

Sample Answer

(a) Using the research by Lewis et al. (2014), explain the benefits of exercise on mental health. (10 marks)

Lewis et al. investigated the long and short term effect of a dance intervention on mood in the elderly, specifically on a group of people with Parkinson's disease (PD). Lewis compared elderly individuals with PD to elderly individuals without PD, who were matched on age. In order to see if there were any benefits of exercise on mental health, participants took part in 10 one-hour dance sessions run by a qualified dance instructor over ten weeks. The dance sessions consisted of rhythmic dancing to a strong beat, designed to be appropriate for the age, mobility, and physical constraints of people with mild to moderate PD. Following the dance sessions, participants had their mental health measured using the Profile of Mood States inventory (POMS). This inventory measured six subscales of mood (tension, depression, anger, fatigue, confusion and vigour). The Brunel University Mood Scale (BRUMS) was used to measure the short-term effects of the intervention on all participants (after a one-hour dance session in the ninth week). It was found that changes in some of the POMS subscales were evident; anger declined most significantly, while there was also a significant reduction in anxiety and tension. But the effect of dance did not differ significantly between the experimental and control groups. For the short cycle, all participants in both groups reported improvements in mood after a single dance class. BRUMS subscales for tension, anxiety and vigour were significantly improved.

The results from Lewis et al.'s research indicate that the participants experienced clear benefits to their mental health after taking part in exercise, in this case, dance intervention. These improvements in mood could be seen after only a single session of dance, with greater improvements seen from a series of dance sessions. Depression is the most common neuropsychiatric disturbance in PD, and it is strongly associated with a greater decline in cognition and severity of the disease. Although the results from this study did not show a reduction in depression from the dance intervention, anger, anxiety and tension significantly declined in individuals over the series of ten dance sessions. Anxiety can worsen the symptoms of depression, and so, over a longer-term intervention, depression could potentially be reduced by participation in exercise. The improved mood was also evident after only a single dance session, and again, anxiety was one of the key emotions reduced.

Dance can have psychological benefits for the elderly, especially for those with PD. Dance can provide positive benefits over long and short cycles. Dance can help improve total mood disturbance and anger in elderly people, as well as increase levels of vigour and reduce fatigue, which can indirectly improve mental health. Therefore, it seems that exercise can significantly improve the mental health of individuals with Parkinson's disease; and even if individuals cannot commit to a long-term exercise plan, shorter bursts of exercise can still provide improvements in mental health. Individuals with PD should engage in some exercise to counteract some of the mood-related symptoms of the disease. Finding the right exercise for an individual with mental health problems like PD may alleviate some symptoms of the disease and improve quality of life.

