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EXAMINING ASSOCIATIONS BETWEEN MOTIVES, INSTRUCTOR RELATIONSHIP QUALITY, AND STATE MINDFULNESS IN YOGA

Klara Andersson, Agnes Wallberg

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Abstract

Yoga is an ancient tradition that in contemporary research has been shown to have positive associations with a broad spectrum of health outcomes. Although promising findings have been highlighted, research exploring the mechanisms underlying the use of yoga for enhancing mental health is still in its infancy. Researchers have shown that yoga can increase levels of mindfulness, which has been shown to relate to several aspects of general well-being such as low levels of anxiety, depression, and stress. However, limited study has examined how the quality of the relationship between the yoga student and yoga instructor affects state mindfulness during the yoga class. The present study used a cross sectional research design to investigate associations between levels of stress, negative affect, motives for yoga, relationship quality, and mindfulness during yoga classes. The sample consisted of 219 adults that completed measures of stress, affect, motives for yoga, mindfulness, and relationship quality immediately following a yoga class. Analysis of data indicated that higher levels of stress and negative emotional wellbeing increased the likelihood that yoga was practiced to address psychological motives rather than perceived physical health outcomes. Additionally, relationship quality with the instructor was found to predict greater state mindfulness during the yoga session. The present study highlights the importance of the relationship quality between instructor and student, and suggests that future research investigating the efficacy of yoga in optimizing psychological health should consider how health outcomes might be influenced by interpersonal relationships.

Keywords: yoga, quality of relationship, mindfulness, stress, negative affect

Abstrakt

Yoga är en uråldrig tradition som i modern forskning visat sig ha positiv inverkan på många olika tillstånd av psykisk ohälsa. Trots att forskning om yoga visat på positiva utfall, krävs ytterligare forskning på området. Yoga har visat sig kunna öka grad av mindfulness, vilket visat sig ge lägre nivåer av ångest, depression och stress. Hittills har förhållandet mellan yogautövare och yogainstruktör och hur detta påverkar grad av mindfulness under yogapasset inte undersökts i forskningssammanhang. Denna studie är en tvärsnittsstudie som undersöker potentiella samband mellan stress, negativa affekter, motiv för yoga, relationen mellan yogalärare och yogautövare, samt grad av mindfulness under yogapasset. Urvalet bestod av 219 vuxna som omedelbart efter avslutat yogapass besvarade påståenden om stress, affekter, motiv till att träna yoga, mindfulness och kvaliteten på relationen till yogainstruktören. Analys av data visade att högre nivåer av stress och negativa affekter, ökade sannolikheten för att utöva yoga av mer psykologiska skäl. Dessutom visade sig kvaliteten på förhållandet till yogainstruktören förutsäga högre grad av mindfulness under yogapasset. Denna studie visar på betydelsen av relationen mellan yogainstruktör och yogautövare. Förslag på framtida forskning bör fokusera ytterligare på hur positiva effekter av yoga kan förstärkas, och hur interpersonella relationer i yogasammanhang påverkar dessa effekter.

Nyckelord: yoga, kvalitet på relationer, mindfulness, stress, negativa affekter

Examining associations between motives, instructor relationship quality, and state mindfulness in yoga

Yoga is an ancient practice designed to balance both mental and physical aspects of an individual. The tradition of yoga has been traced to its origins in India over 5000 years ago as a spiritual or philosophical discipline and is often referred to as a "mind-body practice" including physical movement (asanas), breathing (pranayama) and meditation (dhyana) and has been proposed as a "prominent holistic wellness approach" (Jeter, Slutsky, Singh, & Khalsa, 2015). In the past 50 years yoga has become more popular in Western societies, and a growing body of research evidence suggests that it may be beneficial for both mental and physical health (Ross & Thomas, 2010). Studies comparing the effects of yoga and exercise in both healthy and diseased populations, have reported comparable outcomes on a variety of health-related measures (Penedo & Dahn, 2005).

In a bibliometric analysis conducted on published yoga therapy research, Jeter et al. (2015) state that due to the effects of stress on conditions such as mental health, chronic pain, and sleep disorders, between 60% to 90% of visits to the doctor are stress-related. More specifically, chronic stress has been identified to result in a maladaptive activation of the hypothalamic pituitary-adrenal (HPA) axis and the autonomic nervous system that regulates the parasympathetic (rest and digest) and sympathetic (fight and flight) systems in the body (Jeter et al., 2015). Ross and Thomas (2010) highlight research supporting the belief that yoga techniques can improve mental health through its down regulation of the sympathetic nervous system and HPA axis in response to stress. Further numerous yoga studies (e.g., Michalsen, Grossman, Acil, Langhorst, Lüdtke, Esch, Stefano, & Dobos, 2005; Gokal, Shillito, & Maharaj, 2007) have highlighted positive health outcomes on a broad spectrum of health domains, such as physiological factors as well as psychological well being, including the stress response (Selvamurthy, Sridharan, Ray, Tiwary, Hedge, Radhakrishan, & Sinha, 1998).

Yoga research to date has outlined a range of promising findings, however Jeter et al. (2015) highlight that the evidence supporting the efficacy of yoga practice is still is in its infancy, and that the need for more scientifically rigorous evidence related to yoga as an add-on intervention for clinical use is warranted. In particular, the potential limitations to high quality yoga research include methodological challenges specific to yoga design as well as a lack of both funding and investigator training. Jeter and colleagues (2015) propose that besides Randomized Control Trial (RCT) studies, which provide the most rigorous evidence for research in general, designs such as nonrandomized controlled or uncontrolled studies, may provide useful indicators for further research (e.g. help generate hypotheses for larger studies and determine sample sizes).

Research investigating the efficacy of yoga practice may address issues related to the worldwide epidemic associated with a sedentary lifestyle as a risk factor for various health problems (Penedo & Dahn, 2005). Physical inactivity has been proposed to double the risk of adverse health outcomes comparable with obesity and smoking, as well as societal burdens due to changing lifestyles including increased costs for health-related diseases, e.g. depression and anxiety-related problems (Penedo & Dahn, 2005). Numerous studies exploring the relationship between overall physical activity and mental health suggest that physical activity reduces symptoms of anxiety, improves mood, and prevents the onset of depression (Penedo & Dahn, 2005). Research (West, Otte, Geher, Johnson, & Mohr, 2004), specifically investigating the effects of yoga, African dance, and classroom lecture conditions, using a RCT design, showed that participants attending the two physical-activity interventions had significant reductions in negative affect and perceived stress. Penedo and Dahn (2005) posit that recent studies investigating associations between physical activity and health collectively

suggest that physical activity, including non-conventional programs such as hatha yoga, can lead to positive mental-health benefits across several populations.

In particular, Butterfield, Schultz, Rasmussen, and Proeve (2017) have investigated the mechanisms of yoga more closely and highlight that across numerous studies mindfulness is one of its most prominent aspects (Chiesa & Serretti, 2009; Evans et al., 2011). Within yoga practice, mindfulness is often considered the "active ingredient" (Brown, Ryan & Creswell, 2007) and has been shown to relate to several aspects of general well-being such as low levels of anxiety, depression, and stress (Brown & Ryan, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Hanley & Garland, 2014). The concept of mindfulness originates from the Buddhist tradition where conscious attention and awareness are actively cultivated (Brown & Ryan, 2003). Mindfulness concerns a self-regulated awareness towards states and processes in the present and involves a non-evaluative acceptance and openness in relation to moment-to-moment experiences (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, & Devins, 2004). Mindfulness has been conceptualized both as a trait and state; research has shown that individuals can train state mindfulness capacity even though their trait mindfulness is low (Brown & Ryan, 2003).

Guided by previous research on mindfulness in exercise contexts (e.g., Cox, Ullrich-French, & French, 2016), the present study investigates state mindfulness during yoga classes. As Cox and colleagues (2016) put forth, individuals that are most successful in adhering to long-term physical activity are most likely motivated by rewards from the practice itself, instead of being motivated by extrinsic factors such as anticipated outcomes of the activity (e.g. changing of appearance or losing weight; Deci & Ryan, 2007). That is, maintaining attention to current events associated with the undertaking of performance of physical activity has been associated with increased adherence to physical activity behaviors (Cox et al., 2016).

In regard to yoga practice, Park, Riley, Bedesin and Stuart (2016) examined different motives for yoga and found that participants' motives for practice often change as practice continues over time. More specifically, individuals who commence practicing yoga with a fitness orientation as their primary motive often experience a change in their motives from mainly physical to more psychological reasons. This shift from physical to psychological motives may be associated with related research that highlights a shift from motives characterized as being extrinsic changing to those that are more intrinsic in nature (Deci & Ryan, 2007). Further, common motives for yoga practice that are characterized as being psychological were associated with stress reduction, spirituality, relaxation, and depression/anxiety reduction. Park et al. (2016) propose that understanding individuals' motives for engaging with yoga is of central importance as it may facilitate practice over the long-term, and subsequently ameliorate various health problems (Park et al., 2016).

More generally, mindfulness has been forwarded as a mechanism in the reduction of stress; according to Brännström, Duncan, and Moskowitz (2011) mindfulness training has been integrated into several structured training programs for example, mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990) and Acceptance and Commitment Therapy (ACT; Hayes, 2005). These treatments have shown promising results in improving psychological outcomes. In particular, MBSR programs have shown strong potential for decreasing stress-related complaints and increasing overall well-being (Grossman et al., 2004).

Stress as an indicator of decreased mental health correlates with other concepts relating to mental illness such as negative affect (Clark & Watson, 1986; Kanner, Coyne, Schaefer, & Lazarus, 1981; Wills, 1986) and elevations of physiological response (cf. Baum, Singer, & Baum, 1981). According to Jeter and colleagues (2015), stress typically arises during environmental challenges and/or perceived threats, when one does not possess appropriate coping responses (Lazarus & Launier, 1978). Studies have shown that the intentional

practice of yogic principles can trigger a relaxation response (Benson, 1975) that counters the effects of the involuntary physiologic or stress responses and restores balance in the nervous system. Jeter et al. (2015) advance that the application of yoga as an adjuvant therapy in clinical practice may lead to health benefits beyond traditional treatments in isolation.

In clinical practice, the therapist-client relationship is highlighted as being central to health outcomes, and has been identified as underpinning the efficacy of clinical treatments addressing mental health issues (Messer & Wampold, 2002). However, research examining yoga and mental health outcomes has not examined the relationship quality between the instructor and participants. Within the physical activity context of sport, extensive research has examined outcomes derived from coach-athlete relationship quality (cf. Jowett, 2017); given the physical (often group based) nature of yoga, the theoretical framework of the coach-athlete relationship in sport may provide a useful framework for examining the mechanisms underpinning the relationship between yoga and mental health.

According to Davis and Jowett (2014), a high quality interdependent relationship between coaches and athletes is a fundamental precursor to athletes' development. In relation to the development and maintenance of positive mental health, Davis and Jowett (2014) have used Bowlby's attachment theory (Bowlby, 1978) as a theoretical framework in examination of relationships within the sports context. Specifically, the sport coach in relation to the athlete can fulfill the three basic attachment functions (i.e., a target for proximity, a safe haven, and a secure base) during times of need. Variations in attachment styles among athletes in relation to the quality of relationship to their coaches are likely to differ with implications for the overall well being of athletes as expressed by the presence of positive affect, as well as the absence of negative affect.

Guided by interdependence theory (Kelley & Thibaut, 1978), Jowett and colleagues (2004) proposed the "3 C's" model, which aims to explain the positive aspects of the quality of the relationship between coaches and athletes. According to Jowett and Ntoumanis (2004), this relationship has three dimensions defined as C*loseness, Commitment,* and *Complementarity* (Jowett & Ntoumanis 2004). *Closeness* refers to the affective bond between coaches and athletes (e.g. feelings of being cared for, liked, and valued). *Commitment* refers to the concept of shared perspectives relating to shared goals and values, enabling self-disclosure and information exchange. *Complementarity* reflects cooperative actions between the coach and athlete, e.g. complementary roles and tasks (Jowett & Meek, 2000; Jowett & Cockerill, 2002). Across multiple studies, lower levels of the "3 C's" have been associated with interpersonal conflict (Jowett & Meek, 2002), indicating that better a quality of the coach-athlete relationship is better for developing skills and emotional wellbeing. The duration of a relationship between a coach and athlete is also of importance in establishing relationship quality; specifically, relationships have the potential to grow stronger over time as they can fluctuate due to increased contact (Jowett & Ntoumanis, 2004).

In light of previous research, the aim of the present study was to explore associations between stress and affect in relation to how they may guide motives for practicing yoga. Further, in consideration of the importance of relationship quality between coaches and athletes, this study explored whether the quality of the relationship between yoga instructors and yoga students influenced state mindfulness during yoga practice. In review of previous research, we hypothesized that higher levels of perceived stress and negative affect would be associated with greater motives for practicing yoga for psychological motives. The second hypothesis was that the quality of the relationship between yoga instructor and yoga students would positively influence state mindfulness during the yoga class.

Method

Research Design

A cross-sectional research design using a self-report questionnaire with purposive sampling was used in the present study. A questionnaire containing six sections was constructed presenting questions to the participants in following order; state mindfulness, demographic questions, motives for exercise, relationship quality with the instructor, perceived stress, and positive and negative affect (see appendix for complete questionnaire).

Participants

The participants (N = 219) comprising the samples were yoga students based in a northern Swedish city that attended one of three different yoga studios (n = 113) in the city center or one sports center (n = 106). The three yoga studios and the sports center were independent from one another, and all provided different types of yoga classes (i.e., vinyasa yoga, yin yoga and classical yoga). The total sample included participants aged from 20 to 84 (M = 39.11, SD = 15.08) and mostly women (86%). The participants' experience of yoga ranged from less than one month to 18 years (M_{months} = 48.19, SD = 48.14). At the time of data collection, participants had been practicing yoga with the current yoga instructor ranging from less than one month up to 18 years (M_{months} = 18.66, SD = 32.27).

Measures

The State Mindfulness Scale (SMS; Tanay & Bernstein, 2013). The degree of perceived mindfulness during the yoga classes was measured using a revised version of The State Mindfulness Scale; The State Mindfulness Scale for Physical Activity (SMS-PA; Cox et al., 2016)**.** The SMS-PA is a 12-item scale that measures two subscales reflecting two distinct aspects of mindfulness, namely mental (thoughts and emotions) and physical or body-related events. Participants are instructed to recall the recently completed physical activity and rate each item on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much*). Previous research indicates that the SMS-PA supports a bi-factor structure as well as a one-factor structure indicating that the subscales can be used separately or added together as a total scale to represent overall state mindfulness (Cox et al., 2016). The SMS-PA has been used for research in yoga-settings (Cox, Ullrich-French, Cole & D'Hondt-Taylor, 2016). Evidence shows that internal consistency reliability is good ($\alpha > .80$) and construct validity was supported by positive correlations with other mindfulness measures (Cox et al., 2016). Internal consistency of the SMS-PA in the present study was acceptable ($\alpha = .77$). The SMS-PA has not been used or validated in a Swedish setting, hence for the present study the scale was translated using the translation back-translation procedure (van der Vijver & Leung, 1997). The measure was then subject to pilot testing with a representative sample and items found to be problematic were revised (e.g. the term "sensations" was reported to be difficult to understand and was subsequently replaced with a term that was better understood with a similarly intended meaning). The scale in the present study sample was slightly negatively skewed but within acceptable limits.

Motives for yoga practice. Guided by previous research examining motives for physical activity (Kilpatrick, Hebert, & Bartholomew, 2005) and a study by Park, Riley, Bedesin, and Stuart (2016) examining participants' motives for practicing yoga, a 15-item questionnaire was developed for use in the present study. The items explored motives regarding physical (e.g. weight control or get into shape), psychological (e.g. stress relief or alleviate anxiety/depression) as well as other aspects often reported (e.g. develop skills or fun activity) as

motives for practicing yoga (Kilpatrick et al., 2005; Park et al., 2016). Previous research examining motives for practicing yoga (Cox, Ullrich-French, Cole & D'Hondt-Taylor, 2016) had used related indexes examining psychological and physical health motives.

In the present study two indexes were constructed, one comprised of 6 items representing physical motives (named *PhysIndex* including items; exercise, weight control, flexibility, physical health, appearance/tone the body and strength) and the other comprised of 4 items representing psychological motives (named *PsychIndex* including 4 items; relaxation, spirituality, alleviate anxiety/depression and stress relief). Internal consistency was acceptable for the items belonging to physical motives (α = .77) and slightly below the acceptable limits for the items belonging to psychological motives (α = .64). Skewness and curtosis for both indexes were within acceptable ranges referring to indices for acceptable limits of ±2 (Gravetter & Wallnau, 2014) showing approximately normal distribution.

Participants were instructed to answer how well the motives corresponded to their individual motives by rating each item on a 7-point Likert scale from 1 (*Not at all*) to 7 (*Extremely well*). In addition to the items measuring motives for yoga practice mentioned above, there was one open-answer option to fill in if the participants had a motive for practicing yoga which the questions did not cover.

The Coach-Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004). To measure participants' quality of relationship with the yoga instructor, an adapted form of the Coach-Athlete Relationship Questionnaire (CART-Q) was used. The CART-Q is a self-report instrument designed to measure the quality of the coach-athlete relationship in sport settings. It measures cognitive, affective, and behavioral aspects of the relationship between coaches and athletes and has three subscales: Commitment (e.g., *I feel committed to my instructor*); Closeness (e.g., *I like my instructor*); and Complementarity (e.g., *I feel good and safe when I am instructed by my yoga instructor*). The CART-Q consists of 11 statements rated on a 7-point Likert scale from 0 (*Do not agree*) to 7 (*Agree completely*). In the present study items were adapted to be appropriate for yoga settings (e.g. the term "coach" was replaced with "yoga instructor"). A Swedish researcher with extensive experience of research using the original scale then reviewed the adapted version of the scale. The changes were piloted on a representative sample who completed the questionnaire and were asked to comment on the items; minor changes were made according to these comments to clarify the wording of items.

Results from a Swedish sample validation of the CART-Q have demonstrated sufficient internal consistency for all the three subscales (Yang & Jowett, 2012). In the present study internal consistency for the total scale was good (α = .90). Internal consistency levels for all the three subscales were also good (α = .79 for *Commitment*; α = .84 for *Closeness*; and α = .85 for *Complementarity*) and comparable with the Swedish sample validation (Yang & Jowett, 2012). Data for this sample was negatively skewed (-1.398), which is common for this measure. Previous validation for a Swedish sample showed high mean values on the three subscales; this corresponds to the high mean values in the present study sample (Yang & Jowett, 2012).

The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). To measure perceptions of life stress a 4-item version of the PSS was used in the present study. The PSS-4 measures frequency of stress experiences in the last month *(e.g., how often have you felt you were unable to control the important things in your life*?). The four items are rated on a 5-point Likert scale from 0 (*never*) to 4 (*very often*). The PSS scales (14-item, 10-item and 4-item) have all shown good internal consistency (Eskin & Parr, 1996). The Swedish version has shown good internal reliability and good construct validity (Nordin & Nordin, 2013). Internal consistency of the 4-item PSS in the present study was adequate (α = .75). Skewness for the scale was (.31) within acceptable limits showing normally distributed data.

The PSS scale has been previously used in physical activity settings (Gustafsson, Skoog, Davis, Kenttä, & Haberl, 2015).

The Positive and Negative Affect Scale PANAS (PANAS; Kercher, 1992; Watson, Clark, & Tellegen, 1988). In the present study a short form of the PANAS, the Positive and Negative Affect Schedule Short-Form (I-PANAS-SF), was used. I-PANAS-SF is a self-report scale that measures positive and negative affect during the past month. It has two subscales, positive (PA) and negative (NA) affect (Thompson, 2007). It consists of five positive (e.g., *active*) and five negative (e.g., *upset*) items that are each rated on a 5-point Likert scale from 1 (*not at all*) to 5 (*extremely*). The I-PANAS-SF is comparable to the original PANAS regarding temporal stability; additionally, the convergent and criterion-related validity of the I-PANAS-SF is supported (Thompson, 2007). The Swedish version of the I-PANAS-SF has previously been used in physical activity settings and has shown acceptable internal consistency (Gustafsson, Skoog, Podlog, Lundqvist, & Wagnsson, 2013). Internal consistency of the NA subscale in the present study was adequate ($\alpha = .74$), but questionable for the PA subscale ($\alpha = .68$). However, for the purpose of the present study it is not problematic that internal consistency of PA subscale is low, since only the NA subscale is needed to investigate the research questions. Skewness for both subscales for the present study sample were within acceptable limits (PA = -.38, NA = .87) showing normally distributed data.

Procedure

Fourteen yoga instructors (86% women), with varying backgrounds in terms of training and duration of teaching experience, that were actively working in the yoga studios were informed about the study and asked if they were interested in participating; collectively, these yoga instructors were responsible for leading twenty two classes. The class sizes ranged from 7 to 70 individuals ($M = 26.26$, $SD = 19.77$); the duration of the classes ranged from 1 to 2 hours ($M = 1.47$, $SD = 0.32$). Prior to commencing the class, the yoga instructors informed the yoga participants that two students from Umeå University would be handing out questionnaires that they could voluntarily answer directly after class. Participants were informed that the duration to complete the questionnaire would be approximately 10 minutes and that the purpose of the study was to investigate the relationship between yoga student and the yoga instructor as well as other effects of practicing yoga. Those individuals that were interested in participating were provided an information sheet outlining the nature of the study and gave written informed consent prior to completing the questionnaire outside of the yoga room. During the completion of the questionnaires the researchers were available to answer any questions from participants. At each point of data collection, it was noted: type of yoga studio (yoga studio or sport center); how many participants attended the class; the form of yoga in the class; the gender of the instructor; which instructor was taking the class; and duration of the class. Data were collected across a three-week period of time in the month of October.

Statistical analyses

Statistical analyses were carried out using the program IBM SPSS Statistics 24. Descriptive data were analyzed using independent sample *t*-tests to examine differences between groups. Differences between groups in relation to gender were analyzed and reported but were not the subject of further analysis as this was beyond the scope of the present study.

Pearson product-moment correlations were used to assess correlations between all outcome variables. To test associations between PSS and NA scores in relation with psychological motives for practicing yoga, linear regression analyses were conducted. Linear regres-

sion analyses were also conducted to test the association between relationship quality with yoga instructor and state mindfulness. The complete sample was also divided into two groups based on median splits in relation to the length of time participants had been practicing yoga with the instructor (< 6 months = group 1: short duration of experience; > 6 months = group 2 long duration of experience). Effect sizes for the *t*-tests were calculated using guidelines for Cohen's *d* (0.21-0.50 = small, 0.51-1 = moderate, <0.8 = strong; Cohen, 1988), effect sizes for correlations were calculated using guidelines for Pearsons *r* (<0.+/-1 = weak, <0.+/-3 = modest, <0.+/-5 = moderate, <0.+/-8 = strong; Mujis, 2004), and for the regression using adjusted R^2 guidelines to determine how well the model fit the data (<0.1 = poor fit, 0.11-0.3 = modest fit, 0.31-0.5 = moderate fit, > 0.5 = strong fit; Mujis, 2004). Indices for acceptable limits of skewness and kurtosis were decided to be ±2 (Gravetter & Wallnau, 2014).

Missing data

There were missing values across all four standardized measures. These were found to be distributed among 18 participants, upon closer inspection the data were determined to be missing completely at random (Bhaskaran & Smeeth, 2014). In order to minimize the impact of missing data, missing values in the standardized measures were replaced with the mean of the available items from the same subscale for that individual (Graham, Cumsille, Elek-Fisk, 2003). Participants who had failed to complete an entire scale were excluded from further analyses involving the measure.

Ethical considerations

An information sheet was attached to the questionnaire to inform participants of the purpose of the present study. To participate in the study participants were asked to indicate their consent by ticking a consent-box on the questionnaire. The participants were informed of their right to withdraw their participation from the study at any time, and that results were to be anonymous, also participants were instructed not to include any personal information. Furthermore, all yoga instructors were informed that the study did not aim to review their personal accomplishments as instructors and that their involvement would remain anonymous.

Results

Sample characteristics

Means and standard deviations for all of the outcome variables and for participants' total length of yoga experience are presented in table 1. Results are presented for total sample (N = 219) and for groups based on short or long duration of time spent practicing yoga with the current yoga instructor (i.e., the yoga instructor participants referenced at the time point of data collection). The division of groups based on yoga experience was undertaken as previous research highlights that duration of a relationship can be associated with relationship quality (Davis & Jowett, 2013). The groups were calculated using median splits (Mdn_{months} = 6) and resulted in the identification of a *Short Duration* group (i.e., duration of practice with the current instructor ranging from 0 to 5 months; n = 102, M = 0.88, SD = 0.93) and a *Long Duration* group (i.e., duration of practice with the current instructor ranging from 8 months to 18 years; n = 106, M_{months} = 36.96, SD = 38.62).

In examination of gender differences, independent samples *t*-test were conducted. A gender difference was observed for scores on SMS-PA and for psychological motives for

practicing yoga (*PsychIndex*). There was a significant effect for gender, $t(214) = 2.28$, $p < .05$, $d = .44$, with women scoring higher on SMS-PA ($M = 3.21$, $SD = 0.48$) compared to men ($M = 2.99$, $SD = 0.50$). The effect size for this analysis was found to correspond Cohen's (1988) convention for a modest effect. There was a significant effect for gender, $t(216) = 2.65$, $p < .05$, $d = .57$, with women scoring higher on *PsychIndex* ($M = 4.92$, $SD = 1.24$) compared to men ($M = 4.28$, $SD = 1.29$). The effect size for this analysis was found to correspond Cohen's (1988) convention for a moderate effect. Despite the gender differences observed, it was determined that the inclusion of male participants in the subsequent data analyses was appropriate. The rationale for their inclusion was that it more accurately reflected the composition of the groups at the time of data collection; in general, participants' completion of the measures was based on the group dynamics and composition of the class they had just attended. The inclusion of all participants is particularly important as some classes were comprised of a small number of participants; further gender differences were not the focus of the current study therefore no further analyses have incorporated gender as an independent variable.

Table 1

Results from independent samples test of means and (standard deviations) for total sample (N=219), and for Short- and Long Duration groups for state mindfulness (SMS-PA), quality relationship to the yoga instructor (CART-Q), perceived stress (PSS-4), positive affect (PA), negative affect (NA), total scores on psychological and physical motives for practicing yoga (PsychIndex and PhysIndex) and for total time of experience of yoga practice in months (ExpYoga)

Scale	Total sample *M* (*SD*)	Short *M* (*SD*)	Long *M* (*SD*)
SMS-PA	3.17 (0.49)	3.09 (0.50) *	3.23 (0.46) *
CART-Q	6.09 (0.84)	5.78 (0.92) **	6.37 (0.68) **
PSS-4	1.45 (0.76)	1.58 (0.82)	1.38 (0.69)
PA	3.60 (0.56)	3.56 (0.58)	3.63 (0.56)
NA	2.15 (0.65)	2.21 (0.69)	2.10 (0.62)
PsychIndex	4.83 (1.26)	4.84 (1.28)	4.82 (1.27)
PhysIndex	4.27 (1.09)	4.36 (1.13)	4.17 (1.05)
ExpYoga	48.19 (48.14)	38.20 (48.31) *	57.43 (47.49)*

*p<.05, **p<.01

In order to examine if differences regarding the duration of time spent with the current instructor existed, independent samples *t*-test between *Short-* and *Long Duration* groups were conducted (see table 1 for descriptives). Results showed that the groups significantly differed on CART-Q scores, $t(204) = -5.30$, $p < .001$, $d = .74$, with higher scores on CART-Q for participants in the *Long* duration group compared to those in the *Short Duration* group. The effect size for this analysis was found to correspond Cohen's (1988) convention for a moderate effect.

Results also revealed that the groups significantly differed on SMS-PA scores, $t(203) = -2.04$, $p < .05$, $d = .28$, with higher scores on SMS-PA for participants in the *Long* duration group compared to those in the *Short Duration* group. The effect size for this analysis was found to correspond Cohen's (1988) convention for a weak effect. Finally, the groups significantly differed in length of total experience of yoga, $t(206) = -2.90$, $p < .05$, $d = .40$, with longer experience for participants in the *Long Duration* group compared to those in the *Short Duration* group. The effect size for this analysis was found to correspond Cohen's (1988) convention for a modest effect. Further *t*-tests revealed no other significant differences between the two groups (see table 1 for means and standard deviations on additional variables).

Table 2

Correlation coefficients between scores on state mindfulness (SMS-PA), quality of the relationship (CART-Q), perceived stress (PSS-4), positive affect (PA), negative affect (NA), scores on psychological and physical motives for practicing yoga (PsychIndex and PhysIndex) for Total sample (N=219)

Scale	1.	2.	3.	4.	5.	6.	7.
1. SMS-PA	-	.252**	.044	.130	.041	.417**	.095
2. CART-Q		-	-.014	.057	-.041	.327**	.063
3. PSS-4			-	-.525**	.584**	.385**	-.004
4. PA				-	-.401**	-.124	.124
5. NA					-	.333**	.001
6. PsychIndex						-	.397
7.PhysIndex							-

*p<.05, **p<.01

Correlation analyses were conducted to investigate if participants who practiced yoga for psychological motives (*PsychIndex*) to a higher extent also reported higher perceived stress (PSS-4) and negative affect (NA) and also to investigate if participants who reported higher state mindfulness (SMS-PA) also reported higher quality of relationship (CART-Q). See table 2 for significance levels and correlation coefficients between all variables for the total sample and table 3 and 4 for *Short-* and *Long Duration* groups.

In summary, the results for total sample showed moderate, positive correlations between *PsychIndex* and scores on PSS-4 and NA. Increases in *PsychIndex* correlated with increases of rating in PSS-4 and NA. Therefore, the higher perceived stress and negative affect the higher psychological motives for practicing yoga. There were a strong, positive correlation between NA and PSS-4. Increases in NA were correlated with increases of rating in PSS-4. Results also showed a modest, positive correlation between SMS-PA and CART-Q. Increases in SMS-PA were correlated with increases of rating in CART-Q. Therefore, the better quality of relationship to the yoga instructor the higher state mindfulness during yoga class.

Table 3

Correlation coefficients between different scores on state mindfulness (SMS-PA), quality of relationship (CART-Q), perceived stress (PSS-4), positive affect (PA), negative affect (NA), total scores on psychological and physical motives for practicing yoga (PsychIndex and PhysIndex) for Short Duration group (n=102)

Scale	1.	2.	3.	4.	5.	6.	7.
1. SMS-PA	-	.113	.024	.112	.091	.405**	.115
2. CART-Q		-	.010	.038	.001	.262**	.087
3. PSS-4			-	-.567**	.537**	.460**	-.015
4. PA				-	-.320**	-.160	.199**
5. NA					-	.377**	.027
6. PsychIndex						-	.141
7. PhysIndex							-

*p<.05, **p<.01

In summary, the correlation results for the *Short Duration* group showed moderate, positive correlations between *PsychIndex* and scores on PSS-4 and NA. Increases in *PsychIndex* were correlated with increases of rating in PSS-4 and NA. Therefore, the higher perceived stress and negative affect the higher psychological motives for practicing yoga. There were a strong, positive correlation between NA and PSS-4. Increases in NA were correlated with increases of rating in PSS-4. There were no significant correlation between SMS-PA and CART-Q.

Table 4

Correlation coefficients between different scores on state mindfulness (SMS-PA), quality of relationship (CART-Q), perceived stress (PSS-4), positive affect (PA), negative affect (NA), total scores on psychological and physical motives for practicing yoga (PsychIndex and PhysIndex) for Long Duration group (n=106)

Scale	1.	2.	3.	4.	5.	6.	7.
1. SMS-PA	-	.357**	.126	.133	-.019	.465**	.076
2. CART-Q		-	.027	.062	-.057	.438**	.111
3. PSS-4			-	-.488**	.619**	.334**	-.018
4. PA				-	-.480**	-.071	.096
5. NA					-	.298**	-.107
6. PsychIndex						-	-.054
7. PhysIndex							-

*p<.05, **p<.01

In summary, the correlation results for the *Long Duration* group showed a moderate, positive correlation between *PsychIndex* and PSS-4. Increases in *PsychIndex* were correlated with increases in rating in PSS-4. There was a modest positive correlation between *PsychIndex* and NA. Increases in *PsychIndex* were correlated with increases of ratings on NA. Consequently, the higher perceived stress and negative affect, the higher psychological motives for practicing yoga. Also, there was a strong, positive correlation between PSS-4 and NA. Increases in PSS-4 correlated with increases of rating in NA. There was a moderate, positive correlation between CART-Q and SMS-PA. Increases in CART-Q were correlated with increases of rating in SMS-PA. To summarize, the better quality of relationship to the yoga instructor, the higher state mindfulness during yoga class.

Table 5

Linear regression results predicting psychological motives for practicing yoga (PsychIndex) with independent variables perceived stress (PSS-4) and negative affect (NA)

Predicting variable	*F (df1,df2)*	R^2	β
PSS-4	36.90 (1, 212)**	.15	.385**
NA	26.71 (1, 214)**	.11	.333**

*p<.05, **p<.01

To examine whether motives for practicing yoga were influenced by participants' levels of perceived stress (PSS-4) and negative affect (NA), linear regression analyses were undertaken to examine how psychological motives for practicing yoga (*PsychIndex*) were pre-

dicted by PSS-4 scores and scores on the NA subscale (table 5 displays results from the regression analyses presented in this section).

Results revealed that scores on the PSS-4 significantly predicted *PsychIndex* scores, $\beta = .385$, $t(212) = 6.07$, $p < .001$, accounting for 15% of the variance in psychological motives for practicing yoga and showed a modest fit. In summary, increases of participants' scores on perceived stress, predicted greater psychological motives for practicing yoga.

In the second regression analysis, results revealed that scores on the NA significantly predicted *PsychIndex* scores, $\beta = .333$, $t(214) = 5.17$, $p < .001$, accounting for 11% of the variance in psychological motives for practicing yoga and showed a modest fit. In summary, increases of participants' scores on negative affect, predicted greater psychological motives for practicing yoga.

Table 6

Linear regression results predicting state mindfulness (SMS-PA) with independent variable quality of relationship (CART-Q) for total sample, Short- and Long Duration group

Group	*F (df1,df2)*	R^2	β
Total sample	14.34 (1, 212)**	.06	.252**
Short Duration	1.24 (1, 96)	.01	.113
Long Duration	15.05 (1, 103)**	.13	.357**

*p<.05, **p<.01

To examine whether state mindfulness was influenced by the quality of relationship to the yoga instructor, a linear regression analysis was undertaken to examine how scores on the SMS-PA were predicted by scores on the CART-Q (see table 6 for regression results for total sample, *Short-* and *Long Duration* groups).

In examination of the total sample, results revealed that scores on the CART-Q significantly predicted SMS-PA scores, $\beta = .252$, $t(212) = 3.79$, $p < .001$, accounting for 6% of the variance in state mindfulness and showed a poor fit. In summary, for all participants, higher the rating of quality of relationship to the instructor predicted greater state mindfulness during yoga class.

In consideration of the results from the second regression conducted with participants from the *Short Duration* group, scores on the CART-Q did not significantly predict SMS-PA scores, $\beta = .113$, $t(96) = 1.12$, $p > .05$, and did not significantly explain any variance in state mindfulness.

In examination of the participants in the *Long Duration* group, results revealed that scores on the CART-Q significantly predicted SMS-PA scores, $\beta = .357$, $t(103) = 3.88$, $p < .001$, accounting for 13% of the variance in state mindfulness and showed a modest fit. In summary, for participants in the *Long Duration* group, higher the rating of quality of relationship to the instructor predicted greater state mindfulness during yoga class.

Discussion

One of the aims of the present study was to explore associations between individuals' reported motives for practicing yoga and their mental health. More specifically, based upon previous research, individuals' perceived stress and negative affect were examined in relation to motives underpinning their yoga practice. Additionally, in consideration of the importance

of interpersonal relationships between coaches and athletes in sport and physical activity, the quality of the relationship between yoga instructors and students was explored in relation to the central factor of state mindfulness experienced during the practice of yoga.

In examination of the first aim, results indicated that levels of perceived stress and negative affect correlated with higher ratings on the index for psychological motives guiding the practice of yoga. The relationship observed between perceived stress and negative affect aligns with previous research (e.g. Clark & Watson, 1986; Kanner, Coyne, Schaefer, & Lazarus, 1981; Wills, 1986) highlighting the co-occurrence of stress and negative affect and suggests the potential positive mental health outcomes perceived to be derived from yoga. In support of this proposal, the results in the present study indicate that participants scoring higher on perceived stress and negative affect are motivated to a greater extent to practice yoga for potential psychological benefits. One potential explanation for this finding relates to the central tenets of Deci and Ryan's (2007) self-determination theory, where intrinsic motivators derived from the practice itself (e.g. stress reduction, relaxation, and enjoyment derived from the practice itself) oppose extrinsic motivators (e.g. external goals such as weight control). Previous research (e.g., Park et al., 2016) highlights that intrinsic motivation is associated with long-term adherence to physical activity behaviors; findings in the present study mirror this pattern as participants generally scored high in terms of mean value of total time spent practicing yoga.

Alternative explanations underpinning yoga practice may relate to growing interest in yoga over the past two decades (Ross & Thomas, 2010). More specifically, yoga has been promoted as a modality to reduce stress; as a result of this connotation yoga may address some of the central issues underlying health concerns reflected in contemporary research (Jeter et al., 2015). Stress-related diseases have been the focus of extensive research in recent years (Jeter et al., 2015), therefore interventions targeting stress reduction have risen in terms of interest for clinical application (e.g. MBSR; Kabat-Zinn, 1990) and research scrutiny (Grossman et al., 2004). In particular, extensive research investigating the relationship between mindfulness and stress has advanced mindfulness practices as potential protocols for use in the reduction of stress (Jeter et al., 2015).

That said, given the research design used in the present study it is not possible to determine a cause and effect relationship between mindfulness and stress in relation to yoga practice. It is possible that participants that reported experiencing greater negative affect and stress were attracted to the practice of yoga due to its associations with mindfulness. Participants in the present sample may have practiced yoga in pursuit of stress reduction, mindfulness and relaxation, rather than deriving these outcomes as a result of practicing yoga. The temporal relationship of these variables cannot be determined through the use of a cross-sectional research design and require further study.

In testing the second hypothesis of the study, that greater relationship quality between yoga instructor and yoga student would be correlated with higher levels of mindfulness during the yoga class, analyses supported the hypothesis. Specifically, relationship quality significantly predicted higher levels of mindfulness for all participants. Further, in line with previous research examining temporal aspects of the coach-athlete relationship (e.g., Jowett & Ntoumanis, 2004), results in the present study indicated that the duration of the relationship with the current instructor significantly predicted the strength of the association between relationship quality and state mindfulness during yoga practice.

Taken collectively, scrutiny of participants' reports suggests that the relationship quality within the sample was high, meaning that the participants were highly satisfied with their yoga instructors. It may be deduced that the relationship between a yoga instructor and yoga student can provide some basic functions that participants appreciate even though the yoga is practiced in groups, without one to one communication, and most often involving

unidirectional communication on the part of instructor. It is worth noting that the present study is the first investigation of the dynamics underpinning the relationship between yoga instructors and students as well as the outcomes associated with the quality of this relationship.

The high ratings reported by yoga students in scoring relationship quality might indicate that the three components of the coach-athlete relationship (i.e., closeness, commitment, and complementarity; Jowett & Ntoumanis 2004) can be addressed by effective yoga instructors. As proposed by Jowett and Ntoumanis (2004), high quality coach-athlete relationships can promote skill development and well-being in athletes. It may be suggested that participants' high scores on both quality of the relationship and state mindfulness during the yoga class are in support of previous coach-athlete relationship research. In exploring potential explanations of this finding, and considering attachment theory (cf. Bowlby, 1988) as it has been recognized in the coach-athlete relationship, high quality yoga instructor-student relationships and associated state mindfulness may be characterized a non-judgmental and accepting environment which supports participants' perceptions of a secure base (i.e., the instructor) and facilitates growth and development (Davis & Jowett, 2014).

Although the results of the present study suggest that relationship quality between a yoga instructor and student may relate to outcomes of yoga practice, further study is required to address limitations of the present study. Future research may adopt a longitudinal research design to include baseline/pre-commencement of yoga measures to better understand changes over time as well as causal relationships. This is particularly pertinent as both concepts of state mindfulness and relationship quality may be influenced by variables associated with time/duration. Additionally, the present study did not control for individual differences such as personality (e.g., extraversion, trait mindfulness), which have been shown to be associated with variables measured in the study (e.g., negative affect; Gustafsson et al., 2015).

It is also worth noting that during the time period reflected in the data collected in the present study, participants will have formed a relationship with the instructor. It may be deduced that participants comprising the sample in the present study were those that were somewhat satisfied with the relationship quality and outcomes associated with participation. Therefore, the study may have collected data from individuals that purposefully selected the class based upon information identifying the instructor that was leading the class; thus, it is possible that the study design excluded those who were not satisfied with the instructor informing participants' responses.

An additional limitation of the present study is that despite the use of validated measures that have been used in previous studies in similar research areas, the SMS-PA required translation to Swedish; however, analyses highlighted the measure demonstrated acceptable reliability. On a related note, the CART-Q is a well-established instrument to measure the quality of the coach-athlete relationship, however it has not been applied to yoga settings. Further, the wordings of the items are oriented to capture positive aspects of a relationship, and the scale normally shows high mean values (Yang & Jowett, 2012). Future research may include the use of instruments that better capture potential negative aspects of poor relationship quality to identify varying nuances that may underlie a wider range of relationships in yoga and exercise settings. A qualitative study could possibly identify what aspects of the relationships to the yoga instructor is meaningful to investigate further. On the other side, the essence of yoga includes being non-judgmental, and one might expect that yoga instructors or the very setting of yoga, could bring about a non-judgmental atmosphere and feelings of being accepted, which makes the instructors likeable.

An additional measurement issue that may limit the generalizability of the finding in the present study was the operationalization of the psychological and physical indexes of mo-

tives for yoga practice. To strengthen future research, further validation of the measurement for psychological and physical motives is warranted.

These findings arising from the present study highlight the importance of the relationship between the yoga instructor and students. Moreover, the present study addresses a notable gap in the scrutiny of yoga as a modality for enhancing mental, as it highlights the central role of relationship quality between the yoga instructor and student, and its influence upon state mindfulness levels during yoga classes. This finding is particularly important as mindfulness is often forwarded as the active ingredient underpinning the efficacy of yoga in optimizing mental health (Brown & Ryan, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Hanley & Garland, 2014). Moreover, this research supports the proposal that continued yoga practice is predominantly guided by psychological motives (Park et al., 2016). In so doing, the data in the present study highlights that participants who practice yoga due to psychological motives also report greater stress and negative affect. Future research using a longitudinal research design may elucidate whether individuals practicing yoga for psychological motives eventually achieved the improved mental well-being they sought through their yoga practice. Associated lines of research enquiry may consider to what extent the quality of the relationship with the yoga instructor affects general well-being for yoga students.

In summary, research investigating the positive health outcomes of physical activity has documented its effects on both physical and mental well-being. Given that yoga combines both mental and physical aspects, we argue that yoga has the potential to function as a bridge between regular physical activity and traditional psychological treatments. The growing popularity of yoga has increased its accessibility, therefore further research is warranted to determine both its efficacy as well as the underpinning mechanisms that influence health outcomes. In light of growing waiting lists at primary health care centers, yoga might offer a viable alternative preventive intervention that can ease the pressure currently being placed on health care services.

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Appendix

Enkät om yoga och potentiella effekter

Hej!

Vi heter Klara och Agnes och är studenter på psykologprogrammet vid Umeå universitet. Vi skriver vårt examensarbete och vänder oss till dig som utövar yoga.

Syftet med denna enkät är att undersöka hur olika faktorer påverkar effekter av yoga. Enkäten består av sex olika delar och omfattar totalt 64 frågor och påståenden. Då enkäten består av skalor från olika mätinstrument ser både skalor och svarsalternativ lite olika ut, läs därför noggrant igenom instruktionerna till respektive del innan du ringar in dina alternativ. Att besvara enkäten tar ungefär 10 minuter.

Din medverkan är betydelsefull för genomförandet av vårt examensarbete. Medverkan är frivillig och du kan avbryta när som helst. Svaren kommer att vara anonyma och kan inte på något sätt kopplas till dig som person. Insamlade data kommer enbart att behandlas på gruppnivå. Genom att kryssa i JA-rutan för samtycke nedan, bekräftar du att du tagit del av informationen och att du vill delta i studien.

Jag samtycker till att delta i denna studie:

☐ JA

☐ NEJ

Dina upplevelser under yogapasset

Dessa påståenden syftar till att undersöka *dina upplevelser under det yogapass du just deltog i*. Vissa påståenden kan verka likadana, men behandla ändå varje påstående var för sig. Påståendena besvaras genom att du ringar in en siffra mellan 0–4, där 0 motsvarar Stämmer inte alls och 4 motsvarar Stämmer helt.

		Stämmer inte alls				Stämmer helt
1.	Jag var medveten om olika känslor som uppstod inom mig	0	1	2	3	4
2.	Jag lade märke till behagliga och obehagliga känslor	0	1	2	3	4
3.	Jag lade märke till behagliga och obehagliga tankar	0	1	2	3	4
4.	Jag lade märke till känslor som kom och gick	0	1	2	3	4
5.	Jag lade märke till tankar som kom och gick	0	1	2	3	4
6.	Det var intressant att följa mina tankemönster	0	1	2	3	4
7.	Jag fokuserade på min kropps rörelser	0	1	2	3	4
8.	Jag kände mig närvarande i min kropp	0	1	2	3	4
9.	Jag lyssnade till vad min kropp sade mig	0	1	2	3	4
10.	Jag var medveten om hur min kropp kändes	0	1	2	3	4
11.	Jag lade märke till förnimmelser i min kropp	0	1	2	3	4
12.	Jag var uppmärksam på hur mina muskler ansträngde sig	0	1	2	3	4

Bakgrundsfrågor

Ålder

____ år

Kön

- ☐ Kvinna
- ☐ Man
- ☐ Annat

Hur länge har du utövat yoga? Uppskatta så gott du kan
(*Svara med den/de tidsenheter som passar dig bäst)*

____ år, *och/eller* ____ månad/månader, *och/eller* ____ vecka/veckor

Hur ofta utövar du yoga med instruktör?

____ ggr/år, *eller* ____ ggr/månad, *eller* ____ ggr/vecka

Om du även utövar yoga själv utan instruktör, hur ofta?

____ ggr/år, *eller* ____ ggr/månad, *eller* ____ ggr/vecka

Under hur lång tid har du utövat yoga med den instruktör som ledde dagens pass?

____ år, *och/eller*____ månad/månader, *och/eller*____ vecka/veckor

Vänligen uppskatta hur ofta du utövar yoga med den instruktör som ledde dagens pass

____ ggr/år, *eller* ___ ggr/månad, *eller* ____ ggr/vecka

Dina anledningar till att utöva yoga

Dessa frågor handlar om *anledningar till varför du tränar yoga*. Vissa alternativ kan verka likadana, men behandla ändå varje alternativ var för sig. Hur väl de olika alternativen stämmer överens med dina anledningar besvaras genom att du ringar in en siffra mellan 1–7, där 1 motsvarar Inte alls och 7 motsvarar I högsta grad.

		Inte alls						I högsta grad
1.	Avslappning	1	2	3	4	5	6	7
2.	Motion	1	2	3	4	5	6	7
3.	Smärthantering	1	2	3	4	5	6	7
4.	Kontrollera vikten	1	2	3	4	5	6	7
5.	Flexibilitet	1	2	3	4	5	6	7
6.	Andlighet	1	2	3	4	5	6	7
7.	Lindra depression/ångest	1	2	3	4	5	6	7
8.	Fysisk hälsa	1	2	3	4	5	6	7
9.	Stressreduktion	1	2	3	4	5	6	7
10.	Utseende/forma kroppen	1	2	3	4	5	6	7
11.	Utveckla färdigheter i yoga	1	2	3	4	5	6	7
12.	Socialt (ex. hitta/umgås med vänner)	1	2	3	4	5	6	7
13.	Styrka	1	2	3	4	5	6	7
14.	Rolig aktivitet	1	2	3	4	5	6	7
15.	Annan anledning beskriv kortfattat:	1	2	3	4	5	6	7

Relationen till yogainstruktören

Dessa påståenden syftar till att undersöka *din relation till yogainstruktören på detta pass*.
Vart och ett av följande påståenden besvaras genom att ringa in en siffra mellan 1–7, där 1 motsvarar Stämmer inte alls och 7 motsvarar Instämmer helt.

		Stämmer inte alls			Neutral			Instämmer helt
1.	Jag känner att jag har en nära relation till min yogainstruktör	1	2	3	4	5	6	7
2.	Jag känner engagemang gentemot min yogainstruktör	1	2	3	4	5	6	7
3.	Jag upplever att mitt individuella syfte med yogan ges goda förutsättningar med hjälp av min yogainstruktör	1	2	3	4	5	6	7
4.	Jag tycker om min yogainstruktör	1	2	3	4	5	6	7
5.	Jag litar på min yogainstruktör	1	2	3	4	5	6	7
6.	Jag respekterar min yogainstruktör	1	2	3	4	5	6	7
7.	Jag uppskattar de ansträngningar min yogainstruktör har gjort för att förbättra sitt tränarskap	1	2	3	4	5	6	7
8.	Jag mår bra och känner mig trygg när jag blir instruerad av min yogainstruktör	1	2	3	4	5	6	7
9.	När jag blir instruerad av min yogainstruktör, känner jag mig mottagli för hans/hennes ansträngningar	1	2	3	4	5	6	7
10.	När jag blir instruerad av min yogainstruktör, är jag beredd att göra mitt bästa	1	2	3	4	5	6	7
11.	När jag blir instruerad av min yogainstruktör, har jag ett vänligt och öppet förhållningssätt	1	2	3	4	5	6	7
12.	Jag får känslan av att mitt syfte med att utöva yoga accepteras och stöttas av min yogainstruktör	1	2	3	4	5	6	7

Den senaste månaden

Dessa frågor handlar om *dina känslor och tankar den senaste månaden*. För varje fråga kommer du att ange hur ofta du känt eller tyckt på ett speciellt sätt genom att ringa in en siffra mellan 0–4.

Under den senaste månaden, hur ofta har du…

		Aldrig	Nästan aldrig	Ibland	Ganska ofta	Väldigt ofta
1.	känt att du inte haft kontroll över de viktigaste faktorerna i ditt liv?	0	1	2	3	4
2.	känt dig säker på din förmåga att hantera personliga problem?	0	1	2	3	4
3.	tyckt att saker och ting har utvecklats som du velat?	0	1	2	3	4
4.	känt att problemen blivit så många att du inte kunnat bemästra dem?	0	1	2	3	4

Mina känslor i allmänhet

Den här skalan innehåller ett antal ord som beskriver känslor. Läs varje ord och markera hur bra detta beskriver hur *du känt dig den senaste månaden*.

		Aldrig				Alltid
1.	Upprörd	1	2	3	4	5
2.	Fientlig	1	2	3	4	5
3.	Pigg	1	2	3	4	5
4.	Skamsen	1	2	3	4	5
5.	Inspirerad	1	2	3	4	5
6.	Orolig	1	2	3	4	5
7.	Bestämd	1	2	3	4	5
8.	Hjälpsam	1	2	3	4	5
9.	Rädd	1	2	3	4	5
10.	Aktiv	1	2	3	4	5

TACK FÖR DIN MEDVERKAN!