

# Positive and negative well-being among adolescents from theological and conventional schools in India

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#### **ABSTRACT**

In this pilot study, we examined positive and negative well-being among 60 students from theological and conventional schools. Participants included 30 students (50% females) from each school, aged 16–18 years. Self-reported measures included life satisfaction and achievement motivation for positive well-being and stress and anxiety for negative well-being. Results indicated that theological school students reported much lower life satisfaction compared to students in conventional schools with a large effect size. Similar patterns were observed with stress and anxiety, although effects were small. There were no differences in achievement motivation between the two schools. Regarding gender, findings showed that males reported lower stress and anxiety than their female counterparts and these effects were large. Genders did not differ in life satisfaction and achievement motivation.

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#### **KEYWORDS**

Adolescents; positive wellbeing; negative well-being; theological school; conventional school

India has the world's largest youth population, with 365 million 10-24-year-olds (United Nations, 2014). Researchers have reported that 30% of 12–18-year-old Indian students have behavioural and emotional problems (Pathak et al., 2011). And, another study showed prevalence rates as high as 50% for emotional maladjustment in Delhi (International Institute for Population Sciences, 2007). Thus, it is critically important to identify factors that may promote psychological health in Indian adolescent students. A growing body of research suggests that spirituality is related to physical health, mental health, and psychological well-being (Kelley & Miller, 2007). Spirituality has been defined as one's personal relationship with a higher power and has been shown to be a protective factor against depression among ethnically diverse samples of American adolescents (Desrosiers & Miller, 2007). Research has shown that Indian college students use spiritual reflection and meditation as a means of coping with mental illness (Nieuwsma, Pepper, Maack, & Birgenheir, 2011). However, research on spirituality in Indian adolescents is largely absent from the literature. To our knowledge, there have been no studies examining differences in student outcomes between theological and conventional schools. Thus, in this pilot study we sought to make an initial contribution towards this area by comparing positive and negative well-being among adolescents in theological and conventional schools.



# Schooling in India

There are four major religions represented in Indian theological schools namely, Gurumukhi schools of the Sikhs, Maktabs and Madrasas of Muslims, Gurukhulas, Pathshalas, or Sanskrit schools of Hindus, and Mission schools of the Christians (LaRue, 2013). Theological schools, often called the Gurukul schools in India have existed since the Vedic ages (Joshi & Dubey, 2014). These schools were traditional Hindu residential schools of learning, mainly in a teacher's house or a monastery (Ranjan, Pandey, & Ranjan, 2014). Madrasas followed these schools during the Mughal rule to educate children of Muslim parents (Ranjan et al., 2014). Under the British rule in India, Christian missionaries from England and the United States were established throughout the country, and the curriculum they followed became the benchmark for schools in India (Ranjan et al., 2014).

Primary schools may be organised into two types: conventional and theological. Conventional schools have a common syllabi including Language(s), Mathematics, Science - Physics, Chemistry, Biology, Geography, History, General Knowledge, Information Technology/Computer Science, etc. In contrast, theological schools with either Sikhism, Christianity, Hinduism, or Islam as a foundation-focus on value based education and religious practices in the school curriculum. Apart from their formal education, students at theological schools have additional specific routine activities including meditation, religious education, and social work (Davis, Kerr, & Kurpius, 2003). Theological schools have a blend of spiritual and modern scientific education. At these schools, the teacher imparts knowledge on various aspects of the religion, scriptures, philosophy, literature, warfare, statecraft, medicine, astrology, and history (Pandya, 2014). There has been an accumulating body of scientific evidence linking religious involvement with improved health outcomes (Koenig, McCullough, & Larson, 2001).

## Positive well-being

#### Life satisfaction

Life satisfaction has been defined as subjective appraisal of the quality of one's life overall or within specific domains (Diener, Suh, Lucas, & Smith, 1999). Barkin, Miller, and Luthar (2015) suggested that spiritual development among adolescents has important implications on mental health and life satisfaction. Spirituality was a positive predictor of life satisfaction among adolescents in a study conducted in India (Khan, Shirazi, & Ahmed, 2011). Many dimensions of religiosity and spirituality were positively associated with life satisfaction, but daily spiritual exercises has accounted for the largest portion (Kelley & Miller, 2007).

#### **Achievement motivation**

Achievement motivation has been defined as a recurrent need to improve one's performance (Takeuchi et al., 2014). Siddiqui (2013) suggested that spiritual intelligence in university students is positively related to achievement motivation. Religious practices have also been shown to enhance achievement motivation of students (Ames, 1992). Student's participation in church activities was related to heightened educational expectations and math and reading tests (Regnerus, Smith, & Fritsch, 2003).

# **Negative well-being**

#### Stress

Research has shown that spirituality may reduce the effects of stress. Costello and Lawler (2014) offer support for the incorporation of mindfulness interventions into the school curriculum, as a means of empowering children to address stress in their lives. Barnes. Bauza. and Treiber's (2003) research with adolescents suggested that meditation has positive implication for functioning of students. Pardini, Plante, Sherman, and Stump (2000) have also reported that higher levels of religious faith predicted optimistic life orientation and higher resilience to stress.

## **Anxiety**

Koenig (2009) reported that spiritual beliefs and practices, a regular component of theological school's curriculum, could comfort those who are anxious, increase one's sense of self-control, and boost confidence. Davis et al. (2003) also indicated an inverse relationships between spiritual, existential, or religious well-being and anxiety, among male participants.

# Gender difference in positive and negative well-being

## Positive well-being

Generally, females show poorer outcomes compared to males on indicators of positive well-being. For example, Singh (2015) reported a notable gender difference in life satisfaction, where males scored much higher than females. Regarding achievement motivation, some researchers have reported variation in males and females (Linnenbrink & Pintrich, 2002), whereas other researchers have shown no differences between males and females (Singh, 2014).

# **Negative** well-being

Studies on gender differences in subjective well-being consistently show that females tend to experience higher level of unpleasant affect than males (Brody & Hall, 1993; Nolen-Hoeksema & Rusting, 1999). Female students also tend to show more academic performance stress compared to male students (Madhyastha, Latha, & Kamath, 2014). However, some research has reported no gender differences in anxiety (Mokashi, Yadav, & Khadi, 2012).

# The present study

In the current pilot study, we sought to contribute information about differences in positive and negative well-being between adolescents who attend theological and conventional schools, given the absence of literature examining this topic. The study was driven by an overarching research question: how do adolescents in theological and conventional schools differ in positive and negative well-being? Prior research has shown that religion is associated with better mental and physical health (Koenig, 2009). Thus, we

expected that students in the theological school would report higher life satisfaction than students in conventional schools. Secondly, we also expected a higher achievement motivation among theological school students, as research has shown that religious practices enhance achievement motivation (Ames, 1992). Third, since a majority of research suggests a positive relationship between religion and mental health (Koenig, 2013), we expected theological school students to have lower stress and anxiety. Finally, based on available research (Singh, 2015), we expected that females would report lower life-satisfaction and higher levels of stress and anxiety compared to males. Research on achievement motivation is mixed (Singh, 2014), so we did not make formal expectations.

#### Method

## **Participants**

Participants included 30 students attending a theological boarding school and 30 from a conventional day school in India. Participants were 50% male (n = 30), aged between 16 and 18 years old, and were in 11th and 12th grades. Based on school fees, the sample came from families of middle to upper socioeconomic class.

#### Measures

#### Life satisfaction

We used the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) to assess how content participants were in their life. The scale included five items (e.g., "In most ways my life is close to my ideal") rated on a seven-point scale ranging from 7 (Strongly agree) to 1 (Strongly disagree). Items were averaged to form an overall score, with a higher score indicating higher life satisfaction. Diener et al. (1985) reported a twomonth test-retest correlation of .82 and an alpha of .87.

## Achievement motivation

The Deo-Mohan Achievement Motivation Scale (i.e., n-Ach; Deo & Mohan, 1985) was employed. The questionnaire includes 50 items covering four areas: academic motivation, dramatics, general interest, and sports. Response options ranged from 1 (Always) to 5 (Never). A variable was generated by averaging across items. The minimum score was 0 and the maximum was 400 (score >169 is high achievement motivation). Prior research has indicated a test-retest reliability of .69 and a reliability of .83 (Deo & Mohan, 1985).

#### Stress

The Stress Symptom Rating Scale (Heilbrun & Pepe, 1985) measured the amount of stress an individual experiences. The scale includes 25 symptoms rated on a six-point scale from 0 (Not at all) to 5 (More than once per day). Items were averaged to form an overall score, with higher score indicating higher stress. Alpha of .93 has been reported (Farokhzad, 2014).

#### **Anxiety**

We used Sinha's Comprehensive Anxiety Scale (SCAT; Sinha & Sinha, 2010) to measure anxiety. The test includes 90 items with a "yes" or "no" response option. A variable was

generated by averaging across items and the total score obtained may vary between 0 and 90. A sample item is "Do you have the fear of being unsuccessful even after thorough preparations?" The scale has yielded valid and reliable scores in prior research (Sinha & Sinha, 2010).

### **Procedure**

Participants were recruited from a residential theological boarding school and a conventional school in India. Data collection was completed in two steps, beginning with seeking permission from school authorities, and then recruiting participants. Students were given study measures in the classroom during the school day.

# **Results**

# Analytic strategy

T-test analysis was computed to compare mean levels between participants from theological and conventional schools. We report p-values, and consistent with an emerging debate (Kirk, 1996), we use effect sizes to indicate meaningful differences between school and gender groups. Kirk has shown how proportionally more journals are increasing their use of effect size as an indicator of statistical difference. Cohen's (1992) recommendations are used as guidelines for effect size.

## **Preliminary analyses**

As shown in Table 1, stress was inversely associated with achievement motivation (r =-.32, p < .05) and anxiety was positively correlated with stress (r = .58, p < .01). The size of the coefficient indicates that these associations were medium to large. The remaining variables were not associated with one another.

## **Primary analyses**

## Positive and negative well-being in theological and conventional school students

As shown in Table 2 and Figure 1, participants in the theological school had lower life satis faction than those in the conventional school (p < .05, d = 1.102). According to Cohen (1992) this effect was large. There was no difference in achievement motivation (p =1.00). Regarding negative well-being, participants in the theological school had lower stress than those in the conventional school (p = .484, d = .182). There was little difference

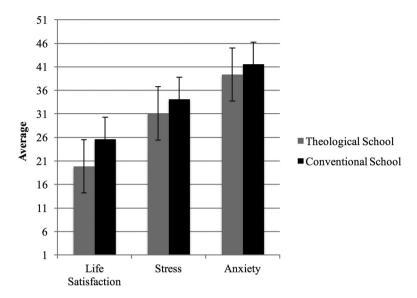
**Table 1.** Descriptive statistics and correlations for study variables.

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Variables	1	2	3	М	SD	95% CI
1. Life Satisfaction				22.73	6.78	20.98 to 24.48
2. Achievement Motivation	.035			1.29	19.44	1.00 to 6.31
3. Stress	.132	324*		32.62	16.58	28.34 to 36.90
4. Anxiety	.046	223	.583**	40.47	12.72	37.18 to 43.76

Note: CI = confidence intervals calculated for means.

	Theological school		Conventional school						Males		Females					
	М	SD	М	SD	T-ratio	95% CI	р	d	М	SD	М	SD	95% CI	T-ratio	р	d
Life Satisfaction	19.83	6.02	25.63	6.32	-3.638	-8.99 to 2.61	.0006	1.102	21.26	5.57	24.20	7.62	-6.39 to .51	1.706	.093	.441
Achievement Motivation	129.10	18.48	129.10	20.67	.000	-10.13 to 10.13	1.000	.000	1.35	16.77	1.22	20.21	-9.47 to 9.73	2.57	.013	.007
Stress	31.10	18.56	34.13	14.49	706	-11.64 to 5.58	.484	.182	25.23	14.63	40.00	15.23	-22.49 to $-7.05$	-3.82	.0003	.989
Anxiety	39.33	14.40	41.60	10.91	687	-8.87 to 4.33	.494	.178	36.26	11.61	44.66	12.55	-14.65 to -2.15	2.69	.009	.695

Note: CI = confidence intervals calculated for *t*-values, d = Cohen's d.

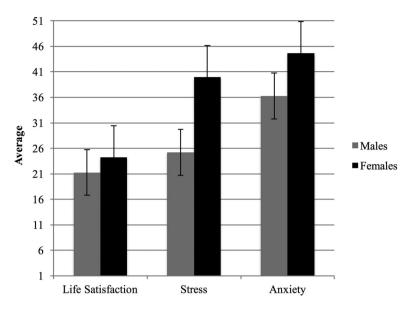


**Figure 1.** Life satisfaction, stress, and anxiety between theological and conventional school students. Note: Vertical lines indicate one standard deviation above and below the mean.

in anxiety between participants from the theological and the conventional school (p = .494, d = .178).

#### Gender differences

As shown in Table 2, positive and negative well-being was compared among males and females across the schools. Difference in life satisfaction were not statistically significant (p = .093), but effect sizes were medium (d = .441). Males reported much lower life satisfaction than females. There was no significant gender difference in achievement motivation (p = .978; d = .007). Regarding negative well-being, males had lower stress (p < .05, d= .989) and lower anxiety than females (p < .05, d = .695. The effect size for both stress and anxiety were large (Cohen, 1992). We compared males and females separately across the schools (see Figure 2). The male participants from theological school had lower life satisfaction than males of conventional school (p = .194; d = .487), although there was no difference in achievement motivation (p = .995; d = .002). Regarding negative well-being, males in the theological school had lower stress than in conventional school (p <.05; d=.88). Also, males in theological schools had lower anxiety than in conventional schools (p < 0.05; d = 1.22). These results were statistically significant and effect size for both stress and anxiety between males from the two schools was large (Cohen, 1992). Among females, theological school students had a lower life satisfaction than in conventional school (p < .05; d = 1.44). There was no difference in achievement motivation (p = .997). Regarding negative well-being, females in theological schools had higher stress than those in conventional school (p = .299; d = -.38). Also, there was little difference in anxiety between females in theological schools and conventional schools (p = .513; d = -.24).



**Figure 2.** Life satisfaction, stress, and anxiety among adolescent males and females. Note: Vertical lines indicate one standard deviations above and below the mean.

## **Discussion**

The current pilot study compared students from a theological school and a conventional school on positive and negative well-being. Given the diversity of religious schools in India (LaRue, 2013), it is important to study how outcomes vary across these schools. Previously, researchers have shown that religious involvement leads to improved health (Koenig et al., 2001). Spirituality has also been found to be associated with physical health, mental health, and psychological well-being (Kelley & Miller, 2007). But, to our knowledge, there has yet to be research conducted examining differences in students of theological and conventional schools in India. The current study sought to provide initial insights towards this topic.

Findings for positive well-being were contrary to expectations: Students in theological schools reported lower life satisfaction than those in conventional schools. This departs from research that has shown a positive association between spirituality and life satisfaction (Barkin et al., 2015). One explanation for this discrepancy centres on differences between spirituality and theological schools. It is possible that the conceptualisation of spirituality differs too much from participation in theological schools to make comparisons. Another explanation might have to do with the structural differences in the schools. Religious schools are often also boarding schools. Thus, students face challenges in being away from home that could contribute to the relatively low life-satisfaction observed in this study. Research has shown that adolescents vary in how well they adapt to boarding schools (Behaghel, Chaisemartin, & Gurgand, 2015). Dick, Manson, and Beals (1993) have argued that living in boarding schools may exacerbate the stress adolescents experience in this developmental period. Future research could address this issue by identifying religious schools that do not include boarding or conventional schools that do include boarding, for comparative purposes.

Results on negative well-being were consistent with our expectations: students in theological schools reported lower scores on measures of stress and anxiety compared to students in conventional schools. However, differences were small. This finding is similar with past research that has shown how religious participations positively predicted resilience to stress (Pardini et al., 2000). Also, Koenig (2009) reported that spiritual beliefs and practices, a component of theological schools' curriculum, could comfort those who were anxious.

Males reported lower stress and anxiety than females. Prior research has reported similar gender patterns. Women have higher levels of stress than men (Nolen-Hoeksema & Rusting, 1999), as well as a higher academic stress (Madhyastha et al., 2014). We also examined gender separately across theological and conventional schools. Males from theological schools reported lower stress compared to conventional school males, with a large effect size. Whereas, females from theological schools showed more stress than conventional school females. This finding falls in line with the previous research reporting higher stress among females (Nolen-Hoeksema & Rusting, 1999). Additional research is needed that examines genders across school types.

Analyses indicated that achievement motivation did not meaningfully differ between theological and conventional schools, nor between genders. This finding differs from prior studies that have shown positive associations between religious practices and achievement motivation (Ames, 1992) and educational expectations (Regnerus, 2003). This inconsistency may be due to differences in being a student of a theological school and from participating in spiritual experiences. The conceptualisation of religious participation is a critical direction of research in this area.

## Limitations, future directions, and conclusion

Limitations of the current study include generalisability, measurement, and cross-sectional research design. First, the study included a small sample of students from one theological and conventional school each. This greatly reduces the ability for results to apply towards other types of theological schools. Research is needed that includes larger samples with students from diverse theological and conventional schools. As noted above, including schools that vary in boarding structure would also be important. Second, measurement issues were also evident in this study. Students were not assessed for their interest in the religious practices they performed each day. Previous research has shown a positive relationship between religious involvement and health outcomes (Koenig, 2009). Thus, a fruitful area for research would be to measure actual interest and involvement of students in the religious practices, to obtain a more accurate understanding of these topics. The third limitation centres on research design. Given the cross-sectional nature of this study, we are unable to draw any conclusions about the directions of the observed associations. It is possible that student-level characteristics exist independent of the school type they attend. It will be important for future research to include longitudinal research designs to enable a distinct examination of individual and school-level associations in psychological outcomes and theological school participation.

In conclusion, although this study is not without its limitations, it does offer an initial examination of positive and negative well-being amongst students in theological and conventional schools. Results showed that students in theological schools reported much lower life-satisfaction and somewhat lower stress and anxiety than their counterparts in



conventional schools. Gender differences were also observed with males reporting lower stress and anxiety than females. Achievement motivation was not shown to differ between schools or genders. Overall, the study addresses a noticeably large gap in the literature and offers several directions for additional research in this area.

#### Disclosure statement

No potential conflict of interest was reported by the authors.

#### **ORCID**

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