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Emotional Capital Development, Positive Psychology and Mindful Teaching: Which Links?

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The start of university life requires a period of adaptation, which can sometimes have an impact on the mental health of students. The latest results from the Observatoire National de la Vie Etudiante (OVE, 2013) show that more that 40% of university students report symptoms of psychological fragility (sleep problems, fatigue, depression, stress or loneliness), which can impact their level of wellbeing and performance. Beyond Savoirs [knowledge], Savoir Faire [knowing what to do], the role of Savoir Être [knowing how to be] referring to a set of emotional competencies, is crucial in sustaining human capital in a broad sense, personal development and health (Gendron 2004). During the Initiatives d'Excellence en Formations Innovantes (IDEFI) Programme, **[**Initiatives of Excellence in Innovative Training] 132 first year university students of education underwent an intervention (a minimum of six workshops of four hours) aimed at developing their emotional capital. Using two approaches PIA2 (European Management and Project Management Methodology) and ACT Training derived from Acceptance and Commitment Therapy (ACT) the objective was to develop trainees' social and personal emotional competencies such as self-esteem, self-knowledge, empathy and conflict management. Using an interdisciplinary approach drawing on educational theory, theory of human resources and positive psychology, the results show that emotional capital, developed using positive psychology tools, can improve wellbeing and contribute to a holistic personal development.

Keywords: emotional capital, emotional competencies, soft skills, ACT, mindfulness.

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Introduction

Although attending university is generally viewed as a positive experience, offering many new opportunities, it nonetheless sometimes involves a stressful period of adaptation for students. First year university students face a variety of stressors: making new relationships, modifying existing relationships with parents and family, and learning study habits for a new academic environment. The presence of these stressors often correlate with low self-confidence, anxiety and a low academic performance. In addition, students must learn to function as independent adults (Parker, Hogan, Eastabrook, Oke & Wood, 2006). The results of the latest National Survey of Student Living Conditions in France (OVE, 2013) indicated that 41.4% of university students experienced sleeping problems, 52.0% fatigue, 28.1% depression and 54.9% stress in the week that preceded the survey. Those scores vary between men and women (higher scores for women) and between ages (higher scores between 23-25 years).

Knowing that the first year of university can potentially have a significant impact on students' wellbeing and, indirectly on their general performance, the objective of our research was to design an experimental programme targeted at first year university students, in order to develop their emotional capital (Gendron, 2004, 2008), using interactive workshops focusing on personal health issues and wellbeing. Proficiency in emotional capital potentially encompasses the skilled management of emotions, external situations and relationships, and promotes better mental health for students, especially a higher resilience to stressors. Developing emotional capital can be helpful in demanding emotional contexts, for example for first year students adapting to independent living and a new academic environment or for new teachers managing a stressful work situation.

Emotional capital and educational performance

The notion of 'capital' is derived from an economic discourse and refers to a supply of capital identified by its sources and its returns (Gendron, 2013). Traditional economic theory, generally viewed capital as physical items that are used and useful in the production process. However the notion of capital has been expanded as a general way of thinking and taken on a broader meaning especially, where some aspects of its definition provide a useful way of thinking in another domain. Gendron (2004) argues that, in previous definitions of human capital, the individual and social skills that enable an individual to gain economic and social benefits from interaction with others have been insufficiently theorised. She describes this as 'knowing how to be' (*fr*. savoir-être) for example to know the rules of socialising and how to behave in social situations, to know how to communicate effectively, how to handle a conflict.

Emotional competencies constitute a crucial resource for individuals. As emotional competencies can enhance social, economic and personal performance we have to consider them as an emotional capital, defined as "the set of resources (emotional competencies) inherent to an individual that is useful for personal, professional and organisational development, that contributes to social cohesion and can bring about personal, economic and social returns" (Gendron, 2013, pp. 24). Emotional capital can be developed, as emotional competencies are learnt capabilities. In education emotional capital would have a crucial role to play as it impacts on learning processes. It might be particularly important for children and young people at risk as it

might promote a more holistic development, which would in turn impact on their ability to manage relationships, and to their personal, and academic success.

Because emotional capital can be damaged in certain situations, repeated failure at schools can lead to children and young people developing inappropriate responses, dropping out of education or being excluded. Research from business psychology demonstrates the vicious cycle where people who have lost their jobs lose their self-confidence and self-esteem, isolate themselves and consequentially may not use their emotional or social capital or their social networks for finding a job (Bennett, Martin, Bies, Brockner, 1995).

Emotional capital can help students reach their potential in the classroom and as future workers at the workplace. Emotional capital becomes crucial for the youth's wellbeing and achievement in life and is the basis for self-improvement, growth, and lifelong learning, as well as successfully interaction with others. It also helps develop resilience, allowing people to respond to stress and disappointment in appropriate and productive ways. Emotional capital has been developed in this experimental research using an active pedagogical approach incorporating mindfulness and project management

Theoretical basis, objectives and protocol of the mindfulness approach. Acceptance and Commitment Training (ACT) is a multidisciplinary approach drawing on Mindfulness Programmes (Kabat-Zinn et al., 1992) and Acceptance and Commitment Therapy (Hayes, Strosahl, & Wilson in 1999) that has the potential to contribute to the development of emotional competencies. It is an empirically based psychological intervention that uses acceptance and mindfulness strategies combined with with commitment and behaviour-change strategies, to develop a psychological flexibility. ACT differs from traditional cognitive behavioural therapy in that rather than trying to teach people to regulate their thoughts and emotions ACT teaches them to observe, accept, and embrace those difficult personal emotions, particularly those that are identified as previously undesirable.

Using this approach, the objective is to develop trainees' social and personal emotional competencies such as such as self-esteem, self-knowledge, empathy and conflict management. More specifically, drawing on positive psychology and educational approaches, workshops on acceptance and engagement and practical exercises of mindfulness encourage the development of a psychological flexibility. The workshops are grounded in a belief that that behavioural inflexibility and rigidity and a tendency to avoid psychological events can be potentially damaging. ACT is based on the premise that learning how to cope with difficult thoughts and emotions can impact positively on reducing counter-productive behaviours for the learner. So, the objective is to help students develop more psychological flexibility, and to reduce the time spent 'fighting against' painful thoughts, emotions and memories in order to use their energy more effectively and productively.

The ACT workshop centres on six cognitive processes: cognitive diffusion, acceptance, being in touch with the present moment, observing the self, values, and committed action. To help individuals at developing their psychological flexibility (Harris, 2006), cognitive diffusion provides a method of reducing the tendency to reify thoughts, images, emotions, and memories; acceptance describes allowing thoughts to come and go without struggling with them. Being in touch with the present moment focuses on the awareness of the here and now, experienced with openness, interest, and receptiveness; observing the self describes

accessing a transcendent sense of self, a continuity of consciousness which is unchanging; defining values describes discovering what is most important to one's true self and committed action is about setting goals according to values and carrying them out responsibly.

The main objectives of ACT were to develop students' personal emotional competencies, to learn about themselves to be able to learn about others, to be able to regulate their own emotions to be able to help others regulate their emotions. Drawing on a positive education perspective, some exercises focus on training students to assess situations in a positive way: the metaphor of 'half full/ half empty glass' and to be aware of the thought processes relating to difficult psychological situations or events. ACT aims to train people to regain a psychological flexibility in the presence of painful events or emotions and to avoid trying to control or suppress those painful thoughts. It requires them to think about their own values, in personal, relational, educational and work contexts. In this way the programme contributes to diminishing the psychological and physiological impacts of painful situations and reducing associated stress.

The programme follows the protocol for interventions based on ACT: at minimum, six workshops of four hours. The experimental research was based on a traditional design: two groups – an experimental group and a control group with data collected pre and post intervention. For ethical reasons the control group received the ACT training at the end of the experimental period.

Theoretical basis, objectives and protocol of the management project programs. The programme also drew on an active learning pedagogy (Dewey 1915). The main objective of the project management element of the programme was to work in groups, for students have to learn about themselves and each other, to evaluate their individual and group progress and to work together collaboratively. A variety of exercises were used to develop the students' commitment to the programme, in this way students become active participants in their projects where team spirit had an important place. In order to create the groups, a short questionnaire allowed students to identify their profile choosing from four categories: manager, visionary, analyst and collaborator. Moreover in this approach, each member had responsibilities and specific duties, which contributed to the team performance. Each team used 'a board notebook' in order to manage the project's progress and, this way, each student learnt to mange their input and to develop their deductive, inductive, analytic, and critical skills. Following a guide students defined and analysed the stakeholders and associated risks. The tutor had an important role as a coach, helping and encouraging students to continue and to persist in order to achieve the team objectives. From the first session until the end of the project, students completed tests and identified using an evaluation scale, their developing emotional, social and personal competencies.

Methodology

Institutional framework, stakeholders and data

This study is part of a national scientific project entitled *Initiatives d'Excellence en Formations Innovantes (*IDEFI) [Initiatives of Excellence in Innovative Training]. The programme entitled 'Emotional Capital, Well-being and Performance' aimed to preparing and facilitating the integration of young students and high school students-future university students and at participating to their success through the development of relevant emotional capital. In addition the active learning pedagogy provided a propitious

environment for students to develop their abilities work in a group, manage conflict, understand the importance of social and interpersonal skills, and develop personal and social emotional competencies that would underpin their personal and academic development. The Faculty of Education Sciences integrated the programme into the timetable of the second semester, during the first year, as part of two modules: 'Evaluation and orientation in teaching and education' and 'Personalised Professional Project'. The development of emotional capital was supported by combining the two approaches; ACT and project managements (PIA2).

Sample

The participants in this research consisted of a group of 132 first year university students of education from the Faculty of Education Sciences (final dataset of 97 students made up of 11 males and 86 women students with a mean age of 20 years). The participants were divided into 8 groups (19 students maximum per groups), 4 experimental groups (XP GP) and t 4 control groups (Ctrl GP).

Instruments

The Trait Emotional Intelligence Questionnaire (TEIQue) is a scientific measurement instrument that draws on trait emotional intelligence theory. Developed by Petrides in 2009, it consists of 153 items responded to on a 7-point scale (from 'strongly agree' to 'strongly disagree'). It provides scores for 15 subscales and four factors (wellbeing, self-control, emotionality, and sociability) and a global trait EI.

The Emotion Regulation Profile-Revised (ERP-R) developed by Nelis, Quoidbach, Hansenne, & Mikolajczak in 2011, is a vignette-based measure. It comprises 15 scenarios describing different types of emotion-eliciting situations. Each scenario features a specific emotion (e.g., anger, sadness, fear, jealousy, shame, guilt, joy, contentment, awe, gratitude, pride) and is followed by eight possible reactions: four considered as adaptive and four viewed as maladaptive. Respondents are required to select, for each scenario, the strategies that best describe their most likely reactions in the situation.

The Mindful Attention Awareness Scale (MAAS) developed by Brown and Ryan in 2003 is a 15-item scale designed to assess the core characteristics of mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. Studies have shown that the MAAS assesses a unique quality of consciousness that is related to, and predictive of, a variety of self-regulation and well being constructs.

The Acceptance and Action Questionnaire 2 (AAQ 2) developed by Bond et al. in 2011, assesses a person's experiential avoidance, immobility, acceptance and action. The 10 items are rated on a 7-point Likert-type scale from 1 (never true) to 7 (always true). High scores on the AAQ-2 are reflective of greater experiential avoidance and immobility, while low scores reflect greater acceptance and action.

The Depression, Anxiety, Stress Scale (DASS) developed by Lovibond and Lovibond in 1995, consists of 42 negative emotional symptoms. The scale rates the extent to which individuals have experienced each symptom over the past week, on a 4-point severity/frequency scale. Scores for the Depression, Anxiety and Stress scales are determined by summing the scores for the relevant 14 items.

The Echelle de Motivation en Education [Academic Motivation Scale – AMS] developed by Vallerand and colleagues in 1989 is based on self-determination theory and is composed of 28 items subdivided into seven subscales (see Vallerand et al., 1992). This scale assesses on a 7-point-Likert-type-scale, three types of intrinsic motivation (intrinsic motivation to know, to accomplish things, and to experience stimulation), three types of extrinsic motivation (external, introjected, and identified regulation), and motivation.

The Echelle d'Auto-efficacité Généralisée [Generalized Self-efficacy Scale] developed by Schwarzer and Jerusalem in 1995 is a 10 items scale, which was created to assess a general sense of perceived self-efficacy with the aim to predict the ability to cope with daily 'hassles' as well as adaptation after experiencing stressful life events.

Analysis

Statistical data was analysed in SPSS using T-test and analyses of variance (ANOVA) in order to identify inter-group differences between the experimental group (XP GP) and control group (Ctrl GP) but also to identify intra-group differences between measurements taken before the training (T1) and after the training (T2).

Results

Experimental Group (XP GP) and Control Group (Ctrl GP): main inter-group differences

The first inter-group differences between means scores were obtained using Academic Motivation Scale. The experimental group presents higher mean scores in relation to two subscales of intrinsic motivation (IM) both in pre-test and post-test phase. Figure 1 describes the means and standard deviation of each group. One can see clearly that the mean scores for the subscale *intrinsic motivation to know* for XP GP is 5.42, whereas for Ctrl GP is 4.99. This subscale is related to several constructs such as exploration, curiosity, learning goals, intrinsic intellectuality (item e.g. 'Because I experience pleasure and satisfaction while learning new things') and indicates that the participants from experimental group had a greater tendency to report that they would perform an activity for the pleasure and the satisfaction that one experiences while learning, exploring, or trying to understand something new. For the second subscale – intrinsic motivation to experience stimulation, the mean scores of participants from experimental group is 3.80, whereas for control group is 3.35. This means that students from XP GP report that they are more likely to engage in an activity in order to experience stimulating sensations (item e.g. 'For the pleasure that I experience when I read interesting authors').

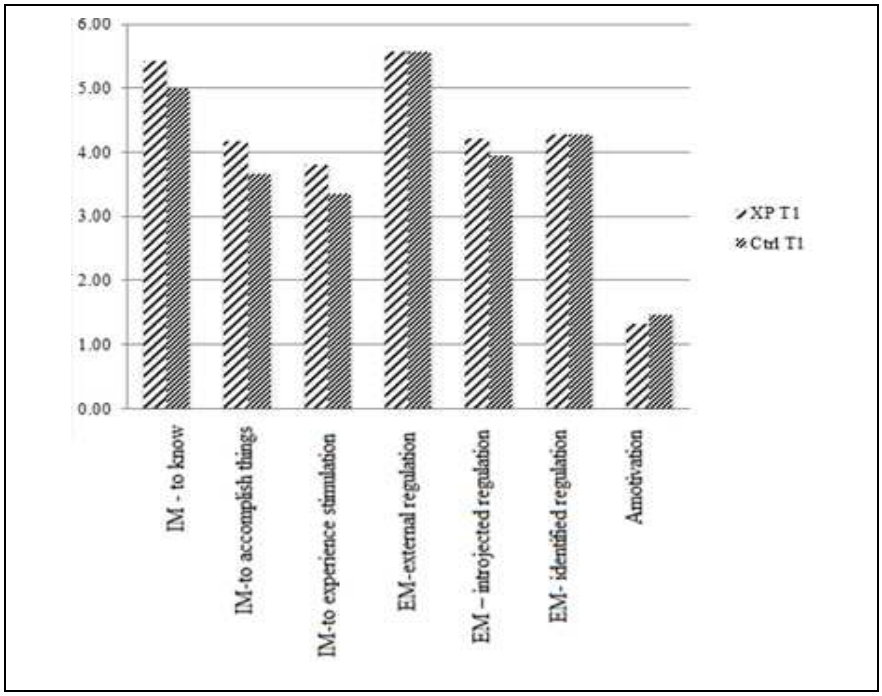

Figure 1. Mean scores of XP T1 and Ctrl T1 (AMS)

Another relevant inter-group characteristic, identified in the moment T1, was identified using the *Trait Emotional Intelligence Questionnaire* – TEIQue. This instrument allowed us to evaluate the factors and scales of emotional intelligence and the total EI score of the subjects. Statistical analysis suggested that at T1 (pre-test), subjects from Ctrl GP reported a higher level of self-control those from XP GP (see Figure 2) (m=4,1987 compared to m=3,9051). This result suggests that subjects from Ctrl GP report a reasonable degree of control over their urges and desires. This might suggest that in addition to managing impulses, they are good at regulating external pressures and stress and are neither repressed nor overly expressive. In contrast the mean score for subjects from XP GP suggests a tendency to impulsive behaviour and a reduced ability to manage stress where low self-control can often be associated with inflexibility.

TEIQue allowed us to identify also a significant inter-group difference relating to emotional regulation; subjects from Ctrl GP having higher mean scores (m=4,0338 compared to m=3,652). A characteristic item for this subscale is '*When I get upset, I can calm myself down quickly*'. This scale measures short, medium and long-term control of feelings and emotional states. These data suggests that subjects from the Ctrl GP report that they have more control over their emotions and can change unpleasant moods or prolong pleasant moods through personal insight and effort. This might impact on their psychological stability and their ability to pick themselves up after emotional setbacks. On the other hand, participants from XP GP report a lower score relating to emotional regulation and might have more of a tendency to emotional mood swings and periods of prolonged anxiety or even depression. They might find it difficult to deal with their feelings and might be often moody and irritable.

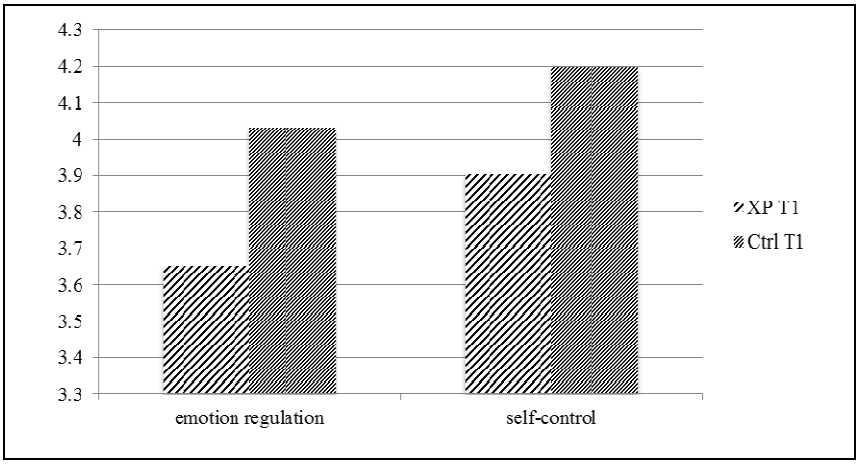

Figure 2. Mean scores of XP GP and Ctrl GP in T1 (TEIQue)

Finally, the scores obtained, using *Acceptance and Action Questionnaire* (AAQ2), indicate the same pattern as the previous analyses. Participants from XP GP reported less flexibility than those of Ctrl GP (m=4,76 compared to m=4,44; U=816; p=0,05). Higher scores obtained by the Ctrl GP indicate greater psychological flexibility or acceptance and committed action towards valued goals. This variable was evaluated through items like: 'My painful experiences and memories make it difficult for me to live a life that I would value'. Psychological flexibility is important as a broad number of studies indicate that a lower psychological flexibility, correlates to a number of negative outcomes including anxiety, depression, reduced work performance, and substance abuse.

Experimental Group (XP GP) and Control Group (Ctrl GP): main intra-group differences

The purpose of ERP- R at the end of the program (T2) was to evaluate the *emotion regulation* of the participants and determine how they usually react in different emotional situations. ERP-R evaluated two forms of regulation. Nine scenarios assess the *down-regulation of negative emotions* and six measure the *up-regulation of positive emotions*. For each scenario, eight reactions are proposed, four adaptive and four maladaptive. The two most common circumstances in which people regulate their emotions are (1) when their emotions impede goal achievement and (2) when their emotions do not match with the group's emotional display rules. *Emotional regulation* (ER) refers to the processes through which individuals process which emotions they have, when they have them, and how they experience or express these emotions. In this way the ERP-R not only provides information about how a person regulates his/her emotions, but it also highlights the regulation strategies used. Statistical analysis identified, after the intervention program (T2), that subjects from XP GP have better abilities (m=20,02) than subjects from Ctrl GP (m=17,9) on *up-regulating positive emotions* (Z=2,284, p=0,022) and on *focusing on the positive side* of the situation even if there are some obstacles (Z=2.851, p=0,004).

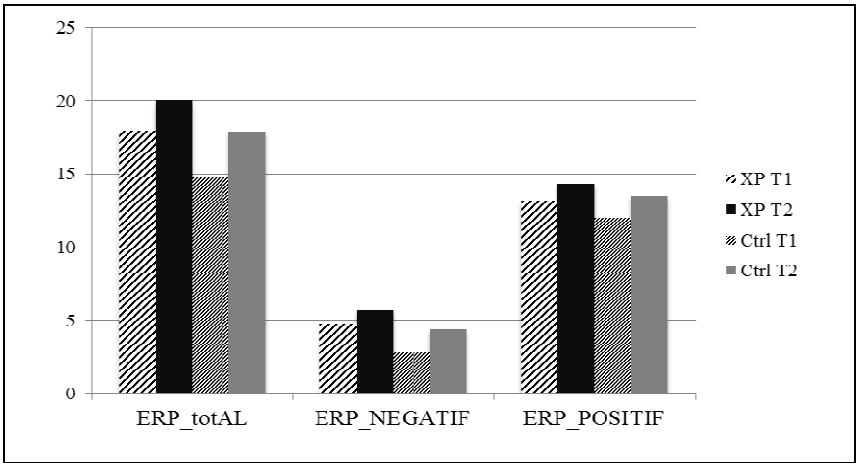

Figure 3. Mean scores of XP GP and Ctrl GP in T1 and T2 (ERP-R)

For the positive emotion component participants were allowed to choose as many options as they wanted from eight options to indicate how they would typically respond in these situations. Four of these options are designed as up-regulating strategies and four of the options were designated as down-regulating strategies. Depending on which strategies were checked, participants obtain a total score on eight strategies. Total down-regulating and up-regulating scores were calculated by adding the total scores for the four up-regulating strategies and the four dampening strategies. For the same group (XP GP), we also identified a positive correlation between *up-regulating positive emotions* ability and the subscale *optimism* of TEIQue (r= 0,306; p= 0,018). This correlation might be expected, because optimists are people who expect good things to happen to them and the difference between optimists and pessimist is the way they approach and cope with adversity. Optimism, defined as the persistence in pursuing goals despite obstacles and setback, is not only a state, but also can be learned and developed. In TEIQue, *optimism* is linked to well-being, albeit in a forward-looking way. High scorers look on the bright side and expect positive things to happen in their life. Low scorers are pessimistic and view things from a negative perspective. They are less likely to be able to identify and pursue new opportunities and tend to be risk-averse. Along with happiness and self-esteem, this scale reflects your general psychological state at this point in time.

Another relevant result obtained after the training intervention, identified that subjects from XP GP raised their level of *empathy* (m= 4,94 compared to m=4,74; Z= 2,347; p= 0,019). Empathy measures the perspective-taking aspect of empathy: seeing the world from someone else's point of view. In other words, it has to do with whether one can understand other people's needs and desires. Participants with high scores on this scale tend to be skilful in conversations and negotiations because they take into account the viewpoints of those they are dealing with. They can put themselves 'in somebody else's shoes' and appreciate how things seem to them. Empathy is one basis for moral action, as a motivator of helping and altruism, part of the emotional connection between people culture and society. From a developmental psychology perspective the growth of empathy, however, reveals an individual capacity to respond to another's emotional experience, which is a foundation for social and emotional understanding. This particular emotional competence is an essential emotional competence in a classroom situation.

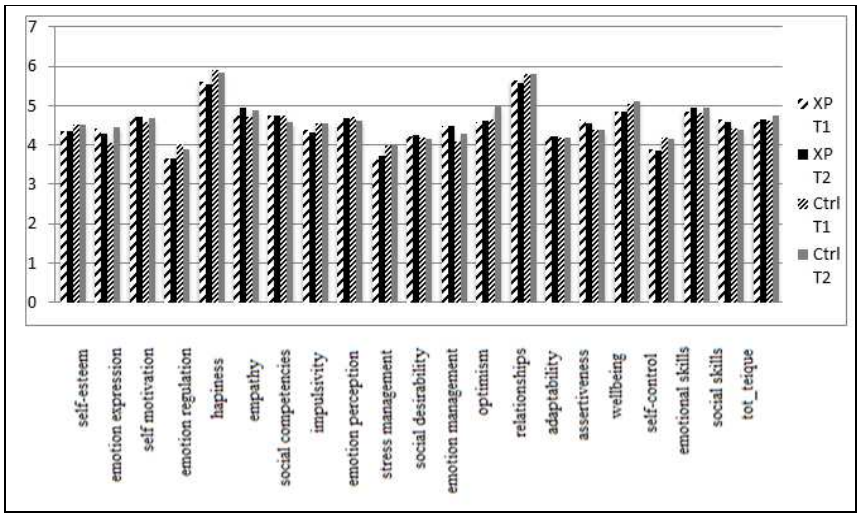

Figure 4. Mean scores of XP GP and Ctrl GP in T1 (TEIQue)

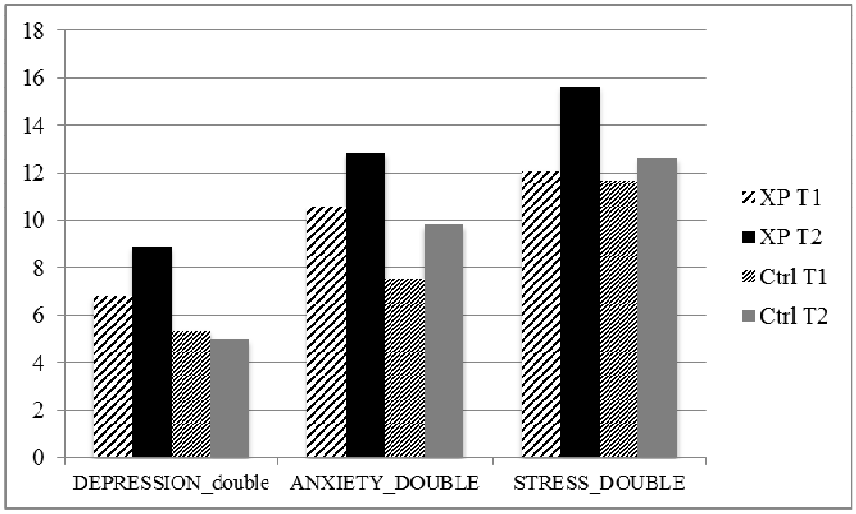

Figure 5. Mean scores of XP GP and Ctrl GP in T1 and T2 (DASS)

Another interesting result was revealed by the *Depression, Anxiety, Stress Scale* (DASS). Statistical data illustrated that, after the training (T2), subjects from XP GP reported higher levels of stress (m=7,81 compared to m=6,04; Z=2,702 ; p=0,007, m=5,28 compared m=6,42; Z=2,194; p=0,028). One explanation for this result is that the training may have allowed to students to know themselves better, to become more aware of their levels of stress and potentially to be able to better evaluate their personal resources.

Discussion

The purpose of this study was to develop emotional capital among first year students using tools from the positive psychology, Acceptance and Commitment Training (ACT), which is derived from derived from Acceptance and Commitment Therapy.

A limitation of our study is that it wasn't possible to randomly sample participants due to restrictions relating to the as the enrolment schedule for the University. Further studies will need to consider randomly sampling participants, using a reduced battery of tests, and consolidating the promising results by implementing and evaluating follow-up programmes in the 2nd and 3rd year of university (aiming to maintain the increases in emotional capital). Overall, however, the statistical data allows us to confirm positive changes in students' scores for variables like: *up-regulating positive emotions*, and *empathy*, but also a greater awareness of level of *anxiety* and *stress* which could mean that students started to know themselves better and to work on their level of stress management.

The condition of well-being, both in private and social domains, encompasses more than economic and social capital, it includes emotional capital as well. Emotional capital is crucial in underpinning self-adaptation to changes in society and the world of work. Developing emotional capital represents a personal, professional and organizational asset that helps us to act on ourselves, our organisation and our environment. Acceptance and Commitment Training contributes to its development. Through active engagement in core values and overcoming the psychological barriers to change, the individual may develop the flexibility necessary to lead a better quality of life.

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