Expert Opinion Article

A Comparative Study of Social Attitudes Among Arts and Science Stream College Students in Ahmedabad City

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ABSTRACT: The present study explores differences in social attitudes among undergraduate students enrolled in Arts and Science streams in Ahmedabad, Gujarat, with a particular focus on gender differences. Social attitudes particularly those regarding women's status, family planning, and sex education are critical in shaping the values, behaviors, and socio-cognitive development of youth. This research employed a descriptive and comparative design, selecting 120 students through stratified random sampling, ensuring balanced gender and stream representation. The Social Attitude Scale by A.S. Patel et al. (1995) served as the main instrument, measuring three domains: women's status, family planning, and sex education. Independent sample t-tests were used for analysis. Findings indicated that Science stream girls held significantly more progressive attitudes compared to science stream boys. However, no statistically significant differences were noted in the Arts stream or in the combined gender comparison. The implications suggest that educational stream and gender are interrelated influences on the formation of social attitudes, and education systems must consider these dynamics when designing interventions. The study underscores the importance of embedding value-based education, gender sensitization, and psychosocial support systems in academic institutions.

Keywords: Social Attitudes, Gender Differences, Academic Stream, Undergraduate Students,

Introduction:

Attitudes are deeply rooted mental and emotional predispositions that guide an individual's perceptions and behaviors in various social contexts. From a psychological standpoint, attitudes are not static opinions but dynamic constructs composed of three components: cognitive (beliefs or thoughts about a subject), affective (emotions or feelings toward the subject), and behavioral (actions or intentions related to the subject). These tripartite elements of attitude (Rosenberg & Hovland, 1960) interact to influence how individuals assess and respond to social realities. Attitudes are formed and shaped through various psychological processes, including conditioning, social learning, reinforcement, and cognitive appraisal (Ajzen, 2001).

The development of social attitudes is further influenced by individual differences in personality traits, emotional intelligence, moral development, and identity formation. For instance, individuals high in openness to experience and empathy are more likely to adopt liberal social views, while those with authoritarian or conformist tendencies may resist progressive social changes. Erikson's theory of psychosocial development highlights that during adolescence and early adulthood, individuals actively explore social roles and ideologies, shaping their attitudes in alignment with their emerging sense of self (Erikson, 1968). defined attitudes as a "mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related." These attitudes, especially during adolescence and early adulthood, can influence career choices, interpersonal relationships, and civic behavior.

In India, where traditional values often coexist with modern ideologies, issues like women's rights, family planning, and sex education remain contested and sensitive. Societal norms, religious beliefs, and patriarchal values often inhibit open discussions on these themes, despite their relevance to public health and gender equality (Jejeebhoy, 1998; Verma et al., 2004). Past research has shown that young women, especially in urban settings, are generally more open and accepting of progressive views on social issues than men, likely due to differences in socialization and exposure (Dasgupta & Greenwald, 2001).

The present study is situated within this cultural complexity and aims to investigate how gender and academic stream (Arts vs. Science) influence students' social attitudes. Ahmedabad city, known for its educational diversity and socio-cultural blend of conservatism and modernity, provides a fitting context for this investigation.

Aim: To examine and compare the social attitudes of undergraduate Arts and Science stream

Objectives: 1. To assess the social attitudes among boys and girls within the Science stream. 2. To assess the social attitudes among boys and girls within the Arts stream. 3. To compare social attitudes between boys and girls across both academic streams.

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Research Methodology:
Research Design
This study adopted a descriptive and comparative cross-sectional survey design. A cross-sectional approach allows for the assessment of existing conditions and difference between predefined groups in this study, gender and academic streams at a single point in time.

Participants
The population for the study comprised undergraduate students enrolled in regular Arts and Science programs at colleges situated in Ahmedabad city. A total of 120 participants were selected using stratified random sampling, ensuring balanced representation across both gender and academic stream. The sample was equally divided into four subgroups: 30 boys and 30 girls from the Arts stream, and 30 boys and 30 girls from the Science stream.

Participants were included in the study if they were enrolled in regular undergraduate programs in either the Arts or Science streams at colleges located within Ahmedabad city, were permanent residents of Ahmedabad, and willingly provided informed consent for participation. The inclusion of only regular-mode students helped ensure consistent academic exposure among the participants. Students were excluded from the study if they were enrolled in distance- learning or external programs, had already graduated or were pursuing postgraduate education, or were irregular in their college attendance. These criteria were established to maintain homogeneity within the sample and enhance the validity of the comparative analysis.

Tool
Data were collected using the standardized Social Attitude Scale developed by A.S. Patel, Dinesh Patel, and Navin Patel (1995), which measures three key dimensions: Women's Status, Family Planning, and Sex Education. The instrument employs a Likert-type scale format, allowing respondents to indicate their level of agreement with a series of statements. Institutional permissions were obtained before data collection commenced. Participants were approached after classroom sessions, where they were briefed about the study's purpose, assured of confidentiality, and informed consent form was taken. The questionnaire was then administered in a controlled environment, and completed responses were collected on the spot.

The data were analyzed using SPSS software. Descriptive statistics, including means and standard deviations, were calculated to summarize the data. Independent sample t-tests were conducted to examine statistically significant differences in social attitude scores between male and female students within and across academic streams.

Table 1: Science and Arts Stream Gender Comparison

Group	N	Mean (M)	SD	SED	t-value	Significance
Boys	60	236.22	20.52	3.51	0.93	Not Significant
Girls	60	238.	20			

The overall social attitude scores for boys and girls in both streams are compared in Table 1; while mean scores appear to be slightly higher for girls than for boys, there is no significant difference (t = .93, p > .05), indicating that when both academic streams are combined gender does not significantly impact students' social attitudes.

Table 2: Science Stream Gender Comparison

Group	N	Mean (M)	SD	SED	t-value	Significance
Boys	60	225.03	20.5	4.65	4.28	Significant
Girls	60	245.46	15.6			

The t-test results shown in Table 2 reveal a statistically significant difference (t = 4.28, p < .01) between boys and girls in the Science stream with girls scoring higher than boys, which suggests that girls who select science disciplines may be more progressive in their views than boys in the same discipline.

Table 3: Arts Stream Comparison

Group	N	Mean (M)	SD	SED	t-value	Significance
Boys	30	242.93	17.99	5.42	1.69	Not Significant
Girls	30	233.73	21.12			

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The mean scores for boys and girls are compared in Table 3; while boys have a slightly higher mean score, there is no significant difference (t = 1.69), indicating that gender does not meaningfully affect social attitudes within the Arts stream.

Discussion:

The present study investigated the impact of gender and academic stream on college students' social attitudes regarding three key domains: women's status, family planning, and sex education. The results showed that Science stream girls had significantly more positive social attitudes than boys, but no significant differences were found for Arts stream or in the overall comparison between boys and girls. These findings align with previous studies suggesting that women tend to internalize egalitarian social norms more easily (Dasgupta & Greenwald, 2001) and that educational exposure is a key factor in attitude development (UNESCO, 2015).

Part of this difference can be attributed to psychological and developmental reasons; Erikson's theory of psychosocial development states that young adulthood is a time when individuals go through an identity formation stage in which they search for values, roles, and social norms (Erikson 1968). Girls tend to mature emotionally at a younger age than boys and are more heavily socialized to care about others, which may result in more favorable attitudes toward gender equality and sexual education. However, there was no significant difference between the Arts stream, perhaps because humanities and social sciences students have more equal exposure to gender-sensitive topics and liberal social values (Gadhvi 2006; Gadhvi & Bhatt 2013).

These findings are consistent with Bandura's (1977) Social Learning Theory that suggests that people acquire social behaviors and attitudes by observing and imitating those around them. For example, girls in Science stream may have more progressive peer or teacher models to reinforce egalitarian values, while the structured, technical nature of science education may restrict similar modeling for boys unless designed into learning experiences, thereby highlighting a demand for visible, value-driven role models and experiential learning opportunities.

Academic exposure can shape how information is processed and attitudes formed from that perspective; according to the Elaboration Likelihood Model, people who process message content more deeply (e.g., discussing content during class in Arts-related disciplines) will develop more stable and informed attitudes (Petty and Cacioppo 1986), which may account for the relatively equal gender attitudes among students in the Arts stream. And finally, while the overall comparison of boys and girls across streams shows no significant difference that could be attributed to educational factors, it is possible that urban education systems within Ahmedabad are encouraging a baseline level of awareness that reduces some gender-based disparities; but when combined with the psychological mechanism of stereotype internalization (Bem 1981), the technical curricula in Science stream may provide fewer opportunities for critical discussion of social issues.

Strengths and Limitations

This study has several strengths that contribute to its reliability and relevance: the sample was selected to include gender and academic stream balance, the attitudes were measured with a standardized and culturally relevant scale, the urban setting in Ahmedabad provides insight into the views of students in a modernizing society rooted in tradition, and ethical research practices such as informed consent and stratified sampling were employed.

However, even with its strengths, the study is limited by a small sample (N = 120), restricted to students in Ahmedabad city, which may limit the generalizability of findings beyond other regions, especially rural or less urbanized ones; the use of a cross-sectional design that does not measure attitudes over time but only at a specific moment in time; and the use of self-report questionnaires with an unknown margin for social desirability bias.

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