SPECIMEN FORMAT FOR THESES OF MONTH

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Sub Subject Heading:	**:**	-
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Title of the thesis	**:**	Determinants of Risk and Resilience amongYouth and the Effect of Sensitization Programme.
(i) In Roman Script (ii) In roman Script		- -
Nomenclature of Degree:	**:**	Ph.D in Human Development
Month & Year of Enrolment:	**:**	January 2019
Month & Year of Registration:	**:**	January 2019
Month &Year of Submission:	**:**	May 2025
Month &Year of Award	**:**	October 2025
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Abstract within 300 words:

Youth represent the most dynamic segment of any population and are crucial to a country's future. This developmental phase marks the transition from childhood to adulthood, involving distinct cognitive, emotional, and social changes. These changes neither fully occur in early childhood nor can wait until adulthood. Youth often explore identities and roles with some freedom from strict societal expectations, but gradually face increasing responsibilities. In India, out of 1.2 billion people, 54% are under 24 years, highlighting the importance of youth lifestyles and well-being.

This study focuses on youth as a formative period preparing them for active social participation. It examines risk and resilience among youth, exploring factors influencing these components. Understanding risk factors helps identify young people in need of early intervention, while recognizing resilience informs targeted programs to support them.

A cross-sectional study was conducted in Coimbatore, Tamil Nadu, involving 1,710 youth aged 18-22. Data was collected via self-made demographic questionnaires, the Youth Risk Behaviour Scale (2019), and the Resilience Questionnaire (2017). A sensitisation program was then implemented with 122 participants in the experimental group and 62 in a control group. Over two weeks, 16 sessions addressed topics like addiction, problem-solving, protective factors, and counselling.

Analyses showed moderate to high risk behaviours, such as substance use and unsafe practices, alongside moderate to low resilience levels, including self-belief and emotional regulation. Risk and resilience were significantly interrelated; high risk often meant lower resilience. Socio-demographic factors such as age, gender, parents' education, and family income influenced both risk and resilience.

Post-program results revealed improved resilience and reduced risk behaviours in the experimental group, supporting the program's effectiveness. However, some resilience aspects required ongoing support. The study underscores the need for continuous sensitisation, early identification of at-risk youth, and collaboration among educators, families, and policymakers to promote youth well-being.

i) Major objectives:

Primary objective:

- To assess the incidence of risk behaviours among the youth.
- To assess the levels of resilience among the youth
- To analyse the interrelationship between the risk behaviours and resilience component.
- To explore the socio-demographic predictors of risks and resilience.
- To examine the effect of sensitisation programme on the risk behaviours and resilience among the selected youth.

ii) Hypothesis: -

iii) Methodology :

With the objectives identified and research questions formed, the research study was framed under five phases:

Phase I:

- Review of the literature: Review of the literature has been collected based on both national and global studies, as discussed under the chapters of introduction and review of literature.

- Population and sampling: In alignment with the study's purpose, the population and sampling methods were carefully defined. A simple random sampling procedure was employed to select the study sample, which was conducted in two stages: (A) selection of the study area and (B) selection of the sample population.

(A) Selection of study area- The study was conducted in Coimbatore city, located in the state of Tamil Nadu. To ensure equitable representation of youth from across the city, colleges were selected from each of the five geographical zones, namely east, west, north, south and central zones. A total of 15 colleges were approached, based on the strength of the students, zonal representation and distance of 25 km from the institute. Six colleges gave consent to conduct the study.

(B) Selection of the sample population- The study focused on youth between the ages of 18–22 years from Coimbatore district. An initial pool of 2,584 students were approached, after which a final sample of 1710 students consented to

participate. These participants were drawn from 6 colleges located in Coimbatore city and represented a diverse demographic background, including both urban and rural areas, as well as students from joint and nuclear families. The zonal distribution of the participants was as follows: North Zone – 468 students, South Zone – 218 students, Central Zone – 235 students, West Zone – 375 students, and East Zone – 414 students. The sample consisted of 799 female and 911 male students.

The inclusion criteria were that the youth should be between the ages of 18-22 years, and should be able to read and write English as the assessment tools (written) communicated in English. The exclusion criteria were – the youth with special needs who were physically challenged, as well as those undergoing any psychological and psychiatric treatments. They were excluded from the study based on the observation of the researcher, seconded by teachers' and parents' concurrence.

- Assessment of tools- In the present study, tools were utilised to effectively address the research objectives, such as, a questionnaire to collect socio-demographic profile, the 2019 Youth Risk Behaviour Surveillance System (YRBSS) and the 2017 Resilience scale were used.

- **Socio-demographic questionnaire**: A self-developed questionnaire was administered to elicit information on the socio-demographic conditions. The information on the socio-demographic conditions provides insights into the personal and family background of the individual as well as their living conditions that possibly may influence their behaviours and opinions, contributing towards valuable comprehension for research purposes. The questionnaire consisted of markers such as age, gender, educational status, types of family, area of residence, father's and mother's education, father's and mother's occupation, and family annual income.
- **2019 Youth Risk Behaviour Surveillance System (YRBSS) -** The tool was developed by the Centres for Disease Control and Prevention. The tool consisted of risk behaviours under five domains, namely-risk concerning safety, attempting suicides, substance use, sexual behaviour and health issues.
- **2017 Resilience Scale -** The tool was developed by the 'Assessment and Development Consultants'. The tool consists of eight components, namely- self-belief, optimism, purposeful direction, adaptability, ingenuity, challenge

orientation, emotional regulation and support seeking.

Both the tools on risk and resilience were pilot tested to check the reliability and validity, which had acceptable and good scores respectively indicating a fit for intended use.

Phase II: Data collection, data before the sensitisation (Pre-sensitisation data).

After acquiring Institute Human Ethical Committee clearance and permission from the college/university administration, rapport building took place between the students and the researcher to build trust and a relationship. Establishing rapport with the selected youth was essentially carried out to have active participation of the youth in a smooth and with a maximum level of valid response. Since the survey consisted of few sensitive questions, a sense of confidentiality was developed and the participants were assured of protecting their identity. Informed consent was obtained from all participants. Data collection on the college campus was started soon after the rapport building and the obtaining consent. Questionnaire and scales were distributed, and the participants took 15 minutes to 35 minutes maximum to complete responding in writing.

Phase III: Data analysis-Analysing of pre sensitisation data

Analysing data, applying statistical and logical techniques to illustrate and evaluate the pre-sensitisation data from youth on their risk behaviours and resilience components.

The data analysis was carried out using:

- Frequency and percentage: To assess the prevalence of risk behaviour and the levels of resilience among youth and to explore the socio-demographic distribution.
- Canonical correlation analysis: To identify the significant relationship between risk behaviours and resilient elements among youth.
- Multiple-linear regression: To identify the predictive capacities of socio-demographic markers on risk factors and resilience components among youth.

Phase IV: Conduct sensitisation programme and data collection (Post-sensitisation data)

Developing sensitisation modules, conducting the sensitisation programme and

collecting data after the sensitisation (Post-sensitisation data)

- An educational sensitisation was planned for behavioural change among the participants, which included educational activities, interactive sessions designed to educate, and workshops to raise awareness among the selected youth based on the findings of the data analysed before sensitization.

- One college was selected from the central zone based on the prevalence of risk behaviour and permission granted by the administration.

- 184 youth were selected based on a controlled randomised selection technique, comprising 122 youth for the experimental group and 62 for the control group waitlist.

- The topics covered under sensitisation were unhealthy and abusive risks, addictions, building self-love, strengthening self-efficacy, strengthening protective factors, etc., using ice-breaking activities, focus group discussion, quiz, panel discussion, simulation exercise and positive awareness. The whole programme was carried out over two weeks (4 days per week), segregated into 16 sessions, with a duration of one and a half hours per session and two sessions per day.

  This programme was conducted by a trained clinical psychologist and assisted by the investigator. The clinical psychologist played a crucial role in conducting a sensitisation programme for the youth using the validated educational content, delivering lecturers/awareness, clearing doubts, tailoring messages to the students to make them aware, and conducting counselling sessions if asked and required. The role of the investigator was to conduct focus group discussions, exercises, and activities for the students and completely assist and facilitate the clinical psychologist, provide accurate information, carry out evaluation, and conduct impact assessment.

- Post data was collected after 10 days, and follow-up data after a gap of one month.

Phase V: Data analysis-Analysing of post data sensitisation

Analysing data (post-sensitisation) and applying statistical as well as logical techniques to illustrate and evaluate data from youth based on their risk behaviours and resilience factors before and after the sensitisation (pre-, post-data and follow-up).

Post-sensitisation data analysis was carried out using the following statistical tests,

- Paired sample t test: To identify the effect of the sensitisation programme in pre- data and post-data.
- Independent t-test: To assess the effect of the sensitisation programme by identifying the significant differences between risk behaviours and resilience among the experimental and control groups in the pre- and post-sensitisation data.
- MANOVA: Multivariate analysis of variance was used to identify the significant effect of sensitisation programme on risk behaviours and resilience elements among youth in the pre-data, post-data data and follow up and to check the sustainability of the programme.

iv) Findings:

Results and findings of the study are presented under the following heads:

A. Socio-demographic profile of the respondents

B. Prevalence of risk and levels of resilience among youth

C. Interrelationship of risk behaviours and resilience components among youth

D. Predictive capacities of socio-demographic markers on risk and resilience among youth

E. Evaluate the effect of the sensitisation programme in pre- and post-data and follow-up phases

A. Socio-demographic profile of the respondents

- ✓ A high percentage of the participants were older youth between 20-22 years (51.7%) than the younger youth between 18-19 years (48.3%).
- ✓ With regard to gender, males constituted 53% and females were 47%.
- ✓ A higher percentage of youth were students in their II-year postgraduate (24.4%), followed by III-year undergraduate (20%). The remaining 55% of youth were students studying in their I and II year undergraduate and I year postgraduate students.
- ✓ Around 70.4% of them hailed from a nuclear family and 20.6% from a joint family.
- ✓ Majority of the youth resided in the urban area (45.4%) followed by rural area (30%).

- ✓ Educational status of parents – Most of the fathers of the youth have completed their postgraduate (30.5%) and undergraduate (25.8%), whereas the mothers have completed their 10^{th} standard (27.5%) and 11^{th} -12^{th} standard (26.1%).
- ✓ Occupational status of parents- The majority of the youth's fathers were working in the private sector (48%), and mothers were not employed (69.6%).
- ✓ Majority of the youth reported to have a family income between 2 lakhs – 5 lakhs (56.5%) followed by an income of 5 lakhs-10 lakhs (22.7%) per annum.

B. Prevalence of risk and levels of resilience among youth

- ✓ The highest prevalence of risk behaviour was found in tobacco, smoking, self-medication, attempting suicide and health issues among the youth
- ✓ Moderate levels of risk were found in eating habits, sexual behaviour, risk of driving, and physical activities.
- ✓ Looking into the levels of resilience components of youth, low level of resilience was found mostly in all components of resilience starting from challenge orientation, emotional regulation, support seeking, purposeful direction, ingenuity, self-belief and optimism, except for adaptability, which was found to be in a high level among the youth of the present study.

C. Interrelationship of risk behaviours and resilience components.

The canonical correlational analysis (CCA) was used to find whether a relationship exists between the risk factors and the resilience components among youth. The result collectively showed the full model across the functions, which was statistically significant using the Wilk's λ. The full model illustrated functions 1 to 4 that were statistically significant, indicating the relationship between the risk (predictor) and resilience (outcome) variables.

- ✓ Function 1 indicated that, higher the substance use and health issues, the lower is the ingenuity and challenge orientation, and has been labelled as "risk of decreased positivity" based on the nature of the predictor variable and outcome variable.

- ✓ Function 2 illustrated, the higher the purposeful direction, the lower the risky sexual behaviour. Similarly, when adaptability is low, there is an increase in the risk of health issues. This function has been labelled as "risk of despair" based on the nature of the predictor variable and outcome variable.
- ✓ Function 3 showed that the higher the self-belief lower the substance use, whereas the higher the risk of health issues. Similarly, when the risk of health issues is high, the adaptability is lower. This function has been labelled as "risk of impulsivity" based on the nature of the predictor variable and outcome variable.
- ✓ Lastly, function 4 depicted that lower support-seeking behaviour tends to increase the risk of attempting suicide, and there are fewer safety issues. This function has been labelled as "reduced self-efficacy and maladjustment" based on the nature of the predictor variable and outcome variable.

D. Predictive capacities of socio-demographic markers on risk and resilience among youth Risk Behaviours

- ✓ Concerning safety issues, all the socio-demographic markers were found to be the significant predictors except for area of residence and mother's education, with 6.6 percent of variance (F=9.908, p>.000).
- ✓ Concerning the risk of attempting suicide, all the socio-demographic markers were found to be significant predictors except for the father's and mother's education. The predicting socio-demographic markers accounted for 33.9 percent of variance (F=86.125, p>.000).
- ✓ In the risk of substance use, all the socio-demographic markers were found to be significant predictors except for age, type of family and father's occupation accounting for 7.8 percent of variance (R=14.307, p>.000).

- ✓ Risk of sexual behaviour showed that all the socio-demographic markers were found to be the significant predictors except for type of family, father's education and occupation and family income. The predicting socio-demographic markers accounted for 5.6 percent of variance (F=8.315, p>.000).
- ✓ Looking into health issues all the socio-demographic markers were found to be the

significant predictors except for age, educational qualification, type of family, mother's education and occupation with3.1 percent of variance (F=5.44, p>.000).

Resilience components

- ✓ Concerning self-belief all the socio-demographic markers were found to be the significant predictors except for age, educational qualification, mother's education and occupation with 3.1 percent of variance (F=5.44, p>.000).
- ✓ In optimism, only gender and mother's education were found to be significant predictors, accounting for 1.6 percent of variance (F=2.69, p>.003).
- ✓ The component of purposeful direction showed hat, except for father's education, no other socio-demographic markers were found to be significant predictors, which accounted for 1.4 percent of variance (F=2.415, p>.007).
- ✓ In adaptability, the socio-demographic markers such as educational qualification, area of residence and family income were found to be significant predictors with 2 percent of variance (F=3.396, p>.000).
- ✓ Ingenuity component showed that all the socio-demographic markers were found to be the significant predictors except for type of family, area of residence and mother's education. The predicting socio-demographic markers accounted for

2.9 percent of variance (F=5.087, p>.000).

- ✓ Looking into challenge orientation, not all socio-demographic markers, but only the mother's education, was found to be the significant predictor with 1.4 percent of variance (F=2.360, p>.009).
- ✓ Concerning emotional regulation all the socio-demographic markers were found to be the significant predictors except for age, gender, educational qualification, mother's education, mother's occupation and family income with 2.6 percent of variance (F=4.546, p>.000).
- ✓ Looking into support seeking, only gender and area of residence were found to be significant predictors with 1 percent of variance (F=1.714, p>.072).

E. Effect of sensitisation programme in pre-, post-data and follow-up phases

- ✓ Risk- The paired sample t test results showed a significant decrease in the mean scores of post-tests when compared to the mean scores of the pre-test, which represented lower scores, indicating a lower level of risk behaviour. The Cohen's D value indicated a medium effect for safety issues, attempting suicide, and health issues and a large effect for substance use and sexual behaviour.
- ✓ Resilience- The test results showed a significant increase in the mean scores of post-tests when compared to the mean scores of the pre-test, which represented higher scores at higher levels of resilience. While in the dimension of adaptability, the mean scores of pre- and post-sensitisation did not show any difference.

Also looking into the Cohen's D value, we can see the effect size of self-belief, optimism, purposeful direction, ingenuity, challenge orientation, and support seeking was found to be small and emotional regulation were medium.

- ✓ The independent t test results showed that both the experimental and control group youth exhibited higher levels of risk behaviours in the pre data analysis, whereas in the post sensitization data, it was observed that the mean scores of the experimental group had decreased considerably indicating the reduced involvement in risk behaviours when compared to control group that persisted higher scores. The differences in mean scores was significant at 1% levels.
- ✓ The resilience results depicted that both the experimental and control group youth showed similar mean scores during pre-data analysis, whereas in the post-sensitisation, it was observed that the mean scores of the experimental group showed an increase with significant differences at 1% levels in self-belief, optimism, purposeful direction, ingenuity emotional regulation and support seeking. However, no significant differences were seen in the dimensions of adaptability and challenge orientation.
- ✓ Multivariate analysis of variance was done to test the significance of the effect of the sensitisation programme on the risk factors among youth of the experimental group in the pre- and post-sensitisation and follow-up data after a gap of one month. The assumptions were met through the test of sphericity. The univariate test results showed a significant interaction between the subject

factors of all the risk behaviours namely, safety issues, attempting suicide, substance use, sexual behaviour and health issues with 16.5%, 30.7%, 75%, 70.2% and 23.4% of variance respectively based on the given Partial Eta Squared value. Pairwise comparison also showed the difference between the mean scores of the factors of risk measures. Though effectiveness was observed in scores of risk behaviours, but risk of safety issues was not sustained during follow up showing a slight increase, which indicated the need for regular or periodic sensitisation or intervention programmes.

- ✓ Multivariate analysis of variance showed the significance of the effect of sensitisation on the components of resilience among youth of the experimental group in the pre- and post-sensitisation and the follow-up data after one month. The assumptions were met through the test of sphericity. The univariate test results showed a significant interaction between the subject factors of all the components of resilience namely self-belief, optimism, purposeful direction, ingenuity, challenge orientation, emotional regulation, support seeking except for adaptability with 26.8%, 37.8%, 40.8%, 4.3%, 11.4%, 25.9% and 4.9% of variance respectively based on the given Partial Eta Squared value. Pairwise comparisons also showed the difference between the mean scores of the factors of resilience measures. In resilience, though the effect was seen in the post-test, few dimensions like challenge orientation, adaptability and optimism showed a slight decrease during follow up showing a need for reinforcement and regular intervention to sustain resilience.

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