陈式与杨式太极拳干预对大学生注意特征的影响研究

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摘要: 研究目的: 健康中国战略背后是人民对健康需求的升级,不仅注重身体健康,更注重心理健 康和社会适应。当代大学生置身于注意力经济的秩序之中,好奇心强、求知欲旺,对注意的有效控 制是大学生提高学习效率、缓解压力、改善情绪的有效方法。太极拳的"阴阳相济""心静体松" 等健身养生思想对于解决当今人类身心健康等社会问题都是一种有益的价值参照。太极拳流派众多, 风格迥异。陈式太极拳练习时讲求螺旋缠丝,快慢相间。 杨式太极拳则要求柔缓舒展,均匀行进。 通过探析不同风格的陈式与杨式太极拳对大学生注意特征的影响与差异,为注意特征的调控提供可 行的训练手段。本研究意义是首先为太极拳对身心健康的影响提供实证;其次,帮助太极拳习练中 体悟拳理,为太极拳教学实践提供指引;最后为注意特征条康提供可行的训练手段。**研究方法:**本 研究采用文献资料法、问卷调查法、实验法、数理统计法。样本量计算: G.power 计算样本量 51 人, 三组各 17 人。按照被试招募要求,在湖南人文科技学院招募 51 名被试,受试者纳入标准:1.受试人 群年龄 18-30 岁;2.对太极拳感兴趣的初学者,练习时间少于 1 个月;3.身体健康均无代谢性疾病;4.签署 知情同意书。排除标准:1.运动性功能障碍者;2.长期进行规律性太极拳练习者。被试签订受试知情同 意书,统计基本信息,进行前测,第三方生成随机信封,随机分入三组。分别展开实验干预内容。 干预时间: 12 周,运动频率: 3 次/周,运动时长: 1h。动作选取:以陈式与杨式竞赛套路为基础, 动作要素中包括前进步、后退步、平行步、定势几个母势动作,包括起势、野马分鬃、倒卷肱、云 手、单鞭。在12周后展开后测。采用注意特征量表对注意特征(注意转移、注意广度、注意稳定 性、注意分配)进行测量与评价;再结合 stroop 色-词测试对注意进行评价研究,对测试数据进行分 析整理。研究结果: 1.12 周实验干预后,陈式太极拳、杨式太极拳与对照组注意特征对比中,注意 分配注意特征四维度上注意分配(F(2,51)=5.002,P=.011),注意广度(F(2,51)=4.562,P=.015),注 意稳定性 (F(2,51)=7.66,P=0.001),注意转移 (F(2.51)=4.554,P=0.015)。三组注意四维度特征上呈现主 效应显著,P<0.01。2.对陈式太极拳与杨式太极拳两组进行数据比较,注意分配上,陈式组与杨式 组之间存在显著性差异(P=0.026),杨式注意分配优于陈式组;注意广度上,陈式组与杨式组无显 著性差异(P=0.870);注意稳定性上,陈式组与杨式组有显著性差异(P=0.045),杨式组注意稳定性 上优于陈式组;注意转移上,陈式组与杨式组(P=0.254)不存在显著性差异。综上,陈式与杨式组 注意广度、注意转移上无差异,而杨式组在注意分配、注意稳定性优于陈式组。3.12周实验干预后, 其 stroop 色-词测试三组数值显示三组在 RT、ACC[RT(P=0.501), ACC(P=0.667)]上均呈现主效应不显 著。而陈式组与杨式组组内前后 RT (P=0.03) 存在显著性差异,ACC(0.252)无显著性差异。**研究结** 论: 1.在 12 周实验干预后,陈式太极拳组、杨式太极拳组注意特征优于对照组,故而陈式太极拳、

杨式太极拳能够提高大学生注意特征。2.陈式太极拳、杨式太极拳两者注意特征间存在差异性,其中注意分配、注意稳定性上杨式太极拳优于陈式太极拳,而在注意广度与注意转移上,两者无显著性差异,仅显示陈式太极拳更优趋势。3.陈式太极拳、杨式太极拳练习能够唤醒并获得内部注意意识。结合研究结论,论证本研究假设。本研究以为在太极拳练习中,应当坚持练习持续时间长,对注意特征的刺激效果将更佳。而初学者在太极拳的选择上,应当先优于选择杨式太极拳进行练习,杨式太极拳练习更简易,而陈式太极拳练习难度大,更难见效果,可在杨式太极拳练习较为稳定后,再加入陈式太极拳进行练习,补充提高注意特征其他维度。

关键词:太极拳;注意特征;大学生;陈式太极拳;杨式太极拳

A Study on the Effects of Chen-style and Yang-style Tai Chi Interventions on the Attention Characteristics of College Students

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Abstract: Research Objective: The Healthy China strategy reflects the upgraded health demands of the people, emphasizing not only physical health but also mental health and social adaptability. Contemporary college students are immersed in the order of the attention economy, characterized by strong curiosity and a strong desire for knowledge. The effective control of attention is an effective method for college students to improve learning efficiency, relieve stress, and improve mood. The fitness and health preservation ideas of Tai Chi, such as "yin-yang complementarity" and "calm mind and relaxed body", provide a valuable reference for solving current social problems related to human physical and mental health. There are numerous Tai Chi schools with distinct styles. Chen-style Tai Chi emphasizes spiral winding and alternating fast and slow movements during practice, while Yang-style Tai Chi requires gentle, smooth, and even movements. By exploring the impact and differences of different styles of Chen-style and Yang-style Tai Chi on the attention characteristics of college students, this study aims to provide feasible training methods for the regulation of attention characteristics. The significance of this research is to first provide empirical evidence for the impact of Tai Chi on physical and mental health; second, to help practitioners understand the principles of Tai Chi and provide guidance for Tai Chi teaching practice; and finally, to provide feasible training methods for attention characteristic improvement. Research Method: This study employs the methods of literature review, questionnaire survey, experiment, and mathematical statistics. Sample size calculation: G-power calculated a sample size of 51 people, with 17 people in each of the three groups. According to the recruitment requirements for subjects, 51 subjects were recruited from Hunan University of Humanities, Science and Technology. The inclusion criteria for subjects are: 1. Age between 18 and 30 years old; 2. Beginners interested in Tai Chi with less than one month of practice; 3. Good health without metabolic diseases; 4. Signed the informed consent form. The exclusion criteria are: 1. People with motor function disorders; 2. Those who have regularly practiced Tai Chi for a long time. Subjects signed the informed consent form, basic information was collected, and pre-tests were conducted. Random envelopes were generated by a third party and subjects were randomly assigned to three groups. Experimental intervention content was then carried out respectively. The intervention period was 12 weeks, with a frequency of 3 times per week and a duration of 1 hour. The movements were selected based on the competition routines of Chen-style and Yang-style Tai Chi, including basic movements such as forward step, backward step, parallel step, and fixed posture, as well as starting posture, Wild Horse Parts Mane, Reverse Rolling Up the Sleeve, Cloud Hands, and Single Whip. Post-tests were conducted after 12 weeks. The Attention Characteristics Scale was used to measure and evaluate the attention characteristics (attention transfer, attention span, attention stability, and attention distribution); the Stroop color-word test was also used to evaluate attention, and the test data were analyzed and sorted. Research Results: 1. After 12 weeks of experimental intervention, in the comparison of attention characteristics among the Chen-style Tai Chi group, Yang-style Tai Chi group, and the control group, there were significant main effects in the four dimensions of attention distribution (F(2,51) = 5.002, P = 0.011), attention span (F(2,51) = 4.562, P = 0.011) 0.015), attention stability (F(2.51) = 7.66, P = 0.001), and attention transfer (F(2.51) = 4.554, P = 0.015). The P value was less than 0.01 for all four dimensions. 2. When comparing the data of the Chen-style Tai Chi group and the Yang-style Tai Chi group, there was a significant difference in attention distribution (P = 0.026), with the Yang-style group having better attention distribution than the Chen-style group; there was no significant difference in attention span (P = 0.870); there was a significant difference in attention stability (P = 0.045), with the Yang-style group having better attention stability than the Chen-style group; there was no significant difference in attention transfer (P = 0.254). In summary, there was no difference in attention span and attention transfer between the Chen-style and Yang-style groups, but the Yang-style group had better attention distribution and attention stability than the Chen-style group. After 12 weeks of experimental intervention, the Stroop color-word test results of the three groups showed that there was no significant main effect in RT and ACC (RT (P = 0.501), ACC (P = 0.667)). However, there was a significant difference in RT (P = 0.03) within the Chen-style group and Yang-style group before and after the intervention, while there was no significant difference in ACC (0.252). Research conclusion: 1. After 12 weeks of experimental intervention, the attention characteristics of the Chen-style Tai Chi group and Yang-style Tai Chi group were better than those of the control group. Therefore, Chen-style Tai Chi and Yang-style Tai Chi can improve the attention characteristics of college students. 2. There are differences in attention characteristics between Chen-style Tai Chi and Yang-style Tai Chi. Yang-style Tai Chi is superior to Chen-style Tai Chi in attention allocation and attention stability, while there is no significant difference in attention span and attention transfer. Only a trend of Chen-style Tai Chi being better is shown. 3. The practice of Chen-style Tai Chi and Yang-style Tai Chi can awaken and obtain internal attention awareness. Based on the research conclusion, the hypothesis of this study is verified. This study suggests that in Tai Chi practice, one should persist in practicing for a long time, as the stimulating effect on attention characteristics will be better. For beginners, it is recommended to choose Yang-style Tai Chi for practice first, as it is easier to learn. Chen-style Tai Chi is more difficult to practice and less likely to show results.

After achieving a relatively stable level in Yang-style Tai Chi practice, Chen-style Tai Chi can be added to further improve other dimensions of attention characteristics.

Keywords: Tai Chi; Attention characteristics; College students; Chen-style Tai Chi; Yang-style Tai Chi