



Spirituality and hope: The interconnection in human experience

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Abstract

This study examined the relationship between spirituality and hope among the Indian population aged 18-55 years. Over the years, spirituality has been recognised as an integral part of human nature and experience. Similarly, hope is a popular construct in positive psychology, characteristic of having good expectations of the future. Studies have been carried out determining that hope is an integral construct in many aspects of an individual's life and fosters positivity and resilience through spiritual means in times of hardships and many chronic illnesses, although there is limited literature on its unique relationship in normal populations and no age comparison studies. Hence the study aims to understand the interconnectedness of spirituality and hope to better enhance well-being and provides applications for therapeutic techniques for those facing mental health issues. The study employed the Daily Spirituality Experience Scale (DSES) with 16 items to measure participants' spiritual experience, and the Adult Hope Scale (AHS) with 12 items to measure the level of hope. The sample comprised of 100 participants (male=37, female=63), aged 18-55, selected through opportunity sampling. The Pearson's correlation revealed a significant positive relationship between spirituality and hope. It also reported significant differences in spirituality, hope and its dimensions among young adults and middle age. Differences in pathway thinking were observed among males and females. These findings suggest the interconnected nature of the two variables and provides implications for mental health practitioners when delivery and planning intervention programs.

Keywords: Spirituality, hope, subjective well-being, transcendence

Introduction

The study of hope, religiousness, and spirituality has garnered significant attention due to their profound implications for psychological well-being, particularly among youth living in adversity. King *et al.* (2020) [2] explored these relationships by examining how religiousness, through spirituality and social connections, might enhance hope among adolescents in El Salvador. Their findings indicated that religiousness was directly and indirectly related to hope via spirituality and social connections, emphasizing the role of faith-based organizations like Compassion International in fostering hope among youth. Similarly, DiPierro *et al.* (2018) [1] found that religion/spirituality moderated the relationship between hope and anxiety in Latino adolescents, highlighting that high levels of hope combined with religious/spiritual engagement were associated with the lowest levels of anxiety. These studies underscore the importance of integrating religious and spiritual dimensions in understanding hope and psychological outcomes in young populations.

Jo and Jun (2014) [3] expanded on the role of spirituality in fostering hope among nursing students, identifying significant predictors such as hope, gratitude, voluntary service, and religious activity. This highlights the multifaceted nature of spirituality and its interplay with various positive psychological traits. Chang *et al.* (2013, 2016) [4, 10] provided further evidence by demonstrating that hope agency and pathways mediated the associations between religiosity, spirituality, and depressive symptoms, suggesting that hope mechanisms are crucial for psychological adjustment in both adults and college students.

Moreover, Javanmardifard *et al.* (2020) [6] explored the relationship between spiritual well-being, hope, and treatment adherence in diabetic patients, revealing a complex interaction where spiritual well-being and hope were inversely related to treatment adherence. Wnuk (2023) [5] and Aslan and Cetinkaya (2022) [12] also supported the beneficial effects of religious and spiritual practices on hope and subjective well-being in different populations, including Chilean students and haemodialysis patients, respectively.

Despite these insights, several research gaps remain. Firstly, there is a need for more comprehensive models that integrate spirituality and hope across diverse cultural and demographic contexts. Secondly, the specific mechanisms through which these factors interact to influence psychological outcomes require further elucidation. Lastly, the potential differential relationships of components of hope (agency and pathway thinking) on spirituality and religiousness across different age groups and life stages remain underexplored.

Therefore, this paper aims to address these gaps by testing an integrative model of spirituality, hope, agency and pathway thinking in a diverse sample of 18-55-year olds in Bangalore, India. Drawing on a Relational Developmental Systems metatheory, the study seeks to elucidate the nuanced relationship between spirituality and hope, thereby providing an understanding of the interconnected nature of spirituality and hope among individuals. By doing so, the research aims to contribute to the development of targeted interventions that leverage religious and spiritual resources to enhance psychological well-being in all populations.

Literature Review

King *et al.*, (2020) [2] sought to further understand the relations of these potentially powerful resources for youth

living in adversity. Although existing research suggests that religiousness might be associated with adolescent hope via spirituality and social connections, few studies have tested models that integrate both. Thus, as applied psychologists, the aim of this paper was to test a theoretical model in the lives of youth. Drawing on a Relational Developmental Systems metatheory, they sought to further elucidate the relations between religiousness and hope and to explore how involvement in the faith-based youth-development organization, Compassion International (CI), might facilitate character strengths like hope. In order to do so, they tested whether religiousness was directly and indirectly (via spirituality and social connection) related to hopeful future expectations, using a sample of 9–15-year-olds in El Salvador ($M = 11.6$ years; $n = 888$), half of whom were involved in CI and the other half of whom were a locally matched counterfactual sample. Structural equation models revealed that higher levels of religiousness were directly and indirectly associated with higher levels of hope in relation to higher levels of spirituality and social connections among these youths. CI-supported youth reported significantly higher levels of religiousness than the counterfactual sample. Findings suggest that the relationship between religiousness and hope is best understood when it incorporates youth's spirituality and social connections associated with religion.

DiPierro *et al.*, (2018) ^[1] examined the moderating role of religion/spirituality the link between hope and anxiety in a sample of Latino youth. Religion/spirituality combined with high levels of hope was hypothesized to be associated with the lowest levels of anxiety. 134 Latino adolescents (83.5% Mexican heritage) attending a charter high school in a large Midwestern city (45.5% Male, $M = 16.14$ years, $SD = 1.31$) completed a survey that included items measuring religiosity/spirituality, beliefs around goal setting, and self-reported anxiety symptoms. A link between hope and anxiety was evident, with higher levels of hope associated with lower levels of anxiety. However, religion/spirituality moderated the association between hope and anxiety. Simple slope plots revealed that a negative association between hope and anxiety was only evident in the presence of religion/spirituality. Hope was unrelated to anxiety in the absence of religion/spirituality.

Jo and Jun, (2014) ^[3] investigated the factors affecting spirituality in nursing students. A total of 247 nursing students participated in the study. Data were analysed by frequencies, t-tests, ANOVA, Pearson correlation coefficients and multiple stepwise regression via SPSS WIN 18.0. The mean scores for hope, gratitude, and spirituality were above-average. However, there were significant mean differences in spirituality according to religion, religious activity, voluntary service, satisfaction with the nursing field, and motivation for entering a college of nursing. Spirituality positively correlated with hope and gratitude. Significant predictors of spirituality included hope, gratitude, voluntary service and religious activity. The regression model explained 51.3% of perceived spirituality. To improve spirituality among nursing students, nursing educators should develop educational intervention programs to promote hope and gratitude, and support participation in voluntary service and religious activity.

Chang *et al.*, (2013) ^[4] examined hope agency and pathway as potential mediators of the associations of religiosity and spirituality with depressive symptoms in an adult sample of

101 primary care adults. Results of conducting multiple mediation tests indicated that hope agency and pathway fully and significantly accounted for the associations of religiosity and spirituality with depressive symptoms. In contrast, an alternative mediation model involving religiosity and spirituality as potential mediators of the associations of hope agency and pathway with depressive symptoms failed to be supported. Overall, our findings offer support for the contention that hope agency and pathway play important roles in accounting for the associations of religiosity and spirituality with psychological adjustment in adults. Some implications of the present findings are discussed.

Javanmardifard *et al.*, (2020) ^[6] aimed to determine the relationship between spiritual well-being and hope, and adherence to treatment regimen in patients with type II diabetes referred to diabetes clinics. In this descriptive-correlational study, 227 diabetic patients referred to healthcare centers and diabetes clinics affiliated to Shiraz University of Medical Sciences were selected via cluster sampling (clinics) followed by convenience sampling (patients). The study data were collected using a demographic information form, spiritual well-being scale developed by Ellison and Paloutzian, Herth hope scale, and adherence to treatment regimen questionnaire. Then, the data were entered into the statistical software and were analysed using descriptive and inferential statistics. The results indicated that most participants had moderate spiritual well-being, high hope, and low adherence to treatment regimen. Additionally, spiritual well-being was directly associated with hope and reversely related to adherence to treatment. A significant reverse correlation was also observed between hope and adherence to treatment. Considering the fact that spiritual well-being and hope were reversely associated with adherence to treatment regimen, further studies should be done in this field. Also patients' image of God and their interpretations of being sick might not be appropriate and need correction.

Wnuk, (2023) ^[5] aimed to verify, whether, in a sample of Chilean students, religiousness is indirectly related to hope through spiritual experiences, and whether spiritual experiences are indirectly related to subjective wellbeing via hope. The sample consisted of 177 Chilean students and the following measures were applied: The Daily Spiritual Experiences Scale, the Herth Hope Index, the Satisfaction with Life Scale, the Positive and Negative Affect Schedule, and one item measuring the frequencies of prayer and Mass attendance. According to obtained results religiousness was indirectly, positively related to hope through spiritual experiences. In turn spiritual experiences were indirectly, positively related to subjective wellbeing through hope. Conducted research confirmed the beneficial role of religious practices, spiritual experiences, and hope for Chilean students' subjective wellbeing and the presence of mechanisms underlying the relationships between religiousness as well as spirituality and subjective wellbeing.

Nazan and Saritas, (2021) ^[7] used a cross-sectional and correlational design and included 650 cancer patients and found a statistically significant relationship between the mean Spiritual Orientation Scale scores of the patients and their sociodemographic characteristics (sex, age, marital status, educational status, employment status, income) ($p < 0.05$). Results reported high spirituality linked to low hopelessness levels among patients.

Hong *et al.*, (2015) ^[8] examined spirituality, hope, and self-sufficiency among low-income job seekers. Collected survey data from low-income job seekers and hypothesized models with full mediation by hope. Results reported spirituality fosters hope and hope fosters self-sufficiency among low-income job seekers and hope fully mediates the relationship between spirituality and self-sufficiency.

Rassool, G. H., & Khan, W. (2023) shed light on the importance of the use of hope in psychotherapy and how Islamic psychotherapy works on the instillation of hope for better, long-lasting, and speedy improvement.

Chang *et al.*, (2016) ^[10] examined goal-focused hope as a potential mediator between the association of multidimensional spirituality and depressive symptoms in a sample of 319 college students. Results of conducting a series of multiple mediation tests indicated that hope agency, but not hope pathways, fully and significantly accounted for the associations of ritualistic, theistic, and existential spirituality with depressive symptoms. Overall, our findings offer support for the contention that hope agency plays an important role in accounting for the association between spirituality and psychological adjustment in college students. Some implications of the present findings are discussed.

Sepahvand (2019) ^[11] carried out a correlational design and predictive study. For this purpose, 396 employees of Markazi Province Electric Distribution Company working in 2015, were selected by stratified random sampling based on their job conditions and were examined as the sample. The required data, were collected by Snyder Hope Scale, Survey of Perceived Organizational Support and Workplace Spirituality Scale, and were analysed by Pearson correlation coefficient and multiple simultaneous regressions. The results indicated that there was direct and significant relationship between perceived organizational support and workplace spirituality with hope and its components in employees ($r=0.28$ to 0.53 , $p<0.001$). However, workplace spirituality had the main contribution in predicting total hope, agency thinking and pathway thinking in employees in level of $p<0.001$ (Respectively with Beta= 0.528 , 0.508 and 0.461). Workplace spirituality was the important variable in explaining the hope of employees and it is necessary to pay it special attention by the managers of the organizations.

Aslan and Cetinkaya (2022) ^[12] conducted a descriptive and correlational study with 180 patients in a private and a public dialysis center. The data of 173 haemodialysis patients who met the inclusion criteria were collected using personal information form, Herth Hope Scale, Self-care Agency Scale, and Prayer Attitude Scale. A positive, moderate, and statistically significant correlation was found between the Prayer Attitude Scale and total score ($r = 0.144$, $P = 0.048$) and sub-scale future ($r = 0.350$, $P = 0.000$) of Herth Hope Scale. And there was positive correlation between the Prayer Attitude Scale and the total score of Self-care Agency Scale ($r = 0.599$, $P = 0.000$) and its five sub-dimensions' drug use ($r = 0.566$, $P = 0.000$), diet ($r = 0.619$, $P = 0.000$), self-monitoring ($r = 0.522$, $P = 0.000$), hygienic care ($r = 0.576$, $P = 0.000$) and mental status ($r = 0.328$, $P = 0.000$). The study found that prayer had a positive effect on self-care agency and hope in haemodialysis patients.

Schutte, (2023) ^[13] conducted a meta-analytic study to consolidate the results of studies investigating the relationships between agency thinking and pathways

thinking with depression and anxiety. Results showed that across studies both higher levels of agency and pathways thinking were associated with less depression and less anxiety. The weighted effect sizes for agency thinking were $r = -.391$ for depression and $r = -.259$ for anxiety. The weighted effect sizes for pathways thinking were $r = -.328$ for depression and $r = -.206$ for anxiety. The effect size for the association of agency thinking with depression was substantially larger than the effect size for the association of pathways thinking for depression. Agency thinking and pathways thinking were both more strongly associated with depression than anxiety. The agency thinking association with depression and anxiety increased in strength with age, while pathways thinking did not. The findings suggest that even though both pathways thinking and agency thinking as aspects of hope play important roles in relation to depression and anxiety, agency thinking may be especially pivotal. Future research can build on these results with experimental designs to generate causal findings and investigate ways to enhance agency thinking and pathways thinking as a means to reduce depression and anxiety.

Methodology

Aim

To examine the relationship between spirituality and hope among the Indian population aged 18-55 years.

Objectives

1. To study the relationship between spirituality and hope.
2. To study and compare the levels of spirituality and hope among young adults and middle age adults.
3. To study and compare the levels of spirituality and hope among male and females.

Research Questions

1. To what extent does spirituality correlate with hope?
2. To what extent do levels of spirituality and hope differ among young and middle age adults?
3. To what extent do levels of spirituality and hope differ among males and females?

Hypotheses

1. Spirituality will have a positive relationship with hope.
2. Agency thinking will have a positive relationship with spirituality.
3. Pathways thinking will have a positive relationship with spirituality.
4. Young adults will have lower spirituality than middle age adults.
5. Middle age adults will have lower hope than young adults.
6. There are significant differences in spirituality among males and females.
7. There are significant differences in hope among males and females.

Research Design

The study will adopt a correlational analysis between spirituality and hope in order to understand the nature of the relationship between them.

Sample

A sample of 100 aged 18-55 years, adopting an opportunity and random sampling technique for optimum amount of data collection and to reach diverse populations.

Procedure(s)

The participants will be required to fill a google form which includes consent, demographic details, and the 2 questionnaires assessing the 2 constructs.

Measurements/Tools

1. Adult Hope Scale (AHS) – Snyder *et al.*, 1991

The quality assessment of the studies evaluating the psychometric properties for the Snyder Hope Scale revealed that the majority of the studies received a final score of fair. Specifically, 26 of the papers assessed internal consistency and 50% of them received a score of fair. Only seven papers assessed the reliability of the Snyder Hope Scale; three (43%) received a fair score as well. All three papers that assessed content validity received a final score of excellent. Structural validity was assessed in 30 of the papers and received a fair score in 17 (57%) cases. Hypotheses testing was assessed in 23 papers, receiving a score of fair in 14 (61%) of them. (Amirah *et al.*, 2018).

2. Daily Spiritual Experience Scale (DSES) – Underwood, 2013

Convergent validity for the DSES was supported through positive correlations between its total score and emerging components and other commonly utilized measures of spirituality and religion. Discriminant validity was supported through negligible correlations with sociodemographic data. Females reported significantly higher DSES scores. (Lace and Handal, 2017).

Results

All the quantitative data collected through the forms were put into the SPSS programme for analysis. The forms were circulated using an opportunity sampling technique, yielding a total of 100 participants, which were analysed in the current study. The significance level for all the analysis was set to .05. Normality testing was done using the Kolmogorov-Smirnov test, indicating data was normally distributed, (Spirituality, $z=1.16$, $p=.118$, Hope, $z=.88$, $p=.420$) Hence, to specify any differences between spirituality and hope based on gender and age, t-test analysis was used. As for the analysis of the relationship between spirituality, hope, agency and pathway thinking, Pearson’s correlation was employed.

Descriptive Statistics of Sample

	Variable	Frequency	Percentage
Gender	Female	63	63.0%
	Male	37	37.0%
	Total	100	
Age Group	Young Adult	64	64.0%
	Middle Age Adult	36	36.0%
	Total	100	

Table 1: Descriptive statistics of sample

Variable	Mean	Standard Deviation
Spirituality	4.37	1.09
Hope	50.82	7.75
Agency Thinking	25.13	4.64
Pathway Thinking	25.69	3.98

Correlations

Table 2: Correlation between Spirituality and Hope

		Spirituality	Hope
Spirituality	Pearson Correlation	1	.239*
	Sig. (1 tailed)		.008
	N		100
Hope	Pearson Correlation	.239*	1
	Sig. (1 tailed)	.008	
	N	100	

*significant at .05 level

Pearson’s correlation analysis was done to examine the relationship between spirituality and hope. The results of the analysis showed a significant positive correlation between the two, ($r=.239$, $p=.008$).

Correlations

Table 3: Correlation between Spirituality, Agency Thinking and Pathway Thinking

		Spirituality	Agency Thinking	Pathway Thinking
Spirituality	Pearson Correlation	1	.321*	.091
	Sig. (1 tailed)		.001	.185
	N		100	100
Agency Thinking	Pearson Correlation	.239*	1	.611*
	Sig. (1 tailed)	.008		.000
	N	100		100
Pathway Thinking	Pearson Correlation	.091	.611*	1
	Sig. (1 tailed)	.185	.000	
	N	100	100	

*significant at .05 level

Pearson’s correlation analysis was done to examine the relationship between spirituality and subscales of hope (agency and pathway thinking). The results of the analysis showed a significant positive correlation between spirituality and agency thinking, ($r=.321$, $p=.001$). Although a weak positive correlation is shown between spirituality and pathway thinking, it is non-significant, ($r=.091$, $p=.185$). A strong significant positive correlation was seen between the two subscales of hope, agency and pathway thinking, ($r=.611$, $p<.001$).

Independent Samples Test

Table 4: T-test on comparison of spirituality and hope between young adult and middle age

Variable	Group	N	Mean	Std. Deviation	t	Sig.
Spirituality	Young Adult	64	4.15	1.17	-3.11	.002
	Middle Age	36	4.77	.80		
Hope	Young Adult	64	49.09	7.65	-3.10	.003
	Middle Age	36	53.89	7.02		
Agency Thinking	Young Adult	64	24.09	4.68	-3.10	.003
	Middle Age	36	26.97	4.01		
Pathway Thinking	Young Adult	64	25.00	3.97	-2.36	.020
	Middle Age	36	26.92	3.75		

A t-test analysis was done to compare spirituality and hope dimensions between young adults and middle age. The results indicate young adults have lower spirituality ($t = -3.11, p = .002$), hope ($t = -3.10, p = .003$), agency thinking ($t = -3.10, p = .003$) and pathway thinking ($t = -2.36, p = .020$) in comparison with middle age individuals.

Independent Samples Test

Table 5: T-test on comparison of spirituality and hope among females and males

Variable	Group	N	Mean	Std. Deviation	t	Sig.
Spirituality	Female	63	4.43	1.02	.71	.479
	Male	37	4.27	1.22		
Hope	Female	63	50.27	7.97	-.93	.357
	Male	37	51.76	7.38		
Agency Thinking	Female	63	25.25	4.59	.35	.730
	Male	37	24.92	4.79		
Pathway Thinking	Female	63	25.02	4.09	-2.25	.026
	Male	37	26.84	3.57		

A t-test analysis was done to compare spirituality and hope dimensions among males and females. The results indicate there are no significant differences in spirituality ($t = .71, p = .479$), hope ($t = -.93, p = .357$), and agency thinking ($t = .35, p = .730$). However, a significant difference was seen in pathway thinking between males and females, indicating males have higher pathway thinking than females ($t = -2.25, p = .026$).

Discussion

This study aimed to explore the relationships between spirituality, hope, and the sub-dimensions of hope (agency and pathway thinking) in a sample of 100 participants. The results revealed several significant findings:

- 1. Positive Correlation Between Spirituality and Hope:** A significant positive correlation was found between spirituality and hope ($r = .239, p = .008$), suggesting that higher levels of spirituality are associated with higher levels of hope.
- 2. Correlation Between Spirituality and Agency Thinking:** There was a significant positive correlation between spirituality and agency thinking ($r = .321, p = .001$). This indicates that individuals with higher spirituality tend to have higher agency thinking, reflecting a stronger belief in their ability to initiate and sustain actions towards their goals.
- 3. Weak and Non-Significant Correlation Between Spirituality and Pathway Thinking:** Although a weak positive correlation was observed between spirituality and pathway thinking ($r = .091, p = .185$), it was not statistically significant.
- 4. Strong Positive Correlation Between Agency Thinking and Pathway Thinking:** A strong and significant positive correlation was found between agency thinking and pathway thinking ($r = .611, p < .001$), indicating that these two components of hope are closely related.
- 5. Age Differences in Spirituality and Hope:** Middle-aged adults scored significantly higher in spirituality ($t = -3.11, p = .002$), hope ($t = -3.10, p = .003$), agency thinking ($t = -3.10, p = .003$), and pathway thinking ($t = -2.36, p = .020$) compared to young adults.

- 6. Gender Differences in Pathway Thinking:** While no significant differences were found in spirituality, hope, and agency thinking between males and females, males had significantly higher pathway thinking than females ($t = -2.25, p = .026$).

Positive Impact of Spirituality on Hope

The significant positive correlation between spirituality and hope aligns with previous literature indicating that spirituality can enhance an individual's overall sense of hope. This is particularly relevant in psychological and therapeutic contexts, where fostering spirituality might be a strategy to increase hope and optimism among individuals.

Role of Agency Thinking

The strong correlation between spirituality and agency thinking suggests that spirituality might enhance individuals' confidence in their ability to achieve their goals. This finding is consistent with studies by Chang *et al.* (2016)^[10] and Schutte (2023)^[13], which highlight the pivotal role of agency thinking in psychological well-being and its potential as a mediating factor between spirituality and various psychological outcomes.

Age-Related Differences

The higher levels of spirituality and hope in middle-aged adults compared to young adults might be explained by the different life stages and experiences. Middle-aged adults may have more established spiritual beliefs and life experiences that contribute to a greater sense of hope and agency. This finding suggests that interventions aimed at increasing hope and spirituality might need to be tailored differently for various age groups to be effective.

Gender Differences in Pathway Thinking

The finding that males have higher pathway thinking than females could suggest that men are more likely to perceive multiple routes to achieve their goals. This gender difference highlights the need for further research to understand the underlying reasons and to develop targeted interventions that address these differences.

Limitations and Future Research

While the study provides valuable insights, several limitations should be acknowledged:

- 1. Cross-Sectional Design:** The study's cross-sectional design limits the ability to infer causality. Longitudinal studies are needed to examine the causal relationships between spirituality, hope, agency thinking, and pathway thinking.
- 2. Measurement Tools:** While established scales were used, the self-reported nature of the data may introduce biases. Future research could incorporate qualitative methods to gain deeper insights into participants' experiences of spirituality and hope.

Conclusion

This study contributes to the understanding of the complex relationships between spirituality, hope, and the sub-dimensions of hope. The findings suggest that spirituality is

positively associated with overall hope and specifically with agency thinking. The study also highlights significant age-related and gender differences in these constructs. These insights can inform the development of tailored interventions to enhance hope and well-being across different demographic groups. Future research should continue to explore these relationships with larger, more diverse samples and longitudinal designs to build on these findings and provide more robust conclusions.

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