

( $B = -.22$ ) goals as well as extrinsic motivation ( $B = .60$ ) remained in the final regression model, accurately classifying 71% of the participants. Results highlight the importance of recognizing gender differences in developing interventions for moving nonexercisers from the preparation to action stage as well as from the action to maintenance stage. Findings also reveal the importance of the mastery approach goal for both males and females desiring to move from the action to maintenance stage of exercise.

### **Advancing the exercising personality in an adult sample: A look into mechanisms of change**

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The purpose of this investigation was to further the exercising personality literature by exploring mechanisms responsible for exercise stage transitions. Achievement goals and perceived ability are viable mechanisms based on past research with personality traits and self-reported exercise (Lochbaum et al., 2007, 2009). Adults (females = 182; males = 137) ranging from 18 to 68 years of age ( $M$  age 32) completed measures of personality,  $2 \times 2$  achievement goals, perceived physical ability and stage of exercise based on the transtheoretical model. The following stages were represented: maintenance ( $n = 153$ ), action ( $n = 60$ ), preparation ( $n = 51$ ), contemplation ( $n = 30$ ) and pre-contemplation ( $n = 25$ ). MANOVA results revealed main effects ( $p < .01$ ) for sex and exercise stage. Follow-up tests for sex revealed differences ( $p < .05$ ) in agreeableness (females > males), neuroticism (females > males) and perceived physical ability (males > females). For personality, follow-up tests revealed differences ( $p < .05$ ) in agreeableness and neuroticism, with post hoc tests demonstrating results consistent with the exercising personality literature. Bivariate correlations indicated relationships ( $p < .05$ ) amongst the exercising personality variables and the potential achievement goal/perceived ability mechanisms. Binary logistic regressions were conducted with the mechanisms as the predictors of the four possible neighboring stage dichotomies. Results revealed perceived physical ability as a predictor ( $p < .05$ ) of both the action/maintenance ( $B = .86$ ) and preparation/action ( $B = .42$ ) dichotomies. The mastery-approach ( $B = .34$ ) and performance-avoidance ( $B = -.42$ ) goals were predictors ( $p < .05$ ) of the contemplation/preparation dichotomy. No mechanism emerged as a significant predictor of the pre-contemplation/contemplation dichotomy. The reported results add depth to the exercising personality literature by stimulating mechanistic explanations and interventions.

### **A Theory-based Intervention Designed to Increase Chronic Low Back Pain Patients' Adherence to Physiotherapists' Recommendations: A Pilot Study**

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The purpose of this pilot study was to test the feasibility and conduct a power analysis related to a self-determination theory-based communication skills training program designed to increase physiotherapists' psychological needs supportive behavior when treating patients with chronic low back pain (CLBP). Primary outcomes were self-reported physical activity (PA), adherence to prescribed home-based exercises, and back pain-related measures (pain, disability, and satisfaction). Secondary outcomes included psychological needs support, autonomous motivation, and competence. Control ( $n = 4$ ) and intervention ( $n = 3$ ) group

physiotherapists received one hour of training in evidence-based treatment for CLBP, including PA promotion advice and home-based exercises. Intervention group physiotherapists also received six hours of autonomy-support training, utilizing the '5A' health behavior change model. Patients ( $n = 28$ , mean age = 46.60 years) completed questionnaires at Week 1 and Week 4 following their initial visit. Compared with the control group, intervention group participants reported more PA ( $d = .26$  in Week 1,  $d = .50$  in Week 4), greater adherence to prescribed home-based exercise ( $d = .40$  in Week 1,  $d = .15$  in Week 4) and larger improvements in satisfaction with level of back pain ( $d = .41$ ). However, decreases in pain levels were similar across the groups and improvements in functional outcomes were less for the intervention group than the control group ( $d = .25$ ). Compared with control group participants, the intervention group reported similar or higher levels of autonomy support ( $d = .24$  in Week 1, no difference in Week 4), autonomous motivation (no difference in Week 1,  $d = .21$  in Week 4), and perceived competence ( $d = .32$  in Week 1,  $d = .46$  in Week 4). A focus group interview indicated that intervention group physiotherapists valued the training and believed it had provided them with useful skills. Findings provided preliminary evidence supporting the feasibility of this intervention. More in-depth study into the effectiveness of this training is warranted.

### **Motivational climate, self-determination motivation, and psychological well-being in Mexican young athletes.**

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Drawing from the frameworks of Achievement Goal Theory (Ames, 1992; Dweck, 1999; Nicholls, 1989) and the Self-Determination Theory (Deci Ryan, 1985; 2000) the present study tested the following sequential relationship model of motivational processes and indicators of optimal psychological functioning in the case of Mexican athletes: Motivational Climate - Self-determined motivation - Psychological Well-being (Subjective Vitality and Self-esteem). The mediational role of self-determined motivation was also studied. Six hundred fifty-one Mexican young athletes (330 female and 321 male,  $M$  age = 13.99  $SD = 1.88$ ) completed a multi-section questionnaire tapping the targeted variables. Structural Equation Modeling (SEM) analysis revealed that task-involving climate positively predicted self-determined motivation ( $\beta = .30, p < .01$ ), however ego-involving climate negatively predicted self-determined motivation ( $\beta = -.31, p < .01$ ). In turn, the self-determined motivation positively predicted psychological well-being indicators, that is, Subjective Vitality ( $\beta = .22, p < .01$ ) and Self-esteem ( $\beta = .59, p < .01$ ). In addition, the results (Delta  $\chi^2(4) = 29.19, p > .05$ ) of the mediation analysis (Holmbeck, 1997) showed that the self-determined motivation totally mediated the path between Task-involving climate and Self-esteem, and partially mediated the path between Task-involving climate and Subjective Vitality. The results are discussed in terms of their theoretical and practical utility.

### **Examining the Relationship Between Athlete Leadership Behaviors and Cohesion in Team Sports**

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Athlete leadership has been defined as an athlete occupying a formal or informal role within a team who influences a group of team members to achieve a common goal (Loughead et