2005). The instrument is based on Marcia's (1966) definition of identity status. The instrument has 28 items, sorted into 4 statuses of occupational identity: Diffusion (e.g., "At this point, I am not worried about the type of job I will be most successful in; I will think about it in the future"), Foreclosure (e.g., "The occupation I have chosen is a tradition in my family and I feel I would like to follow the family tradition"), Moratorium (e.g., "At the present moment, I do not know exactly what I want as my career, but I am examining several occupational options"), and Achievement (e.g., "After many doubts and considerations, I have a clear idea as to what my occupation will be"). A 5-point Likert-type scale of agreement, ranging from strongly disagree (1) to strongly agree (5) was used. Cronbach's alpha coefficients for Diffusion, Foreclosure, Moratorium and Achievement statuses were .63, .75, .69, and .68 respectively.

Mental health of students' was measured using the *Mental health scale from Well-being Self-Assessment Questionnaire*, which was originally developed by A. Gostautas (2005). The Well-being Self-Assessment Questionnaire consist of 124 statements on the physical and mental health, which together define well-being, but in this study only mental health scale (80 statements) was used. Possible answers to the statements are: yes (1) or no (0). The instrument is a four scale: Real evaluation (e.g., "My mental health is strong"), Comparison with peers (e.g., "My mental health is stronger than peers"), Characteristics of improvement (e.g. "My mental health has improved over the last two-three weeks) and Satisfaction with situation (e.g. "I am satisfied with mental health"). The higher rating reflects a better mental health. Cronbach's alpha coefficients for Real evaluation, Comparison with peers, Characteristics of improvement and Satisfaction with situation were .77, .85, .88 and .84 respectively. Cronbach's alpha coefficient for General mental health (full scale of mental health, 80 items) was .93.

Data analysis

In order to answer a research question as well as to test the hypothesis several statistical methods were used. First, descriptive statistics (means and standard deviations) as well as *Pearson* correlations were calculated to understand students' general characteristics and each variable's tendency (see Table 1). In addition, *One-way Anova* was used to analyze gender differences in mental health and occupational identity. Finally, *Cluster analysis* were conducted to differentiate students according to similarity of occupational identity statuses and mental health components.

RESEARCH RESULTS

The analysis of mental health components and occupational identity statuses between male and female students revealed significant differences only in moratorium occupational status. The results indicated that females tend to experience more moratorium status than males ($p < .05$).

Correlational analysis revealed the underlying relations between general mental health and its components and four occupational identity statuses. As seen in Table 1, general mental health was positively associated with foreclosure status ($r = .23, p < .01$) and achievement status ($r = .34, p < .01$). Although, among the components of mental health, real evaluation of mental health was positively related to achievement status ($r = .33, p < .01$), and negatively correlated with diffusion status ($r = -.23, p < .01$). Comparison with peers, characteristics of improvement, and satisfaction with situation were positively related with both – achievement ($r = .20, p < .01$; $r = .20, p < .01$ and $r = .23, p < .01$ respectively) as well as positively related to foreclosure ($r = .23, p < .01, r = .30, p < .01$ and $r = .35, p < .01$ respectively).

Table 1. Means, Standard Deviations and Correlations of Occupational Identity Statuses and Mental Health Subscales

Scale and Subscale	1	2	3	4	5	6	7	8	9
Mental health									
1. General mental health									
2. Real evaluation	.79**								
3. Comparison with peers	.83**	.48**							
4. Characteristics of improvement	.77**	.32**	.64**						
5. Satisfaction with situation	.77**	.87**	.43**	.31**					
Occupational identity status									
6. Diffusion	-.15	-.23**	-.07	.04	.01				
7. Foreclosure	.23**	.05	.23**	.30**	.32**	.22**			
8. Moratorium	-.07	-.08	-.07	.02	.02	.39**	.01		
9. Achievement	.34**	.33**	.20**	.20**	.23**	-.15	.24**	-.02	
M	49.16	15.27	10.08	8.92	14.89	17.99	16.70	20.29	22.06
SD	14.44	3.58	5.01	5.45	4.22	4.50	5.54	4.47	4.90

Note: N = 167. M = mean; SD = standard deviation.
*p < .05. **p < .01.

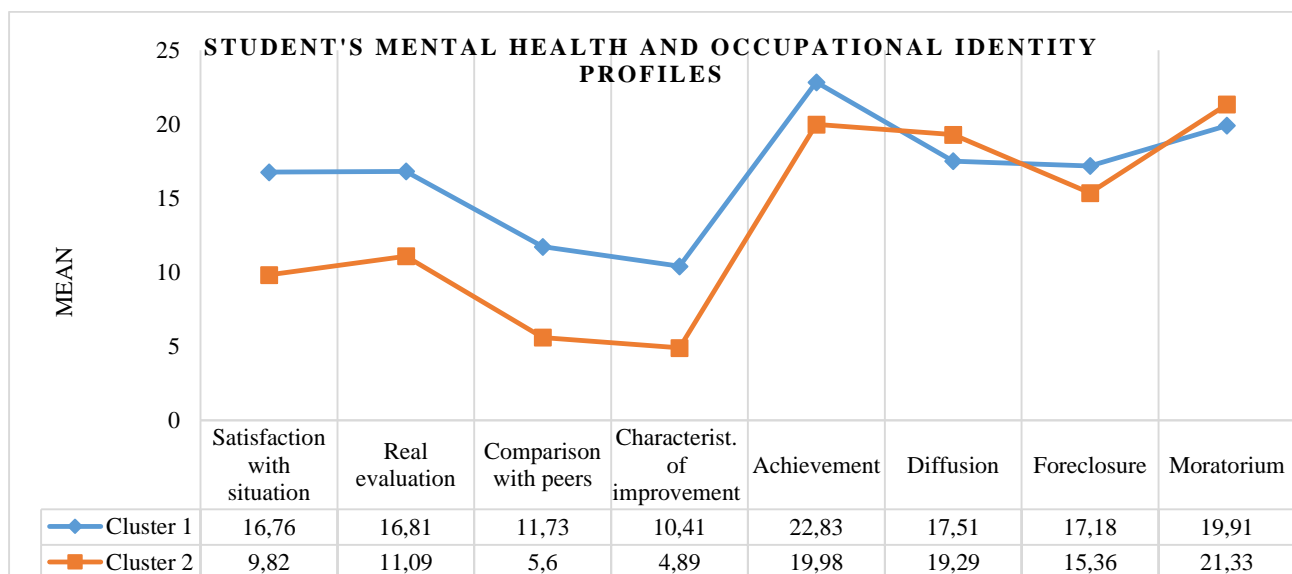


Figure 1. The profiles of students' (N=167) mental health components and occupational identity statuses

To simultaneously discover the solution of grouping occupational identity statuses and mental health components in such a way that objects in the same group (cluster) will be more similar to each other than to those in other groups (clusters), cluster analysis was performed. This would enable to differentiate students, in order to provide required

interventions in the future. For this purpose, the *Two-Step Cluster* analysis were conducted using *Log-likelihood* distance measure and *Schwarz's Bayesian* criterion. Two clusters solution was found. The first cluster consisted of students with higher scores in general and all components of mental health as well as higher scores in achievement and foreclosure occupational statuses. Size of first (largest) cluster is 73.1 %. Size of second (smallest) cluster is 26.9 %. In contrast lower scores in all components of mental health and higher scores in diffusion and moratorium occupational identity statuses, characterize the second cluster. Mean of general mental health in first cluster is 55.71 and in the second cluster – 31.40. The profiles of components of mental health and occupational identity statuses are presented in Figure 1.

No statistically significant gender differences were found between clusters ($\chi^2 = 1.193$, $p > 0.05$). This means that distribution of men and women scores in different profiles are similar in studied sample.

DISCUSSION

Students' mental health is a pressing issue in today's university. Good mental health affects the quality of learning, occupational identity, relationships with others, in the end the relationship with yourself. It is important for University community to understand the profound impact that mental health problems can have on all aspects of university life, and to treat mental health issues as an institutional responsibility and priority. Counseling centers can respond effectively to the current challenges if they have the support and commitment of the administration. The need for counselling centers has never been greater. They will continue to play an important role in supporting the mission of higher education institutions by providing counseling for students who are experiencing problems and assisting them in achieving their educational and personal goals (Kitzrow, 2003).

This study tried to find the relationships between students' mental health and their occupational identity statuses. The results of this study clearly shows that better mental health of students is related to highest status of occupational identity – achievement. The results are consistent with previous studies which found that occupational identity formation has an effect on person's mental health, especially in its formation period – at ages nineteen and twenty-one (Malanchuk et al., 2010). The results indicated that highest – achievement – status is positively related to general mental health and all its components. The results are consistent with results of another recent research that obtain the relationships between higher identity statuses (achievement and moratorium statuses) and planned happenstance skills, skills that can create and transform unplanned events into opportunities in career-related fields (Ahn et al., 2015).

Several researches have suggested that women perform better than men on identity development, and display higher identity achievement and moratorium than men (Schwartz and Montgomery, 2002). In our study, significant differences were found in moratorium occupational status, indicating that females tend to experience more moratorium status than males. In comparison to men, women are high in exploring issues that pertain to various spheres of life, and have committed themselves after trying out various options (Sandhu, 2006).

We do not found significant relation between diffusion status and mental health. Diffusions are relatively directionless, unconcerned about their lack of commitment, and easily swayed by external influences (Kroger and Marcia, 2011). Marcia suggested that those with identity diffusion do not experience much anxiety because there is little in which they are invested. As they begin to care, more they move to the moratorium status, or may end up adopting a negative and self-destructive identity-role. Skorikov and Vondracek (2011) research reviewed, that educational and family experience in childhood and early adolescence are strongly predictive of successful vocational identity development later on. It suggest to a conclusion, that diffusion status is more related to a personality features influenced by early educational and family experience than to mental health issues. Further studies are needed to determine why a moratorium status do not relate with mental health in this case, although Marcia notes, that moratoriums report experiencing more anxiety. It is important to notice that both diffusions and moratoriums have low commitments. The question is whether the ability to commit linked to mental health issues. Further researches could give an answer.

Linking to rural communities, it is known that youth in rural areas tend to have more psychological problems, e.g. higher levels of depression, substance abuse and lack of mental health services available, than those residing in urban areas (Moore and Walton, 2013). However, all other mental health problems are similar between rural and urban areas (Lambert et al., 2008). Results of several researches indicated that rural and urban students did not report significant differences in the extent of their adjustment to college (Bitz, 2011). Further, there were no significant differences between rural and urban students in the paths for student aspirations, student self-concept, and student achievement (Young, 1998). According to those results, in our research we do not point on differences between rural and urban students. As most of agronomy students after graduating usually work in rural areas, we found more important to understand, what helps to become a good specialist while studying. One of the answers is improvement of mental health. Regarding qualities of agricultural professions, previous research (Daukilas et al., 2007) has demonstrated that it is essential to orient around not only technological, but also social and emotional expressions competence development in youth preparation for living in rural areas. Daukilas and colleagues (2007) concluded that the balanced of personal constructs (capabilities, emotional, health, possibilities of working activity, etc.) is essential in order to achieve good farming results.

Recently published studies (and this one is one of those) points to one very clear conclusion: providing the most effective career and mental health services to university students requires an examination of psychosocial, vocational, and personal issues within the counseling context (Hinkelman and Luzzo, 2007). According to Multon and colleagues (2001), university counsellors must view students holistically and integrate the goals of psychological and career adjustment into their counseling treatment plan. Problem now occurs, when career counsellors are lack of psychological knowledge. Many career counselors may be reluctant to discuss client's personal issues because they do not have advanced training in

psychotherapy. Yet, there is still a need to acknowledge how client's personal issues interact with career exploration and decision making and to make appropriate referrals when needed (Hinkelman and Luzzo, 2007). For this reason, further researches in this area would expand understanding between vocational and mental health issues. Our study revealed that it is significant connection between occupational identity and mental health. In further studies, would be reasonable to specify how mental health problems such as depression, stress, anxiety, substance use, etc., affect vocational issues.

To conclude, the result of this study will hopefully serve for a better understanding of occupational identity development related to mental health improving. James Marcia's theory of identity development based on exploration and commitment. Using this four-identity stages matrix, counsellors can recognize whether students have or have not explored a great deal, and whether they are committed to their choices. With knowledge of these results, counsellors can feel more confident in career advising and know that they are helping students accomplish realistic and ideal goals that are closely related to their mental health issues.

CONCLUSIONS

1. Better mental health of students is related to highest status of occupational identity – achievement.
2. There is no significant relations between diffusion and moratorium statuses and mental health.

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