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Anthropometry, Physical Functioning, And Quality Of Life In The Exercising Diabetic Patient

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(No relevant relationships reported)

Among U.S. adults, more than 35% are obese and 9% are diagnosed with diabetes. Obesity and diabetes impair daily functioning and associate with poorer subjective quality of life (QOL). Exercise is an effective intervention for weight loss, functional improvement, and amelioration of psychological symptoms; however, the precise characteristics of prescription to optimally enhance QOL in this population are not well defined.

PURPOSE: To evaluate QOL predictors in subjects with type 2 diabetes undergoing structured exercise.

METHODS: 61 subjects with diabetes were randomized into one of two 10-week exercise interventions; 38 subjects completed the program. Group 1 (n=23) participated in organized interval training with professional supervision twice weekly; group 2 (n=15) performed the same supervised interval training but also performed two 60-min unaccompanied walking sessions per week. At baseline and follow-up, demographic, anthropometric, functional, and QOL data were collected. Multiple linear regression determined the effect of exercise, physical functioning, and anthropometric indices on QOL outcomes.

RESULTS: At baseline, subjects were 67.9 ± 9.1 years of age, 42.1% male, and they had a composite QOL score of 58.9 ± 18.1. Older age and three assessments of physical functioning associated with higher baseline QOL; obesity associated with a trend for higher QOL (p=0.054). From baseline to posttest, QOL improved 17.7% (p<0.001). Group assignment was not a significant predictor of this change (p=0.998). Women improved more than men (p=0.031), and improvement in physical function associated with greater improvements in QOL. At the end of the intervention, age (p=0.022) and physical function corresponded to elevated QOL. Group assignment was not a significant predictor (β=9.3; p=0.098). At baseline (p<0.001), change scores (p=0.021), and at follow-up (p<0.001), the six-minute walk was the most pronounced variable of physical functioning to correspond to QOL.

CONCLUSION: Exercise improved QOL for subjects with diabetes. Additional walking didn't help. Older men and especially women improved more. This may be a consequence of attention, as supervised sessions provided marked improvement. It may be important for exercise aimed at improving psychological wellbeing to include companionship.

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The Role of Gratitude in Intrinsic and Extrinsic Exercise Motivation

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(No relevant relationships reported)

PURPOSE: To determine the role of positive psychology in the prediction of exercise motivation. Specifically, we examine the construct of gratitude in association with intrinsic and extrinsic exercise motivation.

METHODS: One hundred predominantly female (84%) undergraduate participants (age: M=19.78, SD=2.43) responded to online survey questionnaires including demographics, subjective health, gratitude (GRAT-R) and Exercise Motivation (EMI-2).

RESULTS: Hierarchical regressions including theoretically derived control variables (age, sex, minority status and subjective health) explored the role of gratitude in the prediction of intrinsic and extrinsic exercise motivation. Gratitude was significantly positively associated with intrinsic motivation (β=.397, p<.001), but not extrinsic motivation (β=.225 , p=.07). In analyzing gratitude subscales, Sense of Abundance was positively associated with intrinsic motivation (β=.296, p<.01), and Social Appreciation was positively associated with both intrinsic (β=.497, p<.001) and extrinsic motivation (β=.401, p<.001). In further examining subscales of the EMI-2, total gratitude scores were significantly positively correlated with Stress Management (r=.411, p<.001), Revitalization (r=.386, p<.001), Enjoyment (r=.411, p<.001), Challenge (r=.390, p<.001), Affiliation (r=.254, p<.01), Ill-Health Avoidance (r=.250, p<.05), Positive Health (r=.356, p<.001), Weight Management (r=.201, p<.05) and Strength/Endurance (r=.310, p<.01).

CONCLUSIONS: Gratitude positively predicted exercise motivation, particularly intrinsic motivators of exercise. These findings suggest that positive psychological practices are associated with attitudes that encourage health behavior change.

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Mindfulness and Intrinsic Exercise Motivation—The Mediating Role of Exercise Self-Efficacy

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PURPOSE: We examined the role of mindfulness in predicting exercise motivation. Mindfulness is associated with health, but its influence on exercise motivation is largely unexamined. We tested the relationship between mindfulness and exercise motivation, using self-efficacy as a possible mediator of this relationship.

METHODS: Undergraduates (N = 100; 84% Female, 80% Caucasian) completed online questionnaires assessing demographics, Mindfulness (MAAS), exercise self-efficacy (SEE), and exercise motivation (EMI-2).

RESULTS: Hierarchical regressions controlling for age, sex, and minority status examined relationships among mindfulness, exercise self-efficacy, and exercise motivation. Mindfulness was positively associated with intrinsic (β=.210, *p*<.05), but not extrinsic motivation (β=.086, *p*<.438). Mindfulness was also positively associated with exercise self-efficacy (β=.244, *p*<.05. Exercise self-efficacy was positively associated with both intrinsic motivation (β=.484, *p*<.000) and extrinsic motivation (β=.218, *p*<.05). Mediation analysis revealed that exercise self-efficacy fully mediated the relationship between mindfulness and exercise motivation (β=.210, *p*<.05; β= .186, *p*<.285). Exploratory analyses examined correlations between facets of the EMI-2 and mindfulness and exercise self-efficacy. Mindfulness was significantly correlated with two intrinsic facets [Revitalization (r=.220, *p*<.028), Enjoyment (r=.254, *p*<.011)]. Exercise self-efficacy was significantly correlated with five intrinsic facets [Revitalization (r=.500, *p*<.000), Enjoyment (r=.499, *p*<.000), Challenge (r=.508, *p*<.000), Affiliation (r=.216, *p*<.05), Positive Health (r=.284, *p*<.01)] and one extrinsic facet [Competition (r=.344, *p*<.000)].

CONCLUSIONS: Mindfulness is moderately predictive of intrinsic exercise motivation, however, exercise self-efficacy largely mediates this relationship.

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The Mediating Effect of Perceived Health on the Relationship Between Physical Activity and Subjective Well-being

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(No relevant relationships reported)

Subjective well-being (SWB) is a critical indicator of positive youth development. Physical activity (PA) has been identified as a potential correlate of SWB. But the underlying mechanism for the association between PA and SWB has remained largely unexplored.

PURPOSE: To examine the association between the PA and SWB in college students, and to determine if the perceived health mediated the association between them.

METHODS: 1209 college students (631 male and 578 female, mean age = 19.63 years) voluntarily completed a questionnaire consisting of four parts: Subjective Happiness Scale with four 5-point Likert items assessing Happiness, Satisfaction with Life Scale with five 7-point Likert items measuring life satisfaction, two questions adapted from the National Health and Nutrition Examination Survey (NHANES) asking the time (in minutes) spent on PA per week, and one 5-point Likert item adapted from NHANES measuring the perceived health. According to a widely used procedure to test mediation, three multiple regression models were performed. First, the perceived health (mediator) was regressed on the PA (independent variable). Second, happiness and life satisfaction (dependent variables) were respectively regressed on the PA (independent variable). Finally, happiness and life satisfaction (dependent variables) were respectively regressed on both the PA (independent variable) and perceived health (mediator). Age, gender, and weight status were obtained by self-report and added to all models as covariates.

RESULTS: The first model revealed that PA was a significant predictor of perceived health (t = 5.30, p < 0.01). In the second model, PA significantly contributed to the happiness (t = 3.43, p < 0.01) and life satisfaction (t = 3.62, p < 0.01), respectively. However, after including the perceived health to the second model, the coefficient of PA was no longer significant for both happiness