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Illusory Control and Well-Being in a Non-Clinical Sample

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Annotation: A perceived sense of control over the environment is one of our basic needs. People's need of control is a survival mechanism and a factor of human progress. Perceived control refers to the individual's beliefs about the controllability of a situation and about the degree to which she/he has the skills and abilities necessary to obtain a desired outcome. Illusion of control is people's tendency to overestimate their abilities to control the events. According to Taylor and Brown (1988), illusion of control is one of the people's positive illusions, enhancing their emotional comfort and sense of security, in a word which is perceived more familiar and predictable than it is in reality. The general aims of this study are: 1) to investigate the presence of unrealistic perceptions of control in a sample of Romanian students and 2) to investigate a possible correlation between illusory control and well-being. The results confirm people's general tendency to overestimate their ability to control the events. A direct correlation between illusion of control and well-being could not been demonstrated. The role of illusory control as an adaptive mechanism is discussed according to the available data.

***Key words*:** Illusory Control, Well-Being, Students, Romania

Иллюзорный контроль и благополучие в неклинической выборке

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Аннотация: Осознанное чувство контроля над окружающей средой - одна из наших основных потребностей. Потребность людей в контроле - это механизм выживания и фактор человеческого прогресса. Воспринимаемый контроль относится к убеждениям человека о возможности управления ситуацией и о степени, в которой он / она обладает навыками и способностями, необходимыми для достижения желаемого результата. Иллюзия контроля - это склонность людей переоценивать свои способности контролировать события. Согласно Тейлору и Брауну (1988), иллюзия контроля - одна из положительных иллюзий людей, усиливающая их эмоциональный комфорт и чувство безопасности, одним словом, которое воспринимается более знакомым и предсказуемым, чем оно есть на самом деле. Общие цели этого исследования: 1) исследовать наличие нереалистичных представлений о контроле у выборки румынских студентов и 2) исследовать возможную корреляцию между иллюзорным контролем и благополучием. Результаты подтверждают общую тенденцию людей переоценивать свою способность управлять событиями. Прямая корреляция между иллюзией контроля и благополучия продемонстрировать не удалось. По имеющимся данным обсуждается роль иллюзорного управления как адаптивного механизма.

Ключевые слова: иллюзорный контроль, благополучие, студенты, Румыния.

1. Introduction

People’s beliefs in their own abilities to exert control over the environment and to produce desired results are imperative for survival and for mental comfort as well. From an evolutionary perspective, if we are in control of our environment, then we

have a far better chance of survival[1]. Beyond this obvious truth, our need of control is much more than a survival mechanism, it leads to a better and more efficient adaptation to the external world, and it acts as a determining factor of human progress. A large part of scientific discoveries and technical innovations could be regarded as an expression of our biologically rooted need to understand, predict and to gain more control over the world (Siegel, 2008; Leotti, Iyengar & Ochsner, 2010).

In objective terms, our control over the environment refers to these cause-effect relationships between our actions and their consequences, reflecting the extent to which a behavioral response produces an intended outcome (actual or objective control; Perry, Chipperfield & Stewart, 2010). After several successful experiences of producing desired results by their own intentional actions, people develop subjective perceptions and beliefs about their abilities to control their inner states, feelings, behaviors, external events and processes. Perceived control is a subjective/phenomenological construct reflecting individual beliefs about the controllability of a situation and about the degree to which she/he has the skills and abilities necessary to obtain a desired outcome (Perry, Chipperfield & Stewart, 2010; Walen, 2020). In other words, perceived control is understood as the extent to which one believes that he or she can predict or influence events (Bandura, 1989). Among the most investigated construct in psychology, perceived control has been proved to have a significant impact on people's physical and psychological health, well-being, stress reactions and coping, social relations, decision making, advertising, occupations and professional activity, social and consumer behavior, motivation and academic behavior, memory, cognitive development and so on (Perry, Chipperfield & Stewart, 2010). In fact, a large diversity of human behaviors could be interpreted as an expression of people's need of control: violence, discrimination, exploration or avoidance, rituals and superstitions, adherence to social norms and values, leadership, involvement in tasks, learning and so on. Life can be viewed as a struggle against

[1] http://changingminds.org/explanations/needs/control.htm

randomness affirmed J. M. Burgers in a highly cited paper, published in Science in 1975[2].

2. Illusion of Control as a Positive Illusion

There are situations when perceived control differs from actual control. Due to the adaptive value of perceived control and its importance for mental comfort and well-being, people tend to overestimate their abilities to control events. In an influential paper published in 1975, Ellen Langer wrote about the *illusion of control*, illustrating experimentally the thesis that people tend to consider everyday events and situations as being controllable, even if they are actually determined by chance. According to Langer (1975) and other later authors (a review in Thompson, Armstrong & Thomas, 1998), this illusion is enhanced when cues related to skills, such as choice, competition, practice, or familiarity are introduced or when people are personally involved into chance situations (Yarritu, Matute & Vadillo, 2014), when there are motivated to avoid aversive outcomes (Biner et al., 2009) or when they experience power (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009). An attractive topic of investigation for both social psychologists and mental health professionals, illusion of control has been defined as a very common mental heuristic reflecting people's tendency to perceive themselves as being in control over situations, events and outcomes that in reality they are not in control (Thompson, 1999).

Illusion of control has been observed in most people in various life situation and under different conditions (Orgaz, Estévez & Matute, 2013). An important number of laboratory studies has shown the presence of illusion of control in students trying to control uncontrollable lights, tones or lottery tickets (Langer, 1975; Alloy and Abramson, 1979; Wasserman et al., 1983; Aeschleman et al., 2003; Msetfi et al., 2005) or trying to cure fictitious patients in a medical decision task (Blanco, Matute & Vadillo, 2011). Other authors has emhasised the same illusion in internet players

[2] Burgers, J. M. (1975). *Causality and Anticipation,* Science, 189, 4198, pp. 194-198.

(Matute et al., 2007), in sport players who sometimes feel that a particular ritual is necessary for succes (Bleak and Frederick, 1998) or even among the supporters who fell that their actions during watching TV at home can contribute to the final score obtained by their favorite team (Pronin et al., 2006). Consumer behavior and organisations themselves are also vulnerable to the illusion of control (Kramer and Block, 2011; Durand, 2003) (a short review after Orgaz, Estévez & Matute, 2013; a relatively recent meta-analysis in Stefan & David, 2013).

Illusion of control leads to some errors in basic cognitive tasks (such as perception, evaluation, planning), causing sometimes inappropriate behaviors and failures. An obvious example is pathological gambling: people continues to play becoming more and more confident that next time they will be lucky as cues from the situation (practice, familiarity, competition) give them the illusion that they can control the results (Orgaz, Estévez & Matute, 2013). Due to illusory optimism, overconfidence and people's illusion of control over a large domain of variables that in reality they cannot control, only a small percentage of newly started firms and businesses manage to survive and grow over time (Makridakis & Moleskis, 2015). In every-day life, when our illusions of control are brutally destroyed by reality we feel deception.

Despite these costs and inconvenients, Taylor and Brown (1988; 1994) nominated the illusion of control as a *positive illusion* asserting that "most people exhibit positive illusions in three important domains: a) they view themselves in unrealistically positive terms; b) they believe they have greater control over environmental events than is actually the case; and c) they hold views of the future that are rosier than base-rate data can justify" (Taylor & Brown, 1994). Positive illusions have been described by the two authors as subjective images of reality, adaptive and self-serving, pervasive in general population, enabling people to overwhelm uncertainty and to maintain an optimistic view about the future. According to Taylor and Brown (1988; 1994) and their collaborators (e.g. Taylor & Stanton, 2007; Taylor & Sherman 2008) positive illusion could not be view primarily

as expressions of our exaggerated egocentric needs or as expression of our limited cognitive processing capacities, they could be viewed as adaptive coping mechanisms with essential roles in maintaining or protecting a positive self-image and developing a sense of self-efficacy in a world which, due to their presence, become more familiar and more predictable (Bernáth-Vincze, 2016).

Despite the skepticism of some researches (Colvin and Block, 1994; *Robins & Beer, 2001; McKay & Dennett, 2009)* and their obvious costs in decision making (Makridakis & Moleskis, 2015), the prevalence of positive illusions in normal population has a strong empirical support (Taylor & Brown, 1988; 1994; Taylor & Stanton, 2007; Taylor & Sherman 2008). Although it is no doubt in the psychological literature that to have self-perceptions that differs greatly from reality could be highly maladaptive (Kinney, 2000), a considerable number of studies show that to have moderate positive illusions could be helpful to get through major stressful life events or traumas, to have greater happiness, greater self-esteem and better performances; in other words, moderate positive illusions could contribute, in some circumstances, to a healthy mental state and a better quality of life (Taylor & Stanton, 2007; Taylor & Sherman 2008; Bernáth-Vincze, 2016).

3. An Investigation on Illusory Control and Well-Being

Scope/Objectives. The general aims of the research presented in this paper are: 1) to investigate the presence of unrealistic perceptions of control in a sample of Romanian students and 2) to investigate a possible correlation between illusory control and well-being.

Subjects. 327 respondents were included into the study sample. They were all students (graduate or post-graduate) selected on a voluntary basis from various academic programs of the "1 Decembrie 1918" University of Alba Iulia. Their ages ranged from 18 to 40 years (mean value 22.4). The most part of the respondents were women (92%).

Methods and Instruments. All the participants completed some demographic data and two online scales: one assessing illusory control (The Illusion of Control Scale - ICS) and a short scale assessing well-being (The Five Well-Being Index, WHO-5).

The Illusion of Control Scale (ICS) is an adapted version after the original scale developed by Kimmel & Kaniastry (1996) (adapted for Romanian population by Bernáth-Vincze, 2016). This scale evaluates the individual's perceived control about negative events. The instrument has 15 items, 6 of them assessing the perception of control over negative events relevant to the person, for example: "becoming an alcoholic", or "becoming a diabetic"; 9 items assessing perception of control over negative events from the outside, for example: "to divorce from your spouse" or "to be abandoned by your friends and family when you need them"; 5 items assessing the perception of control over negative events involving significant people (family members, friends, relatives). The answers could be given on a 7 degrees Lykert-type scale, where 1 - completely uncontrollable, and 7 - completely controllable.

The Five Well-Being Index (WHO-5) is a short self-reported scale, introduced in its present form in 1998 by the WHO Regional Office in Europe as part of the DEPCARE project on well-being measures in primary health care. It has been translatated into several languages, including Romanian. According to available data, this short scale has adequate validity in screening for depression in clinical trials and it has good construct validity as a unidimensional scale measuring well-being in clinical and non-clinical populations (https://www.corc.uk.net/ outcome-experience-measures/the-world-health-organisation-five-well-being-index-who-5).

Results. The mean score obtained by all the participants in the Illusion of Control Scale is 4,63 (SD 1,6), a value situated above the central value of the scale. This result is similar with that obtained by Bernáth-Vincze (2016) with the same instrument in a more heterogeneous sample, representative for general population. In this study, 63% of the respondents presented ICS mean scores situated above the mean value of the scale, indicating the presence of illusory control.

In a item-by-item analysis, participants exhibited higher ICS scores – higher illusory control – at items like: To become an alcoholic (71,4% of the respondents rated this event with the maximum score: 7 points, meaning completely controllable); To become very unattractive (91,2% of the respondents rated this event with 5, 6 or 7 points, appreciating it as largely controllable). To become a drug addict (77,2% of the respondents rated this event with 6 or 7 points, appreciating it as largely controllable); To lose the respect of my colleagues (79,2% of the respondents rated this event with 5, 6 or 7 points, considering it largely controllable); To have a harmonious relationship with my family and friends (83,3% of the respondents rated this event with 6 or 7 points, considering it largely controllable); To succeed in an exam or professional project (93,3% of the respondents rated this event with 6 or 7 points, considering it largely controllable); To be hired from my job or To get a job according to my personal qualities. The lowest values of illusory control have been recorded at the following items: To be robbed on the street; To lose a hand or a leg; To win the lottery; To have a car accident.

These data confirms the presence on the illusion of control in the study sample and an in depth analysis of the domains/ nature of events where the illusory sense of control is higher could have valuable implications for mental health. People who strongly believe that the harmony of interpersonal relations is a matter of personal control could feel guilt and an helplessness when she/he goes through a separation or divorce. The beliefs that alcohol or substance abuse and dependence are matters of personal control, are the primordial roots of stigmatization.

A potential correlation between illusory control and well-being could not be proven in this study. The value of the Pearson correlation index I obtained has been under the significance threshold. This result could indicate that the relation between the illusory control and well-being could be more complex than I anticipated and a range of other variables could interfere.

Conclusions. Several decades ago, Taylor and Brown (1988) considered that illusion of control, and other positive illusions as well, as serving to enhance peoples'

self-esteem, sense of confidence and protecting mental health. According to the two authors, the illusion of control is probably the result of a person's effort to assimilate uncertain and contradicting data about the world and the self into the positive self-scheme (from Novović, Kovač, Djuric & Biro, 2012).

This study confirms that people tend to overestimate their abilities to control external events and to produce desired results. The most part of the young people included in the study sample exhibited an enhanced illusory control in relation with negative events from their daily life, such as the possibility to lose the respect of others or to lose a job. The magnitude of illusory control seems to be lower in Romanian population when the data are compared with those obtained in similar studies conducted in USA and in other North European countries, being influenced by historical and cultural factors (according to Bernáth-Vincze, 2016). In fact, the illusion of control is influenced by multiple variables that include the familiarity of the situation, motivation and the anticipated outcome, cultural and personality factors or peoples' emotional state as well.

At a first glance, we tend to assert that perceived control, even if it is illusory, it gives us a sense of confidence and mental comfort, protecting mental health and enhancing well-being. Although the presence of illusion of control in general population has a considerable empirical support (Presson & Benassi, 1996; Stefan & David, 2013), its relation with well-being/emotional state/quality of life is rather controversial (Novović, Kovač, Djuric & Biro, 2012; Vincze, Roth & Dégi, 2012).

Illusion of control has positive roles in maintaining peoples' self-confidence and a positive emotional state, leading them to get involved in new and challenging tasks. Even if it might be overall positive, illusion of control has a negative side because it could lead people to take unnecessary risks. An "optimal level of illusory control", probably dictated by personal and situational factors, could be desirable.

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