THE INFLUENCE OF PSYCHOLOGICAL FACTORS ON PAIN LEVELS AMONG CIRCUS ARTS STUDENTS

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INTRODUCTION

Literature suggests psychosocial factors influence the stress response and, thus, the likelihood of injury occurrence. The daily training load of circus artists is associated with maximum stress. A better understanding of causes of injuries can have a positive impact on the artists’ health and performance. However, there is a lack of studies focusing on the association between stress and coping and pain levels in Circus Arts. Therefore, the aim of this study is to examine the association between pain and the independent variables stress and coping resources by using a prospective cohort design.

MATERIAL AND METHOD

33 Circus Arts students (1st & 2nd year, 54.5% male, 51.5% freshmen, mean age=22.39±2.50 years) from Codarts University of the Arts Rotterdam were followed for three months during the academic year 2014-2015. At baseline, participants completed the Athletic Coping Skills Inventory–281. Additionally, participants completed the Subjective Units of Distress and the Self-Estimated Functional Inability because of Pain2 (a measure of how much current pain is limiting activities, ranging from “very well” to “cannot work in the production because of pain” for 14 body areas) every two weeks. One-way Spearman correlations and regression analyses were used.

RESULTS

Pain (M=4.2±9.00) was significantly associated with stress (M=34.14±15.58; r=.56, p<.000). Stress could predict 28.2% of the variance in pain (F(1,31)=12.16, p<.001). Furthermore, pain was significantly related to the total coping score (M=38.88±8.75; r=-.34, p<.05). Specifically, scores of concentration (r=-.29, p<.05) and freedom from worry (r=-.34, p<.05) were significantly correlated.

DISCUSSION & CONCLUSION

High stress levels are associated with high pain levels, while high coping resources are correlated with low pain levels. To prevent injuries it can be useful to lower stress levels of students by teaching them stress management skills. In addition, lectures about coping and other mental skills can be taught to raise the coping resources of students.

KEY WORDS: INJURY, STRESS, COPING

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