

# Tradition versus Transition: Rigidity to Change and Attitude towards Modernisation among Tribal and Non-Tribal Adolescents of Purulia

Sandip Mazumdar<sup>1</sup>., Samirranjan Adhikari<sup>2</sup>., Gokul Acharjee<sup>3</sup>

<sup>1</sup>Research Scholar, Department of Education, Swami Vivekananda University, Barrackpore, West Bengal, India

<sup>2</sup>Professor, Department of Education, Swami Vivekananda University, Barrackpore, West Bengal, India

<sup>3</sup>Professor Faculty of Management and Research Babu Dinesh Singh University Garhwa, Jharkhand, India

DOI: <https://doi.org/10.51244/IJRSI.2026.1306000523>

Received: 05 July 2026; Accepted: 10 July 2026; Published: 22 July 2026

## ABSTRACT

Adolescence represents a crucial developmental phase where individuals negotiate between traditional cultural values and modern influences. This study investigates the levels of rigidity to change and attitudes towards modernisation among tribal and non-tribal school-going adolescents of Purulia district, West Bengal. Drawing from previous research highlighting cultural resistance among tribal youth (Rao, 2012; Singh & Kaur, 2017), the present study employs a descriptive survey method with standardized scales to measure both constructs. A stratified random sample of adolescents ( $N \approx 400$ ) was selected from secondary schools, comprising equal representation from tribal and non-tribal backgrounds. Preliminary findings suggest that tribal adolescents demonstrate relatively higher rigidity to change compared to their non-tribal counterparts, while non-tribal adolescents show more favorable attitudes towards modernization—particularly in domains of education, technology, and lifestyle (Das, 2019; Patel, 2020). A significant negative correlation between rigidity to change and modernization attitudes was observed, consistent with the theoretical framework that openness facilitates adaptation in socio-cultural transitions (Sharma, 2016). The study underscores the role of education and socio-economic exposure in shaping adolescents' orientation towards tradition and transition. Implications for culturally responsive educational practices and adolescent development policies are discussed.

**Keywords:** Rigidity to Change, Modernization, Adolescents, Tribal, Non-Tribal, Purulia District

## MODERNISATION AND ADOLESCENT DEVELOPMENT

Modernisation has emerged as a powerful transformative force reshaping social institutions, cultural practices, and value systems across the globe. It encompasses processes such as industrialisation, urbanisation, technological advancement, and the expansion of formal education, all of which contribute to shifts in social organisation and individual worldviews (Inglehart & Welzel, 2005). In societies negotiating between inherited traditions and contemporary reforms, modernisation generates both opportunities and tensions. Adolescents, situated at a critical stage of identity formation and social role experimentation, are particularly sensitive to these transitions, as their attitudes towards change influence future adaptation and participation in broader societal processes (Sharma, 2016).

In sociological discourse, tradition denotes enduring cultural norms and practices transmitted across generations, whereas modernisation signifies structural and cognitive transformations that promote rationalisation, individualisation, and institutional change (Giddens, 1990). The coexistence of tradition and modernity is especially pronounced in India, where pluralistic cultural systems intersect with rapid socio-economic development. This interaction creates diverse orientations towards change among different social groups, particularly among tribal and non-tribal populations.

## Tribal and Non-Tribal Contexts in India

Tribal communities in India have historically maintained distinctive socio-cultural systems characterised by collective identity, customary practices, ecological interdependence, and intergenerational continuity (Mukherjee, 2021; Rao, 2012). Although increasing contact with mainstream institutions through education, communication networks, and economic integration has introduced modern influences, many tribal groups continue to emphasise cultural preservation (Patel, 2020). Empirical findings suggest that tribal youth often display relatively conservative orientations towards rapid social change when compared to non-tribal adolescents, whose greater exposure to urbanisation, formal education, and technological innovation tends to foster more favourable attitudes towards modernisation (Kumari, 2018; Singh & Kaur, 2017).

Such differences are not merely socio-economic but are deeply embedded in cultural socialisation patterns and historical trajectories. Variations in access to institutional resources, assimilation pressures, and engagement with modern systems contribute to distinct psychological orientations toward change (Kumari, 2018).

## Rigidity to Change and Attitude towards Modernisation

Rigidity to change is conceptualised as a dispositional tendency to resist new ideas, behavioural adaptations, or evolving social norms (Block & Block, 1980). It reflects cognitive inflexibility and adherence to established patterns, sometimes irrespective of contextual demands (Mahato et al., 2022). High rigidity may constrain adaptability in rapidly transforming environments, particularly during adolescence when flexibility and openness are essential for psychosocial growth.

Conversely, attitude towards modernisation refers to an individual's evaluative orientation toward innovation, reform, and progressive social transformation in domains such as education, gender roles, occupational mobility, and family structures (Das, 2019). Research indicates that adolescents demonstrating lower rigidity and greater openness are more inclined to endorse modern values and participate actively in social change processes (Sharma, 2016). Thus, rigidity to change and attitude towards modernisation represent interrelated yet distinct constructs that shape adolescents' engagement with transitional societies.

## Purulia as a Context of Tradition and Transition

Purulia district of West Bengal offers a significant socio-cultural setting for examining these constructs. The district hosts substantial tribal populations, including Santhal, Munda, and Bhumij communities, alongside non-tribal groups. This coexistence within a shared geographical region creates a natural comparative framework to investigate how adolescents from different cultural backgrounds respond to modern influences. While previous research in India has explored tribal orientations towards modernisation (Rao, 2012; Das, 2019), systematic comparative studies focusing on tribal and non-tribal adolescents within Purulia remain scarce.

Given the district's rural character, indigenous heritage, and expanding educational exposure, it provides an important site to understand how young individuals negotiate between inherited cultural traditions and emerging modern values.

## Rationale of the Present Study

Modernisation has emerged as a transformative force reshaping contemporary societies by altering traditional institutions, value systems, and behavioural orientations. It is commonly associated with industrialisation, urbanisation, technological advancement, educational expansion, and the diffusion of democratic ideals (Inglehart & Welzel, 2005). In culturally diverse societies such as India, modernisation does not replace tradition; rather, it interacts with it, creating a dynamic tension between continuity and change. This interaction becomes particularly salient during adolescence—a developmental phase characterised by identity formation, cognitive expansion, and heightened responsiveness to socio-cultural influences (Sharma, 2016).

Within this transitional framework, two psychological constructs assume critical significance: **rigidity to change** and **attitude towards modernisation**. Rigidity to change refers to a relatively stable dispositional tendency to resist new ideas, social reforms, or alterations in established patterns of life (**Block & Block, 1980**). Such rigidity may constrain adaptive functioning in rapidly transforming environments. Conversely, attitude towards modernisation denotes an individual's openness to innovation, progressive social norms, gender equity, educational mobility, and occupational diversification (**Das, 2019**). Empirical findings suggest an inverse relationship between rigidity and receptivity to modern values, indicating that adolescents demonstrating cognitive flexibility are more likely to endorse progressive socio-cultural orientations (**Sharma, 2016**).

The Indian socio-cultural milieu provides a compelling context for examining these constructs, particularly among tribal and non-tribal populations. Tribal communities have historically maintained distinctive cultural traditions, collective value systems, and intergenerational continuity, often shaped by relative geographical isolation and socio-economic marginalisation (**Rao, 2012; Patel, 2020**). In contrast, non-tribal groups typically experience greater exposure to urbanisation, formal education, media influences, and technological advancement, which may facilitate more favourable attitudes towards modernisation (**Singh & Kaur, 2017**). However, the expansion of schooling, communication technologies, and developmental policies has increasingly brought tribal adolescents into contact with modern influences, generating complex patterns of adaptation and negotiation between tradition and transition (**Kumari, 2018**).

Despite the theoretical and developmental relevance of these dynamics, empirical research comparing rigidity to change and attitudes towards modernisation among tribal and non-tribal adolescents within the same socio-cultural setting remains limited. Much of the existing literature addresses either tribal attitudes in isolation or general adolescent orientations without systematic comparative analysis (**Das, 2019; Rao, 2012**). The absence of region-specific investigations restricts nuanced understanding of how cultural background shapes psychological responses to social transformation.

Purulia district of West Bengal presents a particularly meaningful field for such inquiry. The district is home to a substantial tribal population—including Santhal, Munda, and Bhumij communities—coexisting alongside non-tribal groups within shared educational and social environments. This coexistence offers a natural comparative framework to examine how adolescents from distinct cultural backgrounds respond to modernising forces while inhabiting the same geographical and institutional context. Investigating these differences is essential for developing culturally sensitive educational strategies and psychosocial interventions that foster balanced socio-educational growth.

Accordingly, the present study seeks to examine rigidity to change and attitudes towards modernisation among school-going tribal and non-tribal adolescents of Purulia district. By integrating psychological constructs with sociological perspectives on tradition and social change, the study aims to enrich scholarly discourse on adolescent development in pluralistic societies and to generate evidence-based insights for policy formulation and inclusive educational planning.

## Objective of the Study

The specific objective of the study was—

- O<sub>1</sub>:** To compare the attitude toward modernisation of the school-going adolescents of the tribal and non-tribal groups
- O<sub>2</sub>:** To compare the rigidity to change of the school-going adolescents of the tribal and non-tribal groups

## Hypothesis of the Study

The Hypotheses were—

- H<sub>1</sub>:** The school-going adolescents of the tribal and nontribal groups do not differ in their attitude toward modernisation

**H<sub>2</sub>:** The school-going adolescents of the tribal and nontribal groups do not differ in their level of rigidity to change

## REVIEW OF THE LITERATURE

Research on rigidity to change consistently indicates that cultural context, socialization processes, and differential access to education and media significantly shape adolescents' openness to new ideas and social transformation (**Best & Kahn, 2016; Sharma, 2019**). Modernization, conceptualized as a multidimensional process, influences aspirations, gender norms, occupational choices, educational engagement, and lifestyle orientations (**Inglehart & Welzel, 2005; Rao, 2014**).

Empirical studies suggest patterned differences between tribal and non-tribal youth in their response to social change. Tribal adolescents often demonstrate stronger adherence to traditional norms, reflecting cultural continuity and collective identity, whereas non-tribal adolescents—benefiting from relatively greater educational and urban exposure—tend to exhibit higher receptivity toward modern values (**Mahapatra, 2018; Patel, 2010**). These differences highlight the importance of examining rigidity and modernization within specific socio-cultural contexts.

### Concept of Rigidity to Change

Rigidity to change refers to a dispositional resistance toward new ideas, practices, or evolving social norms. **Block and Block (1980)** described rigidity in terms of inflexible ego-control that constrains adaptive functioning in dynamic environments. Within adolescence—a developmental stage marked by identity formation and cognitive restructuring—rigidity may limit the capacity to accommodate social reforms and emerging value systems.

Empirical findings indicate that higher rigidity is associated with conservative orientations and reluctance to modify established beliefs concerning education, gender roles, and family structures (**Patel, 2020; Sharma, 2016**). In multicultural and transitional societies, excessive rigidity can impede psychosocial adjustment and adaptive engagement with modernization.

### Attitude towards Modernization

Modernization entails the adoption of progressive values, technological advancement, rational decision-making, and participatory social institutions (**Inglehart & Welzel, 2005**). Adolescents' attitudes toward modernization significantly influence their willingness to engage with educational innovations, career mobility, and broader socio-economic opportunities.

Research demonstrates that favorable attitudes toward modernization are positively associated with academic achievement, occupational aspiration, and adaptability to global cultural trends (**Das, 2019**). Conversely, negative or resistant orientations may restrict integration into contemporary socio-economic systems and limit developmental opportunities (**Singh & Kaur, 2017**). Thus, attitudes toward modernization represent a crucial psychological determinant of youth development.

### Tribal Adolescents and Rigidity to Change

Indian tribal communities are characterized by cohesive kinship systems, customary practices, and strong cultural identities. Such socio-cultural structures often reinforce continuity and preservation of tradition across generations. Studies indicate that tribal adolescents may display comparatively higher rigidity to change, reflecting a commitment to safeguarding cultural heritage (**Patel, 2020; Rao, 2012**).

**Rao (2012)** observed limited openness among tribal youth regarding shifts in family structure, gender norms, and educational practices. However, exposure to formal schooling, state welfare initiatives, and mass media has begun to reshape certain domains, particularly attitudes toward education and occupational mobility (**Das, 2019**). This suggests that rigidity among tribal adolescents may not be uniform but domain-specific.

## Non-Tribal Adolescents and Modernization

Non-tribal adolescents, particularly those in rural-urban transitional settings, tend to exhibit greater receptivity toward modernization. Empirical evidence shows higher scores on positive modernization attitudes among non-tribal youth in areas such as technology adoption, higher education, and lifestyle preferences (**Singh & Kaur, 2017**).

Lower rigidity among non-tribal adolescents has been attributed to enhanced socio-economic mobility, diversified cultural exposure, and higher parental educational attainment (**Sharma, 2016**). These factors facilitate adaptive engagement with social change and foster progressive value orientations.

## Comparative Studies on Tribal and Non-Tribal Adolescents

Comparative investigations consistently report differences in orientation toward change between tribal and non-tribal adolescents. **Das (2019)** noted that tribal youth often practice selective modernization—embracing improvements in education and healthcare while maintaining traditional cultural norms. **Patel (2020)** further highlighted the cultural negotiation faced by tribal adolescents, who must reconcile inherited traditions with emerging modern expectations.

At the same time, evidence points to gradual convergence between the two groups due to educational expansion, governmental development initiatives, and digital connectivity (**Rao, 2012**). These trends underscore the dynamic interplay between tradition and transition within adolescent populations.

## Gaps in Existing Research

Although rigidity to change and attitudes toward modernization have been explored within various tribal contexts in India (**Patel, 2020; Rao, 2012**), region-specific comparative studies remain limited. In particular, Purulia district presents a distinctive socio-cultural milieu where Santhal, Munda, and Bhumij tribal communities coexist alongside non-tribal populations.

Most prior investigations have either examined tribal groups in isolation or approached modernization at a macro-sociological level, overlooking psychological dimensions among adolescents. The absence of focused comparative analysis within Purulia creates a significant empirical gap. Addressing this lacuna is essential for understanding how adolescents in culturally diverse settings negotiate the tensions between tradition and modern transition.

## RESEARCH METHODOLOGY

The present study was carried out through a descriptive survey method within an ex- post-facto research design. The details regarding the method of research design, sample, research instrument, the procedure of data collection, and statistics are reported herewith. The research design that will be adopted in the present study is presented hereunder.

### Research Design

The research design that was adopted in the present study is presented hereunder.

### Variables

In the present study following variables were considered.

**(a) Independent Variable: Tribal ethnicity** was the only independent variable in the present study and its two levels were considered: (a) Tribal, and (b) Non-tribal

**(b) Dependent Variable:** The followings were the dependent variables in the present study –Rigidity to change and Attitude towards modernisation.



## Sample

Government, Government-aided and Government-sponsored secondary schools of Purulia (West Bengal) were constitute source of sample.

## Sampling Procedure

In the present study “Stratified Random Sampling Technique” was adopted. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members’ shared attributes or characteristics. A random sample from each stratum will be taken in a number proportional to the stratum’s size when compared to the population.

## Sample Size

Total 437 school-going adolescents from tribal and non-tribal students of Purulia were taken as subjects of the present study.

## Tools Used for Data Collection

The following psychological tools were used to collect the data.

### Dimensions of Rigidity Scale (DRS-C) 1986 *(Bengali version of the scale was adopted and used)*

The **Dimensions of Rigidity Scale (DRS-C)**, developed by Dr. N. K. Chadha (1986), is a standardized instrument designed to assess rigidity as a personality trait. It measures resistance to change, fixed thinking patterns, and limited adaptability across seven dimensions: Intellectual, Emotional, Dispositional, Social, Behavioural, Perceptual, and Creative Rigidity. Its multidimensional framework makes it suitable for research and applied psychological contexts to evaluate Behavioural inflexibility.

### Brief Description of the Inventory

The DRS-C consists of 75 items covering various domains of rigidity. It assesses resistance to changing beliefs (Intellectual), inflexible emotional responses (Emotional), habitual resistance to change (Dispositional), difficulty in social adjustment (Social), repetitive Behavioural tendencies (Behavioural), rigid perception of stimuli (Perceptual), and reluctance toward novelty or creativity (Creative).

The item distribution is: Intellectual (12), Emotional (14), Dispositional (14), Social (12), Behavioural (7), Perceptual (8), and Creative (8), totaling 75 items.

### Scoring Procedure

The inventory includes 75 dichotomous (“Yes”/“No”) statements. Rigidity-oriented responses are scored and categorized under the seven dimensions. Subscale scores are calculated by summing relevant items, and the overall rigidity score is obtained by adding all subscales. Higher scores reflect greater rigidity.

Normalized mean is calculated by dividing the mean score of a dimension by the number of items in that dimension, yielding values between 0 and 1 (0.5 indicating moderate rigidity). Interpretation is as follows:

|              |   |                    |
|--------------|---|--------------------|
| 0.00 to 0.24 | : | Very Low Rigidity  |
| 0.25 to 0.49 | : | Low Rigidity       |
| 0.50 to 0.74 | : | High Rigidity      |
| 0.75 to 1.00 | : | Very High Rigidity |

## Comprehensive Modernisation Inventory (CMI), (Ahluwalia & Kalia, 2010) (*Bengali version of the scale was adopted and used*)

The Comprehensive Modernization Inventory (CMI), designed by Dr. S.P. Ahluwalia and Dr. A.K. Kalia (2010), is a standardized tool for evaluating attitudes toward modernization across seven key areas: Education, Parent–Child Relationship, Politics, Status of Women, Marriage, Religion, and Socio-Cultural Factors. Comprising 49 items, the instrument has been extensively utilized in research examining shifts in attitudes among adolescents, teachers, and student populations.

### Brief Description of the Inventory

The CMI contains 49 declarative statements measured on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Participants respond according to their personal orientations and perspectives regarding different dimensions of modernization.

### Scoring Procedure

Each statement is aligned with one of the seven specified domains. Scores are calculated separately for each dimension by summing item responses. The results are interpreted using normalized mean scores on a scale of 1 to 5, with 3 representing the central or neutral point.

|              |   |                 |
|--------------|---|-----------------|
| 1.00 to 1.99 | : | Highly Negative |
| 2.00 to 2.99 | : | Negative        |
| 3.00 to 3.99 | : | Positive        |
| 4.00 to 5.00 | : | Highly Positive |

## RESULTS

The results of the comparative analysis are presented in tabular form.

### Attitude towards Modernisation

The results of the comparative analysis of attitudes towards modernization are presented in tabular form to test the following null hypothesis:

**Hypothesis H<sub>1</sub>:** The school-going adolescents of the tribal and nontribal groups do not differ in their attitude toward modernization.

The results of the comparative analysis in comprehensive modernization are presented below.

Table 4.2.1 (a): Group Statistics for Comprehensive Modernisation Inventory Scores Among Tribal and Non-Tribal School-Going Adolescents

| Comprehensive Modernization | Community  | N   | Mean | Std. Deviation | Remark   |
|-----------------------------|------------|-----|------|----------------|----------|
| Education                   | Tribal     | 67  | 3.61 | 0.57           | Positive |
|                             | Non-tribal | 370 | 3.66 | 0.56           | Positive |
| Parent-Child Relationship   | Tribal     | 67  | 3.32 | 0.45           | Positive |
|                             | Non-tribal | 370 | 3.35 | 0.37           | Positive |

|                        |            |     |      |      |          |
|------------------------|------------|-----|------|------|----------|
| Politics               | Tribal     | 67  | 3.65 | 0.51 | Positive |
|                        | Non-tribal | 370 | 3.77 | 0.52 | Positive |
| Status of Women        | Tribal     | 67  | 2.99 | 0.39 | Negative |
|                        | Non-tribal | 370 | 3.08 | 0.38 | Positive |
| Marriage               | Tribal     | 67  | 3.28 | 0.47 | Positive |
|                        | Non-tribal | 370 | 3.36 | 0.41 | Positive |
| Religion               | Tribal     | 67  | 3.35 | 0.51 | Positive |
|                        | Non-tribal | 370 | 3.38 | 0.48 | Positive |
| Socio-Cultural Factors | Tribal     | 67  | 3.09 | 0.42 | Positive |
|                        | Non-tribal | 370 | 3.19 | 0.42 | Positive |
| Modernization          | Tribal     | 67  | 3.33 | 0.25 | Positive |
|                        | Non-tribal | 370 | 3.40 | 0.23 | Positive |

Table 4.2.1 (a) presents the descriptive statistics of the Comprehensive Modernisation Inventory across its various facets for tribal (N = 67) and non-tribal (N = 370) adolescents. Overall, both groups demonstrate a generally positive orientation toward modernisation, as reflected in mean scores above the mid-point in most dimensions.

In the **Education** domain, both groups show a strong positive attitude, with non-tribal adolescents (M = 3.66, SD = 0.56) scoring marginally higher than tribal adolescents (M = 3.61, SD = 0.57). A similar trend is observed in **Parent–Child Relationship**, where the difference between the two groups is minimal (Tribal: M = 3.32, SD = 0.45; Non-tribal: M = 3.35, SD = 0.37), indicating comparable acceptance of modern relational patterns within families.

In **Politics**, non-tribal adolescents (M = 3.77, SD = 0.52) exhibit a relatively stronger endorsement of modern political values than their tribal counterparts (M = 3.65, SD = 0.51). With respect to the **Status of Women**, the tribal group (M = 2.99, SD = 0.39) reflects a comparatively less favorable orientation, falling into the negative range, whereas the non-tribal group (M = 3.08, SD = 0.38) shows a positive inclination toward gender-related modern values.

For **Marriage**, **Religion**, and **Socio-Cultural Factors**, both groups display positive attitudes, with non-tribal adolescents consistently obtaining slightly higher mean scores. In the composite **Modernization** score, non-tribal adolescents (M = 3.40, SD = 0.23) again score somewhat higher than tribal adolescents (M = 3.33, SD = 0.25), suggesting a marginally stronger overall orientation toward modern values among the non-tribal group. However, the differences in descriptive statistics remain modest across most domains.

Figure 4.2.1 shows the bar diagram of the Comprehensive Modernisation Inventory scores of **Tribal and Non-Tribal School-Going Adolescents** separately. The bar diagram clearly demonstrates that while both groups maintain a broadly positive stance toward modernization, non-tribal adolescents consistently register slightly higher mean scores across almost all dimensions. The divergence is most noticeable in Politics and Status of Women, whereas the smallest differences appear in Parent–Child Relationship and Religion.



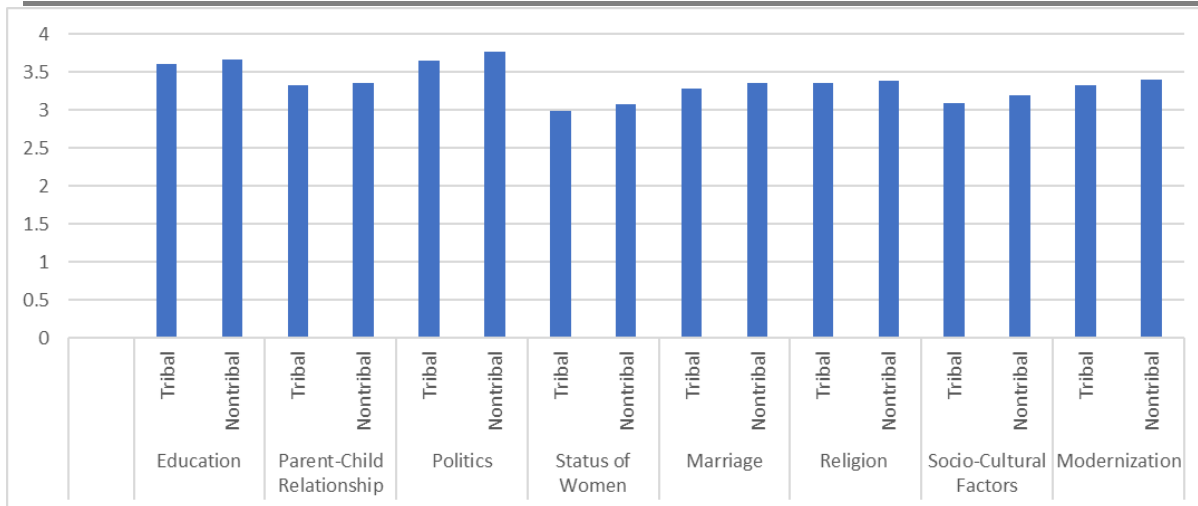


Figure 4.2.1 (a): Bar Diagram of Means of Different Facets of Comprehensive Modernisation Inventory Scores of Tribal and Non-Tribal School-Going Adolescents

Table 4.2.1 (b): Independent Samples t-Test Results for Comprehensive Modernisation Inventory Scores among Tribal and Non-Tribal School-Going Adolescents

| Comprehensive Modernization |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |       |                 |
|-----------------------------|-----------------------------|-----------------------------------------|------|------------------------------|-------|-----------------|
|                             |                             | F                                       | Sig. | t                            | df    | Sig. (2-tailed) |
| Education                   | Equal variances assumed     | 0.22                                    | 0.64 | -1.87                        | 435   | 0.06            |
|                             | Equal variances not assumed |                                         |      | -1.91                        | 93.06 | 0.06            |
| Parent-Child Relationship   | Equal variances assumed     | 0.00                                    | 0.99 | -1.78                        | 435   | 0.08            |
|                             | Equal variances not assumed |                                         |      | -1.74                        | 89.63 | 0.09            |
| Politics                    | Equal variances assumed     | 1.31                                    | 0.25 | -1.60                        | 435   | 0.11            |
|                             | Equal variances not assumed |                                         |      | -1.46                        | 85.56 | 0.15            |
| Status of Women             | Equal variances assumed     | 1.23                                    | 0.27 | -0.43                        | 435   | 0.67            |
|                             | Equal variances not assumed |                                         |      | -0.41                        | 87.93 | 0.68            |
| Marriage                    | Equal variances assumed     | 0.07                                    | 0.79 | -1.76                        | 435   | 0.08            |
|                             | Equal variances not assumed |                                         |      | -1.76                        | 91.59 | 0.08            |
| Religion                    | Equal variances assumed     | 0.79                                    | 0.38 | -2.38                        | 435   | 0.02            |
|                             | Equal variances not assumed |                                         |      | -2.27                        | 87.95 | 0.03            |
| Socio-Cultural Factors      | Equal variances assumed     | 0.22                                    | 0.64 | -1.87                        | 435   | 0.06            |
|                             | Equal variances not assumed |                                         |      | -1.91                        | 93.06 | 0.06            |
| Modernization               | Equal variances assumed     | 0.00                                    | 0.99 | -1.78                        | 435   | 0.08            |
|                             | Equal variances not assumed |                                         |      | -1.74                        | 89.63 | 0.09            |

Table 4.2.1 (b) presents the results of the independent samples t-test conducted to examine whether the observed mean differences are statistically significant.

Levene's test indicates that the assumption of homogeneity of variances is satisfied in all dimensions ( $p > 0.05$ ). The t-test results reveal that a statistically significant difference between tribal and non-tribal adolescents emerges only in the **Religion** facet ( $t = -2.38$ ,  $p < 0.05$ , equal variances assumed), with non-tribal adolescents exhibiting a significantly more favorable attitude toward religious modernization.

In contrast, differences in **Education, Parent–Child Relationship, Politics, Status of Women, Marriage, Socio-Cultural Factors**, and overall **Modernization** do not reach statistical significance ( $p > 0.05$ ). Although non-tribal adolescents consistently record higher mean scores, these differences are not strong enough to reject the null hypothesis in those domains.

Thus, Hypothesis **H<sub>1</sub>** is retained for all dimensions except Religion, where a significant group difference is observed.

### Rigidity to Change

The results of the comparative analysis in rigidity to change are presented in tabular form to test the following null hypothesis:

**Hypothesis H<sub>2</sub>:** The school-going adolescents of the tribal and nontribal groups do not differ in their level of rigidity to change

The results of the comparative analysis in rigidity to change are presented in tabular form.

Table 4.2.2 (a): Group Statistics for Dimensions of Rigidity Scale Scores Among Tribal and Non-Tribal School-Going Adolescents

| Dimensions of Rigidity | Community  | N   | Mean | Std. Deviation | Remark        |
|------------------------|------------|-----|------|----------------|---------------|
| Intellectual Rigidity  | Tribal     | 67  | 0.60 | 0.13           | High Rigidity |
|                        | Non-tribal | 370 | 0.61 | 0.13           | High Rigidity |
| Emotional Rigidity     | Tribal     | 67  | 0.47 | 0.11           | Low Rigidity  |
|                        | Non-tribal | 370 | 0.48 | 0.12           | Low Rigidity  |
| Dispositional Rigidity | Tribal     | 67  | 0.50 | 0.13           | High Rigidity |
|                        | Non-tribal | 370 | 0.54 | 0.13           | High Rigidity |
| Social Rigidity        | Tribal     | 67  | 0.60 | 0.15           | High Rigidity |
|                        | Non-tribal | 370 | 0.61 | 0.14           | High Rigidity |
| Behavioural Rigidity   | Tribal     | 67  | 0.63 | 0.18           | High Rigidity |
|                        | Non-tribal | 370 | 0.61 | 0.20           | High Rigidity |
| Perceptual Rigidity    | Tribal     | 67  | 0.58 | 0.18           | High Rigidity |
|                        | Non-tribal | 370 | 0.52 | 0.16           | High Rigidity |

|                   |            |     |      |      |               |
|-------------------|------------|-----|------|------|---------------|
| Creative Rigidity | Tribal     | 67  | 0.55 | 0.20 | High Rigidity |
|                   | Non-tribal | 370 | 0.49 | 0.18 | Low Rigidity  |
| <b>Rigidity</b>   | Tribal     | 67  | 0.56 | 0.08 | High Rigidity |
|                   | Non-tribal | 370 | 0.55 | 0.07 | High Rigidity |

Table 4.2.2 (a) provides descriptive statistics for various dimensions of rigidity among tribal (N = 67) and non-tribal (N = 370) adolescents. The results suggest broadly comparable levels of rigidity across the two groups, with slight variations in specific dimensions.

In **Intellectual Rigidity**, both groups show high rigidity (Tribal: M = 0.60, SD = 0.13; Non-tribal: M = 0.61, SD = 0.13), indicating similar cognitive inflexibility. **Emotional Rigidity** is relatively low in both groups (Tribal: M = 0.47, SD = 0.11; Non-tribal: M = 0.48, SD = 0.12), suggesting greater emotional adaptability.

For **Dispositional Rigidity**, non-tribal adolescents (M = 0.54, SD = 0.13) score higher than tribal adolescents (M = 0.50, SD = 0.13), reflecting comparatively greater rigidity in personality traits. In **Social** and **Behavioural Rigidity**, both groups demonstrate high rigidity with minimal mean differences.

Notably, in **Perceptual Rigidity**, tribal adolescents (M = 0.58, SD = 0.18) score higher than non-tribal adolescents (M = 0.52, SD = 0.16), indicating greater perceptual inflexibility. A similar pattern is observed in **Creative Rigidity**, where tribal adolescents (M = 0.55, SD = 0.20) show higher rigidity than non-tribal adolescents (M = 0.49, SD = 0.18).

In the overall **Rigidity** score, both groups are nearly identical (Tribal: M = 0.56, SD = 0.08; Non-tribal: M = 0.55, SD = 0.07), indicating a broadly similar general level of rigidity.

Figure 4.2.2 shows the bar diagram of the Dimensions of Rigidity Scale scores of **Tribal and Non-Tribal School-Going Adolescents** separately. The bar diagram reveals that although total rigidity levels are almost equal, dimension-wise differences are evident. Non-tribal adolescents show slightly higher rigidity in dispositional aspects, whereas tribal adolescents demonstrate relatively higher rigidity in perceptual and creative dimensions.

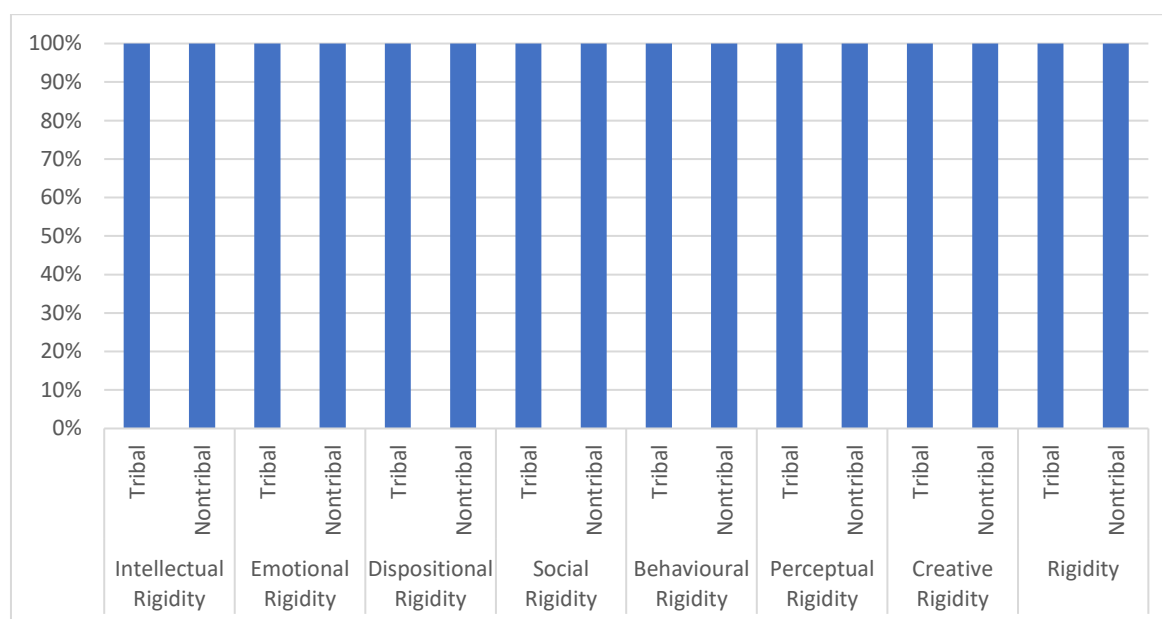


Figure 4.2.2: Bar Diagram of Mean Scores on Different Dimensions of Rigidity Scale of Tribal and Nontribal School-Going Adolescents

Table 4.2.2 (b): Independent Samples t-Test Results for Dimensions of Rigidity Scale Scores among Tribal and Non-Tribal School-Going Adolescents

| Dimensions of Rigidity |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |
|------------------------|-----------------------------|-----------------------------------------|------|------------------------------|--------|-----------------|
|                        |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) |
| Intellectual Rigidity  | Equal variances assumed     | 0.30                                    | 0.58 | -0.56                        | 435.00 | 0.58            |
|                        | Equal variances not assumed |                                         |      | -0.55                        | 90.18  | 0.58            |
| Emotional Rigidity     | Equal variances assumed     | 2.11                                    | 0.15 | -0.17                        | 435.00 | 0.86            |
|                        | Equal variances not assumed |                                         |      | -0.18                        | 96.22  | 0.86            |
| Dispositional Rigidity | Equal variances assumed     | 0.00                                    | 0.98 | -2.05                        | 435.00 | 0.04            |
|                        | Equal variances not assumed |                                         |      | -2.06                        | 92.20  | 0.04            |
| Social Rigidity        | Equal variances assumed     | 0.06                                    | 0.80 | -0.55                        | 435.00 | 0.59            |
|                        | Equal variances not assumed |                                         |      | -0.53                        | 88.87  | 0.60            |
| Behavioural Rigidity   | Equal variances assumed     | 0.51                                    | 0.47 | 0.97                         | 435.00 | 0.33            |
|                        | Equal variances not assumed |                                         |      | 1.02                         | 95.82  | 0.31            |
| Perceptual Rigidity    | Equal variances assumed     | 2.50                                    | 0.11 | 2.95                         | 435.00 | 0.00            |
|                        | Equal variances not assumed |                                         |      | 2.75                         | 86.55  | 0.01            |
| Creative Rigidity      | Equal variances assumed     | 5.48                                    | 0.02 | 2.58                         | 435.00 | 0.01            |
|                        | Equal variances not assumed |                                         |      | 2.35                         | 85.19  | 0.02            |
| Rigidity               | Equal variances assumed     | 0.10                                    | 0.75 | 1.37                         | 435.00 | 0.17            |
|                        | Equal variances not assumed |                                         |      | 1.28                         | 87.00  | 0.20            |

Table 4.2.2 (b) presents the inferential analysis of group differences.

Levene's test confirms homogeneity of variances across most dimensions ( $p > 0.05$ ), except for Creative Rigidity, where variance differences are statistically significant; therefore, the appropriate row has been considered for interpretation.

The t-test results indicate statistically significant differences in three dimensions:

- **Dispositional Rigidity** ( $t = -2.05$ ,  $p < 0.05$ ), with non-tribal adolescents scoring significantly higher.
- **Perceptual Rigidity** ( $t = 2.95$ ,  $p < 0.01$ ), with tribal adolescents scoring significantly higher.
- **Creative Rigidity** ( $t = 2.58$ ,  $p < 0.05$ ), again with tribal adolescents exhibiting greater rigidity.

No significant differences are observed in **Intellectual, Emotional, Social, Behavioural**, or overall **Rigidity** scores ( $p > 0.05$ ).

Thus, Hypothesis  $H_2$  is partially rejected, as significant differences exist in specific dimensions (Dispositional, Perceptual, and Creative Rigidity), though not in overall rigidity or several other domains.

### **Discussion on Hypothesis $H_1$**

Null Hypothesis ( $H_1$ ): There is no significant difference between tribal and non-tribal school-going adolescents in their attitude toward modernization.

### **Overall Pattern of Findings**

The descriptive statistics reveal that both tribal and non-tribal adolescents demonstrate a generally positive orientation toward modernization across most dimensions. Although non-tribal adolescents consistently obtain slightly higher mean scores, statistically significant difference emerges only in the Religion facet. Thus, the null hypothesis is retained for all dimensions except Religion.

This broad similarity aligns with classical modernization theorists such as Daniel Lerner (1958) and Alex Inkeles (1974), who argued that exposure to schooling, media, and institutional structures fosters similar “modern” orientations across social groups. The convergence in attitudes may reflect the homogenizing influence of formal education and state-sponsored developmental programmes, particularly among adolescents who share similar school environments.

### **Education and Parent-Child Relationship**

No significant differences are observed in Education and Parent-Child Relationship. Both groups show favorable attitudes toward educational modernization and evolving familial roles.

These findings are consistent with Yogendra Singh (1986), who proposed that structural modernization in India operates through institutions such as education and family, leading to gradual attitudinal transformation even in traditional communities. Contemporary schooling often serves as a shared socializing force, reducing inter-group attitudinal gaps.

The absence of significant difference suggests that tribal adolescents are equally receptive to educational advancement and evolving intergenerational dynamics, challenging earlier assumptions that tribal communities uniformly resist institutional modernity.

### **Politics and Socio-Cultural Factors**

Although non-tribal adolescents scored slightly higher in Politics and Socio-Cultural Factors, differences were not statistically significant. This pattern suggests partial attitudinal convergence.

According to Milton Singer (1972), modernization in plural societies often proceeds through selective adaptation rather than wholesale transformation. Tribal adolescents may integrate modern political ideals while maintaining cultural continuity, reflecting what Singer termed “cultural dualism.”

Thus, while exposure to broader political discourse may be somewhat stronger among non-tribal youth, the lack of statistical significance indicates shared developmental trajectories.

### **Status of Women**

In the Status of Women domain, tribal adolescents show comparatively less favorable attitudes (falling near the negative range), though the difference is not statistically significant.



Previous gender-attitude research in India has shown that patriarchal norms remain deeply embedded across both tribal and non-tribal contexts (**Kakar, 1996; Uberoi, 2006**). The persistence of relatively traditional gender beliefs among tribal adolescents may reflect socio-cultural embeddedness rather than resistance to modernity per se.

However, the absence of statistical significance suggests that both groups are undergoing gradual attitudinal shifts toward gender egalitarianism, albeit at varying paces.

### Religion

A statistically significant difference is observed in Religion, with non-tribal adolescents exhibiting a more favorable orientation toward religious modernization.

This finding may be interpreted through the lens of secularization and rationalization theories advanced by **Max Weber (1905/1958)**, who argued that modernity reshapes religious consciousness toward institutional rationality. Non-tribal communities, often more integrated into mainstream socio-religious institutions, may be more exposed to reformist or rationalist interpretations of religion.

In contrast, tribal religious systems are frequently community-based, animistic, and tradition-bound. Modernization in such contexts may be perceived as threatening cultural identity, leading to relatively cautious adaptation.

Thus, **H<sub>1</sub>** is rejected only in the Religion dimension, while retained elsewhere.

### Discussion on Hypothesis H<sub>2</sub>

Null Hypothesis (H<sub>2</sub>): There is no significant difference between tribal and non-tribal adolescents in their level of rigidity to change.

### Overall Rigidity

No significant difference is observed in total rigidity scores. Both groups display high levels of overall rigidity.

This finding aligns with developmental research suggesting that adolescence is often marked by cognitive absolutism and identity consolidation (**Jean Piaget, 1952; Erik Erikson, 1968**). During this stage, rigidity may reflect normative developmental processes rather than socio-cultural background.

Therefore, the null hypothesis **H<sub>2</sub>** is retained for overall rigidity.

### Intellectual and Emotional Rigidity

No significant differences are observed in Intellectual or Emotional Rigidity. Both groups demonstrate similar cognitive and emotional adaptability.

Research in cognitive development suggests that schooling enhances abstract reasoning similarly across socio-cultural groups (**Cole & Scribner, 1974**). The comparable intellectual rigidity levels may thus reflect shared academic exposure.

Emotional rigidity remains low in both groups, indicating adaptive emotional regulation consistent with adolescent socio-emotional maturation.

### Dispositional Rigidity

Non-tribal adolescents score significantly higher in Dispositional Rigidity.

Dispositional rigidity relates to stable personality traits. From a personality theory perspective (**Gordon Allport, 1937**), dispositional tendencies are shaped by socialization patterns. Competitive academic environments and structured urban contexts often encourage fixed achievement-oriented self-concepts, which may inadvertently foster dispositional inflexibility among non-tribal adolescents.

Thus,  $H_2$  is rejected for dispositional rigidity.

### **Perceptual and Creative Rigidity**

Tribal adolescents exhibit significantly higher Perceptual and Creative Rigidity.

Perceptual rigidity involves difficulty in reinterpreting stimuli, while creative rigidity reflects resistance to novel idea generation. According to **Melvin Kohn (1969)**, occupational and environmental structures shape cognitive styles. Communities with limited exposure to diversified symbolic systems may show greater perceptual conventionality.

However, this should not be misinterpreted as an intellectual deficiency. Rather, it may reflect culturally grounded cognitive frameworks prioritising tradition and collective norms over innovation-oriented expression.

Thus,  $H_2$  is rejected for perceptual and creative rigidity.

### **Social and Behavioural Rigidity**

No significant differences are observed in Social and Behavioural Rigidity.

This similarity suggests that normative Behavioural expectations during adolescence—peer conformity, rule adherence, and identity consolidation—operate comparably across both communities.

### **Integrated Interpretation**

The findings collectively suggest:

**Attitudinal Convergence in Modernization** – Tribal and non-tribal adolescents are largely similar in their orientation toward modern values, reflecting the integrative role of schooling and broader socio-economic transformation.

**Selective Divergence** – Differences emerge in Religion and specific rigidity dimensions, indicating that cultural identity and socialisation patterns still shape psychological orientations.

**Developmental Universality with Cultural Nuance** – Overall rigidity and modern attitudes show broad convergence, but domain-specific differences reflect culturally mediated adaptations rather than fundamental disparities.

## **CONCLUSION**

$H_1$  (Modernisation): Retained except in Religion.

$H_2$  (Rigidity): Partially rejected—significant differences exist in Dispositional, Perceptual, and Creative Rigidity but not in total rigidity.

The results support the view that modernisation among adolescents is neither uniform nor entirely divergent. Instead, it reflects a dynamic interplay between structural forces (education, media, policy exposure) and enduring cultural frameworks.

## Limitations of the Study

The present investigation provides important insights into rigidity to change and attitudes towards modernisation among tribal and non-tribal school-going adolescents of Purulia district. Nevertheless, several limitations should be acknowledged while interpreting the findings.

First, the study employed a descriptive survey within an ex-post facto research design. Such a design is appropriate for identifying differences and associations among variables but does not permit causal inferences. Therefore, although differences between tribal and non-tribal adolescents were observed, the findings cannot establish whether cultural background, educational experiences, socioeconomic conditions, or other contextual factors directly cause variations in rigidity to change or attitudes towards modernisation.

Second, the study was confined to school-going adolescents from Purulia district of West Bengal. Although the sample size ( $N = 437$ ) was adequate and selected through a stratified random sampling procedure, the geographical and cultural specificity of the sample limits the generalisability of the findings. Tribal communities across India differ considerably in their historical experiences, socio-economic conditions, educational opportunities, and cultural practices. Consequently, the results should not be generalised to all tribal or non-tribal adolescent populations without further empirical verification.

Third, the study relied exclusively on standardised self-report inventories. Although these instruments possess acceptable psychometric properties, self-report measures are susceptible to response bias, including social desirability and participants' subjective interpretation of questionnaire items.

Finally, the study focused primarily on group comparisons and did not examine several contextual variables that may influence adolescents' orientations toward modernisation, such as parental education, family socioeconomic status, school climate, peer influence, digital media exposure, and community participation.

## Suggestions for Future Research (New Section)

The present findings provide several directions for future investigations.

Future researchers may adopt mixed-methods research designs by integrating quantitative surveys with qualitative techniques such as in-depth interviews, focus group discussions, case studies, and ethnographic observations. Such approaches would provide richer insights into how tribal and non-tribal adolescents negotiate the relationship between cultural traditions and modern social changes in their everyday lives.

Comparative studies involving adolescents from different districts, states, and tribal communities across India would improve the external validity and generalisability of the findings. Cross-cultural comparisons may also help identify similarities and differences in the processes through which modernisation influences adolescent development.

Longitudinal research designs are recommended to examine how attitudes towards modernisation and rigidity to change evolve. Such studies could investigate the influence of educational experiences, media exposure, technological access, economic opportunities, migration, and changing social interactions on adolescents' openness to social change.

Future studies should also explore the contributions of significant socialising agents—including parents, teachers, schools, peer groups, community leaders, and local cultural institutions—in shaping adolescents' values, beliefs, and willingness to embrace change. In addition, the rapidly expanding role of digital technology and social media deserves systematic investigation because these platforms increasingly influence adolescents' identity formation, cultural engagement, and attitudes towards modernisation.

Researchers may further employ advanced analytical approaches, including structural equation modelling, multilevel modelling, and mediation or moderation analyses, to better understand the complex interactions among cultural, educational, psychological, and socio-economic factors influencing adolescents' adaptation to modernisation.

## Conclusion

The present study demonstrates that tribal and non-tribal adolescents of Purulia district exhibit broadly similar orientations toward modernisation and comparable overall levels of rigidity to change, although significant differences were observed in selected domains, particularly Religion, Dispositional Rigidity, Perceptual Rigidity, and Creative Rigidity. These findings suggest that adolescents from both communities are simultaneously influenced by traditional cultural values and contemporary social transformations. However, because the study employed a descriptive survey within an ex-post facto research design, the findings should be interpreted as indicating associations rather than causal relationships. The results nevertheless contribute to a better understanding of adolescent development in culturally diverse settings and highlight the importance of culturally responsive educational policies that promote openness to change while respecting indigenous cultural identities. Further research involving broader geographical regions, mixed-methods approaches, and longitudinal designs would strengthen understanding of the dynamic processes through which modernisation influences adolescents' psychological and social development.

## REFERENCES

1. Allport, G. W. (1937). *Personality: A psychological interpretation*. Henry Holt and Company.
2. Best, J. W., & Kahn, J. V. (2016). *Research in education* (10th ed.). Pearson.
3. Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition, affect, and social relations: Minnesota symposia on child psychology* (Vol. 13, pp. 39–101). Erlbaum.
4. Cole, M., & Scribner, S. (1974). *Culture and thought: A psychological introduction*. Wiley.
5. Das, P. (2019). Modernization among tribal adolescents in Eastern India. *Indian Journal of Social Psychology*, 35(2), 112–124.
6. Das, S. (2019). Modernization and value orientation among tribal adolescents: A comparative study. *Indian Journal of Social Research*, 60(3), 321–334.
7. Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton.
8. Giddens, A. (1990). *The consequences of modernity*. Polity Press.
9. Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511790881>
10. Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge University Press.
11. Inkeles, A., (1974). *Becoming modern: Individual change in six developing countries*. Harvard University Press.
12. Kakar, S. (1996). *The Indian psyche*. Oxford University Press.
13. Kaur, K. (2017). Attitude of adolescents towards modernization in relation to their sex. *Journal of All India Association for Educational Research*, 17(1–2).
14. Kohn, M. L. (1969). *Class and conformity: A study in values*. Dorsey Press.
15. Kumari, N. (2018). Attitude of tribal and non-tribal students towards modernization. *International Journal of Scientific Research in Science and Technology*, 4(1), 215–220.
16. Lerner, D. (1958). *The passing of traditional society: Modernizing the Middle East*. Free Press.
17. Mahapatra, A. (2018). Gender equality and ancient Indian culture: A study. *International Journal of Humanities and Social Science Invention*, 7(8), 22–26.
18. Mahato, P., Singh, R., & Verma, S. (2022). Psychological rigidity and adaptability among adolescents: A developmental perspective. *Indian Journal of Psychological Research*, 66(1), 78–86.
19. Mukherjee, S. (2021). Cultural transitions and identity preservation among tribal communities in West Bengal. *Journal of Tribal Studies*, 9(1), 23–37.
20. Patel, R. (2010). *Working the night shift: Women in India's call center industry*. Stanford University Press.
21. Patel, R. (2020). *Research methodology: A practical guide*. Sage Publications.
22. Patel, R. (2020). Rigidity to change and cultural preservation among tribal adolescents. *International Journal of Indian Psychology*, 8(4), 1125–1134. <https://doi.org/10.25215/0804.112>
23. Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.

24. Rao, S. (2014). Modernization and youth aspirations in rural India. *Sociological Bulletin*, 63(2), 215–230. <https://doi.org/10.1177/0038022920140204>
25. Sharma, K. (2016). Rigidity to change and modernization: A psychological perspective. *Indian Psychological Review*, 88(3), 201–212.
26. Sharma, S. K. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65–75. <https://doi.org/10.1016/j.ijinfomgt.2018.09.013>
27. Singer, M. B. (1972). *When a great tradition modernizes: An anthropological approach to Indian civilization*. Praeger Publishers.
28. Singh, A., & Kaur, G. (2017). A comparative study of tribal and non-tribal adolescents' attitudes towards modernization. *Journal of Education and Development*, 7(1), 55–64.
29. Singh, Y. (1986). *Modernization of Indian tradition: A systemic study of social change*. Rawat Publications.
30. Uberoi, P. (2006). *Freedom and destiny: Gender, family, and popular culture in India*. Oxford University Press.
31. Weber, M. (1998). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). Routledge. (Original work published 1905)