SENSE OF COHERENCE OF PEOPLE PRACTICING INDOOR CLIMBING AT VARIOUS LEVELS OF ADVANCEMENT

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Abstract

Climbing is a perfect example of a discipline that is characterized by stressors, both in case of its recreational form and sport competition. Climbers who are in a stressful situation may have different levels of predictability of the internal and external environment (*sense of coherence*). People with a high level of sense of coherence cope better in difficult situations. In the case of non-coherent people, one can speak of a specific immune deficit, acting as a stressor. This deficit may consequently lead to a deterioration of the sport's result. The sense of coherence level can also determine strategies for coping with stress. The aim of the research was to determine the level of sense of coherence of people practicing indoor climbing at various levels of advancement. The study group consisted of 120 people (60 women and 60 men), practicing indoor climbing at three levels: beginner, intermediate and advanced. The test method was applied using Antonovsky's Sense of Coherence Scale (SOC-29). Research results indicate higher level of sense of coherence in the group of men than in the group of women (beginner and intermediate). In case of the advanced group, women show higher level of sense of coherence. Levels of sense of coherence may, therefore, determine the choice of strategies for coping with stress in relation to the level of advancement of climbers.

Keywords: sense of coherence; stress; indoor climbing

Sens de la cohérence chez les personnes pratiquant l'escalade en salle à différents niveaux d'avancement

Résumé

L'escalade est un exemple parfait d'une discipline qui se caractérise par des facteurs stressogènes, tant dans ses formes récréatives que dans la compétition sportive. Les grimpeurs qui sont dans une situation de stress peuvent démontrer de différents niveaux de prévisibilité de l'environnement interne et externe (*eng. sense of coherence*). Les personnes ayant un haut niveau de sens de la cohérence font mieux face à une situation difficile. Dans le cas des personnes non cohérentes, on peut parler d'un déficit immunitaire spécifique, agissant comme un facteur de stress. Ce déficit peut par conséquent entraîner une baisse du résultat sportif. Le niveau de sens de la cohérence peut également déterminer des stratégies pour faire face au stress. Le but de la recherche consistait à déterminer le niveau de sens de la cohérence des personnes pratiquant l'escalade en salle à différents niveaux d'avancement. Le groupe d'étude était composé de 120 personnes (60 femmes et 60 hommes), pratiquant l'escalade en salle sur trois niveaux: débutant, intermédiaire et avancé. Dans les recherches, on a appliqué la méthode d'essai en utilisant le Questionnaire de l'Orientation de Vie (SOC-29) d'Antonovsky. Les résultats de la recherche indiquent un niveau de sens de la cohérence plus élevé chez les hommes que chez les femmes du groupe débutant et intermédiaire. Dans le cas d'un groupe avancé, les femmes montrent un plus haut niveau de sens de la cohérence peuvent donc déterminer le choix des stratégies pour faire face au stress par rapport au niveau d'avancement des grimpeurs.

Mots-clés: stress; sens de la cohérence; escalade en salle

Introduction

Climbing in recent years has been among the most popular, most cultivated and very developing disciplines. It is officially an Olympic discipline which proves its very dynamic development. It is also a good example of a discipline in which one can find difficult situations associated with emotions that arise in response to stressors (Czermak & Chudobina, 2014).

Scientific research on stressful situations in sport is large. It clearly indicates the negative impact of emotions on athletes of very different disciplines (Hanin, 2000; Lazarus, 2000; Vallerand & Blanchard, 2000; Kulas, 2001; Gould & Dieffenbach & Moffett, 2002; Kwiatkowski, 2007; Kosiński, 2013; Rutkowska & Bergier & Witkowski, 2014).

Research on stress in sport is usually focused on identifying the phenomenon and minimizing its effects in order to achieve the highest possible sports result. A much smaller part of the research work is focused on the analysis of stressful situations occurring in recreation, which in the case of high-risk disciplines or extreme sports seems to be a failure, because difficult situations related to physical effort may also limit or prevent typical recreational goals to a large extent (Pijpers *et al.*, 2003; Hodgson *et al.*, 2009; Draper *et al.*, 2008; Czermak & Chudobina, 2014).

The concept of stress has been defined, among others, by Lazarus and Folkman (2011), as "a definite relationship between a person and the environment, which is assessed by a person as aggravating or exceeding its resources and threatening its well-being" (Sapolsky, 2011, p.56). According to this concept, the individual decides whether the situation is stressful or not. According to Lazarus, the stressful situation is assessed on two levels. The first level is the primary assessment, which can trigger negative emotions and is divided into: harm / loss, threat and challenge. Secondary assessment occurs when the situation, as a result of the primary assessment, is considered stressful and the actions will be taken by the unit, aimed at removing stress or mitigating its effects (Martin, 2011). This understanding of stress can be reflected in Antonovsky's Salutogenesis concept. According to his theory, the ways of coping with stress are associated with certain features that the individual exhibits. He introduced the concept of sense of coherence, which is a general orientation, expressing to what extent a man has a firm conviction about the predictability of the internal and external environment. This concept is also associated with predicting the occurrence of the effects of a given situation (Heszen & Sek, 2007). According to Antonovsky's theory, the stronger the sense of coherence, the better will an individual be at difficult situations, while avoiding threats (Heszen, 2013). People with a strong sense of coherence rate stimuli as less stressful; therefore they show greater readiness and willingness to use potential immune resources as opposed to people with low rates (Henszen-Niejodek & Ratajczak, 2000).

Methods

The aim of the research was to determine the level of sense of coherence of people practicing indoor climbing at various levels of advancement. The test group consisted of persons practicing indoor climbing at three different levels of advancement. Beginners were people who climbed climbing routes of difficulties below 6a in the French scale. Intermediate level, people climbing routes from 6a to 7a, while the third group consisted of people climbing above 7a level. 60 women and 60 men took part in the research. The test method was applied using Antonovský's Sense of Coherence Scale (SOC-29). The questionnaire consists of 29 statements and three subscales: sense of intelligibility, resourcefulness and reasonability. The first scale includes 11 statements, the second 10, and the third 8. The respondent answers with the 7-point Likertowska scale, where "1" means that the

attitude is always present, and "7" that it is non-present. In the questionnaire one can also get a general result, i.e. an increase in the sense of coherence level in the subject (result in the range of 29-203).

Results & Discussion

The overall level of sense of coherence in the entire study group (women and men) was 94.5 in the beginner group, 108.6 in the intermediate group and 138.75 in the advanced group. The sense of coherence of men in the beginner group was 120.4, in the intermediate group 138.8, while in the advanced group 134.4. The level of women's sense of coherence in the beginner group was 68.8, in the intermediate group 78.4 and in the advanced group 143.1 (Fig 1).



Figure 1 General level of sense of coherence of people practicing indoor climbing.

The general level of the sense of coherence in the entire study group shows an upward trend with respect to the beginner and intermediate group. This may indicate that people with more climbing experience also have a higher level of sense of coherence. Research results indicate a higher level of sense of coherence in men in the beginner and intermediate group. This is in line with other previously known research results indicating a higher level of sense of coherence in men. In the advanced group, the results are similar and indicate a higher level of sense of coherence in women with regard to men. This result may be related to the specificity of the discipline and be a premise for further research in this area.

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