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The Role of Gender, Age, and Education in Domain-Specific Hope: A Cross-Sectional Study

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Abstract

Hope is a core psychological resource that supports goal-directed behavior and psychosocial wellbeing. Despite growing interest in positive psychology, most research on domain-specific hope has been conducted in Western contexts, and the demographic correlates of hope in South Asian and other non-Western populations remain insufficiently understood. This study examined the relationships between gender, age, and educational attainment and levels of hope across six life domains: social relationships, academics, romantic relationships, family life, work, and leisure activities. A cross-sectional survey design was employed. A total of 381 participants (140 men, 241 women; age range 16-43 years) were recruited through purposive sampling from educational institutions and public offices in Islamabad, Pakistan. The Domain Specific Hope Scale (DSHS) was administered to assess hope across the six domains. Independent samples t-tests and Pearson correlations were conducted using SPSS. The DSHS demonstrated excellent internal consistency (Cronbach's alpha = .913). Men reported significantly higher overall hope, as well as higher hope for social and romantic domains, compared to women. Women reported significantly higher hope for the academic domain. Age showed a significant positive correlation with overall hope, and with hope for romantic and family life domains specifically. Educational attainment was significantly and positively associated with overall hope, and with hope for social and romantic relationship domains. These findings suggest that demographic variables relate to hope in domain-specific, rather than uniform, ways. Education emerged as the most consistent positive correlate of hope. Gender and age differences in hope appear to be domain-dependent and are likely moderated by broader psychosocial variables that warrant further investigation.

KEYWORDS

hope; domain-specific hope; optimism; psychosocial health

Introduction

Hope is widely regarded as a fundamental psychological resource that enables individuals to pursue meaningful goals in the face of adversity. Within the framework of positive psychology, hope has been conceptualized as a motivational state comprising two interconnected components: agency thinking (the perceived capacity to initiate and sustain movement toward goals) and pathways thinking (the ability to generate viable routes to achieve those goals) (Snyder, 2002). This cognitive model of hope distinguishes it from passive wishfulness and frames it as an active, goal-directed process.

Related but distinct from hope, optimism refers to a generalized positive expectancy about future outcomes (Scheier & Carver, 1985). Optimistic individuals tend to maintain positive affect and adaptive coping strategies even in the presence of stress (Hirsch et al., 2007), and they tend to interpret negative life events as temporary, specific, and externally caused rather than permanent and pervasive (Seligman et al., 1979). While some researchers treat hope and optimism as

overlapping constructs (Gallagher & Lopez, 2009), others emphasize their conceptual distinctiveness: optimism is largely trait-based and generalized, whereas hope is more dynamic and goal-specific (Snyder, 2002). Both, however, converge on the importance of positive future orientation for psychological wellbeing.

The protective functions of hope and optimism are well documented. High levels of hope are associated with greater life satisfaction, academic achievement, psychological resilience, and reduced symptomatology across clinical and non-clinical populations (Gallagher & Lopez, 2009; Higgins, 2006; Segerstrom et al., 2017). Conversely, hopelessness has been linked to anxiety, fear, depression, and heightened vulnerability to stress (Adams & Serpe, 2000; Hirsch et al., 2009). Optimism similarly buffers against the negative effects of stressors on physical and mental health (Jackson et al., 2002; Segerstrom, 2005).

An important development in hope research has been the recognition that hope may not operate uniformly across all areas of life. Sympson (1999) proposed a domain-specific model of hope, arguing that individuals can hold differentiated levels of hope for distinct life domains (such as career, relationships, and academics) independently of their global hope (Sympson, 1999). This model offers greater predictive precision than global hope measures and allows researchers to identify which life areas are most and least associated with hopeful thinking in particular groups. A stronger theoretical rationale for why demographic factors might relate differently to hope across domains can be drawn from several complementary frameworks. Social cognitive theory (Bandura, 1997) proposes that self-efficacy beliefs, a person's confidence in their capacity to execute actions needed to produce specific outcomes, are domain-specific rather than global, and are shaped by direct experience, social modeling, and social persuasion within particular life areas.

Because gender, age, and education each structure the kinds of experiences, role models, and social feedback available to individuals in different domains (for example, social and educational environments versus romantic or occupational ones), self-efficacy, and by extension hope, would be expected to vary across domains rather than uniformly. Lifespan developmental theory (Baltes, 1987) further suggests that the salience and mastery of particular life domains shift systematically across the life course, as individuals selectively invest resources in developmental tasks appropriate to their current life stage. This offers a rationale for expecting age to relate more strongly to hope in domains tied to age-graded developmental tasks (such as romantic partnership and family formation) than to more stable domains (such as leisure).

Finally, sociocultural perspectives emphasize that gender roles, educational access, and opportunity structures are shaped by broader cultural and institutional contexts (Bronfenbrenner, 1979), such that the same demographic characteristic (e.g., being a woman) may confer differing levels of perceived agency and opportunity across domains depending on prevailing social norms. Taken together, these frameworks suggest that demographic variables should not be expected to relate uniformly to hope, but rather to interact with domain-specific opportunity structures, developmental tasks, and self-efficacy beliefs, providing a theoretical basis for the domain-specific hypotheses examined in the present study.

Despite these advances, relatively little research has examined how key demographic variables (specifically gender, age, and education) relate to domain-specific hope. Studies that have investigated gender differences in

hope have yielded inconsistent findings, with some reporting higher hope in women (Webber & Smokowski, 2018), others reporting higher hope in men (Puskar et al., 2010), and still others finding no significant gender difference (Valle et al., 2006). Similarly, the relationship between age and hope has produced mixed results, with some studies reporting positive associations (Venning et al., 2009) and others reporting negative or null effects (Bailey & Snyder, 2007; Benzein & Berg, 2005; Esbensen et al., 2004; Westburg, 2001). The relationship between education and hope has been more consistent, with most studies indicating a positive link (Day et al., 2010; Gilman et al., 2006; Marques, 2016; Marques et al., 2015), though the mechanisms underlying this relationship remain underexplored.

The inconsistency in prior findings may partly reflect the use of global hope measures, which obscure variation across life domains. The present study addresses this gap by using the DSHS to examine how gender, age, and education relate to hope within six specific domains of life. Understanding these relationships can inform more targeted interventions aimed at fostering hope in the demographic groups and life areas where it is most lacking. Based on prior literature reviewed above, the following exploratory hypotheses were proposed:

H1: Gender differences will exist across specific domains of hope.

H2: Age will be positively associated with selected domains of hope.

H3: Educational attainment will be positively associated with domain-specific hope.

These hypotheses are associational rather than causal in nature, consistent with the cross-sectional design of the present study, and were tested using an exploratory analytic approach without correction for multiple comparisons.

Methods

Research Design

A cross-sectional survey design was employed. This design was deemed appropriate for examining associations between demographic variables and psychological constructs at a single point in time.

Participants

The sample comprised 381 participants (140 men, 241 women), spanning adolescence through early adulthood (age range 16-43 years), recruited through purposive sampling from educational institutions and public offices in Islamabad, Pakistan. Inclusion criteria required that participants be at least 16 years old, able to read and understand the survey language, and willing to provide informed consent.

Instrument

The Domain Specific Hope Scale – DSHS (Sympson, 1999) was used to measure hope across six life domains: (1) social relationships, (2) academic pursuits, (3) romantic relationships, (4) family life, (5) work, and (6) leisure activities. Each subscale contains multiple items rated on a Likert-type format, and higher scores indicate greater hope within that domain. The DSHS has demonstrated adequate reliability and construct validity in prior research (Sympson, 1999). In the present study, the overall scale yielded a Cronbach's alpha of .913, and subscale alphas ranged from .832 to .861, reflecting good to excellent internal consistency.

Procedure

Following institutional approval, researchers approached potential participants at educational institutions and public offices. Each participant was provided with a brief written explanation of the study purpose and a consent form. Participation was voluntary, anonymous, and unpaid. Completed questionnaires were collected immediately after administration. Data were entered into SPSS (version 26) for analysis.

Data Analysis

Descriptive statistics were computed for all variables. Independent samples t-tests were conducted to examine gender differences in domain-specific hope. Pearson product-moment correlations were used to examine the relationships between age, educational attainment, and hope scores. All tests were two-tailed, with a significance threshold of $p < .05$. Effect sizes (Cohen's d for t-tests) were calculated to supplement the significance testing. Given the exploratory nature of this study and the absence of strong a priori hypotheses regarding domain-specific effects, statistical tests were not corrected for multiple comparisons.

Result and Discussion

Reliability and Descriptive Statistics

The DSHS demonstrated excellent reliability in the present sample (overall $\alpha = .913$; subscale alphas ranged from .832 to .861). To aid interpretation, domain-specific and overall hope scores were additionally expressed as a percentage of the maximum possible score. This transformation allows scores from scales with different ranges to be interpreted on a common, easily understood 0-100% metric. The overall mean hope score across all participants corresponded to 72.44% of the maximum possible score, indicating a moderately high general level of hope. The highest domain-specific hope was observed for leisure activities (79.04% of maximum), while the lowest was observed for romantic relationships (55.14% of maximum).

Gender Differences in Hope

Independent samples t-tests revealed several significant gender differences in domain-specific hope (see [Table 1](#)). Men reported significantly higher overall hope than women ($M = 284.09$, $SD = 39.67$ vs. $M = 274.75$, $SD = 40.73$; $t(379) = 2.18$, $p = .030$, $d = 0.23$). Specifically, men scored significantly higher on hope for social relationships ($M = 46.76$ vs. 44.30 ; $t(379) = 2.12$, $p = .035$, $d = 0.22$) and romantic relationships ($M = 39.57$ vs. 32.80 ; $t(379) = 4.54$, $p < .001$, $d = 0.48$). In contrast, women scored significantly higher on academic hope ($M = 48.84$ vs. 46.86 ; $t(379) = 2.01$, $p = .045$, $d = 0.21$). No significant gender differences were observed for family life, work, or leisure activities (all $ps > .05$).

Relationships Between Age, Education, and Hope

Pearson correlations between age, educational attainment, and domain-specific hope are presented in [Table 2](#). Age was significantly and positively correlated with overall hope ($r = .151$, $p < .01$), hope for romantic relationships ($r = .171$, $p < .01$), and hope for family life (r

$= .105$, $p < .05$), although these correlations were weak in magnitude according to conventional benchmarks. Age was not significantly correlated with hope in the remaining domains.

Educational attainment was significantly and positively correlated with overall hope ($r = .139$, $p < .01$), hope for social relationships ($r = .189$, $p < .01$), and hope for romantic relationships ($r = .155$, $p < .01$). Education was not significantly correlated with academic, family, work, or leisure hope.

This study examined how gender, age, and educational attainment relate to hope across six life domains in a sample of Pakistani adults. The findings extend prior research by highlighting the domain-specific nature of demographic differences in hope, rather than treating hope as a single, undifferentiated construct.

Gender Differences

Consistent with a portion of the existing literature, men in this study reported higher overall hope, as well as higher hope in the social and romantic domains. The most pronounced gender difference was observed for romantic hope ($d = 0.48$), indicating that men in this sample reported notably higher romantic hope scores than women on the DSHS. These findings are empirical and directly supported by the present data.

Beyond these observed differences, one possible explanation is that broader sociocultural dynamics contribute to this pattern. In many collectivist and traditionally structured societies, gender role expectations can shape individuals' confidence about particular life domains, and men may feel greater agency and autonomy in pursuing romantic and social goals, whereas women may face structural constraints (including family expectations, social norms around female expression, and concerns about safety) that temper romantic hopefulness. This interpretation remains speculative, as constructs such as agency, autonomy, and perceived structural constraint were not directly measured in the present study; it is offered as a plausible explanation consistent with theoretical accounts linking hope to perceived agency and opportunity structure ([Snyder et al., 1991](#)), rather than as a finding confirmed by the data.

Conversely, women in this sample reported significantly higher academic hope, a finding directly supported by the present data. One possible interpretation is that this reflects increasing female academic motivation and achievement, particularly in South Asian contexts where access to higher education has expanded for women and where education is often seen as a pathway to social mobility and independence ([Arrosa & Gandelman, 2016](#); [Hendricks-Ferguson, 2006](#)). Similarly, women's greater academic hope may reflect the recognition of education as a strategically important domain given constraints in other areas of life. As with the interpretation offered for the gender difference in romantic hope, this explanation is speculative and was not directly tested in the present study.

The mixed pattern of findings across domains aligns with the broader literature, where gender differences in hope have been inconsistent across global measures ([Valle et al., 2006](#)) but may emerge more clearly when domain-specific assessments are used. This underscores the value of the DSHS over global hope scales when examining demographic moderators. This final observation is drawn directly from the pattern of results obtained here.

Table 1. Domain-Specific Hope Scores by Gender (N = 381)

Domain	Men (n=140) M (SD)	Women (n=241) M (SD)	t	p	Cohen's d	95% CI of Mean Difference
Overall Hope	284.09 (39.67)	274.75 (40.73)	2.18	.030	0.23	[0.91, 17.77]
Social Relationships	46.76 (11.06)	44.30 (10.82)	2.12	.035	0.22	[0.18, 4.74]
Academics	46.86 (9.08)	48.84 (9.37)	2.01	.045	0.21	[3.92, 0.04]
Romantic Relationships	39.57 (14.15)	32.80 (13.96)	4.54	< .001	0.48	[3.84, 9.70]
Family Life	52.30 (9.22)	50.68 (10.42)	1.53	.127	0.16	[0.47, 3.71]
Work	47.54 (9.19)	47.82 (9.64)	0.28	.777	0.03	[2.26, 1.70]
Leisure Activities	51.06 (8.05)	50.31 (9.46)	0.79	.427	0.08	[1.12, 2.62]

Table 2. Correlations Between Age, Education, and Domain-Specific Hope (N = 381)

	Overall Hope	Social Relationships	Academics	Romantic Relationships	Family Life	Work	Leisure Activities
Age	.151**	.096	.024	.171**	.105*	.087	.059
Education	.139**	.189**	-.043	.155**	.080	.042	.058

Note. * $p < .05$; ** $p < .01$ (two-tailed).

Age and Hope

A significant positive relationship between age and hope was observed overall, and specifically in the romantic and family life domains. This suggests that, as individuals grow older (within the 16-43 year age range studied here), their hopefulness about romantic and family life tends to increase rather than decline. This pattern may reflect age-related developmental processes such as the consolidation of identity, the broadening of social networks, the accumulation of life experience, and the development of more sophisticated coping strategies (Wroblewski & Snyder, 2005).

The positive association between age and romantic hope may seem counterintuitive if one assumes that older adults become more cynical about relationships, but the present sample was relatively young (maximum age 43), and positive relationship experiences over time may reinforce rather than erode romantic hope within this range. Similarly, increasing hope for family life with age may reflect the transition toward family formation and the associated motivational investment in family goals.

These findings contrast with studies that have reported null or inverse relationships between age and hope (Bailey & Snyder, 2007; Benzein & Berg, 2005; Esbensen et al., 2004), many of which sampled older adults or clinical populations. Age-hope relationships are likely non-linear and highly context-dependent, underscoring the need for studies that span wider age ranges and diverse populations.

Education and Hope

Educational attainment showed a consistent positive association with hope, replicating findings from multiple prior studies (Day et al., 2010; Gilman et al., 2006; Marques, 2016; Marques et al., 2015). More educated individuals in this sample reported greater overall hope, as well as greater hope in the social and romantic domains. These relationships held even though academic hope itself was not significantly correlated with education, which is an interesting asymmetry deserving further attention.

As a theoretical possibility, higher education may expand individuals' awareness of available opportunities and their belief in their capacity to pursue them, both proposed as key components of agentic thinking in Snyder's (1991) hope model (Snyder et al., 1991). This mechanism was not empirically tested in the present study, as awareness of opportunities and perceived

capacity to act on them were not directly measured; future research employing mediation analysis would be valuable to formally test whether such agentic beliefs statistically account for the association between education and hope.

Education also tends to broaden social networks, improve communication and problem-solving skills, and increase access to material resources, all of which may enhance hopefulness about social and relational outcomes specifically. Furthermore, educated individuals may be better equipped to generate pathways around obstacles, reinforcing the pathways component of hope.

Limitations, Implications, and Future Directions

The sample was drawn from a specific urban setting in Pakistan and may not be representative of rural populations, older adults, or individuals from other cultural contexts. Additionally, participants were recruited through purposive sampling rather than random selection, which may have introduced selection bias and further limits the generalizability of findings to the broader population. Furthermore, the cross-sectional, non-experimental design of this study precludes causal inference; the observed associations between gender, age, education, and hope should be interpreted as correlational, and the direction and mechanisms underlying these relationships cannot be determined from the present data.

Given that the sample was restricted to individuals aged 16 to 43 years, the developmental interpretations offered in relation to age (e.g., identity consolidation, family formation) should be understood as applying only within this relatively young age range; findings may not generalize to middle-aged or older populations, for whom age-hope relationships have shown different or even inverse patterns in prior research (Bailey & Snyder, 2007; Benzein & Berg, 2005; Esbensen et al., 2004).

Despite these limitations, this study has both theoretical and applied implications. Theoretically, the findings support a domain-specific conceptualization of hope and suggest that demographic variables relate to hope in nuanced and context-dependent ways. Practically, the consistent positive association between education and hope strengthens the case for investment in educational access as a means of promoting psychological wellbeing. School- and university-based hope interventions (Marques et al., 2015) may be particularly effective among younger populations.

Additionally, the present study conducted multiple statistical comparisons without correction for multiple

comparisons. Some of the reported effects, particularly those with p-values closer to .05, should therefore be interpreted with caution and considered exploratory pending replication. Furthermore, the present analyses relied on bivariate tests and correlations rather than multivariate techniques such as multiple regression. As a result, we cannot determine the unique contribution of gender, age, and education to hope when accounting for their potential shared variance (for example, age and education are often correlated in cross-sectional samples). Future research should employ multiple regression or structural equation modeling approaches to disentangle the unique and shared contributions of these demographic variables to domain-specific hope.

Future research should examine potential mediators and moderators of the observed relationships, including socioeconomic status, cultural values (such as collectivism and gender role attitudes), relationship status, and the quality of social support networks. Longitudinal designs would allow researchers to track how hope in specific domains changes across major life transitions. Comparative studies across cultural contexts would clarify whether the patterns observed here are specific to the Pakistani context or more universal.

Conclusion

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