Yoga, Mindfulness and Interpersonal Relationship

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YOGA, MINDFULNESS AND INTERPERSONAL RELATIONSHIPS

BY

LAUREN EVRON

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

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ABSTRACT

Previous studies have found that the practice of yoga is related to physical and mental health benefits in the yoga practitioner. Research has not yet studied how yoga practice may influence the practitioners’ interpersonal relationships after the change in mental and health benefits occurs within the self. This study examined how the practice of yoga in real life was positively related to relationship satisfaction and relationship commitment through the mediating variables of stress, mindfulness, authentic self (cognitive variables) and authenticity in relationships (behavioral variable). Two hundred participants were surveyed and one hundred and twenty-two of the participants had never practiced yoga, while seventy-six participants indicated that they had practiced yoga. The goal of this study was to see if those who practiced yoga before had higher levels of relationship satisfaction and relationship commitment than those who had not practiced yoga. Results indicated that those who practiced yoga differed from those who did not, by having higher levels of relationship satisfaction, p=. 000.

An unexpected finding of the study was that the practice of yoga in real life was significantly related to the meditating variables of stress, p = .000, mindfulness p = .089, and authentic self p=.001, rather than attending yoga class itself. Going to yoga class was significantly related to the practice of yoga in real life, p=.000. So, yoga in real life was used as the independent variable instead of attending yoga class. These results indicate that the practice of yoga in real life leads the individual to become less stressed, more mindful, and more in-tune with their authentic self, and
these changes in the individual were all significantly related to relationship satisfaction but not relationship commitment.

The behavioral variable of authenticity in relationships mediated the relationship between yoga in real life and relationship commitment and satisfaction $p=.000$, but it was negatively related to relationship commitment and satisfaction. These findings suggest that being authentic in your relationship is negatively related to the individuals satisfaction and commitment levels, partners satisfaction and commitment levels were not examined in this study and it may provide a clearer reasoning for this result. This study suggests that going to yoga class leads the practitioner to practice aspects of yoga in real life and those who practice yoga in real life are more satisfied in their romantic relationships.
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CHAPTER 1

INTRODUCTION

As a communication scholar I have always been interested in interpersonal relationships and how some couples reach higher levels of relationship satisfaction and relationship commitment than other couples. As an experienced yoga instructor, I have noticed the benefits of my personal yoga practice in my own relationship and I wanted to see if other yoga practitioners noticed this same difference between the practice of yoga and positive relationship outcomes. Yoga can be defined as a system, not of beliefs, but of techniques and guidance for enriched living (Yoga Alliance, 2018). Millions of people practice yoga to enrich their quality of life in some way, some of these reasons include; fitness, stress relief, wellness, vitality, mental clarity, healing, peace of mind and spiritual growth (Yoga Alliance, 2018). As this research continues yoga will become operationalized as a measurement of relationship outcomes, which will be measured through the relationship satisfaction and relationship commitment scales (Rusbult et al., 1998). Relationship satisfaction is as an interpersonal evaluation of the positivity of feelings for one’s partner and attraction to the relationship (Rusbult & Buunk, 1993). Commitment is the “intent to persist in a relationship, including long-term orientation toward the involvement as well as feelings of psychological attachment” (Rusbult et al., p. 359, 1998). Commitment is a psychological construct that directly influences everyday behavior in relationships, including decisions to
persist and depending on your partner, extending beyond self-interest (Rusbult et al., 1998).

I investigate four variables that may intervene between the practice of yoga and positive relationship outcomes between romantic partners; stress, mindfulness, authentic self, and authenticity in relationships. The current research is not only testing to see if there is a difference in relationship satisfaction and commitment between those who practice yoga and those who do not, but if one of these four variables (stress, mindfulness, authentic self, and authenticity in relationships) that are practiced in yoga, may be the intervening variable that relates to positive relationship outcomes.

This research is important because the findings may indicate significant results, which can be used in marriage counseling or as a self-help technique in bettering romantic relationships.

Research has studied both the physical and mental health benefits of yoga practice (Head & Hammer, 2013), but prior research has prioritized individual rather than relational processes and effects (Weinstein, 2014). The current research on yoga looks at the change the practitioner may notice within the self (Weinstein, 2014), such as lower stress levels, increased awareness or mindfulness, (Kabat-Zinn, 2017) or being more true to oneself (Monk-Turner & Turner, 2010). This study examines how interactions between romantic partners may differ once the change within the self occurs.

I model the interrelationships of yoga, stress, mindfulness, authentic self, and authenticity in relationships, to measure positive relationship outcomes, which are relationship satisfaction and relationship commitment. The model not only compares
individual correlations between variables, but it shows relationships amongst the variables of yoga, stress, mindfulness, authentic self, authenticity in relationships and relationship outcomes. This study compares relationship outcomes between those who practice yoga and those who do not, with stress, mindfulness, authentic self, and authenticity in relationships as possible mediating variables.
CHAPTER 2

REVIEW OF LITERATURE

Research into the social benefits of yoga is widespread. This next section will provide literature that explains the relationships between yoga and the cognitive variables of stress, mindfulness, and authentic self, along with relating yoga to the behavioral variable of authenticity in relationships, and finally the difference in relationship outcomes for those who practice yoga and those who do not, possibly through one or more of these four variables.

Yoga has been examined to increase mindfulness in the practitioner (Kishida et al., 2017). Kishida and colleagues surveyed yoga participants using content analysis and identified four major themes based on participants’ responses to opened ended questions. The themes that were identified in those who practiced yoga were: the ability of yoga to generate calm states, mindfulness, (self) compassion, and a sense of connectedness (Kishida et al., 2017). This research tells us that mindfulness is generated in yoga practice and for this reason the current research proposes that yoga is positively related to mindfulness. Research has shown that those who practice mindfulness more have better relationship outcomes (Carson et al., 2004). Carson and colleagues found “Greater mindfulness practice on a given day was associated on several consecutive days with improved levels of relationship happiness, relationship stress coping efficacy, and overall stress” (Carson et al., 2004, p.471). This research tells us that mindfulness can lead to lower levels of stress, and research shows that
lower levels of stress can lead to relationship satisfaction and relationship commitment (Barnes et al., 2007).

Scholars have found that mindfulness is related to greater satisfaction in romantic relationships, and to a greater capacity to manage the stresses that are often experienced in intimate relationships (Barnes et al., 2007). In another study White (2011), found that school-aged girls who participated in a mindfulness-based stress reduction program, were able to better cope with perceived stress (White, 2011). This evidence again describes the relationship between mindfulness and stress reduction. Mindfulness and stress are two of the cognitive variables that may intervene between the practice of yoga and positive relationship outcomes.

The last two variables that will be examined in this research are authentic self and authenticity in relationships. Research on yoga has found that the practice of yoga leads to knowing one’s authentic self through an awareness of the self (Head & Hammer, 2013), and people who are in-tune with the self, feel more “in touch” with their own needs and emotions, and this awareness can lead to increasing amounts of self disclosures (Weinstein, 2014). “A central tenet in yoga psychology is that of embodied learning, embracing the inherent goodness within and, with deep awareness of self, effectively creating authentic relationships with others” (Head & Hammer, 2013, p. 113). This research relates yoga to authenticity in relationships by means of knowing one’s authentic self. Authenticity in relationships has been related to positive relationship outcomes (Brunell et al., 2010) and authenticity in relationships was related to healthy relationship behaviors, which predicted positive relationship outcomes (Brunell et al., 2010).
This literature tells us that mindfulness, stress, and authentic self, play a role in bettering one’s self, but do these variables further explain how relationship satisfaction and commitment increases with the practice of yoga? Further, does the cognitive variable of knowing one’s authentic self relate to the behavioral variable of authenticity in relationships, which may increase relationship satisfaction and commitment? This study follows in the footsteps of previous research, however looking more closely at the role the practice of yoga plays in bettering ones romantic relationship.

To summarize the implications of the review of the effects of yoga practice, there is good reason to believe that there will be a difference in mindfulness for those who practice yoga and those who do not and that the practice of mindfulness will be related to positive relationship outcomes. Attending yoga class may also lead to a difference in stress among participants through the practice of mindfulness in yoga classes. Furthermore, attending yoga class will increase mindfulness in those who practice yoga, and as a result, there will be lower levels of stress in the practitioner.

The cognitive variable of authentic self will also be examined to see if there is a difference in those who practice yoga and if knowing your authentic self increases positive relationship outcomes by affecting how authentically participants behave toward their partners. The behavioral variable of authenticity in relationships will differ in those who practice yoga and those who do not, which may increase relationship satisfaction and commitment between romantic partners.

The proposed model gives a visual overview of how all these variables are interconnected. Some components, such as the relationship between stress and
relationship satisfaction have been thoroughly investigated in previous research. Other components, such as the relationship between mindfulness and commitment, have received little scholarly attention. The model provides a structure both for reviewing previous findings and organizing analysis in the current study.

Yoga

“The word ‘yoga’ means ‘yoke’ or ‘union’ and connotes the interconnection of mind, body, and spirit” (Salmon et al., 2009, p. 59). The spirit in Yoga describes “the energy within and without of the body, the spirit is a higher consciousness; a driving force, a motivation, a reason behind everything we think and everything we do” (Spiritual side of yoga, 2014). When you become aware of this spirit, you are practicing yoga. The definition of yoga, which is to unite, describes the state in which the yogi (practitioner) connects the mind and body together. Yoga is the practice of maintaining a state of complete awareness of the internal mind and body. The practice of yoga gives the practitioner the space to practice meditation through moment-to-moment awareness (mindfulness) (Kabat-Zinn, 2013). Yoga practice involves three core components, the practice of pranayama (breath control), yoga asana (meditative posture, or the physical practice of yoga), and Dyhana (meditation). The reasons why practitioners come to a yoga class may be for one or more of these reasons, and this study is focusing on what happens to the practitioner during yoga class, and how it carries into their daily lives outside of class. Although there are many paths of yoga, traditionally the word yoga refers to Rāja yoga, or the royal path (Satchidananda, 2012). Rāja yoga translates to the science of the mind. The primary text that teaches us
of Rāja yoga is called the Yoga Sutras of Patanjali, which describes the eight limb path to enlightenment.

To explain Rāja yoga further, you first have to understand Patanjali’s eight limb path. There is an uncertainty of who Patanjali was; some think he was a divine incarnation of the serpent Ananta, who supports the universe, who was known as the “first servant of God” and being so close to God, knows the teaching of God best (Desikachar, 1995). Regardless of who people believe Patanjali to be, he summarizes the process and the tools for self-understanding through the eight limb path and he believed that by practice and guidance from a teacher, “our turbulent minds can be brought to peace and extraordinary wisdom and well-being is our potential” (Desikachar, 1995, p. 146). The eight limb path lays out the eight steps one must take in order to reach a higher level of consciousness in this world. These eight steps are practiced in and outside of yoga practice. World-renowned Yogi, B. K. S. Iyengar, creator of Iyengar yoga, which is derived from Rāja yoga, and focuses on precision and alignment in yoga poses (Astanga yoga), describes Patanjali’s eight limb path. “These are sequential stages in an individual’s life journey through yoga. Each step must be understood and followed to attain the ultimate goal of Astanga yoga, that of emancipation of the self” (Iyengar, 2001, p. 58).

The first limb of the eight limb path are the five Yamas, which translates to abstinence and regulation. One of the Yamas is asteya, which means non-stealing. For example if your friend is telling you about their vacation they just came back from, and you “steal” from them by sharing what you did on your vacation and how it was better, you are not practicing asteya or regulation. The second limb of the
eight limb path are the five Niyamas, which translates to observations. One of the
Niyamas is santosha, which means contentment. To practice santosha is to be
content in every situation in your day-to-day life, the practice of being content is to
be at ease with the way things are. The third limb is Asana, which refers to a
meditative posture or being able to reach a state of total relaxation while holding yoga
poses. The fourth limb of the eight limb path is Pranayama, meaning to have control or
the ability to manipulate your breath. The fifth limb is Pratyahara, which means
withdrawal of the senses, not only relying on sight, touch, smell, taste, and sound to
observe what is going on in the world. To practice Pratyahara is to withdraw the mind
into the self so the senses become still and renounce their craving for objects (Johari,
2000). The sixth limb is called Dharana, or concentration in the present moment. The
seventh limb leading the yogi to this higher state of consciousness is Dhyana also
known as meditation. The eighth and final limb of Patanjali’s path to enlightenment is
Samadhi, also known as the super conscious state in which a yogi can fully
contemplate and be in a different universal realm (Iyengar, 2001). These are the eight
limbs of Rāja yoga described by Patanjali, which explains the path the yogi must take
to reach enlightenment.

After understanding Patanjali’s eight limb path, it is equally important to
understand the Kosha model, which explains that the practice of yoga asana
(postures), and how yoga cultivates two of the most essential pillars: trust and
communication (Coral Brown, personal communication, February 13, 2019). The
word Kosha translates to sheaths and the human body is known to have five Koshas
that “interpenetrate each other, encasing the soul like the layers of an onion (Kempton,
2009). The outermost layer or the first Kosha is the Annamaya Kosha, or the physical sheath known as the food body. The physical sheath is made up of the food we eat and few of us can get past the outer layer of our bodies to find the deeper sheaths inside of us (Kempton, 2009). The next three Koshas or layers of the body, are made up of the subtle body because they cannot be tangibly grasped (Kempton, 2009). The second Kosha, which is the first Kosha that makes up the subtle body is called the Pranamaya Kosha, which translates to vital energy sheath. When you feel energized, sleepy, calm, or relaxed you become aware of this Kosha or the vital energy inside of the food body. The third Kosha is the Manomaya Kosha, which translates to mental body, which is the most superficial layer of the mental body (Kempton, 2009). Ones thoughts, images, perceptions, and emotions come from this layer of the body. As we dig a little deeper through our thoughts and perceptions we come to the fourth Kosha of the body, which is the Vijnanamaya Kosha, which explains our inner world through wisdom and awareness (Kempton, 2009). The Vijnanamaya Kosha is responsible for ones insight, intuition, and wisdom. “The wisdom body, at its subtle level, is simply awareness- the objective, observing part of the self” (Kempton, p.4, 2009). The final Kosha of the body is called the Anandamaya Kosha, which is the deepest sheath, translating to the bliss body. It is the most hidden part of us, but its subtle presence is experienced as the instinctive self knows that life is worth living and to be alive is good (Kempton, 2009). We connect to the bliss body when we recognize that love is the deepest reality, beyond mental constructs or ideas (Kempton, 2009).

Coral Brown describes the Kosha system as a container, and the practice of yoga lets the practitioner take a trip through the body, into the deepest layer of one’s
self, known as the bliss body. Through yoga practice, “when one learns to trust and communicate with themselves, they are likely to be able to transfer that skill to their relationships” (Coral Brown, personal communication, February 13, 2019).

Although the realm of yoga and what it means to become a yogi is vast, understanding the eight limb path to emancipation by Patanjali and understanding the Kosha system to describe the trip to the inner most part of the body, provides evidence of what happens to the self during yoga practice and how it may very well spill over into ones romantic relationships. The research on the eight limb path and the Kosha model will be used to explain how yoga practice may change relationship outcomes through the increase of mindfulness, authentic self, and authenticity in relationships and the decrease of stress in the practitioner.

Relationship Outcomes

Relationship commitment can be viewed as a function of a person’s investment in the relationship, such as, time, rewards, satisfaction, and perceived available alternatives (Webster et al., 2015). Relationship satisfaction is examined through the interpersonal evaluation of the positive feelings for one’s partner and attraction to the relationship (Rusbult & Buunk, 1993). Both relationship commitment and relationship satisfaction will be used to determine positive relationship outcomes in the current study. Webster and colleagues (2015) found that the type of relationship and the length of relationship played a role in moderating links among attractive alternatives, for relationship satisfaction and relationship commitment (Webster et al., 2015). This
research explains that relationship satisfaction and commitment are used to better understand positive relationship outcomes.

Lund (1985) conducted a longitudinal study of 129 graduating university students, testing whether relationship continuity could be predicted through the pull model consisting of love and rewards, versus the barrier model consisting of investments and commitment (Lund, 1985). Results indicated “the commitment scale was associated with relationship stability… and the length of time in relationship correlated most strongly with commitment” (Lund, 1985, p. 12). Overall, participants’ scores on the commitment and investments scales best forecasted the fate of their relationship (Lund, 1985). The current study will use the investment model to examine relationship outcomes by asking questions about the length of the participants’ relationships, the relationship type, and questions regarding satisfaction and commitment levels.

Yoga and Relationship Outcomes

Woodyard (2011) assessed articles regarding the therapeutic effects of yoga to provide a comprehensive review of the benefits of regular yoga practice. The research found that, “regular practice of yoga promotes strength, endurance, flexibility and facilitates characteristics of friendliness, compassion, and greater self-control, while cultivating a sense of calmness and well-being” (Woodyard, 2011, p. 49). Woodyard (2011) also adds that practicing yoga will reduce stress, anxiety, and depression, ultimately leading to a better quality of life. “It has been shown to create a greater sense of well-being, increase feelings of relaxation, improve self-confidence and body
image, improve efficiency, better interpersonal relationships, increase attentiveness, lower irritability, and encourage an optimistic outlook on life” (Woodyard, 2011, p. 54). The findings from this comprehensive study suggest that yoga is not only beneficial for the practitioner but can lead to the betterment of interpersonal relationships.

Ross and colleagues (2013) conducted a large-cross sectional study attempting to find the relationship between yoga and the improvement of ones’ interpersonal relationships. “Four themes were identified: yoga practice leads to personal transformation, increases social interaction, provides coping mechanisms to weather relationship losses and difficulties, and leads to spiritual transcendence. Practitioners believed that their interpersonal relationships improved because their attitude and perspective had changed, making them more patient, kind, mindful, and self-aware. (Ross et al., 2013, p. 67). The improvement of practitioners’ interpersonal relationships were assessed through qualitative data. The four main themes that emerged from the data were that yoga leads to personal transformation, yoga increases social interaction, yoga provides coping mechanisms to weather relationship difficulties and losses, and finally yoga leads to spiritual transcendence and connection (Ross et al., 2013). This literature provides evidence that participants who attended yoga class differed from those who did not through an increase in relationship outcomes by way of one of the four themes presented above.

This research describes part one of the model, which describes the difference in relationships outcomes between those who practice yoga and those who do not.
Stress

“Stress is the physical or psychological reaction to real or imagined demands, which is embedded within our social context, and can impact the ways in which we interact with others, specifically our romantic partners” (Randall & Bodenmann, 2016, p.96). Randall and Bodenmann (2017) documented pervasive relationship stress, which varies on three dimensions: locus (internal versus external), intensity (major versus minor), and duration (acute versus chronic). Randall and Bodenmann (2017) conclude that stress is inevitable in relationships and partners cope with these stressors differently, some positively like being supportive of one another’s stressors and some negatively by criticizing or negating each other’s stressors. The current research study asks questions regarding stress levels of the individual participant. A correlation test was used to examine stress levels in those who practiced yoga and those who did not practice yoga to see if stress intervened in the relationship between yoga and positive relationship outcomes. Stress is inevitable between romantic partners (Randall & Bodenmann, 2017), but this current research examined the role yoga played in mental stress reduction in those who practiced and those who did not to determine if stress mediated the relationship between positive relationship outcomes (satisfaction and commitment) and the practice of yoga between the two groups.

In a second study Bodenmann and colleagues (2006) set out to find whether there was a relationship between dyadic coping (of stressors) and marital quality over
time (Bodenmann et al., 2006). The findings indicated that more positive and less negative dyadic coping was significantly associated with a higher marital quality, meaning more supportive communication and less quarreling (Bodenmann et al., 2006). This study provides evidence that there is a positive relationship between marriage coping and marriage satisfaction. Bodenmann and colleagues found that coping with stressors led to higher levels of marital satisfaction (Bodenmann et al., 2006), and yoga teaches us to become aware of our true self (Head & Hammer, 2013), which may lead to better coping strategies in romantic relationships by “embracing the inherent goodness within and, with deep awareness of self, effectively creating authentic relationships with others” (Head & Hammer, 2013, p.113).

Bahun and Huić (2017) investigated relations between external stress, relationship efficacy, and relationship satisfaction of 390 men and women, aged 18 to 35 (Bahun & Huić, 2017). The results showed that “experiencing greater levels of external stress was associated with lower relationship satisfaction” (Bahun & Huić, 2017, p.5). The study further explained that both external stress and perceived distress significantly contributed to relationship satisfaction, and relationship efficacy mediated the relationship between experienced and perceived stress and relationship satisfaction (Bahun & Huić, 2017). This research explains the relationship between stress and relationship satisfaction; and the current research examined participants perceived stress and how it may relate to relationship satisfaction and relationship commitment.

White (2011), conducted a study using school-aged girls to study stress levels in their daily lives, which could lead to psychological and physical problems (White,
The purpose of the study was to investigate the “efficacy of mindfulness training through yoga with school-aged girls to reduce perceived stress, enhance coping abilities, self-esteem, and self-regulation, and explore the relationship between the dose of intervention outcomes” (White, 2011, p. 45). White (2011) used Kabat-Zinns Mindfulness-Based Stress Reduction program, which has been effective on adults to see if the school aged girls would have lower stress levels after completing the program. Results indicated that the treatment group, those who participated in the Mindfulness-Based Stress Reduction program, had higher levels of self-regulation and self-esteem, which led the students to better cope with perceived stress (White, 2011).

This research provides evidence that there is a relationship between mindfulness and stress. As one becomes more mindful, perceived stress is reduced (White, 2011). The current research examined the cognitive variable of stress to see if those who practiced yoga would have lower levels of stress then those who did not and if lower stress levels were positively related to relationship satisfaction and relationship commitment. This is how stress was used as an intervening variable between yoga and relationship satisfaction and relationship commitment.

Yoga, Stress and Relationship Outcomes

Li and colleagues (2012), examined stress and anxiety, which contributed to many chronic diseases that decreased the quality of life in patients (Li et al., 2012). The research examined thirty-five trials where yoga was used to reduce stress and anxiety in patients. Results indicated that twenty-five of the trials “noted a significant decreases in stress and/or anxiety symptoms when a yoga regimen was implemented”
The current research will determine if the increase of yoga practice will decrease stress in those who practiced yoga as Li and colleagues found in 2012.

In a second study, Ledermann and colleagues (2010) investigated the association between daily stresses, marital communication in conflict situations, and marital quality in consideration of stress at the individual and dyadic levels (Ledermann et al., 2010). The empirical findings suggest the “association between daily relationship stress and marital quality is partially mediated at the dyadic level by marital communication in conflict situations, which means that marital quality seems to be affected by daily relationship stress directly as well as indirectly through marital communication” (Ledermann et al., 2010, p. 203). These findings show that the communication between partners directly impacts marital satisfaction, and leads us to believe that couples whom experience less external stress will function at a higher level of relational satisfaction. In other words, participants who are less stressed will report having higher levels of relationship satisfaction and commitment, and participants who report having higher levels of stress, may be able to mediate relationship outcomes by practicing yoga and learning how to better communicate authentically (Coral Brown, personal communication, February, 2019).

This research explains the cognitive variable of stress, and the current study examined the practice of yoga to see if it was negatively related to stress and if lower stress levels would lead to positive relationship outcomes. The participants who practiced yoga regularly will become more aware of the present moment, and
perceived mental stress will be reduced. This research provides evidence that lower levels of stress are related to more satisfying relationships between romantic partners.

Stress and Mindfulness

Along with the research conducted by White (2011), other scholars have also used mindfulness-based programs to study stress reduction. Carson and colleagues (2004), set out to measure mindfulness-based relationship enhancement through studying relatively happy couples. “Those who practiced mindfulness more had better outcomes, and within-person analyses of diary measures showed greater mindfulness practice on a given day was associated on several consecutive days with improved levels of relationship happiness, relationship stress, stress coping efficacy, and overall stress” (Carson et al., 2004, p. 471). The practice of mindfulness on a daily basis was shown to improve the stress levels of couples, which led to an overall improvement in relationship satisfaction and relationship commitment.

Barnes and colleagues (2007), conducted a different study to test the role of mindfulness in romantic relationship outcomes by assessing how mindfulness reduces stress in romantic relationships (Barnes et al., 2007). The results indicated that “mindfulness is related to greater satisfaction in romantic relationships, and to a greater capacity to manage the stresses that are often experienced in intimate relationships” (Barnes et al., 2007, p. 486). On this latter point, because this capacity
was assessed dispositional in this study, further research is needed to examine whether more mindful individuals are better able to regulate their behavior in romantic relationship-specific stressful encounters (Barnes et al., 2007, p. 486). In conclusion, mindfulness was positively related to relationship outcomes, but further research is needed to determine the relationship between mindfulness and stress reduction in overall relationship satisfaction and commitment between romantic partners.

This literature provides evidence that stress and mindfulness are related. Thus leading to the second cognitive variable of this research, mindfulness. In looking at mindfulness separately from stress, I was able to deduce which had a greater impact on yoga and relationship outcomes.

Mindfulness

The source of the mindfulness literature I will be referring to comes from Jon Kabat-Zinn, Ph.D., who is internationally known for bringing mindfulness into mainstream medicine and society and has focused on mind/body interactions for healing, specifically studying how the brain processes emotions (Kabat-Zinn, 2017). Kabat-Zinn defines mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment-by-moment” (Kabat-Zinn, 2003, p. 145). In other words, mindfulness can only be reached by practicing complete awareness of the mind and body in the present moment, which is a basic principal of yoga.

Kabat-Zinn describes this state of mindfulness as simply being awake. “That wakefulness followed directly from his experience of seeing deeply into the human condition and human suffering and his discovery that it was possible to break out of
seemingly endless cycles of self-delusion, misperception, and mental affliction to an innate freedom, equanimity, and wisdom” (Kabat-Zinn, 2015, p. 1483). This describes the psychological change that occurs in the human mind, through constant practice of mindfulness that can be reached through yoga. When asked about the mind-body in medicine, Kabat-Zinn explains “the science of the mind–body connection has evolved to the point where we now also understand that what we used to think of as our genetic inheritance is no longer quite so fixed. How our genes get expressed has everything to do with what we do: how we behave, what we eat, how intimate our relationships are, how we feel about ourselves, how much we exercise, whether we meditate—virtually everything that we’re doing is in some way or another influencing which of our genes get upregulated and which get downregulated. This is the science of epigenetics” (Paulson et al., 2013, p. 96). From a medical standpoint, Kabat-Zinn believes that the practice of mindfulness has a tangible affect on one’s health but can mindfulness impact the function of our romantic relationships?

Iyengar describes reaching this state of mindfulness through the practice of Dharana, which translates to concentration or complete attention (Iyengar, 2002). Iyengar explains “To be thoroughly thoughtless is concentration as well as meditation” (Iyengar, 2002, p. 65). This state of being mindful or completely aware as Kabat-Zinn describes it, can be reached through ones yoga practice, by not only practicing the sixth limb of the eight limb path, Dharana, but also when performing yoga asana (meditative posture), by wholly committing your nerves, cells, intelligence, conciseness, and the self to the asana. This thoughtful or mindful state requires deliberate attention, and it is heavily spoken of in yoga practice.
It has been documented for over a decade that mindfulness has significant physical and psychological effects on subjects. For example, during an eight week study Davidson and colleagues (2003) set out to “measure brain electrical activity before, immediately after, and then 4 months after an 8 week training program in mindfulness meditation” (Davidson et al., 2003, p. 564). The scholars hypothesized that mediation would decrease anxiety and increase positive affect and the participants practicing meditation would therefore show increased left-sided activation (Davidson et al., 2003). The research findings “are the first to suggest that meditation can produce increases in relative left-sided anterior activation that are associated with reductions in anxiety and negative affect and increases in positive effect” (Davidson et al., 2003, p. 569). Although this study was the first of its time in 2003, many scholars have continued this train of thought by studying the health benefits of mindfulness (Kabat-Zinn, 2015, Head & Hammer, 2013 & Kishida et al., 2017). The Davidson study is important to this research because if the practitioner reduces their own anxiety and increases in positive effect, it may change their relationships with their romantic partner (Davidson et al., 2003).

This literature explains that mindfulness can help reduce anxiety, which can lead to better awareness and attention to the present moment, and mindfulness can also help one become aware of the mind-body connection. For these reasons, this research examined mindfulness and how it is related to relationship satisfaction and commitment. The sixth limb of the eight limb path in yoga is called Dharana, which is defined as concentration in the present moment, so as one practices Dharana in yoga, they too are practicing mindfulness. This literature describes the second cognitive
variable of mindfulness, and how mindfulness becomes a mediating variable between
the practice of yoga and relationship satisfaction and commitment.

Insert Figure 3 here

Authentic Self

Weinstein (2014) described that “being oneself is about being true to oneself in
the sense of being genuine and congruent. (Weinstein, 2014). She adds to this idea by
quoting Winnicott’s distinction between the “true self” and “false self”. “When acting
from the true self (authentic self), people feel real and “in touch” with there core needs
and emotions” (Weinstein, 2014, p. 126).

The self can be explained through the self-concept, which describes “the total
collection of attitudes, judgments and values which an individual holds with respect of
behavior, ability, body, and worth as a person” (Rudolph, 1981). In yoga practice we
are searching to find this deepest layer of our true self, also known as the Anandamaya
Kosha (Kempton, 2009). Yoga is the integration of the body, mind, and spirit, so we
understand a disintegration occurs within ourselves, that leads the body, mind, and
spirit to feel disconnected (Salmon et al., 2009). Iyengar provides an explanation of
this disintegration in that it comes from the afflictions of life; lack of knowledge, lack
of understanding, pride, attachment, hatred, malice, and jealousy which inflicts
physical and emotional pain, which leads to our own suffering (Iyengar, 2002). From
these afflictions our mind, body, and spirit become disconnected and we loose sight of
our true most deepest self. When there is a wholeness of the body, mind, and self the human system can integrate the conciseness and soul together, truly becoming in touch with ones true self, and this feeling of connectedness, is the practice of yoga (Iyengar, 2002). Understanding what the self is, and how yoga teaches us to dig into the deepest layer of ourselves, the Anandamaya Kosha, or the instinctive self, (Kempton, 2009) we can further examine how relating to the authentic self can improve romantic relationships and how it has been studied in previous research.

Previous research has assessed the body, mind, and spirit differences between yoga students compared to college students (Monk-Turner & Turner, 2010). Monk-Turner and Turner (2010) found that yoga practitioners were more likely than college students to “report having strong morals and healthy values as well as the ability to express their feelings and consider the feelings of others” (Monk-Turner & Turner, 2010, p. 48). This finding suggests that yoga participants are more in-tune with their morals and expressing their true feelings, which developed the third cognitive variable of the authentic self. The researchers further explained that yoga practitioners may be more likely to express their feelings because of the Yamas (abstinence and restraints) and Niyamas (observations) that are taught from the eight limb path (Monk-Turner & Turner, 2010). One of the Yamas is Ahimsa, which translates to non-violence. Ahimsa not only means to become non-violent physically, but also to practice being non-violent with the words we speak and the actions we take (Yoga’s Ethical Guide to Living, 2019). Since the Yamas are central to yoga practice this research shows how the practice of yoga can better one’s true self through the practice of the first limb of Patanjali’s eight limb path.
Yoga enhances self awareness (Lasater, 2000). “To practice yoga in the deepest sense is to commit to developing awareness by observing our lives: our thoughts, our words, and our actions” (Lasater, 2000, p.6). Yoga poses, breathing practices, and meditation are techniques we can use to support this development, of the awareness of the true self. Lasater (2000) further explains “The real beginning of spiritual practice is evident when we accept responsibility for ourselves, that is, when we acknowledge that ultimately there are no answers outside of ourselves, and no gurus, no teachers, and no philosophy that can solve the problems of our lives” (Lasater, 2000, p.6). Accepting responsibility of who we are and acknowledging that our answers come from within is a central tenet of yoga. This research provides evidence that learning how to connect to the true self may affect the relationship between the yoga practitioner and their romantic partner by becoming more open and honest with their true feelings.

Yoga, Authentic Self, and Relationship Outcomes

“When you grow a plant you first dig the earth, remove the stones and weeds, and make the ground soft. Then you put the seed into the ground and surround it with the soft earth so carefully that when the seed opens it will not be damaged by the weight of the earth. Finally, you water the seed a little and wait for it to germinate and grow. After one or two days, the seed opens into a seeding and a stem grows from it. Then the stem splits into two branches and produces leaves. It steadily grows into a trunk and produces branches in various directions with many leaves. Similarly, the tree of the self needs to be taken care of” (Iyengar, 2002, p. 7). The tree of yoga is a
metaphor to finding one’s true self in that the essence of the tree is in the fruit, so the essence of the practice of yoga is in the freedom, poise, and peace, where the body, mind and the soul are united and merge with the universal spirit (Iyengar, 2002). Iyengar describes how the yoga practitioner begins to find their true self or authentic self through the practice of yoga.

Kishida and colleagues (2017), attempted to find the link between interpersonal relationships and yoga. The two objectives of the study were to “(1) to better understand how yoga practitioners perceive intrapersonal and interpersonal outcomes of their yoga practice, and (2) to develop a conceptual model of yoga’s effects on intrapersonal and interpersonal outcomes that may underlie the “relational” influences of yoga” (Kishida et al., 2017, p. 1). The four themes that were identified through content analysis on participant’s responses, were the ability of yoga to generate calm states, mindfulness, (self) compassion, and a sense of connectedness (Kishida et al., 2017). “Throughout the themes, a common pattern emerged such that yoga practice first led to positive intrapersonal changes, which then influenced one’s interpersonal relationships” (Kishida et al., 2017, p. 1). This finding explains the effect yoga has on the intrapersonal state of the practitioner, which will spark a change in the self, leading to an overall change in personal relationships. “Perhaps, this illustrates the possibility that with repeated practice, a practitioner’s state mindfulness is enhanced, first, in the context of one’s yoga practice, subsequently spilling over to other contexts, ultimately, improving trait mindfulness” (Kishida et al., 2017 p. 6). Once the trait of mindfulness became improved, yogis cultivated other positive traits such as self-compassion and self-kindness.
The development of these skills through the practice of yoga and mindfulness, were first seen as an enhancement within the self (intrapersonal relationship), which then carried over to the practitioners interpersonal relationships (Kishida et al., 2017). The researchers conclude that these “Findings demonstrate the promise yoga holds to improve one’s relationship to oneself (intrapersonal) through mindfulness and self-compassion, and to others (interpersonal), through the enhancement of compassion and social connectedness, which may potentially lead to enhanced health and wellbeing outcomes” (Kishida et al., 2017, p. 1). This literature describes that those who practice yoga will relate to their authentic self more than those who do not practice. Further, I will examine if knowing your authentic self leads to higher levels of satisfaction and commitment in those who practice yoga versus those who do not.

This research develops the third cognitive variable of authentic self, and how it is added to the model. This research on the authentic self, provides evidence that yoga can help improve one’s relationship to oneself, as the Kosha model also explains. In order to understand the deepest layer of the body, the Anandamaya Kosha, one needs to recognize the inherent goodness of the self (Kempton, 2009), and once the self is recognized it can improve interpersonal relationships (Kishida et al., 2017).

This research explains the difference between those who practice yoga and those who do not by understanding the authentic self, which may lead to more positive relational outcomes. This research develops the third cognitive variable of the authentic self.
In the maintenance of interpersonal relationships, the understanding and sharing of one’s true emotions will have an effect on relationship outcomes, which leads us to the next intervening variable, authenticity in relationships.

**Authenticity in Relationships**

Relationship authenticity involves the importance for intimate others to see the real you, good and bad. “Toward that end, authentic relations involve a selective process of self-disclosure and the development of mutual intimacy and trust. In short, relational authenticity means being “genuine and not “fake” in one’s relationship with others” (Kernis, 2003, p. 15). In other research (Kernis, 2003) Kernis explains, people may try to get “in touch with” their true core self and in doing so these individuals will consult their feelings and motives when deciding how and when to respond. When individuals are informed of this true self they then reflect authenticity (Kernis, 2003). Becoming connected or “in touch with” your true self is central in our yoga practice (Head & Hammer, 2013), and this research shows that connecting to the self and responding from the self, is authenticity. This explains why authenticity in relationships is an intervening variable for this study and may be positively related to relationship satisfaction and commitment for those who practiced yoga.
Brunell and colleagues (2010), measured 62 heterosexual couples in order to measure dispositional authenticity and its association with relationship behaviors and outcomes. “Results revealed that authenticity was related to engaging in healthy relationship behaviors, which in turn predicted positive relationship outcomes and greater personal well-being” (Brunell et al., 2010, p. 902). This finding provides evidence that authenticity is positively related to relationship outcomes, but will yoga play a role in the development of relationship authenticity? The present study examined relationship authenticity to see if it mediated the relationship between the practice of yoga and relationship satisfaction and relationship commitment.

Lasater (2000) describes interactions she has in her intimate relationships and how the strength of her yoga practice is tested through her anger, fears, and attachments in these types of relationships. Patanjali advises us to choose the high road in our relationships as he implies that compassion is to be expressed to everyone. To be compassionate, you must be with yourself. “To be compassionate towards others, you must first understand that you suffer. This awareness allows you to see that others suffer, too, and to respond with clarity to this condition, which is shared by all living beings” (Lasater, 2000, p. 51). This research shows that when one becomes aware of the need for self compassion, the realization will lead to developing compassion for others. In yoga not only do we develop an understanding of the self, but we develop and notice the self in others (Lasater, 2000). This research explains that once the true self becomes recognized, the individual then becomes aware of the true self in others, in this case in ones romantic relationship. The current research examined the practice of yoga to see if there was a difference in relationship
authenticity in those who practiced yoga and if relationship authenticity was positively related to relationship outcomes.

Yoga, Authenticity in Relationships, and Relationship Outcomes

Head and Hammer examined relational cultural theory (RCT) and yoga in order to propose a model to reduce negative feelings of the self. RCT explains the phenomenon of how to promote growth-fostering relationships with the self and relationships with others (Head & Hammer, 2013). “A central tenet in yoga psychology is that of embodied learning, embracing the inherent goodness within and, with deep awareness of self, effectively creating authentic relationships with others” (Head & Hammer, 2013, p. 113). This research explains that practicing yoga was found to promote mindfulness of internal bodily sensations as a way of “knowing” or reaching awareness of the body and mind (Head & Hammer, 2013). “Yoga is a system in which one comes to recognize their authentic self and identifies those qualities that pull them out of a place of authentic relating” (Head & Hammer, 2013, p.113). This literature describes the relationship between the knowing of ones true self, through the practice of yoga and how it carries over into ones personal relationships by creating authentic relationships.

This research describes the final variable of the model, the behavioral variable of authenticity in relationships. This research examined the practice of yoga and how it may lead to an increase in relationship authenticity, and how relationship authenticity may be positively related to relationship satisfaction and relationship commitment.
HYPOTHESES

The Proposed Model

Figure 6 is the model that was examined in the current study, the model was broken up into smaller regression models in order to be tested, the smaller models are figures 1-5 listed above.

The practice of yoga plays a role in overall relationship satisfaction and commitment between romantic partners. The model suggests a process where yoga practice affects the cognitive variables of stress, mindfulness, and authentic self and the behavioral variable of authenticity in relationships, which may lead to increases in the outcome variables of relationship satisfaction and relationship commitment in those who practice yoga versus those who do not. Given the limited sample size structural equation modeling is inappropriate as an overall test of the model. Instead individual components of the model were broken out (figures 1-5) and tested to check the viability of the model. Component test is related to the hypotheses as follows.
I examine the overall relationship among independent and dependent variables in testing

_Hypothesis 1: H1: Relationship satisfaction and relationship commitment levels will differ in those who practice yoga then those who do not._

We look at how the cognitive variables mediate between yoga and the outcome variables in hypotheses two through four.

_Hypothesis 2: Stress mediates the relationship between yoga and relationship satisfaction and relationship commitment._

_Hypothesis 3: Mindfulness mediates the relationship between yoga and relationship satisfaction and relationship commitment._

_Hypothesis 4: Self authenticity mediates the relationship between yoga and relationship satisfaction and relationship commitment._

Finally we examine how the behavioral variable mediates the relationship between yoga and satisfaction and commitment with

_Hypothesis 5: Relational authenticity mediates the relationship between yoga and relationship satisfaction and relationship commitment._

Since structural equation modeling can not be used we lose the capacity to examine the entire model simultaneously. However, testing various components of the model provides an initial test viability within the structure as well as pointing toward refinements in the model.
CHAPTER 3

METHODOLOGY

Participants

Data were collected from two hundred participants, 29% were male and 71% were female. The age of participants ranged from 18 to 70 years old. The ethnicity of the two hundred participants were 92% Caucasian, 4.5% African American, 0.5% Asian or Pacific Islander, 5.5% Latino or Hispanic, 1% biracial and 1% other. Participants indicated how long they had been in their romantic relationships, which ranged from 1 week to 48 years with an average relationship lasting 3.8 years. Participants also indicated their relationship status with their romantic partners. 18.5% were casually dating someone, 67.5% were exclusively dating someone, 3% were engaged, and 11% were married. One hundred and fifty-five of the participants were undergraduates from the University of Rhode Island, who were currently enrolled in Communication courses, (Communication fundamentals, Interpersonal communication, Communication theory, and Communication research methods). The remaining forty-five participants were surveyed from two separate yoga studios. The first being the Anna Fascitelli Fitness & Wellness Center at The University of Rhode Island, the other a small yoga studio located in East Greenwich, RI, called Laughing Elephant Yoga. Some of the one hundred and fifty-five undergraduates indicated that they practiced yoga, which we had expected when surveying the communication courses and yoga classes. Out of the two hundred participants that were surveyed 76 participants indicated they practiced yoga, 122 participants indicated they had never
practiced yoga before, and 2 participants left this question blank.

Measures

The survey questions came from existing scales that have been empirically tested to measure the following variables of yoga, stress, mindfulness, authentic self, authenticity in relationship, and relationship satisfaction and commitment.

**Stress.** Perceived Stress Scale (PSS). Perceived stress was measured on a 5-point scale ranging from 0 to 4. 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, and 4 = very often (e.g., “In the last month, how often have you felt that things were going your way”). Questions 6-9 in the current survey asked questions on perceived stress. A subscale of the PSS was taken from Cohen, using 4 items, which were questions 2, 4, 5, & 10. (Cohen et al., 1983). Roberti et al., (2006) assessed the reliability and validity of the Personal Stress Scale. Reliability was deemed good with Cronbach’s alpha of .89. They assessed convergent and divergent validity and determined that “convergent validity was supported, with notable associations among the PSS10 Total Score and the STAI Total Score, the STAI-A factor, and the STAID factor, and small to moderate correlations with the MHLC Chance and Powerful Others subscales” (Roberti et al., p. 139, 2006). A reliability analysis using Cronbach’s alpha for the variable stress resulted in .697 for the current research. This is just below the .7 typical standard for reliability and likely comes from using fewer items than the original scale.

**Mindfulness.** The Mindfulness Attention Awareness Scale (MAAS) is a scale designed to measure the core characteristic of mindfulness, informed be sensitive awareness. MAAS is a 6-point scale ranging from 1-6. 1= almost always, 2= very
frequently 3= somewhat frequently 4= somewhat infrequently 5= very infrequently 6= almost never. (e.g., “I rush through activities without being really attentive to them”). Questions 10-14 in the current survey asked questions on how mindful participants felt they were on a given day. A 5-item subscale of the MAAS was used which were items 7, 8, 9, 10, & 15 (Carson, 2004). Osman and colleagues (2015) used an alternative scale of measurement to test the validity and reliability of the mindfulness awareness scale, and the reliability of the scale was .91 for the overall 15 question scale. The 5-item subscale that was developed through factor analyses (questions 7, 8, 9, 10, & 15) has a reliability of .88 and Osman et al., (2015) proposes these 5 questions as a valid measure of the full MAAS. A reliability analysis using Cronbach’s alpha for the variable mindfulness resulted in .794 for the current research.

**Authentic Self.** The Authentic Scale was used to measure authentic personality in practitioners versus non-practitioners. Items are presented on a 7-point scale, 1 (does not describe me at all) to 7 (describes me very well). (e.g., “I think it is better to be yourself, than to be popular”). Questions 16-19 in the current survey asked questions on how well participants related to their authentic self. A subscale that described “Authentic Living” was used in this survey, which were items 1, 8, 9, & 11 (Wood et al., 2008). The Cronbach’s alpha score for the 4-item subscale was .69 for authentic living. A reliability analysis using Cronbach’s alpha for the variable authentic self resulted in .802 for the current research.

**Authenticity in Relationships.** Authenticity in Relationships Scale (AIRS) is a scale used to measure authenticity between romantic relationships using a 9-point scale ranging from 1-9. 1= Not at all descriptive and 9= very descriptive (e.g., “I would
rather be who my partner wants me to be than who I really am”). Questions 20-24 in the current survey asked questions on how authentic participants were in their romantic relationships. The 5-items with the highest Cronbach’s alpha score were chosen to be part of this survey, which were questions 12, 21, 23, 26, & 34 (Lopez & Rice, 2006). “For the combined sample, these scores evidenced substantial internal consistency estimates Cronbach’s coefficient of .88 and .85” (Lopez & Rice, 2006). A reliability analysis using Cronbach’s alpha for the variable authenticity in relationships resulted in .757 for the current research.

**Relationship Outcomes.** In order to measure relationship outcomes I will be using the Commitment scale to measure commitment levels and satisfaction levels between romantic partners. Questions were asked on a 9 point Likert scale, 1 (do not agree at all), 5 (somewhat agree), and 9 (agree completely). (e.g., “I am committed to maintain my relationship with partner” and our “relationship does a good job fulfilling my needs”). Questions 25-31 in the current survey asked questions of how committed the participant were to their romantic partners. Questions 32-36 in the current survey asked questions of how satisfied participants were in their romantic relationship. All 7 questions from the commitment level scale were used, and all 5 questions from the satisfaction level scale were used (Rusbult, 1998). Rusbult, Marts and Agnew (1998) assessed the reliability and validity of the commitment and satisfaction scales. Both scales were deemed reliable with a Cronbach’s alpha for commitment levels of .91 to .95 in multiple samples and a Cronbach’s alpha of .82 to .88 for satisfaction levels. Rusbult, et al (1998) reported finding ‘good evidence regarding convergent and discriminant validity.” They compared the measures with other measures of couple
functioning. A reliability analysis using Cronbach’s alpha for the variable relationship satisfaction resulted in .921 and for the variable commitment .922 for the current research.

**Yoga.** To measure yoga I asked participants if they practiced yoga, how often they practiced yoga, their level of expertise of yoga, and finally why they go to yoga class. Additionally, I asked questions that were inspired from Park and colleagues research on the essential properties of yoga questionnaire (Park et al., 2018). (e.g., “During yoga class, you have thoughts of self-compassion (kindness/warmth toward yourself)”). The yoga questionnaire used fourteen scales, which had Cronbach’s alphas between .70 and .90, with most above .80 (Park et al., 2018).

Procedure

The survey questionnaire that was given out to participants had a total of forty-one questions. However, after completing questions one through thirty-six, participants were told the last section related to the practice of yoga, so if they did not practice yoga then they had completed the survey and should hand in the survey to the researcher.

The participants who did practice yoga, were asked to continue on and complete the remaining questions, which were questions thirty-seven through forty-one. The forty-five participants who were surveyed at a yoga studios, were asked to complete the anonymous survey directly after taking the yoga class. The participants from The University of Rhode Island fitness center and Laughing Elephant Yoga were given two weeks to return the survey and could enter into a raffle to receive a free Yoga mat. Two participants won a free yoga mat, one participant from the URI fitness
center and one participant from Laughing Elephant Yoga. The one hundred and fifty-five undergraduate students completed their surveys during class time and participants handed in the survey to the researcher directly after completion. The goal of this survey was to compare those who practiced yoga to those who had never practiced yoga before. The survey questions related to the variables in the proposed model; yoga, stress, mindfulness, authentic self, authenticity in relationships and relationship outcomes. All participants of the study had to have a romantic partner whether they were casually dating, exclusively dating, engaged, or married. Some of the communication instructors decided to give out extra credit to the undergraduates enrolled in the communication courses to complete the survey. For the students who were not romantically involved an alternative assignment was offered for equal credit. Analysis

This study was attempting to find a difference between those who practiced yoga and the outcome variables of relationship satisfaction and relationship commitment, through the cognitive variables of stress, mindfulness, authentic self and the behavioral variable of authenticity in relationships. The following five hypotheses were examined through correlation and regression models:

H1: Relationship satisfaction and relationship commitment levels will differ in those who practice yoga then those who do not.

H2: Stress mediates the relationship between yoga and relationship satisfaction and relationship commitment.

H3: Mindfulness mediates the relationship between yoga and relationship satisfaction and relationship commitment.
**H4**: Self authenticity mediates the relationship between yoga and relationship satisfaction and relationship commitment.

**H5**: Relational authenticity mediates the relationship between yoga and relationship satisfaction and relationship commitment.

Regression models were created to determine if mediation had occurred using the Baron and Kenney (1986) method to better explain the path of how yoga is related to relationship satisfaction and relationship commitment. In order to examine if mediation occurs between variables, it is tested through three regressions. The three regressions that must be complete are the independent variable predicts the dependent variable, the independent variable predicts the mediator, and the independent variable and mediator predicts the dependent variable (Baron & Kenny, 1986). The following conditions must be met to support full mediation. 1. The independent variable is shown to significantly influence the dependent variable in the first regression equation. 2. The independent variable is shown to significantly influence the mediator in the second regression equation. 3. The mediator must significantly influence the dependent variable in the third equation. Complete mediation occurs when the independent variable no longer influences the dependent variable after the mediator has been controlled and all the above conditions are met. Partial mediation occurs when the independent variable’s influence on the dependent variable is reduced after the mediator is controlled (Baron & Kenny’s Method for Meditation, 2017).

Regression models will be used to determine if partial or full meditation has occurred between the mediating variables of stress, mindfulness, authentic self, and authenticity in relationships to see if the participants who practiced yoga differed in
relationship satisfaction and relationship commitment levels then those who did not. The results will determine if the regression models are statistical significant in relating yoga to positive relationship outcomes through the Baron and Kenny method for mediation.
CHAPTER 4

FINDINGS

Testing the Model

The first test conducted, examined the practice of yoga to see if there was a significant difference in relationship satisfaction and relationship commitment in those who practiced yoga versus those who did not. An ANOVA test was used to compare those who practiced yoga with those who had never practiced yoga. There was a significant difference in those who practiced yoga and relationship satisfaction ($F_{1, 196} = 6.669 \ p = .002$). The 76 yoga practitioners had a mean satisfaction level of 38.45 (SD = 6.72). The 122 non yoga participants had a mean satisfaction level of 35.375 (SD = 8.72). However, those who practiced yoga did not show a significant difference in relationship commitment then those who did not practice. So, in order to dig a little I used the Baron and Kenney’s (1986) method to see if full or partial mediation had occurred between those who practiced yoga and those who did not practice to determine a difference in relationship commitment between groups, through the possible mediating variables of stress, mindfulness, authentic self, and authenticity in relationships.

The validity of this model should be confirmed independently before we trust it. Particularly because the relationship between relationship authenticities was opposite of what was expected from the literature review. I used step wise regression to explore what model variables related to relationship commitment and one smaller
model had practical significance, which was yoga in real life (YogaIRL), authenticity in relationships, and relationship commitment.

In these data, we found that incorporating yoga practice and philosophy into real life (question 15) affected relational authenticity, which was related to commitment. I used the Baron and Kenney’s (1986) strategy to test how relational authenticity mediated the relationship between yoga practice in real life and commitment. The individual components were all significantly related to each other and the final regression equation was as follows: \( \beta \) YogaIRL + (-.251) R. authenticity = Commitment. Since both variables are statistically significant, the data suggests that relational authenticity partially mediates the impact of yoga in real life on commitment. The interpretation is that yoga in real life has a positive impact on commitment. But it also seems to work indirectly through relational authenticity. YogaIRL has a negative relationship to relational authenricity \( (r = -.234**) \) and relational authenticity has a negative relationship to commitment \( (r= -.196*) \). So even though the net impact of incorporating yoga benefits everyday life, it still leaves us with a final conundrum. Why does relational authenticity have a negative relationship with commitment, which is an issue that I will discuss while reviewing hypothesis five.
Now that we see the difference between the yoga participants and relationship commitment, the following results will describe the relationship between yoga participants and relationship satisfaction, to explain the five hypothesis to determine if mediation occurred. The results regarding relationship satisfaction were more in line with what was expected from the literature review, and there were many interesting relationships to explore. I started by putting yoga in real life into the model because it proved to be statistically significant in both relationship satisfaction and relationship commitment.
Yoga vs. Yoga in real life

I examined the relationship between yoga and yoga in real life to see if there was a difference between those who attended yoga class versus those who practiced aspects of yoga in real life without attending yoga class (survey question 15). Question 15 asked participants to check all properties that applied to them during their day such as “during your day, you feel acceptance of things as they are, during your day, you focus on your breath” etc., which happened to be part of the 7 essential properties that are practiced in yoga. The reason for this was to examine if yoga practitioners would check off more of the 7 properties than non-practitioners. Results were statistically significant when examining yoga and yoga in real life as attending yoga class was related to the practice YogaIRL, p=.000. Further, the 76 yoga participants had a mean score of 4.63 and the 122 non participants had a mean score of 3.59. This provides evidence that those who practiced yoga were more likely to practice more of the essential properties of yoga in their everyday lives. Since this finding was so intriguing we further analyzed the difference between the two groups regarding each of the 7 essential properties.

Table 2 Yoga in real life

| Variable (during your day)               | t    | df  | Sig.  |
|-----------------------------------------|------|-----|-------|
| thoughts of self-compassion             | 0.636| 196 | NS    |
| acceptance of the way things are        | 0.311| 196 | NS    |
| focus on your breath                    | 5.56 | 196 | .000  |
| pay attention to posture and alignment  | 20.43| 196 | .016  |
| take a moment to let go of physical tensions | 3.09 | 196 | .002  |
| take a moment to let go of your mental stress | 2.16 | 196 | .032  |
| have a feeling of connection to a higher power | 2.09 | 196 | .038  |
This table provides evidence that the practice of yoga in real life was statistically significant between those who practiced yoga and those who did not. Although thoughts of compassion and feeling acceptance of the way things are were not significant the following properties were. 64% of the yoga participants indicated that they focused on their breath throughout their day, where as 27% of the non participants focused on their breath throughout their day. 70% of the yoga participants paid attention to their posture and alignment during their day where as 52% of the non practitioners did. 63% of the yoga participants reported that they take a moment to let go of physical tensions during the day, where as 41% of the non participants reported to do so. 67% of the yoga participants indicated that they take a moment to let go of mental stresses and 52% of the non participants indicated that they did so. Finally, 55% of the yoga participants indicated that they have a feeling of connection to a higher power, where as 44% of the non participants indicated a feeling of connection to a higher power. These results indicated that attending yoga class was related to practicing yoga in real life. Next we examine if we should use yoga in real life or attending yoga class, as the independent variable of the study by examining the difference in relationship outcomes between the two groups.

**Yoga in real life and satisfaction**

I examined the relationship between yoga and relationship satisfaction through the same lens as the commitment analysis (figure 7), to determine if the appropriate independent variable was attending yoga class or incorporating yoga in real life. So, before exploring hypothesis two through five, I reviewed the relationship between yoga, yoga in real, and relationship satisfaction. Baron and Kenny’s (1986) method to
mediation indicated that yoga in real life fully mediated the relationship between yoga class and relationship satisfaction. Though yoga class was significantly related to relationship satisfaction as discussed above, when yoga in real life was added to the model, yoga class was no longer statistically significant. With both variables predicting commitment, yoga class had a beta weight of .134 (t=1.841 p = .067; NS) while yoga in real life had a beta weight of .183 (t=2.505 p=.013). Therefore, in testing hypotheses two through five I used yoga in real life as the independent variable rather than attending yoga class to finish examining the model.

This tells us that whether an individual goes to yoga class or not will not have a significant role on relationship satisfaction. But, if the participant can practice yoga in their everyday life, such as; having thoughts of self-compassion, having an acceptance of the way things are, focusing on the breath, paying attention to posture and alignment, letting go of physical tensions, letting go of mental stress, and having a connection to a higher power (Spirit, God, Universe) then the individual will be more satisfied in their romantic relationship. Going to yoga class was related to the practice of yoga in real life, p = .000, so this relationship shows that those who attend yoga class will be more likely to practice what they learned on the mat, off the mat in their real life. This is not to say that people who do not practice yoga will not also practice the aspects of self-compassion, breath focus, letting go of mental stress and physical tensions, etc., in their real life, but those who attend yoga class will be more aware of these things, therefore they are more likely to practice them in their real life. So, this further explains that yoga participants were more satisfied in their relationships through the practice of yoga in real life, then the non practitioners.
Next we will continue to use yoga in real life to examine how the three cognitive variables mediate the relationship between YogaIRL and relationship satisfaction.

Table 3 Yoga in real life and Relationship Satisfaction

|                          | Mean  | Std. Deviation | N  |
|--------------------------|-------|----------------|----|
| Relationship Satisfaction| 36.5389 | 8.14515        | 193|
| Yoga in real life        | 3.9637  | 1.80385        | 193|

Correlations

|                      | Relationship Satisfaction | Yoga in real life |
|----------------------|---------------------------|------------------|
| Pearson Correlation  | 1.000                     | .219             |
|                      | .219                      | 1.000            |
| Sig. (1-tailed)      | .                        | .001             |
|                      | .001                      | .                |
| N                    | 193                       | 193              |
|                      | 193                       | 193              |

Testing the cognitive variables

The second hypothesis examined yoga and stress, however I examined yoga in real life because the relationship turned out to be significant in testing hypothesis 1. Even though I used the variable of YogaIRL, I still wanted to examine if there was a difference between going to yoga class and stress levels, and surprisingly yoga and stress were not significantly related at all (F1, 193 = .132; p=.716; NS). This was surprising because 64 out of the 76 participants who had taken yoga before included
stress reduction as a reason to attending yoga class. A plausible interpretation for this could be that people who regularly attend yoga class, are likely dealing with more mental stress in their lives than people who do not attend yoga class. Therefore after the effect of yoga class is factored in, both groups have roughly the same levels of stress. Next, I examined the relationship among yoga in real life, stress, and relationship satisfaction. YogaIRL was significantly related to stress (F1, 195=36.792 p=.000; ads. R2=.154) so I could not dismiss the effects like we did for taking yoga class. However, when looking at the full model, the effects of YogaIRL dropped out suggesting that YogaIRL is not a useful inclusion when looking at how stress and satisfaction relate to each other. The regression equation was as follows .114YogaIRL (t=1.535, p=.127) + -.284stress (t=3.82 p=.000) = satisfaction. These data suggest that while stress does have an important relationship to satisfaction yoga does not provide much insight into the stress and satisfaction relationship.

Since there is no difference in stress levels in this study between those practice yoga and those who do not, there is no reason to investigate how mindfulness or authenticity might mediate the non-existent relationship.
Table 4 Yoga in real life, Stress, and Relationship Satisfaction

|                          | Mean  | Std. Deviation | N  |
|--------------------------|-------|----------------|----|
| Relationship Satisfaction| 36.4974 | 8.17755        | 191|
| Yoga in real life        | 3.9738  | 1.80769        | 191|
| Stress                   | 7.7644  | 2.55713        | 191|

The third hypothesis examined how yoga in real life was related to mindfulness and relationship satisfaction. Mindfulness was significantly related to relationship satisfaction (F 1, 189 = 8.447. Adj. R² = .038. p = .004). YogaIRL was positively related to relationship satisfaction (F1, 195 = 20.251. Adj R² = .089  p = .000). When examining the relationship between mindfulness and yoga class the equation was as follows (F 1, 193 = 1.245. p=.266 NS). When examining the model to see if mindfulness mediates the relationship between YogaIRL and relationship satisfaction, mindfulness became insignificant which provided evidence that partial mediation occurred. The regression equation was .186YogaIRL (t=2.545, p=.012) + .152mindfulness (t=2.079, p=.039) = relationship satisfaction.

This result indicates that the practice of yoga or going to a yoga class does not make the practitioner more mindful, but practicing yoga in real life leads to the participant becoming more mindful and mindfulness was related to relationship satisfaction.
satisfaction. An explanation for this may be that even if the yoga practitioner is practicing moment-to-moment awareness in the present moment during yoga class, they may not continue to practice mindfulness off the yoga mat. However, for the participants who practiced what they learned in yoga class, in their everyday life, they were not only more mindful, but they were more satisfied in their romantic relationships. So, pausing for a moment to focus on your breath and letting go of mental stresses and physical tensions throughout your day is related to mindfulness, which is significantly related to relationship satisfaction. This result further explains the significance of yoga in real life and how it is significantly more related to relationship satisfaction then attending yoga classes.

Table 5 Yoga in real life, Mindfulness, and Relationship Satisfaction

|                      | Mean | Std. Deviation | N  |
|----------------------|------|----------------|----|
| Relationship Satisfaction | 36.4974 | 8.17755        | 191|
| Mindfulness          | 19.2461 | 3.25369        | 191|
| Yoga in real life    | 3.9948  | 1.78443        | 191|

Table 5: 

|                  | Relationship Satisfaction | Mindfulness | Yoga in real life |
|------------------|---------------------------|-------------|-------------------|
| Pearson Correlation | 1.000 | .207 | .231 |
| Mindfulness       | .207 | 1.000 | .291 |
| Yoga in real life | .231 | .291 | 1.000 |

The fourth hypothesis examined how knowing ones authentic self mediated the relationship between yoga and relationship satisfaction. Attending yoga class was not significantly different then the non yoga group in knowing ones authentic self (F1, 195 = 2.057 p=.266 NS). However, knowing ones authentic self was significantly related
to relationship satisfaction (F1, 191=7.213 Adj R2=.031 p=.008). This result indicates that knowing ones true self, and being in-tune with your own beliefs, needs, and wants will be positively related to relationship satisfaction. However, yoga in real life was statistically significant to knowing ones authentic self (F1, 197=10.994 Adj R2 =.048. p=.001). The model examined if the authentic self mediated the relationship between YogaIRL and relationship satisfaction. The regression equation was .186YogaIRL (t=2.588, p= .010) + Authenticself 1.49 (t=2.082, p=0.39) = relationship satisfaction. Results indicated that partial mediation occurred.

This explains that even though attending yoga class does not increase the knowing of your true self, the practice of yoga in everyday life, such as having thoughts of compassion towards yourself and feeling acceptance of the way things are will lead to a knowing and understanding of your authentic self. This finding is important because even though yoga philosophy explains the Kosha model, which describes the practice of yoga as reaching the deepest layer of the self, the current study explains that the relationship of the self has to continue outside of your practice in order to notice a difference in your romantic relationship. If the yoga practitioner is only focusing on his or her true feelings, emotions, and intuitive self during class, then a change in relationship satisfaction will not be noticed. But, if the practice of cultivating a knowing or understanding of their true self continues outside of yoga class, a shift in relationship satisfaction will occur.

Previous research has shown that when one understands their own true self they are able to notice the true self in others (Lasater, 2000, Monk-Turner & Turner, 2010, & Weinstein, 2014). This further explains that noticing the true self in others
can lead to relationship satisfaction, because you begin to understand your partner has needs, feelings, and deep emotions. Noticing your own desires and needs, may help you to recognize that your romantic partner has similar needs, through the practice of yoga in everyday life.

**Table 6 Yoga in real life, Authentic Self, and Relationship Satisfaction**

|                          | Mean     | Std. Deviation | N |
|--------------------------|----------|----------------|---|
| Relationship Satisfaction| 36.5389  | 8.14515        | 193|
| Yoga in real life        | 3.9637   | 1.80385        | 193|
| Authentic Self           | 23.8005  | 3.51379        | 193|

|                          | Relationship Satisfaction | Yoga in real life | Authentic Self |
|--------------------------|----------------------------|-------------------|----------------|
| Pearson Correlation      | 1.000                      | .219              | .191           |
|                          | .219                       | 1.000             | .222           |
|                          | .191                       | .222              | 1.000          |
| Sig. (1-tailed)          | .001                       | .001              | .004           |
|                          | .001                       | .001              | .001           |
|                          | .004                       | .001              | .001           |
| N                        | 193                        | 193               | 193            |

Now that we have examined the three cognitive variables of the model, stress, mindfulness, and authentic self, I will examine the behavioral variable of authenticity in relationships to see if it mediates the relationship between yoga in real life and relationship satisfaction.

**Testing the behavioral variable**

The fifth hypothesis examined the behavioral variable of authenticity in relationships, which already turned out to be significant in mediating the relationship between yoga in real life and relationship commitment. Relationship authenticity was the only variable to mediate the relationship between yoga in real life and commitment, however the finding was opposite of what the literature review
suggested, because authenticity in relationships was negatively related to relationship commitment instead of positively related. I further examined the relationship between authenticity in relationships and relationship satisfaction to see if the finding was also opposite from what the literature review had predicted. Relationship authenticity was significantly related to relationship satisfaction $F_1, 191 = 34.742$. Adj. $R^2 = .149$ p=.000. Those who practiced yoga showed a significant difference in relationship authenticity then those who did not $F_1, 195 = 13.917$ Adj $R^2 = .062$ p=.000. YogaIRL was related to relationship authenticity $F_1, 197 = 13.725$ Adj. $R^2 = .060$, p=.000. The individual components were all significantly related to each other and the final regression equation was as follows: $0.135 \text{yogaIRL} \ (t=1.989, \ p=0.48) + - 0.361 \text{Relationship authenticity} \ (t=-5.314, \ p=.000) = \text{Satisfaction}$. Since both variables were statistically significant, the data suggests that relational authenticity partially mediates the impact of yoga in real life and relationship satisfaction. These results suggest that the practice of yoga in real life is positively related to relationship authenticity, but relationship authenticity is negatively related to both relationship satisfaction and relationship commitment. This was an interesting and unexpected finding for this study.

A plausible explanation for this is that relationship authenticity is likely not related to your own satisfaction and commitment levels but relationship authenticity is related to your partners’ satisfaction and commitment levels. Being open and honest to your romantic partner overtime will likely increase relationship commitment (Norris & Zweigenhaft, 1999) where as the current study found that being open and honest to your romantic partner would not increase individuals’ relationship commitment. One
has to put forth effort to stay open and authentic with their romantic partner, so individual satisfaction in the relationship may decrease, because it is harder to be honest and authentic all the time. Conversations between romantic partners that require authenticity and the sharing of true feelings are not always the easiest conversations, like being mad or at odds with your partner and this could further explain how the individual may feel less satisfied when speaking their true feelings.

Previous research described the relationship between relationship authenticity and relationship commitment in terms of high and low self-monitors (Norris & Zweigenhaft, 1999). High self-monitors are likely to act like different persons in different situations with different people (unauthentic), and low self-monitors have a unified, consistent sense of self, which is consistent from circumstance to circumstance (very authentic) (Norris & Zweigenhaft, 1999). Pillow and colleagues (2017), found that high self-monitors tend to change their behavior to fit the demands of current situations whereas low self-monitors value being true to themselves and more authentic (Pillow et al., 2017). This research provides reasoning for the current study, as high self-monitors are those who carefully think about who they are talking to and what situation they are in, rather than being truly authentic and not changing their attitude based on circumstances. On the flip side previous research found that low self-monitors were more authentic and consistent in every circumstance (Pillow et al., 2017) and this current study found that the more authentic you are in your relationship the less satisfied you are. This research tells us that we cannot get a good picture on relationship authenticity by only studying the individual’s level of
satisfaction and commitment. Future studies should collect partner data to see if partner satisfaction and commitment is increased through relationship authenticity.

Table 7 Yoga in real life, Relationship authenticity, and Relationship Satisfaction

| Overall Outcomes |
|------------------|
| Yoga was positively related to relationship satisfaction, but not relationship commitment. The correlation tests provided evidence that yoga in real life was more significant than attending yoga class. YogaIRL was related to relationship satisfaction through the mediating variables of stress, mindfulness, authentic self, and relationship authenticity. The cognitive variables of stress, mindfulness, and authentic self provided evidence that they mediated the relationship of yoga in real life to relationship satisfaction. The behavioral variable of authenticity in relationships provided statistical significance but was negatively related to both relationship satisfaction and relationship commitment. |

Due to an insufficient amount of participants and lack of resources, a structural equation model was not used to examine all parts of the model simultaneously. Future |
research should test the model using SEM to see if findings were conclusive. Another limitation of the study was that partner’s data were not collected to further measure relationship satisfaction and relationship commitment. Partner data could better explain why relationship authenticity was negatively related to relationship satisfaction and relationship commitment. Although stress was significant, it seemed to have no meaningful representation in the study, as yoga class did not reduce stress as I believed it would have coming into the study. Future research should also examine stress levels in partners, to see if that may explain the relationship between the practice of yoga and stress. Another implication for future research is to further examine the relationship between knowing ones authentic self, and relationship authenticity. Does knowing your true self relate to sharing your authentic self with your romantic partner? Or does the cognitive variable of the authentic self not translate to the behavioral variable of expressing your true feelings and desires? This too may provide an explanation as to why authenticity in relationships was negatively related to relationship satisfaction and relationship commitment.

The current research provides tangible evidence that yoga in real life can lead to relationship satisfaction, through stress, mindfulness, and knowing ones authentic self. Further research needs to be done to examine the model through structural equation modeling.
This study examined the difference between those who practiced yoga and those who did not to see if there was a significant difference in positive relationship outcomes between the two groups. Yoga in real life was a determinant of relationship satisfaction between the mediating variables of stress, mindfulness, and knowing ones authentic self. YogaIRL explained that going to a yoga class will not change levels of stress, mindfulness, knowing your authentic self, and authenticity in relationships, rather the practice of yoga in everyday life does so. Aspects of yoga that can be taken off the mat such as having thoughts of compassion, warmth, and kindness towards yourself, focusing on your breath, paying attention to posture and alignment, letting go of physical tensions and mental stresses, and feeling a connection to a higher power can lead to relationship satisfaction.

Yoga goes beyond the physical practice of building strength and flexibility on the mat. Yoga teaches the practitioners to become in-tune with their true self, by cultivating a relationship with the Anandamaya Kosha, the intrinsic self that knows living is good. Yoga teaches us to restrain (Yamas) from worldly possessions, including practicing nonviolence, truthfulness, nonstealing, nonexcess, and nonpossessiveness. The practice of the Yamas does not only happen on the mat, but in our daily lives. Yoga teaches us to pay more attention to our bodies, minds, and spirits, but if we are only doing so for an hour on our mats, then the positive attributes of yoga
will not spill over into our personal lives. When the practitioner learns to incorporate yoga in everyday life, then they not only become more mindful, and more authentic, but they become more satisfied in their relationship because of their individual increases of mindfulness and knowing their true self.

Attending yoga class was significantly related to practicing aspects of yoga in everyday life, $p=.000$ but some participants who had not practiced yoga indicated that they practiced aspects of yoga in real life. This finding tells us that attending yoga is only one route that teaches individuals to lower stress levels, become more mindful and practice knowing their true selves. Some individuals may receive these same teachings through religion, spiritual retreats, and other happenings in their lives. This research tells us that regardless if you attend yoga class or not you can increase your satisfaction in your romantic relationships by practicing these essential properties of yoga in your everyday life.

These findings are different from those that have come before them, as this research examines the role yoga plays in interpersonal relationships rather than intrapersonal relationships. This study is also the first to use stress, mindfulness, authentic self, and authenticity in relationships to examine relationship outcomes in those who practice yoga and those who do not.

Although this research is different from previous literature as it examined changes in relationships instead of individual changes, some of the findings were in line with previous research. Kishida and colleagues (2017), found that the practice of yoga led to the theme of mindfulness, which was categorized as awareness, including present moment awareness, attention, and clarity (Kishida et al., 2017). This current
research also find a positive relationship between the practice of yoga in real life and the increase of mindfulness. The second finding was that the practice of yoga led to self-compassion and was a vehicle used for cultivating self-kindness (Kishida et al., 2017). In the current study there was no significant different of cultivating self-compassion in those who practiced yoga versus those who did not practice. Finally, a sense of feeling and connectedness was found in those who practiced yoga to their yoga community (Kishida et al., 2017) and in the current study we did not examine connectedness to other practitioners as we did to relationship satisfaction and commitment.

Limitations

Since participants were not randomly assigned to conditions, the yoga group and the non yoga group, there is a possibility of confounding variables being responsible for results. It could be that yoga practice can teach you to do more of the 7 essential properties in your everyday life, but it can also be that people in the yoga group were much older than the non yoga group (undergraduates). Older people are more likely to be less stressed and more centered then college students, so this may interfere with the data results, which threatens the validity of these findings.

Although the behavioral variable of relationship authenticity was negatively related to relationship satisfaction and relationship commitment, further research can examine relationship outcomes through partner’s satisfaction and commitment levels to provide further evidence of this finding. Another way to get a better grasp on the data is to use structural equation modeling to get a better idea of how the variables are interacting with each other simultaneously.
This research did not study the relationship between yoga and other interpersonal relationships such as friendships, co workers, and daily encounters with strangers. It would be interesting to see if the practice of yoga in everyday life was related to dealing with generalized others in the same way it was related to romantic partners. Since the practice of yoga in every day life affects stress, mindfulness, and knowing the authentic self, it would be interesting to see how daily communication interactions with others may benefit from the practice of yoga in everyday life. In furthering this research I would like to examine how these interactions may change to provide more information on practicing yoga in everyday life to better human interactions.

This study provides further evidence that attending yoga class can increase the cognitive variables of mindfulness and knowing one’s authentic self if it is carried over to everyday life. This study provides new evidence that the practice of yoga in everyday life is related relationship satisfaction between romantic partners.
Survey

You are being asked to take part in a research study. The purpose of this study is to examine the role of yoga and mindfulness in interpersonal relationships, specifically between romantic partners.

To be included in this study you must be between the ages of 18-75 and you must be in a romantic relationship. You must identify your relationship as one of the following:

- Casually dating
- Exclusively dating
- Engaged
- Married

By choosing to part-take in this survey you indicate that you understand the criteria of the study and give consent to volunteer as a participant in the study.

This section of the survey asks questions about your romantic relationship as well as your demographics.

1. Choose one that best describes your relationship status
   (If you are not currently in a romantic relationship, you are not eligible for this study. Thank you for trying to help.)

   Casually dating      Exclusively dating      Engaged       Married

2. How long have you been in this romantic relationship?

   ___________________

3. Age (You must be between the ages of 18-75 to participate)

   ___________________

4. Ethnic origin (Indicate one of the following)

   Asian/Pacific Islander   Black/African American   Caucasian
   Hispanic/Latino          Native American           Biracial ___________________
   Other ___________________
5. Gender (Circle one)

Male    Female    Transgender    Asexual    Non-binary

The next set of survey questions asks you to describe your level of stress over the last month, ranging from 0-4 never to very often.

6. In the last month, how often have you felt that you were unable to control the important things in your life?

0                   1                         2                     3                      4
Never       Almost Never       Sometimes        Fairly Often       Very Often

7. In the last month, how often have you felt confident about your ability to handle your personal problems?

0                   1                         2                     3                      4
Never       Almost Never       Sometimes        Fairly Often       Very Often

8. In the last month, how often have you felt that things were going your way?

0                   1                         2                     3                      4
Never       Almost Never       Sometimes        Fairly Often       Very Often

9. In the last month, how often have you felt difficulties were pilling up so high that you could not overcome them?

0                   1                         2                     3                      4
Never       Almost Never       Sometimes        Fairly Often       Very Often

The next set of survey questions asks you to describe how mindful you are on a daily basis, the questions are asked on a scale from 1-6, almost always to almost never.

10. It seems I am “running on automatic,” without much awareness of what I’m doing

1                   2                         3                         4                  5                  6
Almost            Very                        Somewhat                 Somewhat             Very               Almost
Always            Frequently                  Frequently              Infrequently           Infrequently       Never

11. I rush through activities without being really attentive to them

1                   2                         3                         4                  5                  6
Almost            Very                        Somewhat                 Somewhat             Very               Almost
Always            Frequently                  Frequently              Infrequently           Infrequently       Never
12. I get so focused on the goal I want to achieve that I lose touch with what I’m doing right now to get there

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Almost | Very | Somewhat | Somewhat | Very | Almost |
| Always | Frequently | Frequently | Infrequently | Infrequently | Never |

13. I do jobs or tasks automatically, without being aware of what I’m doing

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Almost | Very | Somewhat | Somewhat | Very | Almost |
| Always | Frequently | Frequently | Infrequently | Infrequently | Never |

14. I snack without being aware that I’m eating

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Almost | Very | Somewhat | Somewhat | Very | Almost |
| Always | Frequently | Frequently | Infrequently | Infrequently | Never |

15. Check all that apply to you

_____ During your day, you have thoughts of self-compassion (kindness/warmth toward yourself).

_____ During your day, you feel acceptance of things as they are.

_____ During your day, you focus on your breath

_____ During your day, you pay attention to your posture and alignment

_____ During your day, you take a moment to let go of your physical tensions

_____ During your day, you take a moment to let go of your mental stress

_____ During your day you have a feeling of connection to a higher power or something greater than oneself (Spirit, God, Universe)
The next set of survey questions asks your understanding of your authentic self, questions are asked on a scale from 1-7, does not describe me at all to describes me very well.

16. I think it is better to be yourself, than to be popular

1 2 3 4 5 6 7
Does not describe me at all

17. I always stand by what I believe in

1 2 3 4 5 6 7
Does not describe me at all

18. I am true to myself in most situations

1 2 3 4 5 6 7
Does not describe me at all

19. I live in accordance with my values and beliefs

1 2 3 4 5 6 7
Does not describe me at all

The next set of survey questions asks you to think about your romantic partner, and how authentic you are in your current relationship with him or her. Questions are asked on a scale ranging from 1-9, not at all descriptive to very descriptive.

20. I’d rather my partner have a positive view of me than a completely accurate one

1 2 3 4 5 6 7 8 9
Not at all descriptive

Very descriptive
21. Sometimes I find myself trying to impress my partner into believing something about me that isn’t really true

1 2 3 4 5 6 7 8 9
Not at all
Descriptive

22. I would rather be the person my partner wants me to be than who I really am

1 2 3 4 5 6 7 8 9
Not at all
Descriptive

23. To avoid conflict in our relationship, I will sometimes tell my partner what I think he or she wants to hear even if it’s not true

1 2 3 4 5 6 7 8 9
Not at all
Descriptive

24. I’d rather think the best of my partner than to know the whole truth about him or her

1 2 3 4 5 6 7 8 9
Not at all
Descriptive

The next set of survey questions is asking how satisfied and committed you are to your relationship. Questions are asked ranging from 1-9, 1 do not agree, 5 somewhat agree, and 9 completely agree.

25. I am committed to maintain my relationship with my partner

Do Not Agree At All
Somewhat Agree
Completely Agree
26. I want our relationship to last a very long time

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

27. I feel very attached to our relationship

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

28. It is likely that I will date someone other than my partner

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

29. I would not feel very upset if our relationship were to end

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

30. I want our relationship to last forever

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

31. I am oriented toward the long-term future of my relationship

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

32. I feel satisfied with our relationship

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree

33. My relationship is much better than others’ relationships

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
|---|---|---|---|---|---|---|---|---|---
|  Do Not Agree At All | Somewhat Agree | Completely Agree
34. My relationship is close to ideal

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
|   | Do Not | Somewhat | Agree At All | Agree | Agree | Agree |

35. Our relationship makes me very happy

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
|   | Do Not | Somewhat | Agree At All | Agree | Agree |

36. Our relationship does a good job fulfilling my needs

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
|   | Do Not | Somewhat | Agree At All | Agree | Agree |

This section relates to the practice of yoga, if you do practice yoga please continue onto this section, if you do not practice yoga, then please answer NO to the first question and hand in your survey. Thank you for your participation in this study.

37. Have you practiced yoga in the last three months?

No _____ (If No, thank you for participating. Please hand in the survey.)

Yes _____ (If Yes, please complete the following questions.)

38. How many yoga classes have you taken in the last 3 months?

____________________________________________

39. What is the main reason why you come to yoga class? (Circle one)

1. Physical practice (exercise/stretching)

2. Meditation practice (breathing)

3. Stress releaser

4. All three
40. Describe your level of yoga experience (Circle one)

1. Beginner (fairly new)
2. Intermediate (not new to yoga, practices moderately)
3. Experienced (practices regularly)
4. Certified Instructor

41. Check all that apply to you

_____ During yoga class, you have thoughts of self-compassion (kindness/warmth toward yourself).
_____ During yoga class, you feel acceptance of things as they are.
_____ During yoga class, you focus on your breath
_____ During yoga class, you pay attention to your posture and alignment
_____ During yoga class, you take a moment to let go of your physical tensions
_____ During yoga class, you take a moment to let go of your mental stress
_____ During yoga class, you have a feeling of connection to a higher power or something greater than oneself (Spirit, God, Universe)

Thank you for your participation in the survey, please hand in to researcher.
FIGURES

Figure 1. Yoga and relationship outcomes H1

Figure 2. Yoga in real life, stress, and relationship satisfaction H2
Figure 3. Yoga in real life, mindfulness, and relationship satisfaction H3

Figure 4. Yoga in real life, authentic self, and relationship satisfaction H4
Figure 5. Yoga in real life, authenticity in relationships, and satisfaction H5

Figure 6. Thesis Model
Figure 7. Yoga in real life, authenticity in relationships, and commitment H5

Figure 8. Yoga, yoga in real and relationship satisfaction
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