

Effects of Yoga on Psychological Health in Older Adults

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Background: The objective of this study was to assess the effect of a yoga intervention on psychological health in older adults. **Method:** A randomized controlled trial study, conducted at 2 North Florida facilities for older adults. Subjects were 98 older adults, ages 65 to 92. Participants were randomly assigned to chair yoga, chair exercise, and control groups and assessed preintervention, postintervention, and 1-month follow-up on the State Anger Expression Inventory, State Anxiety Inventory, Geriatric Depression Scale, Lawton's PGC Morale Scale, General Self-Efficacy Scale, Chronic Disease Self-Efficacy Scales, and Self-Control Schedule. **Results:** Yoga participants improved more than both exercise and control participants in anger (Cohen's $d = 0.89$ for yoga versus exercise, and 0.90 for yoga versus control, pretest to posttest; and $d = 0.90$ and 0.72 , pretest to follow-up), anxiety ($d = 0.27, 0.39$ and $0.62, 0.63$), depression ($d = 0.47, 0.49$ and $0.53, 0.51$), well-being ($d = 0.14, 0.49$ and $0.25, 0.61$), general self-efficacy ($d = 0.63, 1.10$ and $0.30, 0.85$), and self-efficacy for daily living ($d = 0.52, 0.81$ and $0.27, 0.42$). Changes in self-control moderated changes in psychological health. **Conclusions:** Over a 6-week period, our findings indicate yoga's potential for improving psychological health in older adults.

Keywords: mindfulness, stress, anxiety, depression, exercise

There is a demonstrated trend for increased use of complementary and alternative medicine (CAM) therapies by individuals as they age.^{1,2} Older adults consistently report the use of CAM therapies, for self-care; a cross-sectional survey of 1200 community dwelling older adults (older than age 65) found that 62.9% used at least 1 CAM modality, with an average of 3 modalities per respondent.³ Many CAM users implement these approaches, at least in part, for the management of disorders that are either psychological or stress-related.⁴ For instance, 34% of respondents with anxiety spectrum disorders reported using mind-body therapies in the management of their condition. Similarly, 26.5% of respondents with depression, 18.5% with chronic pain, 18.0% with heart problems or chest pain, 13.3% with insomnia, and 12.1% with fatigue, used CAM therapies to manage symptoms. Yoga—a CAM therapy which offers a broad approach including physical exercise, relaxation, breathing, and meditation practices—is one of the most commonly used mind-body approaches for psychological and stress-related conditions. Among yoga practitioners, 63.7% reported implementing yoga techniques for wellness and preventative benefits, and 47.9% reported implementing yoga techniques for the management of specific health conditions.⁵

For older adults with cultural and personal beliefs that create resistance to medical treatment for psychological issues, yoga offers a nonmedical approach to supporting mental health and well-being.⁶ Many individuals may use yoga and meditation techniques rather than seek medical treatment for psychological distress. In fact, individuals who report either physical or psychological medical problems are twice as likely to use CAM techniques as are individuals without reported medical problems.⁷ Older adults may also prefer mind-body strategies—like yoga—that are self-administered because they wish to remain independent and involved in their own

care for as long as possible.⁸ Yoga and meditation interventions have been shown to improve psychological well-being⁹ and decrease anger,¹⁰ anxiety,¹¹ and depression.^{12,13} Although a few previous studies have investigated yoga's impact on older adults,^{14,15} these have used small samples with qualitative and anecdotal descriptions of effects. Dham et al¹⁶ reported that while CAM practices are promising forms of treatment, rigorous study is needed to establish safety, efficacy, and mechanism of action. In particular, additional research is needed to investigate the potential impact of yoga on psychological health in older adults.

In a pilot study,¹⁷ the primary author compared the impact of yoga on psychological health with the impact of walking, chair aerobics, and a nonexercise control group (card/game playing). Group sizes were small (total $N = 42$). The overall Repeated Measures Analysis of Covariance (RM-MANCOVA) showed significant differences across groups over time ($P < .05$). The yoga group trended toward improved outcomes in stress frequency, stress severity, anxiety and depression, compared with other groups; however, in follow-up RM-ANCOVAs, stress frequency was the only variable which achieved statistical significance ($P = .05$). Still, this preliminary evidence indicated that yoga was more effective in promoting psychological health than the other activities. The purpose of this study was to examine further the effects of yoga on psychological health in older adults. Of interest was whether the benefits of yoga are due merely to physical exercise, or rather due to the unique characteristics of yoga (including mindfulness, focused awareness, and deliberate breathing). A prior meta-analysis indicated the psychological components most reactive to change due to exercise in older adults (anger, anxiety, depression, overall well-being, physical symptoms, positive affect, and self-efficacy¹⁸). This investigation focused on those variables to allow direct comparison with the established effects of exercise on psychological health in older adults.

The study was also intended as a preliminary investigation into the impact of yoga on self-control. Several researchers have discussed yoga's role in improving self-control,^{19–21} but this has not been empirically investigated. Self-control was proposed as the psychological mechanism underlying the benefits of yoga; yoga

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practice was expected to increase reported self-control and it was anticipated that changes in self-control would moderate changes in psychological health measures. Kanfer²² proposed that self-management techniques are directed at helping the individual to learn and function independently in the environment, and therefore to be in control of one's behavior, regardless of external stimuli. According to Rosenbaum,²³ self-control is a learned ability, which varies across individuals, based on their learning histories. Rosenbaum suggested that self-controlling responses were "cued by any internal event such as anxiety, pain, or thought that disrupts the effective performance of a target behavior. Self-controlling responses are then directed at reducing the interference caused by such events" (p. 110). The concept of self-controlling behavior includes 4 components: (1) use of cognitions to control emotional/physiological responses, (2) application of problem-solving strategies, (3) ability to delay immediate gratification, and (4) perceived self-efficacy. Rosenbaum indicated that self-efficacy is a necessary component of self-control, because an individual "must believe that he can control his own behavior without outside help" (p. 111) to use self-control mechanisms. As originally outlined by Pantanjali, yoga is a practice of discipline, which ultimately leads to a "steady control of the sense and mind" (p. 20).²⁴ Yoga, therefore, is an intervention whose primary purpose and effect is the cultivation of self-control, and it is proposed that this may be the mechanism through which yoga improves psychological health and well-being.

Materials and Methods

Participants

The study was approved by the Human Subjects Committee of Florida State University. Participants were recruited from 2 North Florida facilities. Facility A was a community activities facility for older adults. Participants used the facility on a daily basis for low-cost and free activities, including exercise, library and computer, lunch program, and social events. Facility B was a senior living community (nonassisted living). Residents of the facility lived in independent apartments, and were self-sufficient for personal care, but received assistance for transportation, cleaning, and cooking. Free activities were provided at the facility for residents, including bingo, arts and crafts, library and computer, and excursions to community events.

Potential participants were informed that they had the opportunity to participate in free fitness classes with a trained instructor, and that their participation would contribute to the general body of knowledge about exercise. Two orientation sessions were held at each location. At orientation sessions, recruited individuals filled out consent forms and health history forms, as well as the demographic survey, and baseline data. All forms were provided in 14-point Times New Roman font, to facilitate reading, and subjects with visual impairment received assistance.

Across both locations, 106 individuals (ages 65 to 92; mean = 77.04, SD = 7.28) were recruited to participate. Participants were predominantly female ($n = 74$), retired ($n = 76$), and widowed ($n = 40$). Race, income, and education demographic data were not collected. Health history information was collected to ensure individuals could safely participate in the program, and provide supportive adaptations to the physical exercises as needed; however, health status was not used as a variable in the study analysis. Participants had no prior yoga experience, and self-report of prior exercise behaviors indicated no differences between groups. An open enrollment policy was used, which allowed all interested individuals to participate; medical

history data were not used to exclude participants from the study. Program characteristics were modified to accommodate all enrolled participants (for instance, offering modifications to each exercise to support physical limitations, including individuals in wheelchairs, and offering seating which allowed for lip-reading for hearing impaired participants). Control group participants were provided the same classes after intervention and data collection was completed. At each location, participants were randomly assigned to 3 groups: chair yoga, chair exercise, and control. Baseline testing showed no differences between groups in demographic characteristics (age, gender, marital or employment status) or baseline measures of the outcome variables (state anger, state anxiety, depression, morale, self-efficacy, chronic disease self-efficacy, and self-control).

Assessment Tools

At baseline, participants completed a medical history form and a demographic questionnaire. Participants completed all self-report measures before the beginning of the intervention, after the last session, and 1 month postintervention. Netz et al²⁵ identified 7 psychological components, which were most sensitive to change in older adults due to exercise intervention; specifically, anger, anxiety, depression, positive affect, overall well-being, self-efficacy, and physical symptoms. Changes in the 6 psychological dimensions were assessed via self-report through the following inventories: the State Anger Expression Inventory,²⁶ the State Anxiety Inventory,^{27,28} the Geriatric Depression Scale,²⁹ Lawton's PGC Morale Scale,³⁰⁻³² the General Self-Efficacy Scale,³⁰⁻³³ and the Chronic Disease Self-Efficacy Scales.³⁴ Self-control was measured through the Self-Control Schedule.³⁵

Interventions

Recruited participants were randomly assigned to 1 of 3 groups (chair yoga, chair fitness, or wait list) at their location. Classes met once per week for 45 minutes each session, over a 6-week period. Participants were instructed to attend all exercise sessions, and attendance was taken at each session. They were given simple instructions to practice specific exercises on their own for 15 minutes during each nonclass day. The purpose of this format of instruction was to provide guided training in the exercises during weekly class sessions, and to help the elderly develop individual responsibility for incorporating exercise into their daily routine through home practice. The exercise instructions for at-home practice were similar for both groups.

The primary author was the instructor for both the chair yoga and the chair exercise group. The instructor is a Registered Yoga Teacher with The Yoga Alliance and a member of the International Association of Yoga Therapists, with primary focus in Hatha yoga. The instructor is also a certified personal trainer and group fitness instructor, with background and training working with older adult clients. The instructor has over a decade of experience in teaching group fitness and yoga classes, and has been a yoga practitioner for over 20 years.

Chair Yoga Group. A yoga intervention, which provided the essential components of traditional Hatha yoga—encompassing pranayama (yogic breathing exercises), asana (yogic physical exercises), and meditation, was implemented to preserve the holistic qualities of a mindfulness yoga format. Each session began with 5 minutes of meditation, continued with 30 minutes of asana, and concluded with 10 minutes of pranayama and meditation. Instructions for each exercise (pranayama and asana) included physical technique, breathing technique, and concentration and

awareness. A traditional Hatha yoga format was modified to accommodate physical limitations, and allow the yoga practice to be conducted while sitting on chairs. Full details of the chair yoga intervention, including detailed pose descriptions, full sequence, and illustrative photographs, are provided in our pilot study.³⁶ During yoga instruction, participants received guidance about how and where to focus their attention. For instance, during a traditional meditation process, participants are instructed to focus on the sensation of the breath in the nostrils, to the exclusion of all other sensations. Typical instruction included: “Maintain your awareness at your nostrils, feeling the physical sensation of your breath. If your mind wanders to something else—to a discomfort in your back or knee, or what you have to do after class—bring it back to your nostrils. Use the physical sensation of your breathing as an anchor to center you in this experience.”

Chair Exercise Group. The exercises selected for the chair fitness sessions paralleled the physical movements of the asanas selected for the chair yoga sessions as closely as possible, to determine if benefits of yoga were due to physical exercise or whether the unique combination of meditation and mindful movement in yoga practice provided additional benefits beyond exercise. The first 5 minutes included gentle stretching as warm-up exercises, as did the last 10 minutes of cool down exercises. The middle 30 minutes of each session included more challenging strength and balance exercises, which were comparable to the asanas practiced in the yoga session.

Control Group. This group of participants was assigned to a waiting list. Control group members had the opportunity to try both yoga and chair fitness after the intervention and all data collection was completed.

Class Attendance and Frequency of Practice. Chair yoga and chair exercise classes were each held for 45 minutes, once per week, for 6 weeks. All participants in both groups attended at least 4 of the 6 sessions. However, analysis of variance (ANOVA) revealed statistically significant differences in attendance, $F_{1,64} = 19.61$, $P < .001$. Yoga participants attended a mean of 5.70 classes (SD = 0.64) while chair exercise participants attended a mean of 5.03 classes (SD = 0.59). Despite the significant differences, compliance rates in both groups were satisfactory and quite similar.

Chair yoga and chair exercise participants were given simple instruction handouts and asked to maintain a daily 15-minute home practice of the exercise program. Group differences emerged, with yoga participants engaging in at home practice 2.37 times per week (SD = 2.09) and chair exercise participants practicing 1.42 days per week (SD = 1.64). These differences were statistically significant, $F_{1,64} = 4.25$, $P < .04$.

Statistical Analysis

Equality of groups at baseline was tested using a multivariate analysis of variance (MANOVA) for anger, anxiety, depression, well-being, general self-efficacy, and self-efficacy for daily living at baseline. Repeated Measures Multivariate Analysis of Variance (RM MANOVA) was used for anger, anxiety, depression, well-being, general self-efficacy, and self-efficacy for daily living using time (ie, pre, end, and 1-month follow-up) as a within repeated factor, and treatment (ie, chair yoga, chair exercise, and wait list control) as a between-subjects factor. Changes in self-control over time were tested using a RM ANOVA. Significant ($P < .05$) effects were descriptively expressed as Cohen's d (mean differences at the end or follow-up minus the mean difference at baseline divided by the pooled standard deviation at the outset).

Results

Equivalence of groups at baseline

Levene's test of equality of variances showed nonsignificant ($P > .05$) differences among the 3 groups' variances on each of the pretest measures, indicating variance equality. Initial screening of the data indicated no significant outliers and data appeared to meet the assumptions for multivariate analysis. Overall, Wilk's $\lambda = .82$, $F_{12,180} = 1.53$, $P < .12$, indicated nonsignificant differences among the 3 groups at pretest on the 6 variables. Between-subject effects for each of the dependent variables were also tested. Differences across groups were nonsignificant ($P > .05$) for all measures. Randomization resulted in equality of means and variances across groups at baseline.

Main Analysis

Multivariate group effects were nonsignificant ($P > .05$), while multivariate time effects, Wilk's $\lambda = 0.46$, $F_{12,84} = 8.23$, $P < .001$, and time by group interaction effects, Wilk's $\lambda = 0.36$, $F_{24,168} = 4.63$, $P < .001$, were significant. Univariate RM ANOVA's were conducted for each of the psychological well-being dependent variables. The analyses revealed that all time by group intervention interactions were statistically significant ($P < .001$ for all, except for anxiety where $P < .002$). The time by group interaction effects are shown in Figure 1. Table 1 presents the standard effect sizes between groups for each variable at pretest, posttest, and follow-up. Standardized contrasts indicate that yoga was substantially more effective than no treatment at posttest (eg, $d = 0.39$ for anxiety to $d = 1.10$ for general self-efficacy), and at follow-up ($d = 0.42$ for self-efficacy for daily living to $d = 0.85$ for general self-efficacy). Yoga was also effective in contrast to exercise, with contrasts of posttest results ranging from $d = 0.14$ (for well-being) to $d = 0.89$ (anger) and contrasts at follow-up ranging from $d = 0.25$ (well-being) to $d = 0.90$ (anger). Since there were differences in attendance and at-home compliance between yoga and exercise participants, additional testing of the hypothesis was conducted using analysis of covariance, with compliance as the covariate. Overall, ANCOVA results supported RM ANOVA results, with significant group differences ($P < .01$) observed at both posttest and follow-up for anger, anxiety, depression, and well-being, and at posttest for self-efficacy and self-efficacy for daily living. Group differences in self-efficacy at follow-up were significant at the $P < .05$ level.

Changes in Self Control

Time by group interaction effect reached significance, Wilk's $\lambda = 0.75$, $F_{4,188} = 7.18$, $P < .001$. Table 1 presents standard effect size between groups. Time by group interaction effect is shown in Figure 2. Yoga led to significantly greater self-control among participants than did exercise or no treatment (d for pretest to posttest = 0.61 for yoga, 0.21 for exercise, and 0.02 for control), and at least some of this change was sustained after the cessation of the intervention (d for pretest to follow up = 0.46 for yoga, 0.13 for exercise, and 0.10 for control).

Self-control as a Predictor of Changes in Psychological Health

A regression model assessed whether changes in self-control from pretest to posttest (and from pretest to follow-up) predicted parallel changes in trait anger, trait anxiety, depression, well-being, general self-efficacy, and self-efficacy for daily living, while controlling for group assignment, class attendance, daily practice, and baseline

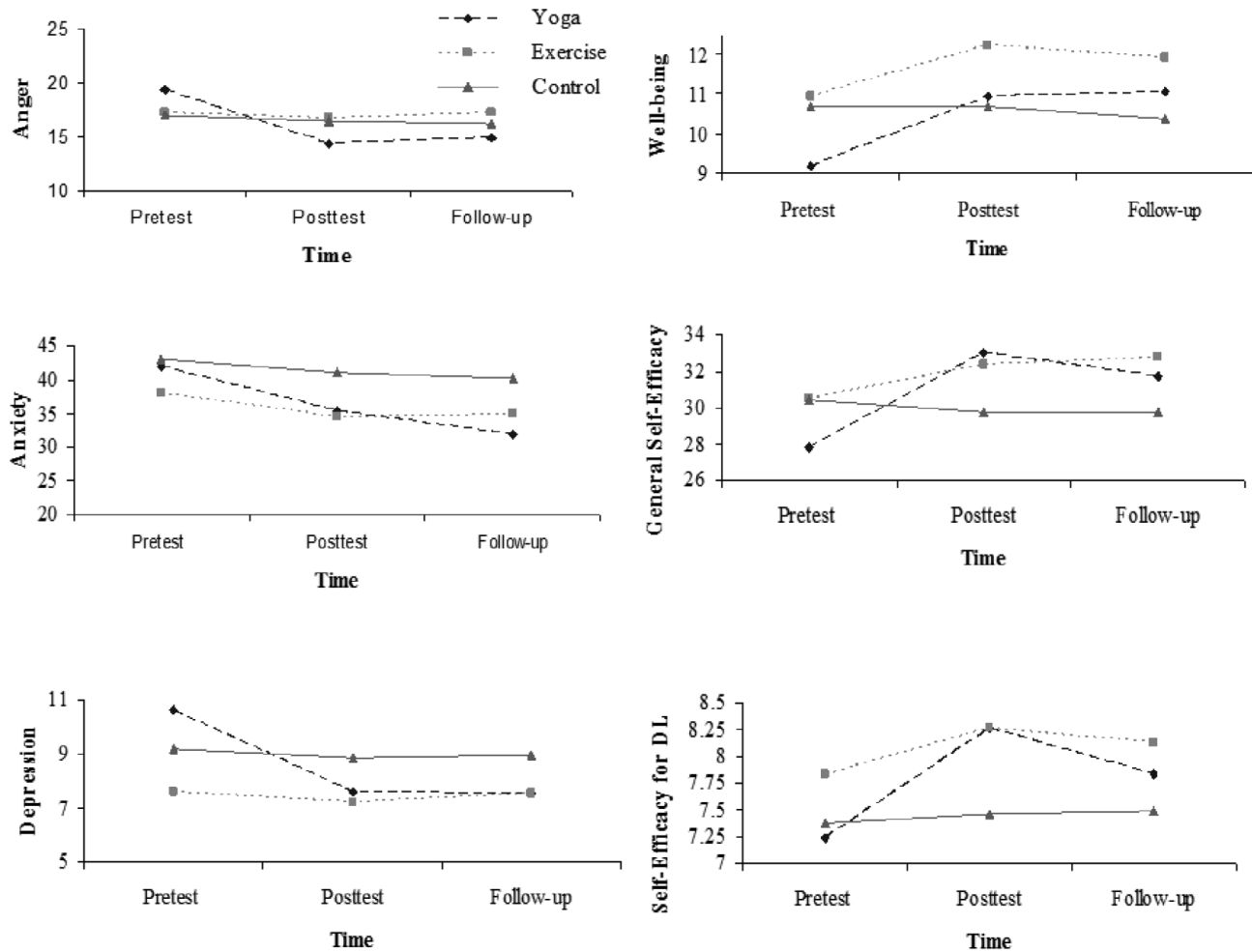


Figure 1 — Mean ratings for well-being variables in the 3 groups at pretest, posttest, and follow-up.

levels of self-control. Multivariate analyses revealed significant effects for time changes from pretest to posttest, $F_{168,361} = 5.36$, $P < .001$. Multivariate analyses resulted in significant time (eg, pretest to follow-up; $F_{210,322} = 17.90$, $P < .001$). Univariate results for each variable are presented in Table 2. Significant multivariate and univariate analyses indicate that changes in self-control were predictive of changes in all psychological variables.

Discussion

The current study examined the effect of chair yoga and chair exercise on psychological health of older adults. Previously, Netz et al³⁷ identified the significant impact of exercise on psychological health (specifically, anger, anxiety, depression, positive affect, overall well-being, and self-efficacy) in older adults. In the current study, yoga participants experienced greater improvements in these areas than did participants in the control exercise group. Standardized contrasts between yoga and exercise at posttest ranged from $d = 0.14$ (for well-being) to $d = 0.89$ (anger); contrasts at follow-up ranged from $d = 0.25$ (well-being) to $d = 0.90$ (anger). While the study was brief (6 weeks of intervention, and follow-up measures at 1 month post intervention), results indicated that a yoga intervention has the potential to improve psychological health in older adults. We propose that while yoga includes physical exercise components

and provides physical exercise benefits, it has a greater impact on psychological health, and is more than an alternate format of physical exercise.

Self-Control as a Mechanism of Change in Yoga

While physical exercise is an integral part of yoga, it is only a means to better understand the participant's mental process. Mindfulness approaches, such as yoga, work by "using intervention strategies with mechanisms familiar to cognitive behavioral therapists . . . [and] promote positive adjustment by strengthening metacognitive skills and by changing schemas related to emotion, health, and illness" (p. 123).³⁸ Mindfulness makes yoga fundamentally different from nonyoga exercise, even when similar physical movements are practiced.³⁹ A yoga class teaches a physical process (ie, feeling the sensation of the breath in the nostrils or standing completely still), which is intended to teach a cognitive process (ie, controlling the thoughts and actions, and maintaining awareness in the present moment). In this study, self-control increased more among yoga participants than in exercise or control group participants, and regression modeling indicates that changes in self-control may be predictive of changes in psychological health. It is possible that self-control is the mechanism of change in yoga practice. Future research should further investigate the impact of yoga on self-control and its potential impact on psychological well-being in yoga participants.

Table 1 Comparison of Change (in Standardized Units) Between Groups over Time^{a,b}

Variable	Pretest vs. Posttest	Pretest vs. Follow-up	Posttest vs. Follow-up
Anger			
Yoga vs. Exercise	0.89	0.90	0.01
Yoga vs. Control	0.90	0.72	-0.18
Exercise vs. Control	0.01	-0.17	-0.19
Anxiety			
Yoga vs. Exercise	0.27	0.62	0.35
Yoga vs. Control	0.39	0.63	0.23
Exercise vs. Control	0.13	0.01	-0.12
Depression			
Yoga vs. Exercise	0.47	0.53	0.07
Yoga vs. Control	0.49	0.51	0.02
Exercise vs. Control	0.02	-0.03	-0.04
Well-being			
Yoga vs. Exercise	0.14	0.25	0.12
Yoga vs. Control	0.49	0.61	0.12
Exercise vs. Control	0.35	0.36	0.01
General self-efficacy			
Yoga vs. Exercise	0.63	0.30	-0.33
Yoga vs. Control	1.10	0.85	-0.25
Exercise vs. Control	0.46	0.55	0.09
Self-efficacy for daily living			
Yoga vs. Exercise	0.52	0.27	-0.25
Yoga vs. Control	0.81	0.42	-0.39
Exercise vs. Control	0.29	0.15	-0.13
Self-control			
Yoga vs. Exercise	0.39	0.33	-0.07
Yoga vs. Control	0.59	0.36	-0.23
Exercise vs. Ctrl	0.20	0.03	-0.16

^a *ES* is computed as the difference between groups over time, in pretest standard deviation units for the overall group. For instance, for the pretest-posttest difference between the yoga group and the exercise group: $(X_{Ypost} - X_{Epost}) - (X_{Ypre} - X_{Epre}) / SD_{prepooled}$. Positive numbers indicate that the first group demonstrated greater improvements in psychological health; negative numbers indicate that the second group reported greater improvements in psychological health.

^b All time by group intervention interactions were statistically significant ($P < .001$ for all, except for anxiety where $P < .002$).

The improved self-control in yoga participants in this study indicates that even beginners with limited and brief yoga training can benefit from its underlying mechanisms.

Implications and Future Directions

Yoga training can improve psychological well-being in older adults, and therefore supports overall health and well-being. Yoga offers a minimally invasive treatment protocol, which is easy to deliver to older adults in group format. While yoga is an out-of-pocket cost not covered by health insurance, it may be a low cost option from both the individual and the community perspectives. For individuals, some community recreation centers offer discounted or free yoga classes. For communities seeking to promote older adult health, yoga can be provided in a low-cost format requiring minimal resources. Furthermore, yoga may serve to complement the

medical treatment, which an older adult may already be receiving; the self-study that a yoga student can undergo can bring greater awareness and effort to the individual's work with a doctor or psychotherapist.⁴⁰ Because yoga can simultaneously provide gentle and effective physical exercise, as well as teach increased emotional and cognitive control, it may be particularly well suited to older adults. Yoga has the potential to be even more effective when consciously and systematically integrated into an individual's overall self-care and medical care program, through deliberate and open dialogue among patients, healthcare professionals, and yoga professionals.⁴¹

Certain traditional yoga poses and breathing exercises may be contraindicated for certain chronic and acute conditions. For instance, individuals with osteoporosis of the spine should avoid spinal flexion in forward bends or any extreme spinal movement, as well as weight-bearing inversions (such as shoulderstand or headstand) due to risk of spinal and cervical fracture. Individuals with glaucoma should

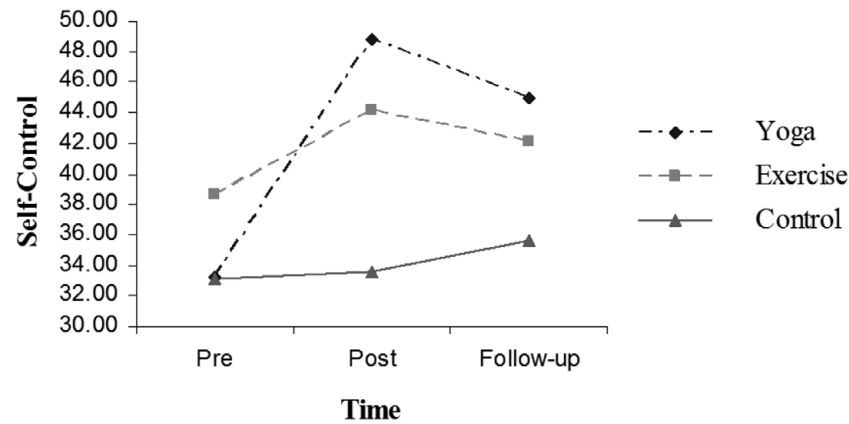


Figure 2 — Mean of self-control at pretest, posttest, and follow-up in the 3 groups.

Table 2 Regression Results for Self-Control as a Predictor of Psychological Health

Variable	Effect	F	df	β	P
Anger	Posttest	92.27	1,96	-.70 ^a	.001
	Follow-up	5.07	1,96	-.22 ^a	.027
Anxiety	Posttest	40.52	1,96	-.55 ^a	.001
	Follow-up	18.19	1,96	-.39 ^a	.001
Depression	Posttest	43.87	1,96	-.56 ^a	.001
	Follow-up	16.43	1,96	-.38 ^a	.001
Well-being	Posttest	16.31	1,96	.38 ^b	.001
	Follow-up	9.83	1,96	.31 ^b	.002
Self-efficacy	Posttest	104.98	1,96	.72 ^b	.001
	Follow-up	26.33	1,96	.46 ^b	.001
Self-efficacy for daily living	Posttest	61.44	1,96	.63 ^b	.001
	Follow-up	15.77	1,96	.38 ^b	.001

^a Indicates that increased self-control was predictive of decreased value (ie, improved psychological health).

^b Indicates that increased self-control was predictive of increased value (ie, improved psychological health).

avoid all inversions due to the increased ocular pressure in the pose. Yoga instructors who work with older adults should ensure that the yoga practice complies with ACSM guidelines for exercise in older adults, with particular attention to contraindications for individuals with chronic diseases or disabilities.⁴² For some older adults, a modified yoga format is appropriate. Modified yoga programs can include all of the core elements of a traditional yoga practice while making adaptations for the sake of accessibility and safety. The current study used a chair-based yoga format; details of the yoga protocol are outlined in the primary author's previous study.⁴³ Further research should

determine the core yoga elements and compare different models for modified yoga, to determine the most effective and safest poses and protocols, and establish guidelines for adapting yoga exercises safely for various conditions and populations. As well, future research studies should include health status in the analysis, to determine the potential impact of yoga on psychological health in individuals with varying health conditions. It may also be useful to collect and conduct analysis with additional demographic information (for instance, race, income, and education), to determine whether yoga offers additional benefits for specific populations.

Yoga, like other CAM therapies, provides an approach to health promotion and disease prevention and treatment, which can supplement modern medical interventions, especially with regard to chronic conditions, which are often inadequately treated with allopathic techniques. Yoga and CAM therapies can “be used as primary therapy to treat specific diseases, as adjunctive therapy in comprehensive treatment plans, and as a means of improving the quality of life of individuals with chronic or debilitating illnesses” (p. 233).⁴⁴ CAM use among patients has already become increasingly common and health professionals need to be informed of application and potential contraindication to guide safe and effective use.⁴⁵ In order for yoga and other mindfulness-based approaches to truly become both useful and acceptable health strategies, a 3-fold approach is needed to (1) establish clear guidelines based on empirical results, which will direct the implementation of yoga for both specific populations, and specific conditions; (2) develop guidelines of yoga teaching and implementation (and consistent standards for yoga teachers and yoga teacher training), to insure that the teachers who are implementing yoga within the medical context are doing so appropriately; and (3) to educate medical professionals about both the use of yoga for specific populations and conditions, and also the necessary standards for yoga instructors to insure that medical professionals establish collaborations with appropriate practitioners and are able to supervise their patients’ use of yoga.

Conclusions

Overall, results indicate that a yoga intervention for older adults reduced anger, anxiety and depression, and increased well-being, general self-efficacy, and self-efficacy for daily living, as well as perceptions of self-control. Yoga has the potential to improve psychological health in older adults. Future research should investigate the effects of a longer-term yoga intervention on psychological health in older adults.

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