IV. RESULTS AND DISCUSSION

Studying the determinants of risk behaviours and resilience among youth encompasses a broad scope, investigating various individual, social, and environmental factors that influence young people engage in risky behaviours or demonstrate resilience in the face of challenges, including exploring factors like family dynamics, peer relationships, school/college environment, socioeconomic status, mental health, personal characteristics, and cultural contexts, to inform prevention and intervention strategies to promote positive youth development

The current research study focused on gathering and analysing accurate data and applying statistical and logical techniques to illustrate and evaluate the results based on the risks and resilience to assess the levels of risk and resilience, and establish the interrelationship between them. The current study also looks into the socio-demographic profile of the youth and further attempts to determine the predictive capacities of socio-demographic markers on risk and resilience. The study also looks into the effectiveness and sustainability of the sensitisation programme that was conducted as part of the study objectives.

The findings of the research "Determinants of Risk and Resilience among Youth and the Effect of Sensitisation Programme" are presented as follows:

A. Socio-demographic profile of the respondents

B. Prevalence of risk and levels of resilience among youth

C. Interrelationship of risk behaviours and resilience among youth

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

E. Effect of the sensitisation programme on risk and resilience among youth

I. The effect of the sensitisation programme– pre- and post-data analysis of the experimental group

II. The effect of the sensitisation programme – analysis of significant differences between the experimental and control groups in the pre- and post-sensitisation.

III. Significant effect of sensitisation on risk behaviours among youth in the pre-, post- data and follow-up phases.

IV. Significant effect of sensitisation on resilience among youth in the pre-, post- data and follow-up phases.

A. Socio-demographic profile of the respondents

Demographic data, a piece of information on the size, growth or distribution of the population, can tell more about a community than its size and whether it is growing or declining. Demographics also provide access to detailed information on the social, economic and characteristics of communities, including the basic features, age, gender, race/ethnicity, social, economic and housing features.

Socio-demographic characteristics are crucial in social and behavioural sciences research as they provide context and help explain differences in attitudes, behaviours, and outcomes across various groups. By understanding factors like age, gender, education, income, and ethnicity, researchers can interpret findings, develop targeted interventions, and inform public policy.

It is a contextual understanding that socio-demographics provide a structure for understanding the environment in which individuals live and operate. Socio demographics are used in fact for various reasons, as it might be of vital importance to know who is filling the survey questionnaire and if the survey targets a specific audience, which allows the researcher to regulate whether they actually reached the target audience. If the research aims for a representative sample of a population, knowing the distribution helps in determining how close the sample replicates the population.

The influence of social demographic characteristics on risk behaviours and resilience among youth poses a significant challenge to an individual, community and youth development. Asking the right demographic questions allows the researcher to discover meaningful and actionable insights to assist in making better decisions.

Risk directly or indirectly has an impact on the youth's lifestyle in different aspects. Therefore, efforts were made to collect the general profile of the college youth with a general profile questionnaire constructed. The different socio-demographic

characteristics of the youth considered for the present study were divided into two groups: the personal characteristics and the demographic background of the selected youth. The socio-demographic background in this study is divided into two parts- personal and parental demographic profiles. The personal characteristics of youth include - age, gender, educational qualification, type of family and residence, and parental demographic background, constitute of – fathers' and mothers' educational status, fathers' and mothers' occupation and family income. Accordingly, Tables VI and Table VII show the socio-demographic data drawing information on the social and statistical characteristics of the population selected.

Table VI

The Personal Profile of the Selected Youth

Personal factors	Category	Frequency	Percentage
Age	18-19 years	826	48.3
	20-22 years	884	51.7
	Total	1710	100.0
Gender	Male	911	53.3
	Female	799	46.7
	Total	1710	100.0
Education Qualification	11^{th} -12^{th}	178	10.4
	I UG	101	5.9
	II UG	287	16.8
	III UG	342	20
	I PG	205	12
	II PG	597	34.9
	Total	1710	100.0

Personal factors	Category	Frequency	Percentage
Type of family	Joint	506	29.6
	Nuclear	1204	70.4
	Total	1710	100.0
Area of residence	Urban	776	45.4
	Rural	513	30.0
	Semi urban	421	24.6
	Total	1710	100.0

To achieve certain goals, people tend to take risks in life. Although some of these goals may be pursued through negative risks (e.g., adolescent drinking to impress their friends and gain their approval), people also engage in positive risks (Monika & Duell, 2022). Age-related differences concerning risk-taking tasks vary depending on task characteristics and older adults' cognitive abilities. Older adults, precisely, are less effective at learning to take advantageous risks and take fewer risks when faced with gains, particularly in financial and mortality-based ones (Nolte & Hanoch, 2023). Adolescents tend to exhibit an interest in new and novel experiences and thrill-seeking, which can include positive risk-taking behaviour, such as trying new tricks at the skate park. This risk-taking behaviour peaks at around 15-16 years and tends to tail off by early adulthood. From table VI, it can be seen that out of the total 1710 youth, 51.7 percent were in the age of 20-22 years and 48.3 percent were between the ages of 18-19 years.

Men and women, boys and girls are affected differently by any risk behaviour or disaster, even if they live in the same household. Risk and protective factors may map onto the brain and uniquely influence individuals based on gender. The role of gender in the fusion effects of risk factors and the shared influences of risk and protective factors is notable. There is a need to consider gender when researching risk and resilience among youth to be able to provide concrete recommendations on how to account for them in future research. Studies have also shown that gender makes use of unique influences on behaviour and clearly influences outcome domains (Cartier L et.al., 2024). Looking into

the gender category, this table shows that among the youth selected, a higher percentage were male (53.3 percent), compared to female (46.7 percent).

School and college are a major part of any adolescent's life. The impact they can have on adolescents can be positive or negative, depending on whether they promote the development of risk factors or protective factors. Research had identified a number of different variables present within young people's lives that place them at risk of educational failure or disadvantage (Armstrong et al., 2005). Being behind in an expected grade level is a strong predictor of all risk behaviours. Positive school experiences provide a source of strength amidst a potentially chaotic environment. Achievement motivation and educational aspirations aid young people in their feelings of self-esteem and self-efficacy. The table also classifies youth based on their educational qualification, where the majority of the youth were doing their II postgraduate (34.9%), followed by III-year undergraduate with 20%, and the least belonged I year undergraduate with 5.9%.

Adolescence and youth are an important phase in the life cycle where the development of familial, interpersonal, and institutional relationships in life may have lasting influences throughout the life-course (Wheaton & Clarke 2003). It is a period that is characterised by the increasing importance of social contexts beyond the home. Perhaps the most important aspect of adolescents' lives that is believed to be impacted by the area of residence is the likelihood of engaging in broadly defined risk-related behaviours such as sexual behaviours, substance abuse, or any unlawful behaviour. Some studies have found that neighbourhood characteristics are associated with adolescents' physical and mental health, educational outcomes, engagement in problem behaviours, and life chances in general (Gephardt, 1997; Sampson et al., 2002). There are various reasons to believe that neighbourhoods could play an important role as a determinant of adolescent well-being compared to either children's or adults' well-being. The type of residence that youth live in can be an active contributor towards risk and resilience. In this given table, it was observed that the majority of the youth reside in the urban area of Coimbatore with 45.4%, followed by the rural area with 30%, and the rest of the youth reside in the semi-urban area of Coimbatore (24.6%).

Family is a form of togetherness which provides support both emotionally, financially, and physically to its members. The joint family setting was the most common family setting or structure in Indian society, but with modernisation and rapidly changing trends, changes in family structure are also visible. The nuclear family is the latest trend in society. Family disruption may lead to adverse effects on the mental health of both the child as well as his parents. Disruptions may be caused by conflicts between family members or among parents, emotional or financial crisis or death of a parent and abuse of the child or the caregiver (Amato, 2005; Carlson & Corcoran, 2001). In this study, the majority of the youth lived in a nuclear family (70.4%), and the rest lived in a joint family (29.6%). Research broadly suggests that youth who are raised in single-parent families are more likely to participate in "unhealthy risk behaviours" and fare worse on a wide range of developmental outcomes compared to their counterparts in dual-parent families (Langton & Berger, 2011).

Parents, family and surroundings impact behaviour, values and beliefs. Young people act and react according to the environment they are raised, and it spontaneously becomes their obvious behaviour. Accordingly, supportive parents and society promote healthy adolescence and youth who can deal with their problems and are also able to handle their emotions effectively.

Table VII

Demographic Information of the Parents of the Selected Youth

Family background	Category	Frequency	Percentage
Father's education	Below 10th	132	7.7
	10th	337	19.7
	11-12th	132	7.7
	Undergraduate	442	25.8
	Post graduate	521	30.5
	Others	146	8.5
	Total	1710	100.0
Mother's Education	Below 10th	301	17.6
	10th	470	27.5
	11-12th	447	26.1
	Undergraduate	350	20.5
	Post graduate	133	7.8
	Others	9	.5
	Total	1710	100.0
Father's occupation	Government	458	26.8
	Private	820	48.0
	Daily wages	432	25.3
	Total	1710	100.0
Mother's Occupation	Government	169	9.9
	Private	133	7.8
	Daily wages	218	12.7
	Not employed	1190	69.6
	Total	1710	100.0

Family background	Category	Frequency	Percentage
Family annual income	Less than 2 lakhs	224	13.1
	2 lakhs-5 lakhs	966	56.5
	5 lakhs- 10 lakhs	389	22.7
	10lakhs- 20 lakhs	109	6.4
	20 lakhs above	22	1.3
	Total	1710	100.0

Adolescents' characters are built from childhood. Families and parents, as the first and primary environment, are the factors of basic character in adolescents. Parents have an important role in the promotion of healthy adolescent behaviours that can influence positive developmental trajectories and health outcomes (Dittus, 2023). Parental monitoring is a key aspect of the parent-child relationship with the potential to mitigate youth engagement in risky behaviours. Adolescents model their behaviour on that of their family members, peers, and role models. Parents' risk-taking behavior matters strongly in how adolescents engage with risky activities, which can be related to genetics and aspects of early learning about substance use (Smit et al., 2018) and other risky behaviours. Adolescents who have caring and involved parents are more likely to transfer their positive feelings outward and act positively in their wider social environment as well. On the other hand, when parents do not express their love or care to monitor their behaviour, this indifference can be catastrophic for young people. Adolescents display a wide range of self-destructive behaviours, in the form as abusing illegal substances or engaging in unsafe sexual behaviours. They also direct their anguish outwards, in the form of aggression and bullying. Parental involvement and direction significantly contribute to on the reduction of risk behavior among young adolescents. A limited ability for abstract reasoning during early adolescence requires clear anticipatory guidance by parents and an active effort to maintain communication in the child-parent relationship (Nelson, 1999). Low levels of parental knowledge about youth activities have been associated with high levels of adolescent problem behaviours, such as delinquency and substance use (Crouter & Head, 2002). Parent, youth, and joint parent–youth behaviours all may lead to parental knowledge. The combination of both parental

actions (Fletcher et al. 2004) and actions of young people (Stattin & Kerr, 2000) may be associated with parental awareness of their youth activities. Several theoretical view points highlight the importance of parent-child relationships to adolescent growth and development by Bronfenbrenner and Crouter (1982), Bronfenbrenner and Morris (1998) and the social development literature by Boyer (2006). Many studies have shown that strong connections between the parent and child and high levels of parent involvement are instrumental as protective factors against a variety of risks (Boyer, 2006; Crouter & Head, 2002).

In Table VII, the data stated that majority of the fathers have completed their post graduate (30.5%), followed by under-graduate (25.8 %), while 19.7 % are educated upto10^{th} standard, few have completed 11^{th} – 12^{th} standard, 7.7 %were educated below 10th standard and other categories showed 8.5%. Coming to the mother's education, majority of the mothers were educated upto 10^{th}standard (27.5 %) and were $11^{th}$and 12^{th} standard (26.1%) passed, followed by mothers with undergraduate level of education (20.5 %) and below 10^{th} standard (17.6%) and very few completed their post graduate (7.8%) while the rest falls in the others category (5%).

Looking into the father's occupation, most of them were working in the private sector (48%), 26.8% in the government sector, and a few worked fora daily wage (25.3%). Referring to the mother's occupation, we can see that the majority of the mothers were not employed (69.6%), followed by mothers working fora daily wage (12.7%). Mothers who worked in the government sector were few (9.9 %), and the rest of the mothers (7.8%) worked in the private sector.

The income gap between the richest and the poorest members of society has become visible throughout the country, this is important to examine its effects on families and youth in particular. Many health behaviours in adults differ by socio-economic status (SES), with lower SES associated with increased numbers of unhealthy behaviours (Laaksonen & Chen, 2003; Matthews 2002). Yet, in adolescence, such patterning is not always found, where low SES were related to high or low risk behaviours (Daniel, 2009; Mason, 2010). While many studies have shown that teens from higher-income families achieve greater academic success than those from low-income families, fewer studies

have focused on other aspects of teenage well-being, such as emotional, psychological, and sexual health. During adolescence, young people are exposed to drugs, alcohol, and sexual activity, and their family life can have a profound effect on their decisions of whether or not to partake in these activities (Brewster, 1994; Figlio & Ludwig, 2000; Upchurch et. al, 2004). The data in the current study showed that most of the youth's family annual income comes between 2 to 5 lakhs (56.5%), followed by the income of 5 lakhs to 10 lakhs (22.7%). It can also be observed that 13.1% of the youth family earned an annual income of less than 2 lakhs, and only a few families earned an amount of 10-20 lakhs (4.1 %), and very few families earned above 20 lakhs, constituting to only1.3%.

A study showed that adolescents from economically disadvantaged backgrounds are at a higher risk of undernutrition. Studies in Uttar Pradesh and Bihar indicate that these adolescents are more likely to experience thinness and stunting, conditions linked to inadequate food intake and poor nutritional quality (Kumar et al., 2021). Also, according to the ASPE (2009), research brief, youth from low-income families are vulnerable to poor outcomes as adults, as these youth often lack the resources and opportunities found to lead to better outcomes. Youth from low-income families are at greater risk than youth from middle- and high-income families to engage in sexual activity before the age of 16 years, get involved in gang membership, attack someone or engage in a fight, steal items worth more than 500 rupees, and ever run away. However, youth from low-income families are not more likely than youth from middle- and high-income families to consume alcohol and marijuana, deal with selling of illegal drugs, or damage property. Seven percent of young women from low-income families have a child by age 18, while only 2 percent of females from middle-income families and 1 percent of females from high-income families have a birth by this age. One in five youth from low-income families (20%) are charged with an adult crime by the age of 24, which is higher than the number of youths from middle- and high-income families (16 and 12%, respectively).

B. Prevalence of risk and levels of resilience among youth

Risk behaviour control is dependent on cultural surroundings, parental behaviour and support systems available to all. Youth risk is what it is: one could die, one could lose everything, one could become disabled and never know a normal life if doing the risky things continues. Youth, a period characterised by drastic physicaland physiological changes, was also seen as a period of rapid changes in their attitude and behaviour, heightened emotionality, changed interest patterns, and changed roles within the social group. At this stage, they are testing themselves in the environment, socially and physically, where they put themselves at risk by testing how far they can push boundaries. Psychologically, it is in this period of life that they become integrated into society as adults, wherein they face numerous behavioural and mental health difficulties. At this period, a significant increase occurs in unhealthy risk-taking behaviours such as violence, smoking, substance use, high-risk sexual behaviour, stress, anxiety, depression, academic difficulties, school dropout and suicide attempts. Not all youth engage in these behaviours often, although many experiment. Worldwide, homicides occur among youth each year, making it the fourth most common cause of death among young people. These concerns mandate research in the domain of mental health.

The current study had an objective to know whether the youth had been affected by such risk behaviours in the city of Coimbatore, if yes, then to what level have they perceived themselves to be at risk? Accordingly, a standardised tool Youth Risk Behaviour Scale, developed by the Centre of Disease Control was used to measure the levels of risks among the selected youth in Coimbatore city.

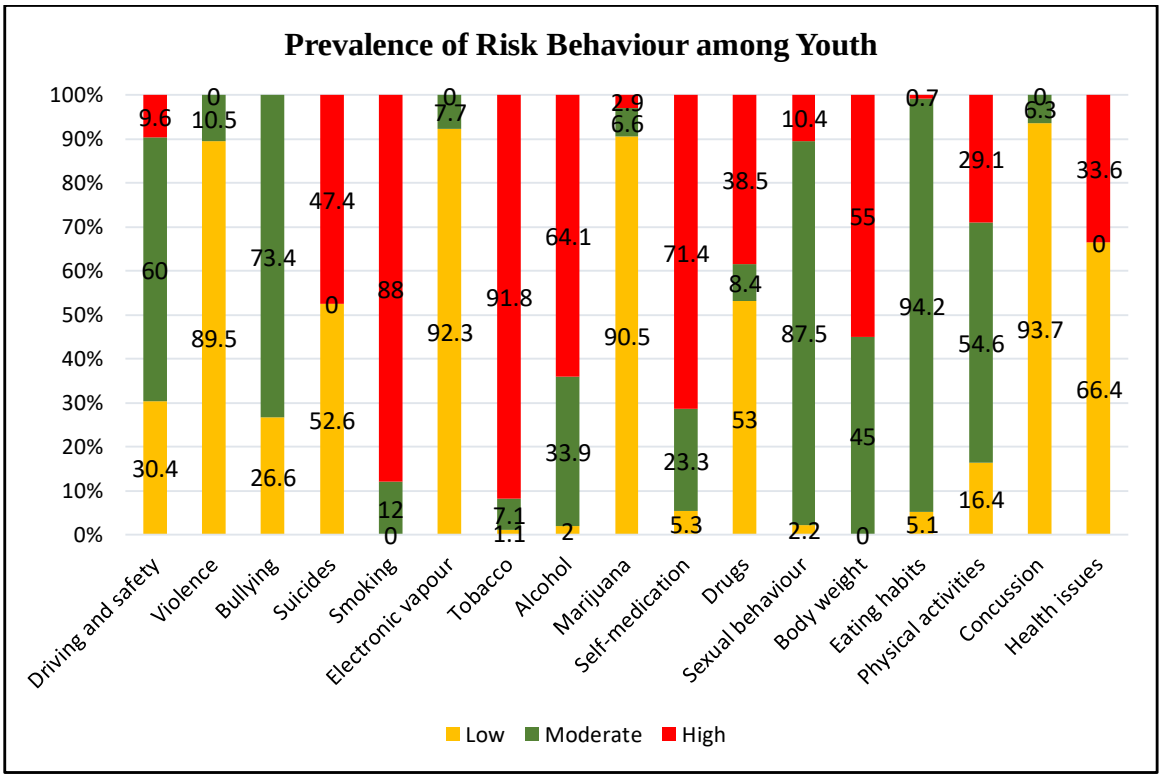

Figure-4

Figure 4 shows the level of risk behaviours among youth in the present study in the city of Coimbatore. It was observed that the majority of the youth reported a moderate level of risk. When it comes to driving and safety issues, it can be seen that majority of the youth experienced a moderate level of risk, low violence related behaviours, moderate bullying, high smoking, low electronic vapour, high tobacco use, high consumption of alcohol, low marijuana, high self-medication, low drugs, moderate sexual behaviour, high body weight, moderate eating habits, moderate physical activities, low concussions, and moderate health related issues. The results highlighted that smoking, tobacco, alcohol, self-medication and body weight risks were seen to be higher and were of more concern among youth. Similar research data was shown by WHO (2022) that mentioned, use of tobacco, alcohol, and other substances was a worldwide problem and affected many adolescents and youth. Early initiation of substance use was associated with elevated risks of developing addiction, dependency and other problems during adult life, and younger individuals were disproportionately affected by substance use compared with people of older ages (WHO, 2022).

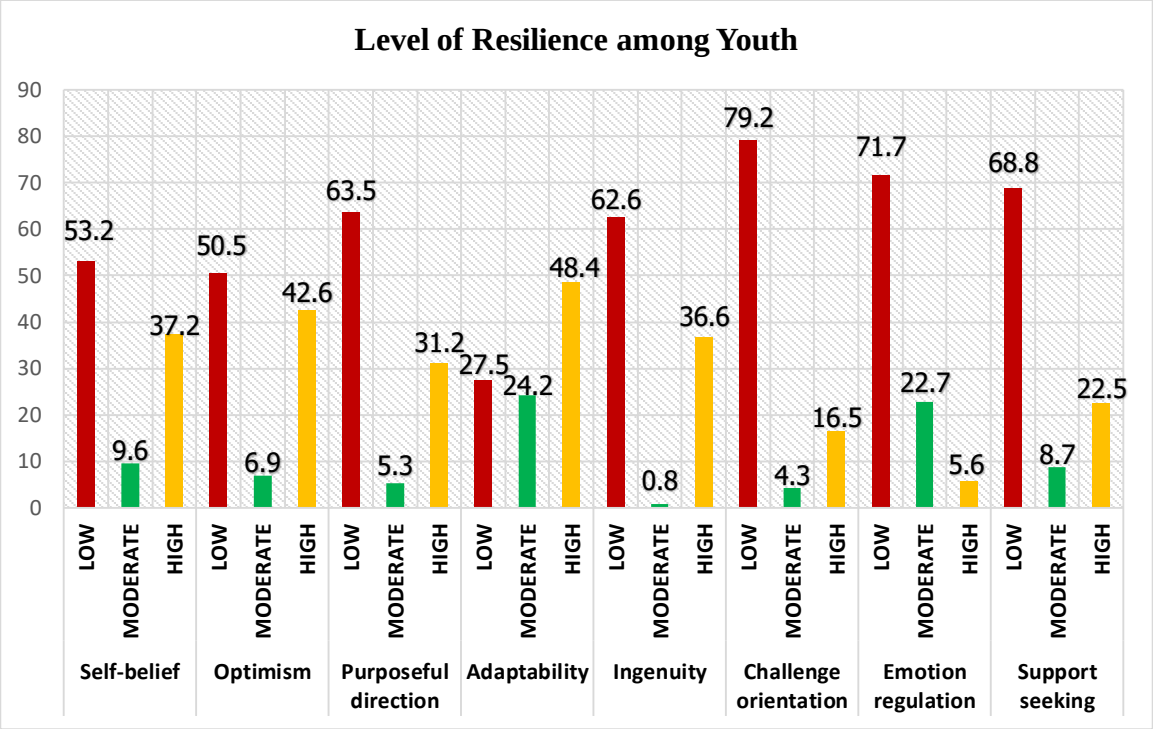

Figure-5

Psychological Resilience is comprehensively understood as the ability of a dynamic system to successfully adapt to any dissruptions that jeopardize its functioning, to withstand or recover from significant challenges that threaten its stability, sustainability, and growth development (Wright et al., 2013). This study indicated that all the eight components of resilience can contribute to good coping with the aftermath of major potentially traumatic experiences and risky behaviours. Figure 5 shows the different levels of resilience components by youth in the city of Coimbatore. It was observed that the majority of the youth experienced a low level of resilience. When it comes to components of self-belief, optimism, purposeful direction, ingenuity, challenge orientation, emotional regulation and support seeking, themajority of the youth experienced a low level of resilience and adaptability was found to beat a high level.

These results assessed the incidence of risk behaviours and the levels of resilience among the youth, hence answering the research question no 1, indicating that the various risk factors and elements of resilience prevail collectively, as well as addressing the first two objective of the study.

C. Interrelationship of risk factors and resilience components.

The Canonical Correlation (CCA) is a multivariate analysis of correlation developed by Harold Hotelling (1936) (Abdi et al., 2018). One of the advantages of the Canonical Correlation (CCA) is its capacity to reflect the complexity inherent in psychological research, where variables often have multiple causes and multiple effects (Zhuang et al., 2020). The Canonical Correlation Coefficient is used to measure the strength of association between two sets of variables, typically referred to as multiple predictors-X and multiple outcomes-Y correlation, while redundancy measures the strength of these relationships (Meloun & Militky, 2011).

The canonical correlation analysis was run using a series of syntax commands. Although the syntax generates an extensive output, the focus will be directed only to a few relevant components. The analysis begins with a sample description and reports the model's fit using Wilk's lambda, which is commonly used when all tests yield statistically significant results with $p<.05$ (Sherry & Henson, 2005). The interpretation of the Canonical Correlation Analysis (CCA) is detailed. In this study, Canonical correlation analysis (CCA) was initiated to identify and examine the overall relationships between two sets of variables, with risk factors being variable set 1 and resilience factors being variable set 2. It necessitated the identification of variable set 1 as the predictor set and variable set 2 as the criterion/outcome set, as the key aspect determining the importance of each variable. The need to understand the relationship between the predictor (risk factors) and criterion/outcome variable (resilience factors), by knowing what risk and resilience factors relate to each other, essentially in expected directions, was the concern. The multivariate and shared relationships between the two variable sets (risk and resilience factors) are displayed in Table VIIIa, and the significance of the canonical correlation coefficient analysis was evaluated using Wilk's lambda.

Table VIII*a*

Multivariate Test of Significance Between Risk and Resilience

Test Name	Value	Approx. F (df1, df2)	Sig.
Wilks	.84789	7.13731(40,7399)	.000

Table VIII*a* collectively shows the full model across the four functions, which was statistically significant using the Wilk's λ = .847 criterion, f(40,7399)= 7.137, P=.000, which confirms that there was a probable relationship between the risk factors and resilience components of the youth. However, this statistical significance does not share the information regarding the magnitude of the relationship, as Wilk's λ represents the variance unexplained by the model. Therefore, computing 1-λyields the overall model effect size in an R^2metricbetween the predictor and the criterion set of variables. Hence, the R2 type effect size (1-.84789) was 0.15, which indicated that the full model explained about 15 percent of the variance shared between the risk and resilience factors of youth.

Table VIII*b*

Eigenvalues and Canonical Correlations of the Functions

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.	Sq. Cor	F (df1, df2)	Sig.
1 to 5	.08282	48.81355	48.81355	.27656	.07648	7.13(40,7399)	.000
2 to 5	.03903	23.00325	71.81680	.19381	.03756	5.24(28,6123)	.000
3 to 5	.03490	20.57133	.08282	.18364	.03372	4.48(18,4805)	.000
4 to 5	.01143	6.73512	99.12324	.10629	.01130	2.19(10,3400)	.016
5	.00149	.87676	100.00000	.03854	.00149	.632(4,1701)	.639

The next section reports the canonical correlation coefficients along with the eigenvalues of the canonical roots, to test the significance of each of the roots. Canonical correlation analysis generates as many canonical functions/variates as per the variable sets. In this current study, the CCA yielded five functions with squared canonical correlations R_c^2 of 0.076, 0.037, 0.034, 0.011 and 0.001 for each successive canonical variate (function). The subsequent functions namely1 to 5, 2 to 5, 3 to 5 and 4 to 5 were significant with (F,40,7399)=7.137, P=.000; (F,28,6123)=5.244, P=.000; (F,18,4805)=4.488, P=.000; (F,10,3400)=2.1912 P=.000, respectively, but function 5 by itself did not explain a significant amount of shared variance between risk and resilience factors of youth after the extraction of the prior functions. Table VIIIb shows the full model function 1 to 4, which was statistically significant as mentioned. Hence, the concern is with the first four functions only and not the last one because the final function in a CCA is often weak and uninterpretable, and the statistical significance test of the final function is often uninformative (Sherry & Henson, 2005).

As it is established that the given predictor and criterion set have a probable relationship as a whole model (VIIIa and VIIIb), as well as after dimension reduction analysis. The second question of what variables are contributing to the relationship between the variable sets across the four functions is given in Table VIIIc. In consolidation, Table VIIIc provides the degree and directionality of the risk factors to the resilience factors of the youth.

Table VIII*c*

Canonical Solution of Risk and Resilience of Youth for Function 1, Function 2, Function 3 and Function 4

	Functions	Function 1			Function 2			Function 3			Function 4			h2
Criterion Set	**Variables**	**coeff**	**r_s**	**rs 2**	**coeff**	**r_s**	**rs 2**	**Coeff**	**r_s**	**rs2**	**coeff**	**r_s**	**rs 2**	
	Self-belief	-.22	.20	4	-.23	.25	6.25	.79	.81	66	.17	.16	2.56	78.81
	Optimism	-.11	-.09	0.81	.19	.20	4	-.12	-.14	1.96	-.36	-.32	10.24	17.01
	Purposeful direction	.28	.31	9.61	.53	.60	36	-.02	-.00	0	.23	.19	3.61	49.22
	Adaptability	-.33	-.44	19.3	-.57	-.53	28	-.44	-.48	23.0	-.02	-.05	0.25	70.74
	Ingenuity	-.63	-.73	53.29	.40	.40	16	.08	.00	0	.03	.02	0.04	69.33
	Challenge orientation	-.38	-.52	27.04	.18	.25	6.25	.16	.13	1.69	-.29	-.24	5.76	40.74
	Emotional regulation	-.16	-.29	8.41	.26	.24	5.76	-.33	-.35	12.2	.46	.38	14.4	40.82
	Support seeking	.11	.10	1	.13	.11	1.21	.03	-.00	0	-.78	-.73	53.29	55.5
	Rc^2	76.5			37.6			33.7			11.3			
Predictor Set	**Safety issues**	-.02	.05	0.25	-.08	-.10	1	-.08	.17	2.89	-.66	-.70	49	53.14
	Attempting Suicide	.27	.22	4.84	-.43	-.60	36	.33	.08	0.64	-.67	.61	37.21	78.69
	Substance use	.76	.88	77.44	-.08	-.08	0.64	-.67	-.45	20.2	-.19	-.10	1	99.33
	Sexual behaviour	-.00	.07	0.49	-.72	-.77	59.2	.34	.34	11.5	-.34	-.40	16	87.34
	Health issues	.49	.56	31.3	.39	.45	20.2	.87	.66	43.5	.13	-.22	4.84	100.0

Note: Canonical Coefficient=.15 (15%). Structure coefficients (rs) greater than |.45| are underlined. Communality coefficients (h2) greater than 45% are underlined. Coef = standardised canonical function coefficient; rs = structure coefficient; = squared structure coefficient; h2 = communality coefficient.

Note: The process for interpreting a function is directly analogous to identifying the useful predictors in a regression or interpreting and naming a factor, with the exception that the Canonical correlation analysis has two equations that one must consider.

So far, the output only showed the overall model fit with 15 percent variance for the set of four canonical variates. Within each set, analysis gives the raw canonical coefficients, standardised coefficients, correlations between observed variables, the canonical variant and the percentage of variance explained by the canonical variant. Table VIII*c* presents the standardised Canonical function coefficients (Coeff.) and Structure coefficients (R) for function 1, function 2, function 3 and function 4. The squared structure coefficients(rs^2) are also given, which represent the percentage of shared variance between the observed variable and the synthetic variable created from the observed variable's set. The communalities(h^2) across this function for each variable are also computed. To identify the contributing variables, the structure coefficients(r_s), the squared structure coefficients (rs^2) and communalities greater than. 45 per cent are highlighted to show the variables with the highest level of usefulness in the model, based on the thumb rule of canonical analysis. This effect size statistic can be interpreted just like the multiple correlation coefficient (R^2) in regression as the amount of shared variance explained between the variable sets across all functions. The squared canonical correlation, Rc^2, is the simple square of the canonical correlation. It represents the proportion of variance (i.e., variance-accounted-for effect size) shared by the two synthetic variables (risk and resilience). Because the synthetic variables represent the observed predictor and criterion variables, the Rc^2 indicates the amount of shared variance between the variable sets. It is directly analogous to the R2 effect in multiple regression.

Further, Table VIII*c* depicts the canonical correlation analysis to evaluate the multivariate and shared relationships between the two variable sets on -risk behaviour (safety issues, attempting suicide, sexual behaviour, and health issues) and resilience factor (self-belief, optimism, purposeful direction, adaptability, ingenuity, challenge orientation, emotional regulation and support seeking) among youth depicted with the arrow marks in 4 models (figure 5 to figure 8). As observed in the table, the significance of the relationship between resilience factors (the dependent variables) and risk factors (the independent variables) varies in terms of different functions based on communalities. As mentioned, the table depicts 4 functions with squared canonical correlations (r_s) of .20, -.09, .31, -.44, -.73, -.52, -.29, .10, .05, .22, .88, .07, .56, for each successive canonical variate in function 1, (r_s) .25, .20, .60, -.53, .40, .25, .24, .11, -.10, -.60, -.08,

-.77, .45 , for each successive canonical variate in function 2, (r_s) .81, -.14, -.00, -.48, .00, .13, -.35, -.00, .17, .08, -.45, .34, .66, for each successive canonical variate in function 3, (r_s) .16, -.32, .19, -.05, .02, -.24, .46, -.78, -.66 -.67, -.19, -.34, .13, for each successive canonical variate in function 4, illustrates about how the variable sets of risk and resilience function differently in terms of being both positively or negatively related.

Canonical correlation analysis (CCA) identified the linear combinations of variables within each set that are maximally correlated. Naming these linear combinations helps to understand what these combined variables represent conceptually. Note that this process for interpreting a function is directly analogous to identifying the useful predictors in a regression or interpreting and naming a factor, with the exception that the Canonical correlation analysis has two equations that one must consider (Sherry & Henson, 2005).

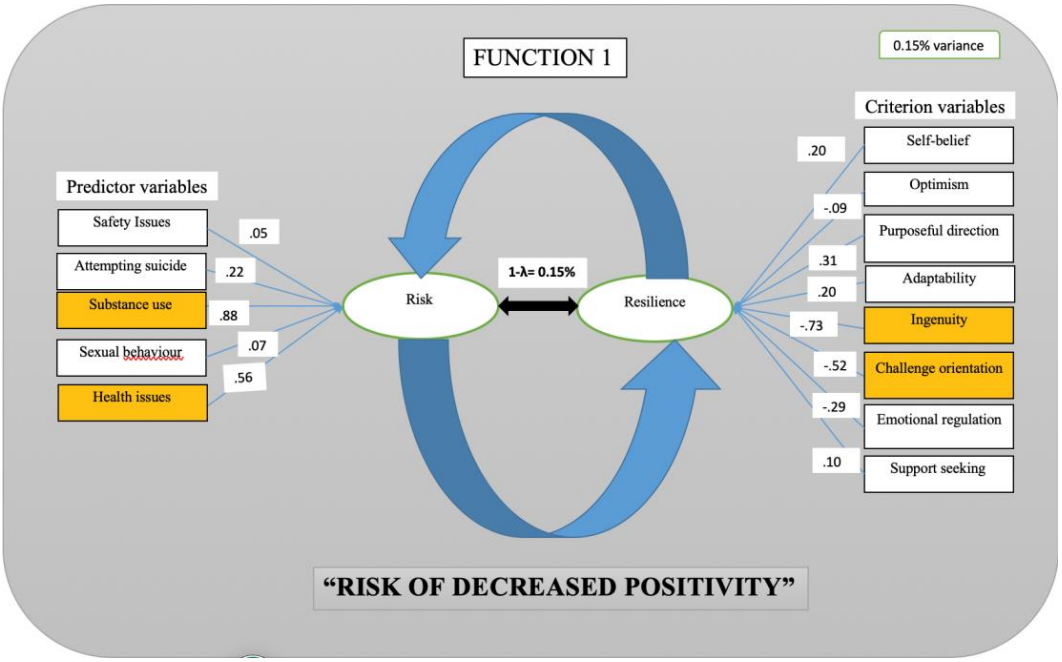

Figure-6 Canonical Correlation Analysis of Function 1

Function 1: Function 1 depicted in Figure 6 showed that the risk factors were inversely related to the resilience factors. It informs us that the substance use variable is the primary contributor to the predictor synthetic variable, with a secondary contribution by health issues. Because the structure coefficient for both substance use (.88) and health issues (.56) were positive, it was negatively related to all of the resilience factors and significantly related to ingenuity (-.73) and challenge orientation (-.52). This figure shows

that where there is higher the substance use and health issues the lesser is the ingenuity and challenge orientation. These findings are broadly supportive of the theoretically expected relationships involving risk and resilience. Therefore, this function seems to capture theoretically consistent relationships that we may collectively call "Risk of decreased positivity." Based on the characteristics of the primary contributors of resilience.

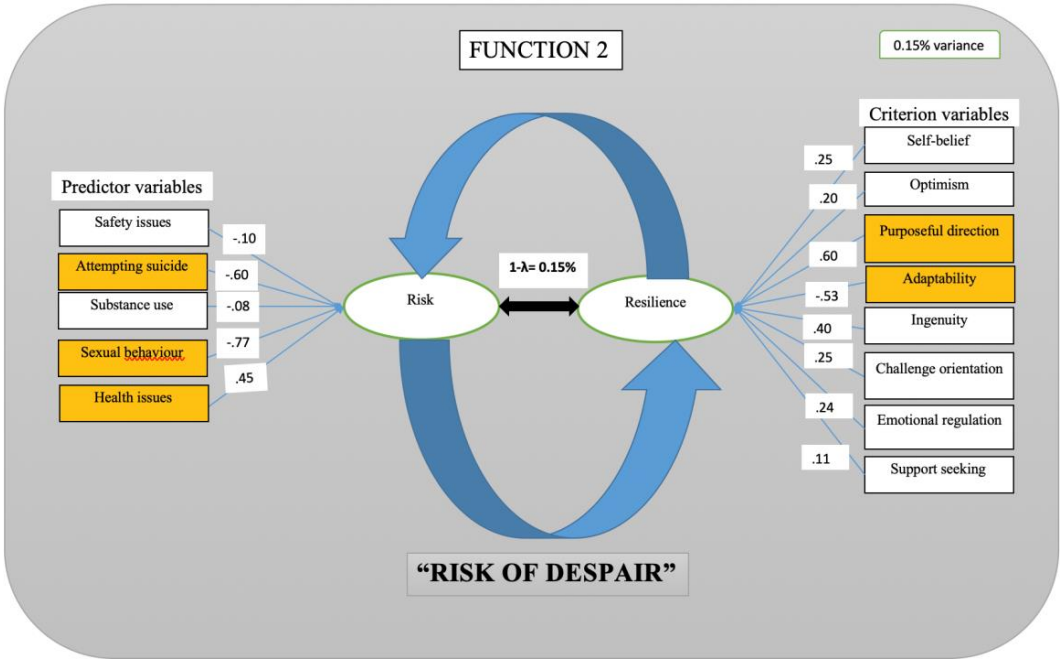

Figure-7 Canonical Correlation Analysis of Function 2

Function 2: Moving on to Function 2, the coefficients in Figure 7 suggested that the only standard variables of relevance were purposeful direction and adaptability. Health issue was seen to be the dominant predictors, along with sexual behaviour. These risk variables were also inversely related. Looking at the structure coefficients for the entire function, we observed that health issues (.45) was positively related to purposeful direction (.60) and negatively related to adaptability (-.53). Sexual behaviour (-.77) had the opposite pattern where it is positively related to adaptability (-.53) and negatively related to purposeful direction (.60). This function explains that when there is high purposeful direction there is a lower risky sexual behaviour. Similarly, when adaptability is low, there is an increase in the risk of health issues among youth. Given the criterion variable, the dominant contributors are sexual behaviour as a predictor and purposeful direction, followed by adaptability in resilience. We collectively label this function as "Risk of despair," given the nature of the variables of resilience.

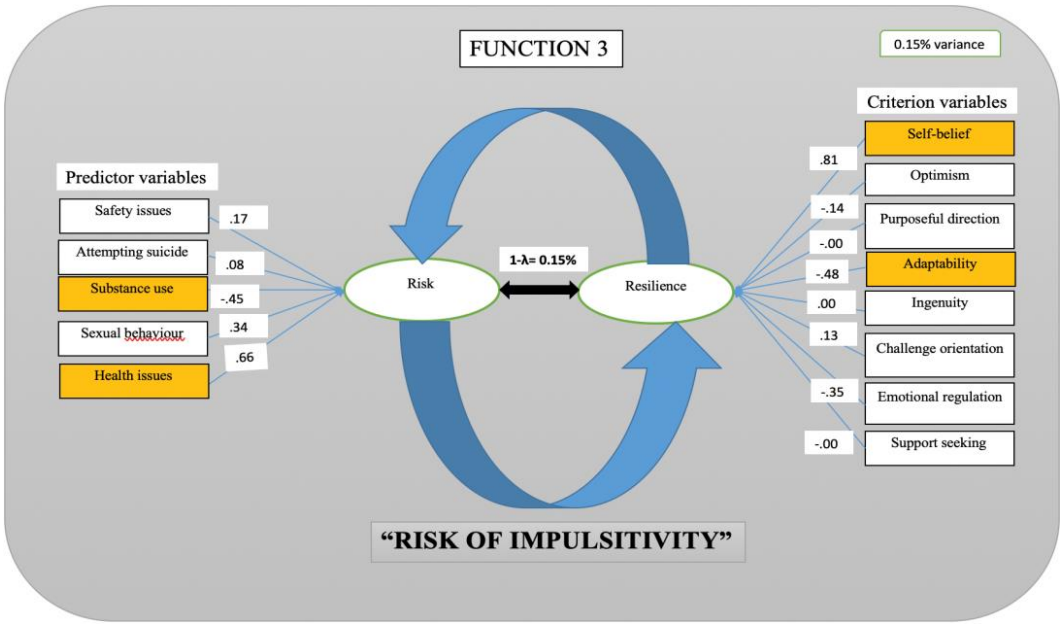

Figure-8 Canonical Correlation Analysis of Function 3

Function 3: Coming on to Function 3, the coefficients in Figure 8 advocate that the only standard variables of relevance in resilience were self-belief and adaptability. Among the risk factors, health issue was seen to be the dominant predictor, followed by substance use. These risk variables were also inversely related. Looking at the structure coefficients for the entire function, we observed that health issues (.66) is positively related to self-belief (.81) and negatively related to adaptability (-.48). Substance use (-.45) had the opposite pattern where it is positively related to adaptability (-.48) and negatively related to self-belief (.81). This function 3 illustrates that higher the self-belief lower is the substance use whereas higher is the risk in health issues. Similarly, when the risk of health issues is high, the adaptability is lower. Given that the risk of health issues as a dominant predictor and self-belief along with adaptability as a resilience criterion variable were the dominant contributors, we collectively label this function as "Risk of impulsivity".

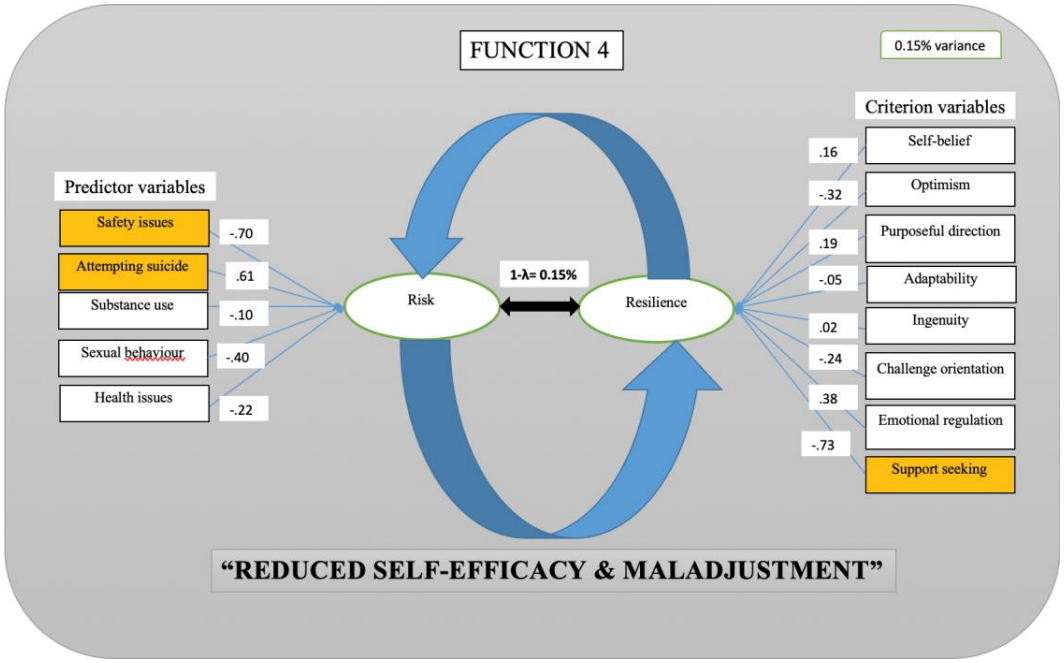

Figure-9 Canonical Correlation Analysis of Function 4

Function 4: Approaching to the last function-Function 4, the coefficients in Figure 9 suggest that the only standard variables of significance in resilience was support seeking. Safety issue risk was understood to be the dominant predictor, closely followed by attempting suicide. The risk variables were also found to be inversely related. Considering the structure coefficients for the entire function, we can see that support seeking (-.73) is positively related to safety issues (-.70) whereas it is negatively related to attempting suicides (.61). This tells that lower the support seeking behaviour tends to increase the risk of attempting suicide and there are lesser safety issues. Given the safety issues, attempting suicide as a predictor and support-seeking criterion variable to be the dominant contributors, we collectively label this function as "Reduced self-efficacy and maladjustment," based on the nature of these variables.

This analysis explores four functions that illustrate the complex interrelationship between risk and resilience, revealing multiple dimensions of their coexistence that were previously under-recognized. Findings based on these functions indicated that higher levels of substance use and health-related issues are associated with lower levels of ingenuity and challenge orientation (function 1). Whether smoking, consumption of tobacco, or drug use, all are associated with deficits in working memory, attention,

associative learning, and serial addition and subtraction, thus facing the consequences of low ingenuity. Thus, chronic substance abuse can lead to cognitive deficits that are particularly pronounced during early periods of abstinence (Gould, 2010). Function 2 posits that higher levels of purposeful direction among youth are associated with lower engagement in risky sexual behaviours. Conversely, lower resilience or adaptability is linked to an increased likelihood of experiencing health-related issues. A study conducted in Singapore showed that adaptability was found to moderate the relationship between age and overall health, with detrimental effects of low adaptability stronger for the younger adults (Yu et al, 2022). These relationships underscore the importance of contextual factors in youth decision-making processes. A teen/adolescent/ youth who is with a group of friends may decide to be more careful when with friends who disapprove of any risky behaviour (engaging in sexual behaviour), in part because youth are highly sensitive to their image among peers. Their sense of danger is also dependent on contextual cues and can vary based on associations and memories that are triggered by a given situation. If the context does not prompt youth to think of their principles and values, they will not necessarily apply them to decisions (IOM & NRC, 2011). Youth often adopt peer social norms, which may serve as a protective factor or contribute to increased risk. For example, if they believe their peers disapprove of sex, they are less likely to become sexually active. If they believe their peers are having sex, they are more likely to become sexually active (ACT, 2025).

Function 3 demonstrates that higher levels of self-belief are associated with reduced substance use, yet paradoxically may coincide with increased health risks. Additionally, elevated health risk is linked to lower adaptability. Supporting this, a longitudinal study found a significant relationship between self-perception at age 19 and subsequent changes in substance use-related problems by age 27. Specifically, lower self-perception at age 19 predicted a relative increase in substance use problems at age 27, whereas higher self-perception predicted a relative decrease in such problems over the same period (Yan et al., 2020). The link between resilience and overall health is significant. Individuals with resilience are better equipped in handling stress, overcoming challenges, and maintaining both physical and mental health. This ability to adapt and recover from hardships can help safeguard against negative health impacts of sustained stress, potentially reducing the risk of various illnesses (King, 2024).

The final function indicated that lower levels of support-seeking behaviour are associated with an increased risk of suicide attempts, despite a reported decrease in perceived safety concerns. Among youth in India, low engagement in support-seeking is primarily driven and influenced by stigma surrounding mental health, limited awareness, and inadequate access to mental health services. A study conducted showed that out of 47 young participants, 7 experienced poor social support, felt cut off from, or unable to share their problems with family or friends. The respondent experienced loneliness and attempted suicide. (Balaji, 2023).

These results establish the interrelationship between risk behaviours and the resilience components among the youth, hence, answers research question no 2 and the third objective of the study is addressed.

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

Socio-demographic markers, based on their nature, has a tendency of having an impact on the youth development and behaviour, in particular on the risk behaviours and the protective factors.

To analyse the predictive capacities, a suitable statistical application can determine if changes in the dependent variable are linked to changes in the independent variables. Accordingly, multiple linear regression analysis was applied to explore the association of socio-demographic markers as independent variables with the dependent variable of risk behaviours, clubbed under five factors, namely, risk of safety issues, attempting suicide, substance use, sexual behaviour, and health issues. The resilience components, such as self-belief, optimism, ingenuity, adaptability, challenge orientation, emotional regulation and support seeking, were also the dependent variable with socio demographic markers being independent variables (predictor).

The findings were organised into the following subsections

a) Predictive capacities of socio-demographic markers on the risk behaviours among youth
b) Predictive capacities of socio-demographic markers on the resilience components among youth

a) Predictive capacities of socio-demographic markers on the risk behaviours among youth

A risk behaviour is a characteristic, condition or behaviour that increases the likelihood of getting a disease or injury or even death. Risk behaviours are often

presented individually, however, in practice, they do not occur alone. They often coexist and have an impact on each other. The outcome of the predictive capacities of socio-demographic markers on risk behaviours among youth was categorised accordingly

I. Predictive capacities of socio-demographic markers on the risk of safety issues

II. Predictive capacities of socio-demographic markers on attempting suicide

III. Predictive capacities of socio-demographic markers on substance use

IV. Predictive capacities of socio-demographic markers on sexual behaviour

V. Predictive capacities of socio-demographic markers on health issues

In multiple linear regression, the socio-demographic markers such as age group, gender, educational qualification, area of residence, type of family, parents' education, parents' occupation and family income were the independent variables with the nominal score for age-group showing 1 for 18-19 years and 2 for 20-22 years, gender having 1 for male and 2 for female and for type of family, 1 for joint family and 2 nuclear family, with regard to area of residence the score code was 1 for urban, 2 for rural and 3 for semi-urban area. The ordinal score for educational qualification was 1 for I year undergraduate, 2 for II year undergraduate, 3 for III year undergraduate, 4 for I year postgraduate and 5 for II-year postgraduate. The ordinal score for father's and mother's education was coded as1 for below 10^{th} standard, 2 for 10^{th} standard, 3 for 11^{th} to 12^{th} standard, 4 for undergraduate and 5 for postgraduate. Coming to the father's occupation the score was 1 for government sector, 2 for private sector, and 3 for daily wage, whereas for mother's occupation, 1 was given for government sector, 2 for private sector, 3 for daily wage and 4 for not employed. Lastly, an ordinal score of 1 was coded for less than 2 lakhs, 2 for 2 to 5 lakhs, 3 for 6 to 10 lakhs, 4 for 10 to 20 lakhs and 5 for above 20 lakhs family income respectively.

With reference to the multiple linear regression analysis, the assumption of singularity was met, and correlation (the independent variables did not have coefficient loadings with more than 0.8) was also met. The collinearity statistics were met with tolerance being less than 1 and VIF with than 10. Extreme univariate outliers were identified during the

initial screening and were modified, after which the Cook's distance was found to be in the range of.000 to .017 for all aspects of risk behaviours that were tested.

I. Predictive capacities of socio-demographic markers on safety issues

Risk of safety issue was the dependent variable; its relevant assumptions were tested, and a sample size of 1696 was deemed to be adequate given the independent variables being ten and the results of multiple linear regression are as follows.

Table IXa explains the results of the correlation test between the socio-demographic markers and the risk of safety issues. It was observed that age-group (_.115**), gender (-.168**), mother's education (.022**) and father's occupation (.046**) were found to be having a significant negative and positive correlation respectively.

Coming to Table IXb, which represent the model summary and ANOVA, showed that the R value of .257, indicated the relationship between the independent and dependent variable to be positive, with 6.6% of variance, with R^2 being .066. Also, a highly significant relationship between the socio-demographic markers and the safety issues was observed with F (12,1683) = 9.908, P<.001.

Further, the multiple linear regression analysis depicted that age of the youth (ß = -1.702, t = -5.763, P = 0.000), gender (ß = -1.696, t = -6.419, P = 0.000), educational qualification (ß = .377, t = 4.131, P = 0.000), father's occupation (ß = 1.050, t = 3.173, P = 0.002), mother's occupation (ß = .508, t = 3.060, P = 0.002), and family income (.658 = ., t = 3.231, P = 0.001), were the significant predictors of safety issues among youth in the study. Examining the predictor variable further indicated one unit change in the age group decreases -1.702 scores in safety issues of the youth, indicating that the lower age group tend to exhibit high risk with regard to safety issues. Similarly, one unit change in the gender decreases -1.696 score in safety issues, suggesting that males had a higher risk for safety issues as compared to females. Also, one unit change in the educational qualification increases .377 scores of safety issues, indicating that youth with higher educational qualifications tend to exhibit a higher risk of safety issues. A unit change in the father's occupation increases 1.050 scores in safety issues. This indicated that fathers working for daily wages, their youth were more prone to the risk of safety issues. Coming to the mother's occupation, it was also found that a one-unit change in the

mother's occupation tends to increase the risk of safety issues by .508 scores, stating that mothers who are not employed, their youth have a higher risk of facing safety issues. Lastly looking into the family income of the youth, it was found that a unit change in the family income tends to increase the risk of safety issues by 0.658 scores, suggesting that youth with higher family income were associated with a high risk of safety based on the nominal and ordinal scores of the predictor variables.

The variables of younger age-group, male gender, high educational qualification, father working for a daily wage, mother not employed and a high annual income were found to be the predictors for risk of safety issues in the present study. The reason could be that of the younger male youth, who often exhibit higher levels of impulsivity and who may not fully appreciate and understand the consequences of unsafe actions, leading to increased safety risk. A report by WHO (2020) revealed that approximately 1.35 million young people die each year as a result of road traffic crashes. Moreover, a higher level of education can lead to higher income, which might increase exposure to various environments that are risky to youth. On the other hand, parents working as daily wage earners or not employed often face job insecurity and can face lower household income, potentially leading to increased risk of safety for the youth.

II. Predictive capacities of socio-demographic markers on the risk of attempting suicide

Risk of attempting suicide is the dependent variable, and its relevant assumptions were tested; a sample size of 1696 was deemed to be adequate given the independent variable to be ten. Table X *a*explains the results of the correlation test between the socio-demographic markers and the risk of attempting suicide. It was observed that only age group (.152**), educational qualification (.213**), type of family (.109**), area of residence (_.059), father's education (_.198**), mother's education (-.123**), father's occupation (.182**), and family income (-.049*) were found to have a significant negative correlation, respectively.

Coming to Table Xb, the model summary and ANOVA, showed that the R value of .582, indicating the relationship between the independent and dependent variable to be positive, with 33.9% of variance, with R^2 being .339. Also, a highly significant relationship was noticed between the socio-demographic markers and the risk of attempting suicide with F (10,1680) = 86.125, P<.001.

Table IX*a*

Correlations between Socio-demographic Markers and Safety Issues among Youth

	Safety Issues	Age group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother occupation	Family Income
Safety Issues	1										
Age group	-.115**	1									
Gender	-.168**	.054*	1								
Education Qualification	.012	.532**	.055*	1							
Type of Family	-.031	-.072**	.154**	.057*	1						
Area of Residence	.003	.003	-.079**	-.013	-.040	1					
Father Education	-.006	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	.022	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.046	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.013	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	.022	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	27.83	1.51	1.47	4.21	1.70	1.79	3.77	2.75	1.98	3.41	2.26
Std. Deviation	5.52	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table IX*b*

Predictive Capacities of Socio-Demographic Markers on Risk of Safety Issues among Youth

Variables	***Unstandardized coefficient***		***Standardized Coefficient***	***t***	***p value***	***R***	***R Square***	***Mean Square***	***F***	***Sig***
	B	**Std. Error**	**Beta**							
(Constant)	25.035	1.913		13.089	.000					
Age	-1.702	.295	-.162	-5.763	.000	.257	.066	257.377	9.908	.000
Gender	-1.696	.264	-.161	-6.419	.000					
Educational Qualification	.377	.091	.121	4.131	.000					
Type of Family	-.619	.306	-.054	-2.022	.043					
Area of residence	-.146	.165	-.022	-.882	.378					
Father's Education	.354	.166	.099	2.130	.033					
Mother's Education	.199	.139	.046	1.425	.154					
Father's Occupation	1.050	.331	.145	3.173	.002					
Mother's Occupation	.508	.166	.096	3.060	.002					
Annual Income	.658	.204	.102	3.231	.001					

a. Predictors: (Constant), Family income, Area of residence, Age group, Types of family, Gender, Mother's education,Educational qualification, Mother's occupation, Father's occupation, Father's education

b. Dependent Variable: Safety issues.

Further, the multiple linear regression analysis depicted that age of the youth (ß = .565 t = 304, P = 0.000), gender (ß = -.120, t =-3.107, P = 0.002), educational qualification (ß = .063, t = 4.690, P = 0.000), residence (ß = .066, t = 2.742, P = 0.006), types of family (ß = .572, t = .280, P = 0.000), fathers occupation (ß = .351 t = 7.216, P = 0.000), mother's occupation (ß = .118, t = 4.783, P = 0.000),and family income (ß = .211, t = 6.950, P = 0.000), were the significant predictors of attempting suicides among youth in the study.

Coming to the analysis of the predictor variable, one unit change in the age group increases .569 scores in the risk of attempting suicide, indicating that the higher age group tend to exhibit a higher risk of attempting suicide. Similarly, one unit change in the gender decreases the risk of attempting suicides with a -.120 score, suggesting that males are more prone to have a higher risk of attempting suicide as compared to females. Also, one unit in the educational qualification increases the .063 score of attempting suicide, indicating that youth with higher educational qualifications tend to exhibit a higher risk of attempting suicide. A unit change in residence increases .066 scores in attempting suicides, suggesting that youth residing in the semi-urban area tend to have a higher risk of attempting suicide than others residing in urban and rural areas. Similarly, in types of family, a unit change increasesthe.572 score in attempting suicides, suggesting that the prevalence of nuclear families was linked to an increase in risk of attempting suicide.

Moving on to father's occupation, a unit change in father's occupation increases .351 scores in attempting suicide. This indicated that the youth whose fathers worked for daily wages were more prone to the risk of attempting suicide. Coming to the mother's occupation, it was also found that a one-unit change in the mother's occupation tends to increase the risk of attempting suicide by .118 scores, stating that mothers who are not employed, their youth have a higher risk of facing issues of attempting suicide. Lastly, looking into the family income of the youth, it was found that one unit change in the family income tends to increase the risk of attempting suicide by .211 score, suggesting that youth with higher family income are associated with a high risk of attempting suicide based on the nominal and ordinal scores of the predictor variables.

The variables of young age-group, male gender, high educational qualification, residing in a semi-urban area, belonging to a nuclear family, father working for a daily wage, mother not employed and a high annual income were found to be the predictors for risk of attempting suicide in the present study. The reason could be that young male adolescents and youth often experience heightened emotional sensitivity, identity formation challenges, peer pressure and societal expectations, which can contribute to suicidal attempts. Young people residing in semi-urban areas may lack adequate mental health resources and support systems,and rapid urbanisation, which can disrupt traditional family structure and social networks, contributing to feelings of isolation and increased suicide risk.

The results of the present study align with the other research data on the issues of suicide. There have been many cases of suicide and suicidal tendencies recorded, which seem to be quite common among youth in India. Accordingly, studies showed suicide rates in 15-29-year-old Indian men were estimated to be twice that of the global average (25.5 vs 13.1 per 100,000), and rates in young Indian women, nearly 6 times as high (24.9 vs 4.1 per 100,000) (World Health Organization, 2019); and suicide is the leading cause of death for both men and women in this age group (India State-Level Disease Burden Initiative Suicide Collaborators, 2018). According to official estimates, over 60,000 young people died by suicide in 2021 alone (National Crime Records Bureau, 2021); these figures are likely to be underestimated by at least 25% if one considers data from nationally representative surveys (Patel et al., 2012). Additionally, these figures exclude suicide attempts, which are at least 15 times more frequent than suicides – young women in particular appear to be at higher risk, reporting them more frequently than men (Amudhan et al., 2020), a contradictory result to the present study. These analyses identified three key factors in suicide attempts such as background vulnerabilities, psychological distress, and intervening triggers. Most attempts followed an interpersonal stressor that was often tied to ongoing family or partner issues, which triggered intense emotions and distorted thoughts, with impulsivity or access to means acting as the final catalysts. Women were especially vulnerable due to socio-cultural pressures. However, the current study indicates that males were prone to attempting suicide, which could be possibly due to socio-cultural pressures from a different angle, likely of societal expectations of fulfilling the demands of reaching presuppositions of parents, peers and family.

III. Predictive capacities of socio-demographic markers on the risk of substance use

Risk of substance use is the dependent variable, and its relevant assumptions were tested, a sample size of 1696 was deemed to be adequate given the independent variable of ten. Table Xi*a* explains the results of the correlation test between the socio-demographic markers and the risk of substance use. It was observed that gender (-.087**), area of residence (-.149**), father's education (.212**), mother's education (.103**), father's occupation (-.152**), mother's occupation (-.077**) and family income (.138**) were found to have a significant positive correlation, respectively.

Looking into table XIb, the model summary and ANOVA, showed that the R value of .280, indicating the relationship between the independent and dependent variable to be positive, with 7.8% of variance, with R^2 being .078. Also, a highly significant relationship was noticed between the socio-demographic markers and the risk of substance use with F (10,1682) = 14.307, P<.001.

Further, the multiple linear regression analysis depicted that gender (ß = -2.871, t =-5.530, P = 0.000), educational qualification (ß = .952, t = 5.196, P = 0.000), residence (ß = -1.148, t = -3.531, P = 0.006), fathers education (ß = 1.677, t = 5.009, P = 0.000) and family income (ß = 1.539, t = -3.757, P = 0.000), were the significant predictors of substance use among youth in the study. Indicating one unit change in the gender decreases the-2.871 score in substance use of the youth, suggesting that males are more prone to have a higher risk of substance use as compared to females. Also, one unit change in the educational qualification increases the .952 score of substance use, indicating that youth with higher educational qualifications tend to exhibit high-risk substance use. A unit change in residence will decrease -1.148 scores in substance use of the youth, suggesting that youth residing in urban areas tend to have a higher risk of substance use than others residing in rural and semi-urban areas.

Moving on to father's education, a unit change in father's education increases 1.677 scores in substance use. This indicated that fathers working for daily wages, their youth were more prone to the risk of substance use. Lastly, coming into the family income of the youth, it is found that one unit change in the family income tends to increase the risk of substance use by 1.539 score, suggesting that youth with higher family income are associated with a higher risk of substance use based on the nominal and ordinal scores of the predictor variables.

Table X*a*

Correlations between Socio-Demographic Markers and Attempting Suicide among Youth

	Attempting Suicide	Age group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother occupation	Family Income
Attempting Suicide	1										
Age group	.152**	1									
Gender	-.004	.054*	1								
Education Qualification	.213**	.532**	.055*	1							
Type of Family	.109**	-.072**	.154**	.057*	1						
Area of Residence	-.059*	.003	-.079**	-.013	-.040	1					
Father Education	-.198**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.123**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.182**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.037	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.049*	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	7.72	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	.92	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table X*b*

Predictive Capacities of Socio-Demographic Markers on Risk of Attempting Suicide among Youth

Variables	***Unstandardized coefficient***		***Standardized Coefficient***	***t***	***p value***	***R***	***R Square***	***Mean Square***	***F***	***Sig***
	B	**Std. Error**	**Beta**							
(Constant)	4.242	.271		15.658	.000					
Age	.565	.044	.304	12.840	.000	.582	.339	49.463	86.125	.000
Gender	-.120	.039	-.064	-3.107	.002					
Educational Qualification	.063	.014	.115	4.690	.000					
Type of Family	.572	.042	.280	13.632	.000					
Area of residence	.066	.024	.058	2.742	.006					
Father's Education	-.026	.025	-.042	-1.073	.284					
Mother's Education	-.011	.021	-.014	-.510	.610					
Father's Occupation	.351	.049	.271	7.216	.000					
Mother's Occupation	.118	.025	.127	4.783	.000					
Annual Income	.211	.030	.184	6.950	.000					

a. Predictors: (Constant), Family income, Area of residence, Age-group, Type of family, Gender, Mother's education, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Attempting Suicide.

The variables of male gender, high educational qualification, residing in an urban area, father working for a daily wage and a high annual income were found to be the predictors for the risk of substance use in the present study. The reason could be that, partly due to the societal expectations, which discourage emotional expression in men. Individuals with higher education may experience increased stress and pressure, leading to increased substance use. Urban areas often provide a large access to substance use, which may have social environments where substance use has been normalised. While higher income gives better access to resources, it can also be a risk factor for substance use. Additionally, the societal expectations and peer pressure in high-income environments can contribute to substance use.

In connection, a study reveals that there are many cases of substance abuse recorded through newspapers, news channels, articles and many more in India, and a study also showed that out of 1630 participants in the age group of 10-24 years the prevalence of substance use was 32.8%, with a median substance initiation at the age of 18 years. Among the substance users, 75.5% began before completing the stage of adolescence. Substances such as tobacco (26.4%), alcohol (26.1%) and cannabis (9.5%) were widely consumed. Sociodemographic determinants included higher age, male gender, urban residence, positive family history, north-eastern state residence and lower socioeconomic class. (Venkatesh et.al, 2024).

The study on substance use found a higher prevalence among males and individuals in older age groups, which may be attributed to greater social exposure, low awareness or negligence on tobacco's health risks or recklessness, particularly among lower socioeconomic groups. The higher proportion and intensity of use among males could also reflect the prevailing social norms and the stigmatisation of substance use among women in Indian society.

Table XI*a*

Correlations between Socio-demographic Markers and Substance Use among Youth

	Substance Use	Age group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother occupation	Family Income
Substance Use	1										
Age group	.007	1									
Gender	-.087**	.054*	1								
Education Qualification	.030	.532**	.055*	1							
Type of Family	.012	-.072**	.154**	.057*	1						
Area Of Residence	-.149**	.003	-.079**	-.013	-.040	1					
Father Education	.212**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	.103**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	-.152**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.077**	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	.138**	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	132.12	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	10.64	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XI *b*

Predictive Capacities of Socio-Demographic Markers on Substance Use among Youth

Variables	***Unstandardized coefficient***		***Standardized Coefficient***	***T***	***p value***	***R***	***R Square***	***Mean Square***	***F***	***Sig***
	B	**Std. Error**	**Beta**							
(Constant)	123.66	3.665		33.746	.000					
Age	-.500	.592	-.023	-.844	.399	.280	.078	1503.41	14.307	.000
Gender	-2.871	.519	-.135	-5.530	.000					
Educational Qualification	.952	.183	.150	5.196	.000					
Type of Family	1.023	.563	.044	1.817	.069					
Area of residence	-1.148	.325	-.087	-3.531	.000					
Father's Education	1.677	.335	.231	5.009	.000					
Mother's Education	-.574	.279	-.066	-2.062	.039					
Father's Occupation	.868	.659	.059	1.317	.188					
Mother's Occupation	-.070	.333	-.007	-.209	.834					
Annual Income	1.539	.410	.118	3.757	.000					

a. Predictors: (Constant), Family income, area of residence, Age-group, Type of family, Gender, Mother's education, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Substance use

IV. Predictive capacities of socio-demographic markers on the risk of sexual behaviour

Risk of sexual behaviour is the dependent variable, and its relevant assumptions were tested, a sample size of 1681 was deemed to be adequate given the independent variable was ten. Table XII*a* explains the results of the correlation test between the socio-demographic markers and the risk of sexual behaviour. It was observed that gender (-.071**), area of residence (.074**) and father's education (-.050*) were found to be having a significant negative and positive correlation, respectively.

Looking into table XIIb, depicting model summary and ANOVA, showed that the R value of .238, indicated the relationship between the independent and dependent variable to be positive, with 5.6% of variance, with R^2 being .056. Also, a highly significant relationship was noticed between the socio-demographic markers and the risk of sexual behaviour with F (12,1668) = 8.315, P<.001.

Further, the multiple linear regression analysis depicted that gender (ß = -.567, t =-3.243, P = 0.001), educational qualification (ß = .383, t = 6.284, P = 0.000), residence (ß = .390, t = 3.565, P = 0.000), mother's education (ß = .276, t = 2.985, P = 0.003) and mother's occupation (ß = .355, t = -3.266, P = 0.001), were the significant predictors of sexual behaviour among youth in the study. Indicating, one unit change in the gender decreases -.567 score in sexual behaviour of the youth, suggesting that males are more prone to have a higher risk of substance use as compared to females. Also, one unit change in the educational qualification increases the .383 score of sexual behaviour, indicating that youth with higher educational qualifications tend to exhibit a higher risk of sexual behaviour. A unit change in residence increases .390 scores in sexual behaviour, suggesting that youth residing in the semi-urban area tend to have a higher risk of substance use than other youth residing in urban and rural areas.

Moving on to mother's education, one unit change in mother's education increases .276 scores in sexual behaviour. This indicated that the higher the mother's qualification higher the risk of sexual behaviour among the youth. Lastly, looking into mother's occupation, one unit change in mother's occupation increases .355 scores in sexual behaviour, suggesting that youth whose mothers were not employed tend to face more risk of sexual behaviour based on the nominal and ordinal scores of the predictor variables.

Table XII*a*

Correlations between Socio-demographic Markers and Sexual Behaviour among Youth

	Sexual Behaviour	**Age group**	**Gender**	**Education Qualification**	**Type of Family**	**Area of Residence**	**Father Education**	**Mother Education**	**Father Occupation**	**Mother occupation**	**Family Income**
Sexual Behaviour	1										
Age group	-.015	1									
Gender	-.071**	.054*	1								
Education Qualification	.032	.532**	.055*	1							
Type of Family	.002	-.072**	.154**	.057*	1						
Area Of Residence	.074**	.003	-.079**	-.013	-.040	1					
Father Education	-.050*	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.033	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.030	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.045	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.025	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	25.45	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	3.44	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XII*b*

Predictive Capacities of Socio-Demographic Markers on Risk of Sexual Behaviour among Youth

Variables	*Unstandardized coefficient*		*Standardized Coefficient*	*t*	*p value*	*R*	*R Square*	*Mean Square*	*F*	*Sig*
	B	**Std. Error**	**Beta**							
(Constant)	22.958	1.264		18.156	.000					
Age	-.387	.196	-.056	-1.976	.048	.238	.056	93.975	8.315	.000
Gender	-.567	.175	-.082	-3.243	.001					
Educational Qualification	.383	.061	.186	6.284	.000					
Type of Family	-.336	.203	-.044	-1.653	.099					
Area of residence	.390	.109	.092	3.565	.000					
Father's Education	-.057	.110	-.024	-.514	.608					
Mother's Education	.276	.092	.097	2.985	.003					
Father's Occupation	-.063	.219	-.013	-.287	.774					
Mother's Occupation	.355	.110	.103	3.226	.001					
Annual Income	.006	.135	.002	.048	.962					

a. Predictors: (Constant), Family income, Area of residence, Age-group, Type of family, Gender, Mother's education, Educational qualification, Mother's occupation, Father's occupation, Father's education

b. Dependent Variable: Sexual behaviour.

The study has highlighted the young people's engagement in sexual behaviours that increase their risk of adverse health outcomes concerning male gender, with high educational qualification, residing in a semi-urban area, whose mothers are highly educated but not employed. The reason could be that youth with higher education have access to greater social networks and circles that facilitate activities related to sexual behaviour. Although mothers with higher education but not employed may lead to limited social interactions, reducing their ability to enforce safe sexual practice effectively, creating an environment where youth are less likely to receive guidance on engaging in unsafe sexual health behaviours.

A study conducted in Ghaziabad showed that 26.8% of the students were sexually active. Boys were sexually more active than girls (34.7% vs. 18.9%) (Maan et.al, 2021). Another study conducted in India found that high-risk sexual behaviour has increased among adolescent boys (64 to 70%) and young men (18 to 27%) from 2005–06 to 2015–16. Adolescent boys having 10th and more years of schooling, who resided in urban areas and belonged to the affluent class of households, showed a higher likelihood to partake in high-risk sexual activity than the young men in India (Sharma et.al, 2020). The study indicated that a significant portion of male sexual behaviour was influenced by exposure to pornography, often driven by peer pressure, curiosity, and the pursuit of pleasure. Additionally, it was found that boys primarily relied on their peers as the main source of information regarding reproductive health, highlighting a gap in formal and accurate sexual education.

V. Predictive capacities of socio-demographic markers on the risk of health issues

Risk of health issues is the dependent variable, and its relevant assumptions were tested, a sample size of 1709 was deemed to be adequate given the independent variable was ten. Table XIII*a* explains the results of the correlation test between the socio-demographic markers and the risk of health issues. It was observed that gender (.-.112**), educational qualification (-.056**), type of family (-.048*), father's education (.177**), mother's education (.108**), father's occupation (-.142**), mother's occupation (-.020**) and family income (.079**) were found to have a significant negative and positive correlation, respectively.

Coming into table XIIIb, the model summary and ANOVA, showed that the R value of .294, indicating the relationship between the independent and dependent variable to be positive, with 8.7% of variance, with R^2 being .087. Also, a highly significant relationship was noticed between the socio-demographic markers and the risk of health issues with F (10,1698) = 16.080, P<.00.

Further, the multiple linear regression analysis depicted that age group (ß = -4.484, t =-6.114, P = 0.000), gender (ß = -3.187, t =-4.975, P = 0.000), educational qualification (ß = .747, t = 3.293, P = 0.001), type of family (ß =-2.518, t = -3.625, P = 0.000), father's education (ß = 2.617, t = 6.352, P = 0.000), father's occupation (ß = 3.479, t = 4.284, P = 0.000), and family income (ß = 2.099, t =-4.143, P = 0.000), were the significant predictors of health issues among youth in the study. Coming to the analysis of the predictor variable, one unit change in the age group decreases -4.484 score in health issues of the youth, suggesting that the lower age group tend to exhibit high risk with regard to health issues. Similarly, one unit change in the gender decreases -3.187 score in health issues, suggesting that males were more prone to have a higher risk of health issues as compared to females. Also, one unit change in the educational qualification increases .747 score of health issue, indicating that youth with higher educational qualifications tend to exhibit a higher risk of health issues. A unit change in the type of family decreases -2.518 scores in health issues, suggesting that youth belonging to joint families tend to have a higher risk of health issues than those in nuclear families.

Moving on to father's education, a one-unit change in father's education increases 2.617 scores in health issues. This indicated that the higher the father's qualification higher the risk of health issues among the youth. Similarly, one unit change in father's occupation increases 3.479 scores in health issues, suggesting that fathers who worked for daily wages, their youth have a higher risk of health issues. Lastly, looking into the family income of the youth, it was found that a one unit change in the family income tends to increase the risk of health issues by 2.099, stating that youth with high family income tend to exhibit increased risk of health issues based on the nominal and ordinal scores of the predictor variables.

The variables of younger age males, with high educational qualification, residing in a nuclear family, whose fathers with high educational qualification and fathers

employed as daily wage and a high family income were found to be the predictors for risk of health issues. The reason could be that youth with higher education may engage in risky behaviour due to stress or lifestyle choices. The family model suggests that disadvantages created by the fathers' occupation and the pressure associated can have detrimental effects on their health. On the other hand, youth from high-income families tend to experiment with various health updates that they get from their elite peer group, as well as their engagement with various substances to enhance their physical appearance, puts them at risk of health issues.

Health issues among young people in India have become a significant public health concern, with rising prevalence across various domains. The prevalence of health issues among adolescents and youth has emerged as a significant concern both in India and globally. Investigating the health-related behaviours and outcomes within this demographic is essential for informing targeted interventions and promoting overall well-being during this critical stage of development. A study in Karnataka revealed facing health and lifestyle challenges, where the majority of them were men (56.7%), aged 25 years or younger (~80%), and lived rural areas (72.8%). All sociodemographic characteristics (except gender) were found to have statistically significant associations with health and lifestyle issues. In a similar manner, issues related to education and academics, safety issues, gender, sex and sexuality also played a role in the self-report health and lifestyle issues in the univariate analysis. (Pradeep et.al., 2023). These young people commonly face multiple health-risk behaviours and conditions, such as nutritional disorders, substance use, high-risk sexual behaviour, mental health issues, and injuries, which often coexist, compounding their health risks. These issues are key contributors to non-communicable diseases and place a significant burden on society through increased mortality, morbidity, and socio-economic losses. However, current health policies often target individual issues in isolation, with limited emphasis on integrated and coordinated approaches. Another study by Mauryaet.al 2019, conducted in Amritsar city resulted lesser number of youth suffering from health problems with an increase in educational level ($p<0.05$). The socio-economic status was found to be significantly associated ($p<0.05$) with health problems. The study found that youth with low educational levels are more prone to develop health problems. Similarly, youth belonging to lower socio-economic status were more likely to develop health problems as reported by the study.

Table XIII*a*

Correlations between Socio-demographic Markers and Health Issues among Youth

	Health Issue	Age group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother occupation	Family Income
Health Issue	1										
Age group	-.031	1									
Gender	-.112**	.054*	1								
Education Qualification	-.056*	.532**	.055*	1							
Type of Family	-.048*	-.072**	.154**	.057*	1						
Area of Residence	-.047	.003	-.079**	-.013	-.040	1					
Father Education	.177**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	.108**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	-.142**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.060*	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	.079**	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	97.08	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	13.28	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XIII*b*

Predictive Capacities of Socio-Demographic Markers on Risk of Health Issues among Youth

Variables	***Unstandardized coefficient***		***Standardized Coefficient***	***t***	***p value***	***R***	***R Square***	***Mean Square***	***F***	***Sig***
	B	**Std. Error**	**Beta**							
(Constant)	90.867	4.519		20.108	.000					
Age	-4.484	.733	-.169	-6.114	.000	.294	.087	2593.25	16.080	.000
Gender	-3.187	.641	-.120	-4.975	.000					
Educational Qualification	.747	.227	.094	3.293	.001					
Type of Family	-2.518	.695	-.087	-3.625	.000					
Area of residence	-.325	.400	-.020	-.813	.417					
Father's Education	2.617	.412	.290	6.352	.000					
Mother's Education	-.472	.344	-.043	-1.371	.170					
Father's Occupation	3.479	.812	.189	4.284	.000					
Mother's Occupation	-.233	.412	-.017	-.565	.572					
Annual Income	2.099	.507	.129	4.143	.000					

a. Predictors: (Constant), Family income, Residence, Age-group, Type of family, Gender, Mother's education, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Health Issues

b) **Predictive capacities of socio-demographic markers on the resilience components of youth**

Resilience is a quality that affects an individual's ability to cope with tension. Resilience is a term with broad usage, frequently applied in different ways. The outcome of the predictive capacities of socio-demographic markers on resilience among youth was categorised according to the components of the resilience

a. Predictive capacities of socio-demographic markers on self-belief
b. Predictive capacities of socio-demographic markers on optimism
c. Predictive capacities of socio-demographic markers on purposeful direction
d. Predictive capacities of socio-demographic markers on challenge orientation
e. Predictive capacities of socio-demographic markers on emotional regulation
f. Predictive capacities of socio-demographic markers on support seeking

While applying the multiple linear regression, the assumption of singularity was met, and correlation (the independent variables did not have coefficient loadings with more than 0.8) was also met. The collinearity statistics were met with tolerance being less than 1 and VIF with than 10. Extreme univariate outliers were identified during the initial screening and were modified, after which the Cook's distance was found to range between .000 to .012 for all aspects of resilience that were tested.

I. Predictive capacities of socio-demographic markers on self-belief

Self-belief is the dependent variable, and its relevant assumptions were tested; a sample size of 1710 was deemed to be adequate given the independent variable was ten.

Table XIV*a* explains the results of the correlation test between the socio-demographic markers and the self-belief. It was observed that gender (-.065**), area of residence (.076**), father's education (-.055*), father's occupation (.062*) and family income (-.062*) were found to be having a significant positive correlation respectively.

Coming into table XIVb, the model summary and ANOVA, showed that the R value of .176, indicating the relationship between the independent and dependent variable to be positive, with 3.1% of variance, with R^2 being .031. Also, a highly

significant relationship was noticed between the socio-demographic markers and self-belief with F (10,1699) = 5.445, P<.001.

Further, the multiple linear regression analysis depicted that, gender (ß = .957, t = 2.024, P = 0.043), area of residence (ß = .983, t = 3.327, P = 0.001), father's education (ß = -1.294, t = -4.252, P = 0.000), father's occupation (ß = -1.478, t = -2.464, P = 0.014), and family income (ß = -.889, t =-2.375, P = 0.018), were the significant predictors of self-belief among youth in the study. Indicating, one unit change in the gender increases the .957 score in self-belief, suggesting that females were experiencing a higher self-belief as compared to males. In the area of residence, a one-unit change increases 983 score in self-belief, suggesting that youth residing in semi-urban areas tend to exhibit higher self-belief of resilience. A one-unit change in father's education decreases -1.294 score of self-belief, suggesting that fathers who completed their education level of 11 and 12^{th} standard tend to exhibit a lower level of self-belief among youth. Similarly, one unit change in father's occupation decreases -1.478 scores in self-belief, indicating that fathers who work in the private or daily wage sector tend to exhibit a lower level of self-belief. Lastly, looking into the family income of the youth, it was found that a one unit change in the family income tends to decrease -.889 scores of self-belief, stating that youth with lower middle family income of 2- 5 lakhs and 5 – 10 lakhs were associated with low self-belief among the youth based on the nominal and ordinal scores of the predictor variables.

In this study, variables such as males, residing in a semi-urban area, whose fathers had low educational status, working in private or as a daily wage worker and having a low to middle family income were the predictors for low self-beliefs. The reason could be that in an Indian society, males, especially in semi-urban settings with a lack of access to high-quality education, may face traditional gender roles as a provider and breadwinner with limited opportunities and autonomy. Economic hardship is another significant psychological stressor that often leads to limited opportunities and low self-belief.

Studies on self-belief among adolescents and youth have highlighted its critical role in shaping developmental outcomes, including academic achievement, mental health, decision-making, and resilience.

Table XIV*a*

Correlations between Socio-demographic Markers and Self-Belief among Youth

	Self-Belief	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Self-Belief	1										
Age Group	-.008	1									
Gender	-.065**	.054*	1								
Education Qualification	-.006	.532**	.055*	1							
Type of Family	-.007	-.072**	.154**	.057*	1						
Area of Residence	.076**	.003	-.079**	-.013	-.040	1					
Father Education	-.055*	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.016	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.062*	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.017	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.062*	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	22.78	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	9.50	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XIV*b*

Predictive Capacities of Socio-Demographic Markers on Self-Belief among Youth

Self-belief	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*p value*	*R*	*R Sq*	*df*	*Mean sq*	*F*	*Sig*
	B	**Std. Error**	**Beta**								
(Constant)	30.364	3.336		9.101	.000	.176	.031	10	479.09	5.44	.000
Age group	.177	.541	.009	.326	.744						
Gender	.957	.473	.050	2.024	.043						
Educational qualification	-.092	.167	-.016	-.549	.583						
Type of family	.157	.513	.008	.305	.760						
Area of residence	.983	.296	.084	3.327	.001						
Father's education	-1.294	.304	-.200	-4.252	.000						
Mother's education	.086	.254	.011	.340	.734						
Father's occupation	-1.478	.600	-.112	-2.464	.014						
Mother's occupation	-.382	.304	-.040	-1.255	.210						
Family income	-.889	.374	-.076	-2.375	.018						

a. Predictors: (Constant), Type of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Self-belief

A study showed that the overall status of self-esteem among rural school-going adolescents was found to be average, female students showed higher self-esteem than male students, and the difference was statistically significant, and Joint family students showed higher self-esteem than nuclear family students, and the difference was statistically significant. ($p<0.05$). The study highlighted social comparison theory as a key framework for understanding gender differences in adolescent self-esteem, noting that adolescents often compare themselves to others in areas like appearance and social status, particularly intensified by social media. Female adolescents are more prone to such comparisons, leading to increased dissatisfaction and stress. Additionally, students' backgrounds influence both self-esteem and national identity, with urban students showing stronger outcomes, likely due to greater access to resources and opportunities that support personal and social development (Mandal et.al., 2023).

II. Predictive capacities of socio-demographic markers with Optimism

The resilience component optimism is the dependent variable, and its relevant assumptions were tested; a sample size of 1710 was deemed to be adequate, given the independent variable of ten. Table XV*a* explains the results of the correlation test between the socio-demographic markers and optimism. It was observed that gender (.078**), father's education (.067**), mother's education (.077**) and father's occupation (-.068**)were found to be having a significant negative and positive correlation respectively.

Coming into table XVb, representing the model summary and ANOVA, showed that the R value of .125, indicating the relationship between the independent and dependent variable to be positive, with 1.6% of variance, with R^2 being .016. Also, a highly significant relationship was noticed between the socio-demographic markers and optimism with $F(10,1699) = 2.694$, $P<.003$.

Further, the multiple linear regression analysis depicted that gender (ß = 1.927, t = 3.383, P = 0.001) and mother's education (ß = .971, t = 3.171, P = 0.002) were the significant predictors of optimism among youth in the study. Hence, one unit change in the gender increases 1.927 score in optimism, suggesting females exhibited higher optimism as compared to males. A one unit change in mother's education increases .971 score of optimism, suggesting that mothers who have a higher education level, their youth tend to exhibit a higher level of optimism based on the nominal and ordinal scores of the predictor variables.

Optimism, as a positive cognitive orientation towards the future, plays a crucial role in influencing mental health, coping strategies, academic motivation, and overall well-being during adolescence and early adulthood. In the Indian context, where young people face diverse socio-cultural, educational, and economic challenges, understanding levels of optimism and their associated factors can provide valuable insights for designing youth-centred mental health. The current study indicated that female youth and the youth with their mothers having higher educational level, exhibited higher level of optimism. A study by Mayra (2023) indicated that gender and educational level affect optimism, responses among college and university students. The research found that female students exhibited significantly higher levels of optimism compared to their male counterparts and highlighted that postgraduate students demonstrated greater optimism than undergraduates, suggesting that educational attainment positively influences optimism levels. Another study conducted for 120 adolescents from Aligarh Muslim University resulted in an insignificant difference between male and female adolescents on optimism and psychological well-being (Farzana, 2016). Lyubomirsky, King, and Diener (2005) opined that females are more optimistic and psychologically healthy than males and that the experimental evidence suggests that positive emotions are valuable because they encourage and promote positive perceptions of self and others, social interactions, altruism, effective handling of conflicts, and physical well-being.

III. Predictive capacities of socio-demographic markers on Purposeful direction

Purposeful direction is the dependent variable, and its relevant assumptions were tested, a sample size of 1710 was deemed to be adequate given the independent variable to be ten. Table XVI*a* explains the results of the correlation test between the socio-demographic markers and the purposeful direction. It was observed that educational qualification (-.048*), father's education (.081**), mother's education (.067**) and father's occupation (-.078**) were found to be having a significant negative and positive correlation respectively.

Coming into table XVIb, the model summary and ANOVA showed that the R value of .118, indicating the relationship between the independent and dependent variable to be positive, with 1.4% of variance, with R^2 being .014. Also, a highly significant relationship was noticed between the socio-demographic markers and purposeful direction with F (10,1699) = 2.415, P<.007.

Table XV*a*

Correlations between Socio-demographic Markers and Optimism among Youth

	Optimism	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Optimism	1										
Age Group	-.016	1									
Gender	.078**	.054*	1								
Education Qualification	-.044	.532**	.055*	1							
Type of Family	-.021	-.072**	.154**	.057*	1						
Area of Residence	-.013	.003	-.079**	-.013	-.040	1					
Father Education	.067**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	.077**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	-.068**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.008	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	.037	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	23.85	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	11.35	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XV*b*

Predictive Capacities of Socio-Demographic Markers on Optimism among Youth

Optimism	***Unstandardized Coefficients***		***Standardized Coefficients***	***t***	***Sig.***	***R***	***R Sq***	***df***	***Mean sq***	***F***	***Sig***
	B	**Std. Error**	**Beta**								
(Constant)	19.263	4.018		4.794	.000	.125	.016	10	343.8	2.69	.003
Age group	-.856	.652	-.038	-1.314	.189						
Gender	1.927	.570	.085	3.383	.001						
Educational qualification	-.010	.202	-.001	-.048	.962						
Type of family	-.042	.618	-.002	-.067	.946						
Area of residence	-.289	.356	-.021	-.813	.416						
Father's education	-.142	.366	-.018	-.386	.699						
Mother's education	.971	.306	.104	3.171	.002						
Father's occupation	.769	.722	.049	1.064	.287						
Mother's occupation	.297	.366	.026	.810	.418						
Family income	-.436	.451	-.031	-.968	.333						

a. Predictors: (Constant), Type of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Optimism

Further, the multiple linear regression analysis depicted that only the father's education (ß = 1.273, t = 3.561, P = 0.000) was found to be a significant predictor of purposeful direction among youth. Hence, one unit change in father's education increasesthe1.273 score of purposeful direction, indicating that the youth whose fathers had a higher education tend to exhibit a higher level of purposeful direction among youth based on the nominal and ordinal scores of the predictor variables.

The variables of father's high educational status showed that it is the predictor for purposeful direction. Concerning the findings of our study, traditional perceptions regarding parental roles often associate nurturing, particularly in terms of educating and raising children, primarily with the mother. This reflects longstanding socio-cultural norms that assign caregiving responsibilities to women, potentially influencing adolescents' and youths' perceptions of parental involvement and support. Mothers are perceived as a source of affection, warmth and emotional support are important givers in the family, especially in children, whereas the present study suggested that father's education predicted the purposeful direction among youth and fathers were being recognised for their role in shaping values, discipline and educational aspiration for their adolescents and youth. While traditionally, the role of fathers was often viewed as supporters of the family's economic well-being by working outside the house as office employees (Aski, 2012). Another study by Masud et al., (2019) revealed that higher levels of fathers' education and their involvement in nurturing behaviours positively impacted adolescents' academic performance, suggesting that educated fathers are more likely to engage in effective parenting, thereby fostering better academic outcomes and other healthy behaviours in their children.

Table XVI*a*

Correlations between Socio-demographic Markers and Purposeful Direction among Youth

	Purposeful direction	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Purposeful direction	1										
Age Group	-.037	1									
Gender	-.031	.054*	1								
Education Qualification	-.048*	.532**	.055*	1							
Type of Family	-.041	-.072**	.154**	.057*	1						
Area of Residence	-.034	.003	-.079**	-.013	-.040	1					
Father Education	.081**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	.067**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	-.078**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.004	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	.039	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	20.97	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	11.06	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XVI*b*

Predictive Capacities of Socio-Demographic Markers on Purposeful Direction among Youth

Purposeful direction	***Unstandardized Coefficients***		***Standardized Coefficients***	***t***	***Sig.***	***R***	***R Sq***	***df***	***Mean sq***	***F***	***Sig***
	B	**Std. Error**	**Beta**								
(Constant)	12.634	3.921		3.222	.001	.118	.014	10	293.52	2.415	.007
Age group	.543	.636	.025	.853	.394						
Gender	-.707	.556	-.032	-1.271	.204						
Educational qualification	.145	.197	.022	.739	.460						
Type of family	-.312	.603	-.013	-.518	.605						
Area of residence	-.005	.347	.000	-.014	.989						
Father's education	1.273	.358	.169	3.561	.000						
Mother's education	-.129	.299	-.014	-.430	.667						
Father's occupation	1.031	.705	.067	1.462	.144						
Mother's occupation	.339	.358	.031	.949	.343						
Family income	.365	.440	.027	.829	.407						

a. Predictors: (Constant), Type of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Purposeful direction

IV. Predictive capacities of socio-demographic markers on Adaptability

Adaptability is the dependent variable, and its relevant assumptions were tested, a sample size of 1710 was deemed to be adequate given the independent variable was ten. Table XVII *a*explains the results of the correlation test between the socio-demographic markers and the adaptability. It was observed that educational qualification (078**), type of family (.050*), father's education (-.078**) and mother's education (-.051*) were found to have a significant negative and positive correlation, respectively. Coming into table XVIIb, the model summary and ANOVA showed that the R value of .140, indicated the relationship between the independent and dependent variable to be positive, with 2% of variance, with R^2 being .020. Also, a highly significant relationship was noticed between the socio-demographic markers and adaptability with F (10,1699) = 3.396, P<.000.

Further, the multiple linear regression analysis depicted that, education qualification (ß = .478, t = 2.748, P = 0.006), residence (ß = .896, t = 2.919, P = 0.004) and family income (ß = -.971, t = -2.500, P = 0.013) were the significant predictors of adaptability among youth in the study. Indicating, one unit change in the educational qualification increases .478 score in adaptability, suggesting that youth with higher educational qualifications tend to experience a higher level of adaptability. A unit change in area of residence increases the .896 score of adaptability, suggesting that youth residing in semi-urban and rural areas tend to experience a higher level of adaptability compared to those in urban areas. Lastly, looking into the family income of the youth, it was found that a one unit change in the family income tends to decrease -.971 scores of adaptability, stating that youth with lower family income were associated with low adaptability among the youth based on the nominal and ordinal scores of the predictor variables.

The variables of high educational qualification, residing in a semi-urban area were found to be the predictors for high adaptability, and the youth with lower family income showed lower adaptability in the present study. The reason could be that, compared to the youth from urban areas, semi-urban and rural regions may have had the experience of facing challenges socially, culturally and economically, which would make them learn to adapt to any circumstances. Living with financial insecurity and having financial constraints often limits access to quality education and creates chronic stress, affecting cognitive and emotional functioning, thus reducing resilience and the ability to adapt to change or challenges.

Table XVII*a*

Correlations Between Socio-demographic Markers and Adaptability among Youth

	Adaptability	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Adaptability	1										
Age Group	.006	1									
Gender	-.001	.054*	1								
Education Qualification	.078**	.532**	.055*	1							
Type of Family	.050*	-.072**	.154**	.057*	1	-.040					
Area of Residence	.028	.003	-.079**	-.013	-.040	1					
Father Education	-.078**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.051*	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.034	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.014	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.028	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	20.93	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	9.80	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XVII*b*

Predictive Capacities of Socio-Demographic Markers on Adaptability among Youth

Adaptability	***Unstandardized Coefficients***		***Standardized Coefficients***	***t***	***p value***	***R***	***R Sq***	***df***	***Mean sq***	***F***	***Sig***
	B	**Std. Error**	**Beta**								
(Constant)	23.405	3.465		6.755	.000	.140	.020	10	322.19	3.396	.000
Age group	-.492	.562	-.025	-.876	.381						
Gender	-.101	.491	-.005	-.206	.837						
Educational qualification	.478	.174	.082	2.748	.006						
Type of family	.242	.533	.011	.454	.650						
Area of residence	.896	.307	.074	2.919	.004						
Father's education	-.326	.316	-.049	-1.033	.302						
Mother's education	-.142	.264	-.018	-.539	.590						
Father's occupation	-.614	.623	-.045	-.986	.324						
Mother's occupation	-.166	.316	-.017	-.527	.598						
Family income	-.971	.389	-.080	-2.500	.013						

a. Predictors: (Constant), Types of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Adaptability

V. Predictive capacities of socio-demographic markers on Ingenuity

Ingenuity is the dependent variable, and its relevant assumptions were tested, a sample size of 1710 was deemed to be adequate given the independent variable of ten. Table XVIII*a* explains the results of the correlation test between the socio-demographic markers and the ingenuity. It was observed that father's education (-.049*) and mother's education (-.087**) were found to be having a significant negative and positive correlation respectively. Coming into table XVIIIb, the model summary and ANOVA showed that the R value of .171, indicating the relationship between the independent and dependent variable to be positive, with 2.9% of variance, with R^2 being .029. Also, a highly significant relationship was noticed between the socio-demographic markers and ingenuity with F (10,1699) = 5.087, P<.000.

Further, the multiple linear regression analysis depicted that, age group (ß = -1.287, t = -2.222, P = 0.026), educational qualification (ß = -.616, t = 2.024, P = 0.043), father's education (ß = -.896, t = -2.751, P = 0.006), father's occupation (ß = -1.661, t = -2.588, P = 0.010), mother's occupation (ß = -.977, t = -2.999, P = 0.003) and family income (ß = -.809, t =-2.019, P = 0.044)were the significant predictors of ingenuity among youth in the study. Further, one unit change in the age group decreases -1.287 score in ingenuity, suggesting that the older age group tend to exhibit lower ingenuity. In educational qualification, one unit change in the educational qualification decreases -.616 score in ingenuity, suggesting that youth with educational qualification of I and II year of graduation tend to experience a lower level of ingenuity. A one unit change in father's education decreases -.896 scores of ingenuity, suggesting that fathers who have an education level of 11 to 12^{th}, their youth tend to exhibit a lower level of ingenuity. Similarly, one unit change in father's occupation decreases -1.661 scores in ingenuity, indicating that fathers who work in the private sector or as daily wage their youth tend to exhibit a lower level of ingenuity. Looking into mother's occupation, one unit change in mother's occupation decreases -.977 score of ingenuity, suggesting that mothers working in the private sector, daily wage or not employed their youth tend to experience low ingenuity. Lastly, looking into the family income of the youth, it was found that a one-unit change in the family income tends to decrease -.809 scores of ingenuity, stating that youth with lower middle family income were associated with low ingenuity based on the nominal and ordinal scores of the predictor variables.

Table XVIII*a*

Correlations Between Socio-demographic Markers and Ingenuity among Youth

	Ingenuity	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Ingenuity	1										
Age Group	-.008	1									
Gender	.043	.054*	1								
Education Qualification	-.012	.532**	.055*	1							
Type of Family	-.038	-.072**	.154**	.057*	1						
Area of Residence	.025	.003	-.079**	-.013	-.040	1					
Father Education	-.049*	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.087**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.004	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.027	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.045	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	20.89	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	10.15	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XVIII*b*

Predictive Capacities of Socio-Demographic Markers on Ingenuity among Youth

Ingenuity	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*p value*	*R*	*R Sq*	*df*	*Mean sq*	*F*	*Sig*
	B	**Std. Error**	**Beta**								
(Constant)	37.654	3.571		10.545	.000	.171	.029	10	512.76	5.087	.000
Age group	-1.287	.579	-.063	-2.222	.026						
Gender	1.004	.506	.049	1.983	.048						
Educational qualification	-.616	.179	-.102	-3.438	.001						
Type of family	-.014	.549	-.001	-.026	.979						
Area of residence	-.192	.316	-.015	-.607	.544						
Father's education	-.896	.326	-.129	-2.751	.006						
Mother's education	-.535	.272	-.064	-1.963	.050						
Father's occupation	-1.661	.642	-.118	-2.588	.010						
Mother's occupation	-.977	.326	-.096	-2.999	.003						
Family income	-.809	.400	-.065	-2.019	.044						

a. Predictors: (Constant), Type of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Ingenuity

The variables of older age-group youth, educational qualification with I and II year of graduation, fathers with educational status of 11 and 12th, parents working in the private and daily wage sectors, and coming from a family with a lower middle annual income was found to be associated with low ingenuity in the present study.

Overall, the common thread is that socioeconomic and educational structures may prioritise safety, conformity, or practicality, all of which can dampen ingenuity. The conditions surrounding these youth, even if they are academically strong, may not be favourable to developing creative problem-solving, innovation, or original thinking, limiting opportunities for the development and expression of ingenuity.

VI. Predictive capacities of socio-demographic factors on Challenge orientation

Challenge orientation is the dependent variable, and its relevant assumptions were tested; a sample size of 1710 was deemed to be adequate given the independent variable of ten. Table XIXI*a* explains the results of the correlation test between the socio-demographic markers and the challenge orientation. It was observed that father's education (-.084**), mother's education (-.081**) and father's occupation (.053*) were found to be having a significant negative and positive correlation, respectively.

Coming into table XIXb, which represents the model summary and ANOVA, showed that the R value of .117, indicating the relationship between the independent and dependent variable to be positive, with 1.4% of variance, with R^2 being .014. Also, a highly significant relationship was noticed between the socio-demographic markers and challenge orientation with F (10,1699) = 2.360, P<.009

Further, the multiple linear regression analysis depicted that only the mother's education (ß = -.753, t = -2.950, P = 0.003) was a significant predictor for challenge orientation among youth in the study. Hence, one unit change in the mother's education decreases the score of -.753 in challenge orientation of the youth, suggesting that the youth whose mothers had an educational qualification of 10th and 12thtend to exhibit a lower level of challenge orientation based on the nominal and ordinal scores of the predictor variables.

Mothers' educational attainment is an important factor influencing how youth approach and respond to challenges. Based on the study results, a study showed the

influence of mothers' educational level on children's comprehensive quality, which concluded that mothers with higher educational attainment can promote the comprehensive quality and development of their children and actively support the sustainable progress of society. Low maternal educational qualification may contribute to reduced challenge orientation among youth due to a combination of limited cognitive modelling, lower parental expectations, and a home environment less beneficial to intellectual risk-taking and resilience. These factors collectively constrain the development of self-efficacy and intrinsic motivation, which are essential for overcoming Challenges (Siyang, 2023).

VII. Predictive capacities of socio-demographic markers on Emotional regulation

Emotional regulation is the dependent variable, and its relevant assumptions were tested; a sample size of 1710 was deemed to be adequate given the independent variable of ten. Table XX*a* explains the results of the correlation test between the socio-demographic markers and the emotional regulation. It was observed that father education (-.075**), mother education (-.058*), father occupation (.066**) and family income (-.060*) were found to be having a significant negative and positive correlation, respectively.

Coming into table XXb depicting the model summary and ANOVA, showed that the R value of .161, indicating the relationship between the independent and dependent variable to be positive, with 2.6% of variance, with R^2 being .026. Also, a highly significant relationship was noticed between the socio-demographic markers and emotional regulation with F (10,1699) = 4.546, P<.000.

Further, the multiple linear regression analysis depicted that, area of residence (ß = -.613, t = -2.043, P = 0.041), type of family (ß = 1.641, t = 3.150 P = 0.002), father's education (ß = -1.148, t = -3.715, P = 0.000) and father's occupation (ß = -1.336, t = -2.194, P = 0.028), were the significant predictors of emotional regulation among youth in the study. Hence, one unit change in the area of residence decreases -.613 score in emotional regulation, suggesting that youth residing in semi-urban and rural areas tend to exhibit a lower emotional regulation as compared to those residing in urban areas. A one-unit change in the type of family increases 1.641 score in emotional regulation, suggesting that youth living in a small family setting, such as nuclear families, tend to experience a high level of emotional regulation compared to those living in joint families.

Table XIX*a*

Correlations Between Socio-demographic Markers and Challenge Orientation among Youth

	Challenge Orientation	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Challenge Orientation	1										
Age Group	-.028	1									
Gender	.043	.054*	1								
Education Qualification	-.020	.532**	.055*	1							
Type of Family	.026	-.072**	.154**	.057*	1						
Area of Residence	.022	.003	-.079**	-.013	-.040	1					
Father Education	-.084**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.081**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.053*	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	.012	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.045	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	17.68	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	9.45	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XIX*b*

Predictive Capacities of Socio-Demographic Markers on Challenge Orientation among Youth

Challenge orientation	***Unstandardized Coefficients***		***Standardized Coefficients***	***T***	***p value***	***R***	***R Sq***	***df***	***Mean sq***	***F***	***Sig***
	B	**Std. Error**	**Beta**								
(Constant)	24.199	3.348		7.227	.000						
Age group	-.716	.543	-.038	-1.318	.188						
Gender	-.201	.475	-.011	-.424	.672						
Educational qualification	-.072	.168	-.013	-.427	.670						
Type of family	-.399	.515	-.019	-.776	.438						
Area of residence	.398	.297	.034	1.342	.180	.117	.014	10	209.14	2.360	.009
Father's education	-.261	.305	-.041	-.855	.393						
Mother's education	-.753	.255	-.097	-2.950	.003						
Father's occupation	-.315	.602	-.024	-.523	.601						
Mother's occupation	-.399	.305	-.042	-1.305	.192						
Family income	.081	.375	.007	.215	.830						

a. Predictors: (Constant), Type of family, M education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Challenge Orientation

A one-unit change in father's education decreases -1.148 score of emotional regulation, suggesting that fathers who have education levels of 10^{th} to 12^{th}grade, their youth tend to exhibit a lower level of emotional regulation. Similarly, one unit change in father's occupation decreases -1.336 scores in emotional regulation of the youth, indicating that fathers who work in private and daily wage sectors, their youth tend to exhibit a lower level of emotional regulation based on the nominal and ordinal scores of the predictor variables.

Socioeconomic disadvantage, such as youth residing in rural and semi-urban areas, residing in a nuclear family, unlike joint families, where they may offer fewer adult role models or support systems and less guidance, contributes to emotional insecurity. Also, youth whose fathers have a low educational status and work in the private and daily wage sector often influence youths' emotional well-being in their interactions with social circles. A study by Lund et al. (2010) emphasises that parental education, particularly the father's and their employment type, are critical determinants of youth mental health. Adolescents with parents in unstable, low-status jobs report greater emotional difficulties, indicating that social and economic conditions are linked with common mental health problems.

VIII. Predictive capacities of socio-demographic markers on Support seeking

Support seeking is the dependent variable, and its relevant assumptions were tested, a sample size of 1693was deemed to be adequate given the independent variable of ten. Table XXI*a* explains the results of the correlation test between the socio-demographic markers and the support seeking. It was observed that gender (.030*), type of family (.010**), mother's education (-.014**), and family income (-.008*) were found to be having a significant negative and positive correlation respectively.

Coming into table XXIb, which represents the model summary and ANOVA, showed that the R value of .100, indicating the relationship between the independent and dependent variable to be positive, with 1% of variance, with R^2 being .010. Additionally, a highly significant relationship was observed between the socio-demographic markers and support seeking, with $F(10,1682) = 1.714$, $p = .072$.

Table XX*a*

Correlations Between Socio-demographic Markers and Emotional Regulation among Youth

	Emotional Regulation	Age Group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother Occupation	Family Income
Emotional Regulation	1										
Age Group	.012	1									
Gender	-.007	.054*	1								
Education Qualification	.020	.532**	.055*	1							
Type of Family	.019	-.072**	.154**	.057*	1						
Area of Residence	-.007	.003	-.079**	-.013	-.040	1					
Father Education	-.075**	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.058*	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.066**	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.009	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.060*	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	20.26	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	9.62	.49	.50	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XX*b*

Predictive Capacities of Socio-Demographic Markers on Emotional Regulation among Youth

Emotional regulation	***Unstandardized Coefficients***		***Standardized Coefficients***	***t***	***Sig.***	***R***	***R Sq***	***df***	***Mean sq***	***F***	***Sig***
	B	**Std. Error**	**Beta**								
(Constant)	30.698	3.387		9.063	.000	.161	.026	10	412.24	4.546	.000
Age group	-.570	.549	-.030	-1.037	.300						
Gender	.040	.480	.002	.084	.933						
Educational qualification	-.252	.170	-.044	-1.485	.138						
Type of Family	1.641	.521	.078	3.150	.002						
Area of residence	-.613	.300	-.052	-2.043	.041						
Father's education	-1.148	.309	-.175	-3.715	.000						
Mother's education	-.460	.258	-.058	-1.781	.075						
Father's occupation	-1.336	.609	-.100	-2.194	.028						
Mother's occupation	-.397	.309	-.041	-1.286	.199						
Family income	-.290	.380	-.024	-.762	.446						

a. Predictors: (Constant), Types of family, Mother's education, Age-group, Gender, Residence, Family income, Educational qualification, Father's occupation, Mother's occupation, Father's education

b. Dependent Variable: Emotion Regulation

Further, the multiple linear regression analysis depicted that only gender (ß = -.794, t = -2.022, P = 0.043) and area of residence (ß = -.534, t = -2.177, P = 0.030) were the significant predictors of support seeking among youth in the study. Hence, one unit change in the gender decreases -.794 score in support seeking, indicating that male youth tend to exhibit a low level of support seeking compared to females. Additionally, a one-unit change in the area of residence results in a decrease of -.534 in support-seeking behaviour, suggesting that youth residing in urban areas tend to exhibit lower support-seeking tendencies compared to those residing in rural and semi-urban areas based on the nominal and ordinal scores of the predictor variables.

Socio-demographic background plays a significant role in shaping youths' resilience and their willingness or ability to seek support. The present study showed that males and youth residing in urban areas were the predictors for low support seeking among youth. The reason could be that male youth think that they might be seen as a sign of weakness, especially in a highly competitive urban environment, by receiving judgment from peers, family members or society as a whole, affecting their social status.

A study conducted on 100 participants found that socio-demographic factors such as higher family income, joint family type, and rural locality were statistically significantly associated with late help-seeking behaviour (Kartik et.al, 2019). The findings indicated a significant positive and negative correlation between risk behaviours and resilience among youth, suggesting that increased engagement in risky behaviours is associated with decreased protective factors. This inverse relationship underscores the potential vulnerability of youth who lack adequate resilience mechanisms. Additionally, the socio-demographic determinants, such as age, gender, socioeconomic status, and educational background, demonstrated a significant influence on both risk behaviours and resilience.

These results highlight the importance of considering contextual and demographic factors when developing targeted sensitisation and interventions aimed at enhancing resilience and reducing risky behaviours among the youth. A study conducted in Nepal with 416 adolescents found that low resilience was associated with factors such as female gender, attending private schools, higher birth order, urban residence, and physical inactivity. These findings highlight the importance of considering socio-demographic

factors when assessing adolescent resilience (Singh et al., 2019), as resilience is not just an individual trait; it is shaped by the context in which an adolescent live. The Socio-demographic disparities can affect both risk exposure and access to protective factors.

These results explored the socio-demographic predictors of risk behaviours and resilience among the youth, here by answering the research question no 3 and addressing the fourth objective of the study.

In continuation of the results of the multiple linear regression, the values of r and R^2 are mentioned to interpret the results. It is important to understand the various dimensions in which these values can be used in the interpretation. The significance of r or R^2 should be interpreted in light of both the strength of the relationship (i.e., population correlation, ρ) and the sample size. A low R^2 value does not inherently indicate that a model is poor or lacks interpretive value. Even models with modest R^2 values can offer meaningful and unique contributions, particularly when contextualised within the specific domain of study. For instance, in the social sciences, it is often impractical to account for all relevant predictors influencing an outcome variable, which may naturally result in lower R^2 values. Importantly, the model in question includes only one predictor variable, which further contextualises the R^2. Thus, a model's relevance should not be judged solely on the magnitude of R^2, but on the theoretical and practical significance of its findings (Bala, 2017). A low R-squared model is acceptable in empirical social science research, and a low R-squared model is not necessarily bad. This is due to the fact that the primary goal of most social science research modelling is usually not to predict human behaviour. Rather, the goal is often to examine whether specific predictors or explanatory variables have a significant influence and effect on the dependent variable. Therefore, a low R-square of at least 0.1 (or 10 percent) is acceptable on the condition that some or most of the predictors or explanatory variables are statistically significant (Ozili, 2023).

Table XXI*a*

Correlations Between Socio-demographic Markers and Support Seeking among Youth

	Support Seeking	Age group	Gender	Education Qualification	Type of Family	Area of Residence	Father Education	Mother Education	Father Occupation	Mother occupation	Family Income
Support Seeking	1										
Age group	.033	1									
Gender	.030*	.054*	1								
Education Qualification	.000	.532**	.055*	1							
Type of Family	.010**	-.072**	.154**	.057*	1						
Area Of Residence	-.014	.003	-.079**	-.013	-.040	1					
Father Education	-.009	-.135**	.113**	-.255**	-.034	-.233**	1				
Mother Education	-.014**	-.064**	.011	-.134**	-.004	-.168**	.556**	1			
Father Occupation	.000	.051*	-.161**	.118**	.089**	.170**	-.817**	-.447**	1		
Mother Occupation	-.001	-.032	.091**	.015	.022	.130**	-.123**	-.456**	.055*	1	
Family Income	-.008**	.020	.073**	.018	-.017	-.007	.347**	.385**	-.434**	-.498**	1
Mean	17.94	1.51	1.47	4.21	1.70	1.80	3.77	2.75	1.98	3.41	2.26
Std. Deviation	7.75	.50	.49	1.68	.45	.81	1.47	1.21	.72	.99	.81

Table XXI*b*

Predictive Capacities of Socio-Demographic Markers on Support Seeking among Youth

Variables	***Unstandardized coefficient***		***Standardized Coefficient***	***t***	***p value***	***R***	***R Square***	***Mean Square***	***F***	***Sig***
	B	**Std. Error**	**Beta**							
(Constant)	23.567	2.767		8.516	.000					
Age	-.507	.448	-.033	-1.132	.258	.100	.010	102.681	1.714	.072
Gender	-.794	.393	-.051	-2.022	.043					
Educational Qualification	-.118	.138	-.026	-.854	.393					
Type of Family	-.103	.426	-.006	-.243	.808					
Area of residence	-.534	.245	-.056	-2.177	.030					
Father's education	-.131	.253	-.025	-.519	.604					
Mother's education	-.183	.211	-.029	-.869	.385					
Father's occupation	-.473	.499	-.044	-.948	.343					
Mother's occupation	-.210	.252	-.027	-.834	.405					
Annual Income	.262	.310	.027	.846	.398					

a. Predictors: (Constant), Family income, Residence, Age group, Type of family, Gender, Mother's education, educational qualification, Father's occupation, Mother's occupation.

b. Dependent Variable: Support Seeking.

E. Effect of the sensitisation programme on risk and resilience among youth

I. The effect of the sensitisation programme - pre data and post data analysis of the experimental group.

Table XXII

Difference between Pre-Test and Post-Test Scores of the Experimental Group on Risk Behaviour

Risk behaviours	Mean ± SD Pre-test	Mean ± SD Post-test	95% Confidence interval of the Difference		t value	Sig	Cohen's D
			Lower	Upper			
Safety issues	28.61 ± 4.583	25.19 ± 5.959	2.107	4.729	5.161**	.000	0.324
Attempting Suicides	7.91 ± 1.060	6.56 ± 1.172	1.062	1.643	9.217**	.000	0.604
Substance use	132.1 ± 7.998	90.39 ±15.833	45.033	25.556	25.556**	.000	1.750
Sexual behavior	24.23 ± 4.987	14.31 ± 4.616	11.117	16.375	16.375**	.000	1.033
Health issues	100.6 ± 14.868	82.06 ±18.033	22.708	8.851	8.851**	.000	0.563

The data in Table XXII shows the outcomes of the paired sample t-test, which was carried out to assess the effect of the sensitization programme on risk behaviours among youth. The findings revealed a contrast in the risk of safety issues before (pre) sensitisation (M=28.61; SD=4.583) and after (post) sensitisation (M=25.19; SD=5.959); indicating a significant difference with t = 5.161, P<.000 with a decrease in the post test scores. The 95% confidence interval for the mean difference ranged from (-2.107 to 4.729), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a medium effect (d=0.324). Coming to the risk of attempting suicide, a significant difference was seen between before (pre) sensitisation

(M=7.91; SD=1.060) and after (post) sensitisation (M=6.56; SD=1.172); t = 9.217, P<.000 with a decreased score in the post test. The 95% confidence interval for the mean difference ranged from 1.062 to 1.643, signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a medium effect (d=0.604). Similarly, in substance use,a significant difference was observed between before (pre) sensitisation (M=132.1; SD=7.998) and after (post) sensitisation (M=90.3; SD=15.83); t = 25.556, P<.000, again with a decrease in post-test scores. The 95% confidence interval for the mean difference ranged from (45.033 to 25.556), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a large effect (d=1.750).

Coming to sexual behaviour scores before (pre) sensitisation (M=24.23; SD=4.987) and after (post) sensitisation (M=14.31; SD=4.616) indicated a decrease in the post test, a significant difference was seen with t = 16.375, P<.000. The 95% confidence interval for the mean difference ranged from (11.117to 16.375), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a large effect (d=1.033). Moving to health issues before (pre) sensitisation (M=100.6; SD=14.86) and after (post) sensitisation (M=82.06; SD=18.03); where the post test scores were decreased and a significant difference was seen with t = 8.851, P<.000. The 95% confidence interval for the mean difference ranged from (22.708 to 8.851), signifying a substantial variance between the sample means.

The effect size computed using Cohen's D indicated a medium effect (d=0.563). Results of the present study indicated that there was a difference between the pre- and post-scores of the sensitization programme with regard to the risk behaviour among youth. The experimental group showed a significant effect ranging from a medium to a large effect of the sensitization programme. The sensitization programme had a positive effect on the risk behaviours scores of youth, with reduced post-test scores.

Table XXIII

Difference Between Pre-Test and Post-Test Scores of the Experimental Group on Resilience

Resilience	Mean ± SD Pre-test	Mean ± SD Post-test	95% Confidence interval of the Difference		t value	Sig	Cohen's D
			Lower	Upper			
Self-belief	22.19 ± 9.217	30.94 ± 6.348	-10.565	-6.943	-9.569**	.000	0.172
Optimism	19.93 ± 10.44	31.16 ± 4.184	-13.146	-9.296	-11.540**	.000	0.268
Purposeful direction	18.64 ± 11.07	34.70 ± 8.161	-18.870	-13.245	-11.304**	.000	0.248
Adaptability	17.39 ± 8.767	17.33 ± 8.057	-1.903	2.018	0.058 NS	.954	0.050
Ingenuity	18.87 ± 8.124	22.72 ±11.105	-6.024	-1.681	-3.513**	.001	0.200
Challenge Orientation	17.50 ± 8.941	22.44 ± 10.07	-6.922	-2.963	-4.944**	.000	0.186
Emotional regulation	17.84 ± 9.879	28.32 ±10.158	-13.136	-7.831	-7.824**	.000	0.523
Support seeking	18.93 ±10.22	22.60 ± 9.447	-6.207	-2.868	-2.868**	.005	0.172

The data in Table XXIII showed the outcomes of the paired sample t-test, which was carried out to assess the effect of the sensitisation programme on the resilience among the youth experimental group. The findings revealed a contrast in the resilience of self-belief before (pre) sensitisation (M=22.19; SD=9.217) and after (post) sensitisation (M=30.94; SD=6.348); indicated a significant difference with t = -9.569, P<.000. The 95% confidence interval for the mean difference ranged from (-10.565 to -6.943), signifying a substantial variance between the sample means. The effect size computed

using Cohen's D indicated a small effect (d=0.172). Coming to optimism, it was observed that there is a significant difference between the before (pre) sensitisation (M=19.93; SD=10.44) and after (post) sensitisation (M=31.16; SD=4.184); t = -11.540, P<.000. The 95% confidence interval for the mean difference ranged from (-13.146 to -9.296), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a small effect (d=0.268). In purposeful direction, scores before (pre) sensitisation (M=18.64; SD=11.07) and after (post) sensitisation (M=34.70; SD=8.161) show a significant difference with t = -11.304, P<.000. The 95% confidence interval for the mean difference ranged from (-18.870 to -13.245), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a small effect (d=0.248). Coming to adaptability scores before (pre) sensitisation (M=17.39; SD=8.767) and after (post) sensitisation (M=17.33; SD=8.057) difference between the mean scores was not observed with t = 0.058, P=.954. The 95% confidence interval for the mean difference ranged from (-1.903 to 2.018). The effect size computed using Cohen's D indicated no effect (d=0.050). Coming to ingenuity before (pre) sensitisation (M=18.87; SD=8.124) and after (post) sensitisation (M=22.72; SD=11.105), there was a significant difference seen with t = -3.513, P<.005. The 95% confidence interval for the mean difference ranged from (-6.024to -1.681), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a small effect (d=0.200). Coming to challenge orientation, the scores before (pre) sensitisation (M=17.50; SD=8.941) and after (after) sensitisation (M=22.44; SD=10.07), and a significant difference was seen with t = -4.944, P<.000. The 95% confidence interval for the mean difference ranged from (-6.922 to -2.963), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a small effect (d=0.186). Moving to emotional regulation, a significant difference was seen between before (pre) sensitisation (M=17.84; SD=9.879) and after (post) sensitisation (M=28.32; SD=10.158); t = -7.824, P<.000. The 95% confidence interval for the mean difference ranged from (-13.136 to -7.831), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a medium effect (d=0.523). Moving to support seeking, a significant difference was seen between before (pre) sensitisation, M=18.93; SD=10.22) and after (post) sensitisation,

M=22.60; SD=9.447); t=-2.868, P>.005. The 95% confidence interval for the mean difference ranged from (-6.207 to -2.868), signifying a substantial variance between the sample means. The effect size computed using Cohen's D indicated a small effect (d=0.172). Results of the present study indicated that there was a difference between the pre- and post-scores of the sensitisation programme concerning resilience components among youth. The experimental group here showed a significant effect ranging from a small to medium effect. The sensitisation programme had a positive effect on the resilience scores of youth, with an increased post-test score.

II. The effect of the sensitisation programme – analysis of significant differences between the experimental and control groups in the pre-and post-sensitisation.

Table XXIV(a): Differences in Risk Behaviours between the Experimental and Control Group in Pre-Sensitisation

Variables	Groups	N	Mean	Std. Deviation	t (df)	Sig.
Safety issues	Experimental group	122	28.61	4.583	17.345 (182,180.296)	.000
	Controlled group	62	17.98	2.084		
Attempting Suicides	Experimental group	122	7.91	1.060	-22.412 (182,170.567)	.000
	Controlled group	62	11.24	.694		
Substance use	Experimental group	122	132.19	7.998	-10.478 (182,123.609)	.000
	Controlled group	62	145.23	7.937		
Sexual behaviour	Experimental group	122	24.23	4.987	4.578 (182,165.681)	.000
	Controlled group	62	21.24	1.705		
Health issues	Experimental group	122	100.61	14.868	9.067 (182,180.811)	.000
	Controlled group	62	82.21	8.183		

Table XXIV(b): Differences in Risk Behaviours between the Experimental and Control Group in The Post-Sensitisation

Variables	Groups	N	Mean	Std. Deviation	t (df)	Sig.
Safety Issues	Experimental group	122	25.19	5.959	-4.693 (182,135.403)	.000
	Controlled group	62	29.40	5.336		
Attempting Suicides	Experimental group	122	6.56	1.172	-6.050 (182,178.282)	.000
	Controlled group	62	7.50	.504		
Substance use	Experimental group	122	90.39	15.833	-22.156 (182,181.971)	.000
	Controlled group	62	137.73	7.908		
Sexual behaviour	Experimental group	122	14.31	4.616	-10.443 (182,89.674)	.000
	Controlled group	62	23.24	6.887		
Health issues	Experimental group	122	82.06	18.033	-12.677 (182,181.731)	.000
	Controlled group	62	113.10	9.502		

The table XXIV(a) depicts the differences between the experimental and the control group concerning their risk behaviour in pre-sensitisation data analysis. It can be noted that both experimental and control group youth showed higher levels of risk behaviours, showing significant differences at 1% levels. Coming to table XXIV(b) in the post-sensitisation data, it can be observed that the mean scores of the experimental group have decreased considerably, indicating the reduced involvement in risk behaviours when compared to the control group's persistently higher scores. The difference between mean scores was significant at the 1% level.

The youth in the experimental group may have gained a deeper understanding of the risks and long-term implications of their actions, thus leading to more informed and

cautious decision-making. A study by Gómez-Lugo et al., (2022) evaluated the COMPAS program in Colombia, which targeted sexual risk behaviours among adolescents. In this programme, the experimental group showed an increased knowledge about HIV and other STIs, sexual assertiveness, self-efficacy, and more favourable attitudes toward condom use compared to the control group. These improvements were sustained six months after the intervention.

Table XXV(a): Differences in Resilience Levels between the Experimental and Control Group in Pre-Sensitisation

Variables	Groups	N	Mean	Std. Deviation	t (df)	Sig.
Self-belief	Experimental group	122	22.19	9.217	.050 (182,152.910)	.960
	Controlled group	62	22.13	2.532		
Optimism	Experimental group	122	19.93	10.440	-.032 (182,145.217)	.974
	Controlled group	62	19.98	8.617		
Purposeful direction	Experimental group	122	18.64	11.071	-2.657 (182,121.687)	.009
	Controlled group	62	23.24	11.182		
Adaptability	Experimental group	122	17.39	8.767	.010 (182,123.764)	.992
	Controlled group	62	17.37	8.688		
Ingenuity	Experimental group	122	18.87	8.124	-2.078 (182,99.656)	.039
	Controlled group	62	21.77	10.428		
Challenge orientation	Experimental group	122	17.50	8.941	-4.426 (182,108.669)	.000
	Controlled group	62	24.00	10.296		

Variables	Groups	N	Mean	Std. Deviation	t (df)	Sig.
Emotional regulation	Experimental group	122	17.84	9.879	-2.526 (182,130.288)	.012
	Controlled group	62	21.65	9.240		
Support seeking	Experimental group	122	18.93	10.228	-1.792 (182,139.510)	.075
	Controlled group	62	21.66	8.850		

According to table XXV(a), the mean scores of resilience during pre-test were similar in self-belief, optimism and adaptability with no significant differences. While the mean scores differed significantly in the dimensions of purposeful direction, ingenuity, challenge orientation, emotional regulation and support seeking at 1% and 5% levels. It can be noted that the mean scores of the experimental group were lower than the control group. In table XXV(b), it can be noted that the mean scores of the experimental group showed an increase in the dimensions of self-belief, optimism, purposeful direction, ingenuity, emotional regulation and support-seeking. The mean scores were significantly different at the 1% level. However, no significant differences were seen in the dimensions of adaptability and challenge orientation. In the dimensions of adaptability, the mean scores were almost similar between the experimental and control groups, and in the dimension of challenge orientation mean score of the experimental group was slightly higher than the control group, but not statistically significant.

Table XXV(b): Differences in Resilience Levels Between the Experimental and Control Group in the Post-Sensitisation

Variables	Groups	N	Mean	Std. Deviation	t (df)	Sig.
Self-belief	Experimental group	122	30.94	6.348	5.298 (182,84.625)	.000
	Controlled group	62	24.37	10.429		
Optimism	Experimental group	122	31.16	4.184	4.071 (182,67.289)	.000
	Controlled group	62	25.84	13.211		
Purposeful direction	Experimental group	122	34.70	8.161	11.962 (182,99.064)	.000
	Controlled group	62	17.84	10.558		
Adaptability	Experimental group	122	17.33	8.057	-.698 (182,134.371)	.486
	Controlled group	62	18.18	7.278		
Ingenuity	Experimental group	122	22.72	11.105	4.842 (182,170.344)	.000
	Controlled group	62	15.18	7.287		
Challenge orientation	Experimental group	122	22.44	10.077	1.601 (182,99.289)	.111
	Controlled group	62	19.66	12.998		
Emotional regulation	Experimental group	122	28.32	10.158	3.955 (182,127.855)	.000
	Controlled group	62	22.15	9.705		
Support seeking	Experimental group	122	22.60	9.447	2.742 (182,140.649)	.007
	Controlled group	62	18.74	8.098		

The sensitisation programme may have been too short or superficial to bring about meaningful changes in deeper psychological traits like adaptability and challenge orientation, which typically require sustained, experiential learning to develop, and improvements in psychological traits may take time to manifest.

A study by Yuping (2023), assessed the impact of mental health education on adolescents' social adaptability. The findings indicated significant improvements in self-adjustment abilities and social adaptability among adolescents after receiving mental health education. However, the study also noted that factors such as age, family environment, and growth environment significantly influenced the outcomes, suggesting that these variables might play a crucial role in the effectiveness of sensitisation programmes.

The findings indicate that the sensitisation programme had a positive impact on both risk reduction and resilience enhancement among youth in the experimental group, as evidenced by improved post-sensitisation mean scores. In contrast, the control group showed minimal or no significant change between pre- and post-assessment scores. The significant differences in mean scores between the experimental and control groups further substantiate the effectiveness of the sensitisation programme.

However, it is noteworthy that a couple of the dimensions of resilience did not show marked improvement following the programme. This highlights the need for sustained and continuous intervention efforts to ensure long-term maintenance of reduced risk behaviours and further development of resilience among youth.

III. Significant effect of sensitisation on risk among youth in the pre-, post-test, and follow-up phases.

Multivariate analysis of variance was used to test the statistical significance of the effect of the independent variables on the set of dependent variables that is the effect of the sensitisation programme on risk factors among youth of the experimental group in their pre and post-sensitisation and the follow-up data (after one month).

Table-XXVI(a): Descriptive Statistics

Dependent Variable	Time of Measurement	Experimental Group (N=30)	
		M	SD
Safety issues	Pre sensitisation	28.61	4.583
	Post sensitisation	24.80	4.063
	Follow up	25.19	5.959
Attempting suicide	Pre sensitisation	7.91	1.060
	Post sensitisation	7.64	.824
	Follow up	6.56	1.172
Substance use	Pre sensitisation	132.19	7.998
	Post sensitisation	109.60	16.517
	Follow up	90.39	15.833
Sexual behaviour	Pre sensitisation	24.23	4.987
	Post sensitisation	26.98	3.250
	Follow up	14.31	4.616
Health issues	Pre sensitisation	100.61	14.868
	Post sensitisation	93.62	16.838
	Follow up	82.06	18.033

The first step of the analysis is descriptive statistics (table XXVIa), which shows the mean and standard deviation of the variables. Pre-sensitisation mean scores (M=28.61, SD=4.583) of safety issues showed more than the post-sensitisation scores (M=24.80, SD=4.063) and the follow-up mean scores (M=25.15, SD=5.959). It can be noted that the mean scores of post-sensitisation and follow-ups showed almost a similar mean score.

Coming to the pre-sensitisation mean scores of attempting suicide (M=7.91, SD=1.060), which was found to be higher than the post-sensitisation mean score (M=7.64, SD=.824). The post-sensitisation mean scores sustained to be lower during follow-up (M=6.56, SD=1.172). Moving to the pre-sensitisation mean scores of substance use (M=132.19, SD=7.998), which was found to be higher than the post-sensitisation mean score (M=109.60, SD=16.517). The post-sensitisation mean scoressustained to be lower during follow-up (M=90.39, SD=15.833). The pre-sensitisation mean scores of sexual

behaviour (M=24.23, SD=4.987) were also found to be higher than post-sensitisation mean scores of sexual behaviour (M=26.98, SD=3.250) and the scores persisted to be lower during follow-up (M=14.31, SD=4.616). Pre-sensitisation mean scores (M=100.65, SD=14.868) of health issues showed more than the post-sensitisation scores (M=93.62, SD=16.838) and the follow-up scores (M=82.06, SD=18.033) respectively. It can be noted that the mean scores of post-sensitisation and follow-up showed lower scores that were sustained, indicating the risk reduction.

Table-XXVI(b): The Test between the Subjects' Effect

Measures	Wilk's Lambda Value	F(*df1,df2*)	P	ɳ2
Safety issues (4-times measures)	.728	22.426(2,120)	.000	.272
Attempting suicide	.576	44.184(2,120)	.000	.424
Substance Use	.149	341.341(2,120)	.000	.851
Sexual behaviour	.169	294.305(2,120)	.000	.831
Health issues	.560	47.167(2,120)	.000	.440

The test between the subject effect indicated by the Wilk's Lambda value of significance was(Λ) =.728, P<.000) for safety, ((Λ) =.576, P<.000) for suicide, (Λ) =.149, P<.000) for substance use, (Λ) =.169, P<.000) for sexual behaviour and ((Λ) =.560, P<.000) for health issues, which showed that the means are significantly different.

Table-XXVI(c): The Test of Sphericity

Within Subject effect (N=30)	Variables	Mauchly's W	Chi Square	df	Sig.
Risk	Safety issues	.961	.4784	2	.091
	Attempting suicide	.954	.5660	2	.059
	Substance use	.957	5.296	2	.071
	Sexual behaviour	.968	3.959	2	.138
	Health issues	.899	12.730	2	.002

The Mauchly's test of Sphericity in the present analysis (XXVIc) showed the p-value was not significant for the subject risk variables of safety issues, attempting

suicide, substance use and sexual behaviour ($p < .091$, $p < .059$, $p < .071$ and $p < .138$) hence the Sphericity was met or can be assumed. But the last risk variable, namely health issues, showed a significant p-value ($p < 0.002$), which indicated that the assumption of Sphericity has not been met.

Table-XXVI(d): Univariate Analysis of Variance for Risk Factors

Measures	Sum of squares	F(*df1,df2)*	Mean	P	ηˆ2
Safety issues	1072.180	23.949(2,242)	536.090	.000	.165
Attempting suicide	124.967	53.551(2,242)	65.362	.000	.307
Substance use	106789.57	363.819(2,242)	53394.790	.000	.750
Sexual behavior	10839.104	285.391(2,242)	5419.552	.000	.702
Health issues	21432.311	36.867(1.817,219.871)	11794.706	.000	.234

The test of sphericity (XXVId) was evaluated for the subject effect for the risk measures. Since the sphericity was met or was assumed, the scores of assumed sphericity were taken to evaluate the test within the subject effect for the risk behaviour variables such as safety issues, attempting suicide, substance abuse and sexual behaviour. As the Sphericity was not met or not assumed, the scores of Greenhouse-Geisser were taken to evaluate the test within the subject effect for the risk behaviour of health issues.

The univariate test results showed a significant interaction between the subject factors of safety issues ($F (2, 242) =23.949$, $P<.000$) with 16.5% of variance given the Partial Eta Squared value of $\eta^2=.165$. Also, a significant interaction was found between the subject factors of attempting suicide ($F(2, 242) =53.551$, $P<.000$) and substance use ($F(2, 242) =363.819$, $P<.000$) .

A variance of 30.7% and 75% was seen between the subject factors given the Partial Eta Squared value of $\eta^2=.307$ and .750 for attempting suicide and substance use respectively. Similarly, a significant interaction was found between the subject factors of sexual behaviour ($F (2, 242) =285.391$, $P<.000$), given the Partial Eta Squared value of $\eta^2=.702$ showed 70.2% variance between the subject factors. Lastly, a significant interaction was again found between the subject factors of health issues ($F(1.817,219.871)= 36.867$, $p < 0.000$) and a variance of 23.4% was seen between the subject factors given the Partial Eta Squared value of $\eta^2=.234$.

Table-XXVI(e) Pairwise Comparison of Measures of Riskin the Pre-Data, Post-Sensitisation Data and the Follow-Up Phases.

Measure	(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig
Safety issues	Pre sensitisation	Post sensitization	3.811	.584	.000
		Follow up	3.418	.662	.000
	Post sensitisation	Pre sensitisation	-3.811	.584	.000
		Follow up	-.393	.567	1.000
	Follow up	Pre sensitisation	-3.418	.662	.000
		Post sensitization	.393	.567	1.000
Attempting Suicide	Pre sensitisation	Post sensitization	.270.	.123	.088
		Follow up	1.352	.147	.000
	Post sensitisation	Pre sensitisation	-.270	.123	.088
		Follow up	1.082	.144	.000
	Follow up	Pre sensitisation	-1.352	.147	.000
		Post sensitization	-1.082	.144	.000
Substance use	Pre sensitisation	Post sensitization	22.590	1.381	.000
		Follow up	41.795	1.635	.000
	Post sensitisation	Pre sensitisation	-22.590	1.381	.000
		Follow up	19.205	1.624	.000
	Follow up	Pre sensitisation	-41.795	1.635	.000
		Post sensitization	-19.205	1.624	.000
Sexual behaviour	Pre sensitisation	Post sensitization	-2.754	.539	.000
		Follow up	9.918	.606	.000
	Post sensitisation	Pre sensitisation	2.754	.539	.000
		Follow up	12.672	.526	.000
	Follow up	Pre sensitisation	-9.918	.606	.000
		Post sensitization	-12.672	.526	.000
Health issues	Pre sensitisation	Post sensitization	6.992	2.494	.018
		Follow up	2.097	2.097	.000
	Post sensitisation	Pre sensitisation	2.494	2.494	.018
		Follow up	1.918	1.918	.000
	Follow up	Pre sensitisation	2.097	2.097	.000
		Post sensitization	1.918	1.918	.000

Pair-wise comparison (XXVIe) showed the difference between the mean scores of the risk behaviours. Coming to the safety aspect of risk, the pre-sensitisation factor significantly differed from post-sensitisation and the follow-up, with mean differences being MD=3.811, P< .000, MD= -3.418, P<.000, respectively. Further, the safety issues scores (Figure 10) of pre-sensitisationsignificantly differed only from the post-sensitisationscores. There were no significant differences between the post-sensitisation scores and the scores of follow-up, where a long-term evaluations need to be demonstrated to reinforce and sustain improvement in safety issues risk reduction.

In the measures of attempting suicide risk (Figure 11), there was a significant difference only between the pre-sensitisation and the follow up with the mean difference being MD= 1.352, P< .000. There was no significant difference between the pre-sensitisation and post-sensitisation. The risk of attempting suicide in post-sensitisation was again seen to be significantly different only with follow-up scores (MD=1.082, P<.000).

Coming to the measures of substance use risk (Figure 12), the pre-sensitisation scores showed a significant difference with post-sensitisation and follow-up, with the mean difference being MD= 22.590, P< .000 and MD= 41.795, P<.000 respectively. The post-sensitisation scores also showed a significant difference with the follow-up, with the mean difference being MD= 19.205, P<.000.

Pairwise Comparison of Risk Factors among Youth

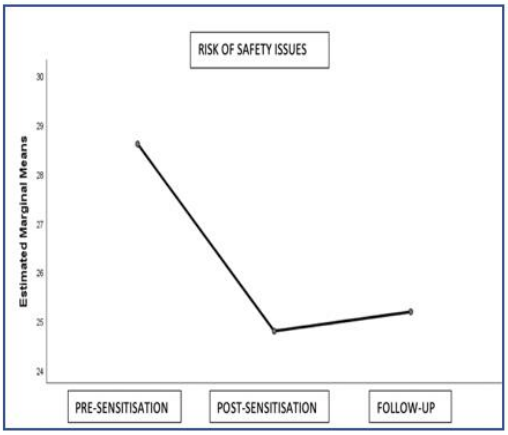

Figure 10

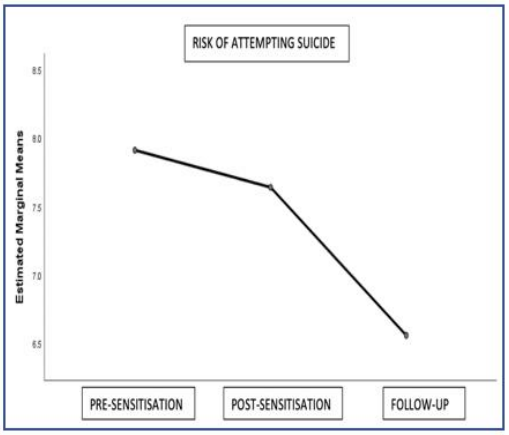

Figure 11

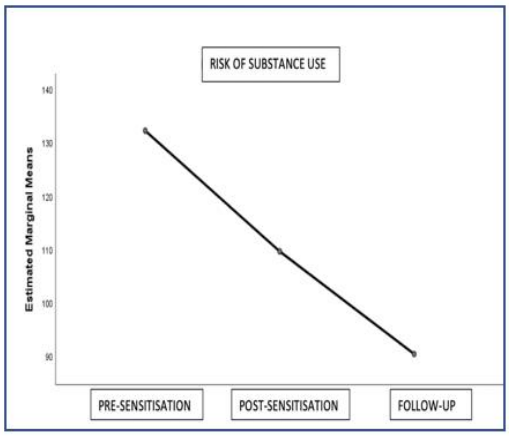

Figure 12

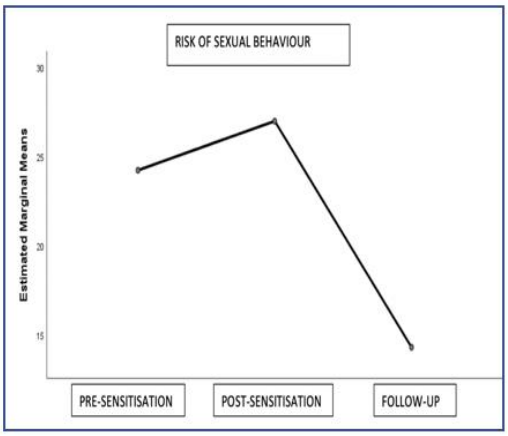

Figure 13

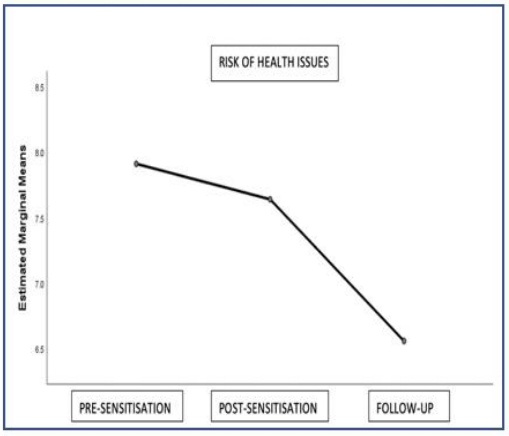

Figure 14

With regards to the measures of risk of sexual behaviour (Figure 13), the pre-sensitisation scores showed a significant difference with post-sensitisation and follow-up, with the mean difference being MD= -2.754, P< .000 and MD= 9.918, P<.000 respectively. The post-sensitisation scores showed a significant difference with the follow-up, with a mean difference being MD=12.672, P<.000.

In the measures of health issues risk (Figure 14), there was a significant difference only between the pre-sensitisation and the follow up with the mean difference being MD= 2.494, P< .000. There was no significant difference between the pre-sensitisation and post-sensitisation. The health issue risk of post-sensitisation was again seen to be significantly different with follow up scores of MD= -1.918, P<.000.

The results of repeated measures indicated that the sensitisation programme for the youth on the measures of risk factors showed a significant effect. The test results showed a strong effect between pre- and post-sensitisation scores. The post-sensitisation scores and the scores of the follow-up explained that the effect was sustained, with the mean scores persisting the same, though slightly lowered, with the decimal points. A slight increase was seen in the post-sensitisation score of sexual behaviour, which might be due to the experimental tendency during post-sensitisation. Interestingly, the slight increase in sexual behavior in post-sensitisation could suggest a paradoxical effect. While the program may have increased awareness and knowledge, it might also have reduced stigma or fear, inadvertently leading to increased experimentation. This aligns with findings from youth sexual health studies, where increased awareness sometimes correlates with exploratory behavior (Kirby, 2002). Youth participants were at a developmental stage (typically adolescence or emerging adulthood) where identity exploration and risk-taking are normative behaviours (Arnett, 2000).

IV. Significant effect of sensitisation on resilience among youth in the pre-, post-data and follow-up phases.

Multivariate analysis of variance was carried out to test the statistical significance of the effect of the independent variables on the set of dependent variables, that is, the effect of the sensitization programme on resilience among youth of the experimental group during the pre- and post-sensitisation and follow-up data (after one month).

Table-XXVII(a): Descriptive Statistics

Dependent Variable	Time of Measurement	Experimental Group (N=30)	
		M	SD
Self-belief	Pre sensitization	22.19	9.217
	Post sensitisation	29.87	8.396
	Follow up	30.94	6.348
Optimism	Pre sensitization	19.93	10.440
	Post sensitisation	32.64	9.579
	Follow up	31.16	4.184
Purposeful direction	Pre sensitization	18.64	11.071
	Post sensitisation	31.77	10.246
	Follow up	34.70	8.161
Adaptability	Pre sensitization	17.39	8.767
	Post sensitisation	19.30	8.376
	Follow up	17.33	8.057
Ingenuity	Pre sensitization	18.87	8.124
	Post sensitisation	21.16	9.935
	Follow up	22.72	11.105
Challenge orientation	Pre sensitization	17.50	8.941
	Post sensitisation	24.28	12.495
	Follow up	22.44	10.077
Emotional regulation	Pre sensitization	17.84	9.879
	Post sensitisation	18.67	9.408
	Follow up	28.32	10.158
Support seeking	Pre sensitization	18.93	10.228
	Post sensitisation	18.88	8.871
	Follow up	22.60	9.447

The first step of the analysis is descriptive statistics (XXVIIa), which shows the mean and standard deviation of the variables. Pre-sensitisation mean scores (M=22.19, SD=9.217) of self-belief showed less than the post-sensitisation scores (M=29.87, SD=8.396) and the follow-up scores (M=30.94, SD=6.348), noting that the mean scores of post-sensitisation and follow-ups showed almost a similar mean score.

Coming to the pre-sensitisation mean scores of optimism (M=19.93, SD=10.440), which was found to be lower than the post-sensitisation mean score (M=32.64, SD=9.579). The post-sensitisation mean scores sustained to be higher during follow-up (M=31.16, SD=4.184). Pre-sensitisation mean scores (M=18.64, SD=11.071) of purposeful direction showed less than the post-sensitisation scores (M=31.77, SD=10.246) and the follow-up scores (M=34.70, SD=8.161). Coming to the pre-sensitisation mean scores of adaptability (M=17.39, SD=8.767), which was found to be lower than the post-sensitisation mean score (M=19.30, SD=8.376). The post-sensitisation mean scores sustained to be higher during follow-up (M=17.33, SD=8.057). The pre-sensitisation mean scores of ingenuity (M=18.87, SD=8.124) were found to be lower than the post-sensitisation mean score (M=21.16, SD=9.935). The post-sensitisation mean scores sustained to be higher during follow-up (M=22.72, SD=11.105).

Similarly, in challenge orientation, the pre-sensitisation mean scores (M=17.50, SD=9.879) which was found to be lower than the post-sensitisation mean score (M=24.28, SD=12.495) and the post-sensitisation mean scores sustained to be higher during follow-up (M=22.44, SD=10.077). Pre-sensitisation mean scores (M=17.84, SD=9.879) of emotional regulation showed less than the post-sensitisation scores (M=18.67, SD=9.408) and the follow-up scores (M=28.32, SD=10.158). A pre-sensitisation mean score of support-seeking (M=18.93, SD=10.228) was slightly higher than the post-sensitisation mean score (M=18.88, SD=8.871), and the scores persisted to be higher during follow-up (M=22.60, SD=9.447). Higher mean scores in post-test and follow-up indicated the sustained resilience enhancement.

Table-XXVII(b): The Test between the Subjects' Effect

Measures	Wilk's Lambda Value	F(*df1,df2)*	P	ηˌ2
Self-belief (4-times measures)	.564	46.346(2,120)	.000	.436
Optimism	.476	66.173(2,120)	.000	.524
Purposeful direction	.450	1.997(2,120)	.000	.550
Adaptability	.968	294.305(2,120)	.140	.032
Ingenuity	.907	6.144(2,120)	.003	.093
Challenge orientation	.750	20.044(2,120)	.000	.250
Emotional regulation	.583	42.862(2,120)	.000	.417
Support seeking	.913	5.706(2,120)	.004	.087

The test between the subject effect (table XXVIIb) indicated by the Wilk's Lambda value of significance was (Λ) =.564, P<.000) for self-belief, ((Λ) =.476, P<.000) for optimism, (Λ) =.450, P<.000) for purposeful direction, (Λ) =.907, P<.003) for ingenuity,(Λ) =.750, P<.000) for challenge orientation, (Λ) = **(**.583, P<.000) for emotional regulation and (Λ) =.913, P<.004) for support seeking showed that the means are significantly different for all the dimensions except for adaptability(Λ) = **(**.968, P<.140).

Table-XXVII(c): The Test of Sphericity

Within Subject effect (N=30)	Variables	Mauchly's W	Chi Square	df	Sig.
Resilience	Self-belief	.918	10.276	2	.006
	Optimism	.606	60.149	2	.000
	Purposeful direction	.976	2.946	2	.229
	Adaptability	.985	1.869	2	.393
	Ingenuity	.983	2.093	2	.351
	Challenge orientation	.852	19.273	2	.000
	Emotional regulation	.977	2.759	2	.252
	Support seeking	.981	2.321	2	.313

The Mauchly's test of Sphericity in the present analysis (XXVIIc) showed the p-value was not significant for the subject resilience components of purposeful direction, adaptability, ingenuity, emotion regulation and support seeking ($p > .0.05$); hence, the Sphericity was met or can be assumed.

But the resilience components, namely self-belief, optimism and challenge orientation showed a significant p-value of .006, .000 and .000 respectively, which indicated that the assumption of Sphericity has not been met.

Table-XXVII(d): Univariate Analysis of Variance for Resilience

Measures	Sum of squares	F(*df1,df2)*	Mean	P	η_p^2
Self-belief	5562.169	44.199(1.848,223.646)	3009.326	.000	.268
Optimism	11774.377	73.576(1.434,173.574)	8208.037	.000	.378
Purposeful direction	17845.721	83.537(2,242)	8922.861	.000	.408
Adaptability	308.432	2.260(2,242)	154.216	.107	.018
Ingenuity	916.393	5.450(2,242)	458.197	.005	.043
Challenge orientation	29999.219	15.523(1.742,210.732)	1722.114	.000	.114
Emotional regulation	8282.989	42.360(2,242)	4141.495	.000	.259
Support seeking	1111.628	6.285(2,242)	555.814	.000	.049

The test of sphericity (XXVIIc) was evaluated for the subject effect for the purposeful direction, adaptability, ingenuity, emotion regulation and support seeking and the sphericity was met or was assumed, hence, the scores of assumed sphericity were taken to evaluate the test within the subject effect for these resilience components. As the Sphericity was not met or not assumed, the scores of Greenhouse-Geisser were taken to evaluate the test within the subject effect for the resilience components, namely self-belief, optimism and challenge orientation.

The univariate test results (table XXVIId) showed a significant interaction between the subject factors of all the resilience namely self-belief, optimism, purposeful direction, ingenuity, challenge orientation, emotional regulation and support seeking, with P<.001.

The percentages of variance of 26.8%, 37.8%, 40.8%, 4.3%, 11.4%,25.9% and 4.9% were respectively based on the given Partial Eta Squared values of .268, .378, .408, .043, .114, .259 and .049 except for adaptability that showed a non-significant interaction between the subject factors.

Pair-wise comparison (table XXVIIe) showed the difference between the mean scores of the factors of the resilience measures. Coming to the self-belief aspect, the pre-sensitisation factor significantly differed with post-sensitisation and the follow-up, with mean differences being MD= -7.680, P< .001 and MD= -8.754, P<.001, respectively. Further, the self-belief factors of post-sensitisation significantly differed only from the pre-sensitisation factor. There were no significant differences between the post-sensitisation scores and the scores of the follow-up (Figure 15)

In the measures of optimism, there was a significant difference between the pre-sensitisation with post-sensitisation and the follow-up, with mean differences being MD= -12.705, P< .001 and MD= -11.221, P<.001, respectively. The optimism factors of post-sensitisation were again seen to be significantly different only with the pre-sensitisation factor, and show no significant difference with the follow-up scores, indicating a regular intervention need to reinforce and sustain improvement in resilience of optimism (Figure 16).

With regard to measures of purposeful direction, there was a significant difference between the pre-sensitisation with post-sensitisation and the follow-up, with mean differences being MD= -13.131, P< .000 and MD= -16.057 P<.001, respectively. The purposeful direction factors of post-sensitisation were again seen to be significantly different only with the pre-sensitisation factor, and show no significant difference with the follow-up scores, indicating a regular intervention need to reinforce and sustain improvement in resilience of purposeful direction (Figure 17).

With regard to the measures of adaptability, it was seen that there is no significant difference found between any of the factors of pre-sensitisation with post-sensitisation and nor with follow up. Adaptability was initially low during the pre-sensitisation phase, increased significantly in the post-sensitisation phase, and then returned to a low level during the follow-up phase. With a long gap of follow-up sessions and without continued reinforcement, the effects may have faded over time, which is a common issue in behaviour

change programmes, and youth may have struggled to sustain adaptive behaviours due to unsupportive environments such as family, school or any community settings (Figure 18).

In the measures of ingenuity, there was a significant difference only between the pre-sensitisation and the follow-up, with the mean difference being MD= -3.852, P< .002. There was no significant difference between pre-sensitisation and post-sensitisation. The ingenuity componentin post-sensitisation showed no significant difference with both the pre-sensitisation and follow up scores (Figure 19).

Pairwise Comparison of Resilience among Youth

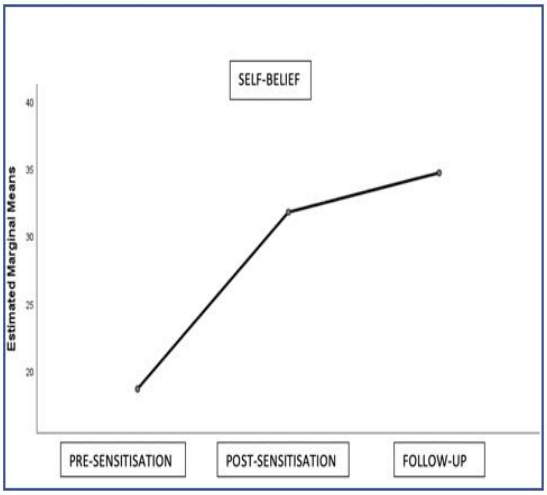

Figure 15

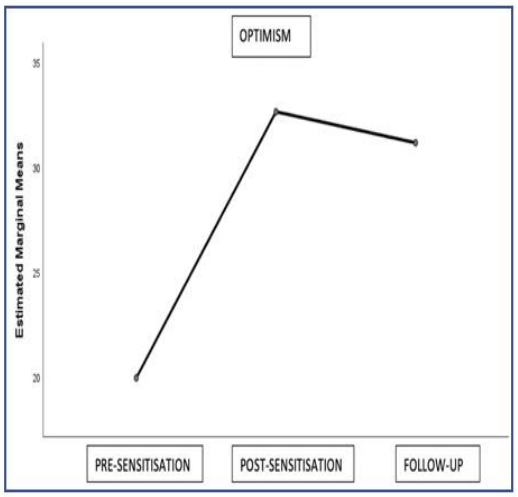

Figure 16

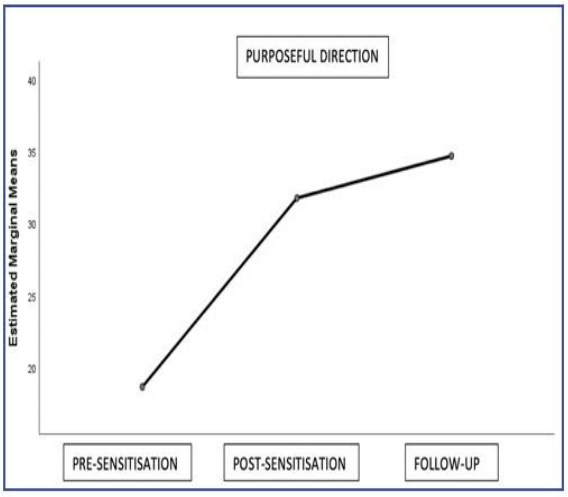

Figure 17

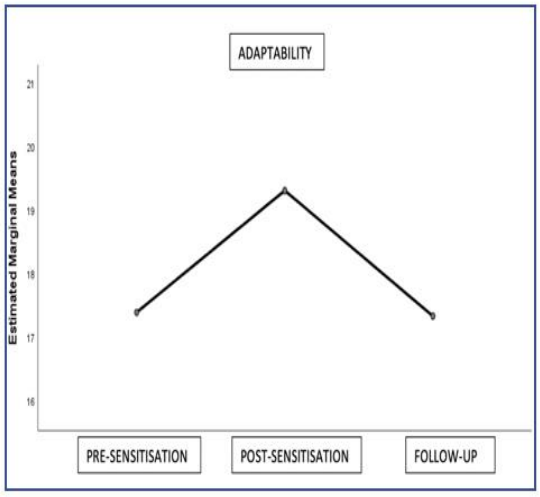

Figure 18

With regards to the measures of challenge orientation, there was a significant difference between the pre-sensitisation, post-sensitisation and the follow-up, with mean differences being MD= -6.779, P< .000 and MD= -4.943, P<.000, respectively. There was no significant difference between post-sensitisation and follow-up scores. A long-term evaluation is needed to reinforce and sustain improvement in resilience of challenge orientation (Figure 20).

Table XXVII(e) Pairwise Comparison of Measures of Resilience in the Pre-Data, Post-Sensitisation Data and the Follow-Up Phases.

Measure	(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig
Self-belief	Pre sensitisation	Post sensitisation	-7.680**	1.150	.000
		Follow up	-8.754**	.915	.000
	Post sensitisation	Pre sensitisation	7.680**	1.150	.000
		Follow up	-1.074	.968	.808
	Follow up	Pre sensitisation	8.754**	.915	.000
		Post sensitisation	1.074	.968	.808
Optimism	Pre sensitisation	Post sensitisation	-12.705**	1.461	.000
		Follow up	-11.221**	.972	.000
	Post sensitisation	Pre sensitisation	12.705**	1.461	.000
		Follow up	1.484	.925	.334
	Follow up	Pre sensitisation	11.221**	.972	.000
		Post sensitisation	-1.484	.925	.334
Purposeful direction	Pre sensitisation	Post sensitisation	-13.131	1.291	.000
		Follow up	-16.057	1.421	.000
	Post sensitisation	Pre sensitisation	13.131	1.291	.000
		Follow up	-2.926	1.253	.063
	Follow up	Pre sensitisation	16.057	1,421	.000
		Post sensitisation	2.926	1.253	.063

Measure	(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig
Adaptability	Pre sensitisation	Post sensitisation	-1.918	1.096	.248
		Follow up	.057	.990	1.000
	Post sensitisation	Pre sensitisation	1.918	1.096	.248
		Follow up	1.975	1.084	.213
	Follow up	Pre sensitisation	-.057	.990	1.000
		Post sensitisation	-1.975	1.084	.213
Ingenuity	Pre sensitisation	Post sensitisation	-2.295	1.227	.191
		Follow up	-3.852**	1.097	.002
	Post sensitisation	Pre sensitisation	2.295	1.227	.191
		Follow up	-1.557	1.194	.584
	Follow up	Pre sensitisation	3.852**	1.097	.002
		Post sensitisation	1.557	1.194	.585
Challenge orientation	Pre sensitisation	Post sensitisation	-6.779**	1.313	.000
		Follow up	-4.943**	1.000	.000
	Post sensitisation	Pre sensitisation	6.779**	1.313	.000
		Follow up	1.836	1.424	.599
	Follow up	Pre sensitisation	4.943**	1.000	.000
		Post sensitisation	-1.836	1.424	.599
Emotional regulation	Pre sensitisation	Post sensitisation	-.836	1.278	1.000
		Follow up	-10.484**	1.340	.000
	Post sensitisation	Pre sensitisation	.836	1.278	1.000
		Follow up	-9.648**	1.175	.000
	Follow up	Pre sensitisation	10.484**	1.340	.000
		Post sensitisation	9.648**	1.175	.000
Support seeking	Pre sensitisatin	Post sensitisation	-.049	1.140	1.000
		Follow up	-3.672*	1.280	.015
	Post sensitisation	Pre sensitisation	-.049	1.140	1.000
		Follow up	-3.721**	1.188	.007
	Follow up	Pre sensitisation	3.672*	1.280	.015
		Post sensitisation	3.721	1.188	.007

Pairwise Comparison of Resilience among Youth

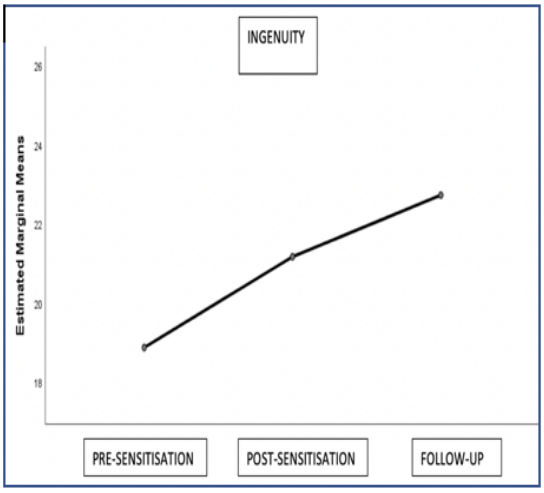

Figure 19

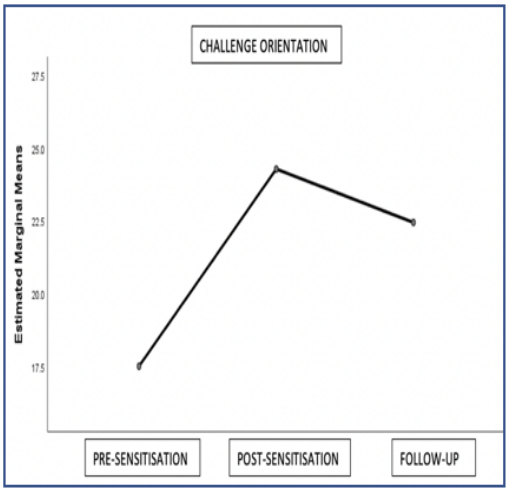

Figure 20

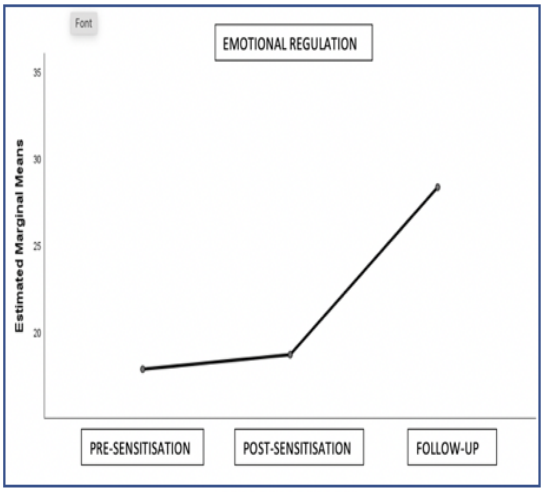

Figure 21

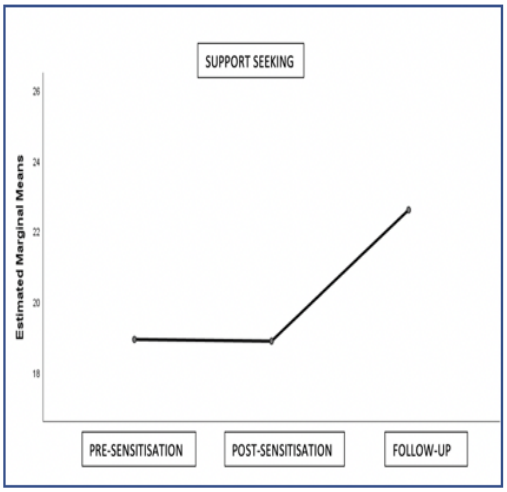

Figure 22

Coming to the measures of emotional regulation (Figure 21), there was a significant difference only between the pre-sensitisation and the follow up with the mean difference being MD= 10.484, P< .000. There was no significant difference between the pre-sensitisation and post-sensitisation scores. The emotional regulation factors of post-sensitisation were again seen to be significantly different only with follow-up scores, with mean differences being MD= 9.648, P<.000.

In the measures of support seeking, there was a significant difference only between the pre-sensitisation and the follow up with the mean difference being

MD= -3.672, P< .000. There was no significant difference between the pre-sensitisation and post-sensitisation scores (Figure 22). The support-seeking factors of post-sensitisation were again seen to be significantly different only with follow-up scores, with mean differences being MD= 3.721, P<.000.

The results of repeated measures indicated that the sensitization programme for youth on the measures of resilient factors showed a significant effect during post-sensitisation, where the pre and post scores showed a significant difference with increased scores in post-test. The post-sensitisation scores and the scores of the follow-up explained that the effect was sustained, with the mean scores of follow-up persisting to be higher than pre-scores and post-test scores, except for adaptability and optimism which had a slight decrease in the follow-up scores.

These results successfully examined the effect of sensitisation programme on the risk reduction and resilience enhancement among the selected youth, hence, this answers the research question no 4 and the fifth objective of the study is addressed.

Discussion

The results of the current study highlighted, younger adolescents are exclusively vulnerable and they are exposed to an unlimited amount of peer pressure to adopt certain ethics, rules and actions, so they tend to resolve conflict mainly using negative approaches such as aggression, etc. The study highlights the influence of various sociodemographic factors on risk and resilience. Low levels of resilience are associated with an increased risk of substance use, health issues and attempting suicide. A cross-sectional study of Liu et al. (2014) showed that low resilience was associated with suicide attempts, especially in middle-aged participants. Nyberg et al. (2020) also found that low resilience and substance use disorders in late adolescence were predictive of both self-harm and suicide death in middle age. This highlights the importance of promoting preventive behaviours amongst a high-risk population. Controlling this risky behaviour by raising more ways of awareness early in life may help decrease the burden of complications, injuries and even death. Attention to risk factors at both individual and social levels is essential to provide the fullest understanding of living a healthy youth life and to be able to develop their well-being with enhanced resilience.

The study explored a substantial rate of risk behaviours among youth in the city of Coimbatore. The observation in this study indicated that substance use was one of the risky behaviours among youths. The observation in this study indicated that various socio-demographic factors were significant predictors of the risk behaviours and resilience among youths. Regardless of the party culture in the city, the ignorance about the dangers, coupled with the easy availability of cheap products, has led to high tobacco use. Smoking is another factor of substance use, which was observed to be high at 88 percent. The Centre for disease control and Prevention in 2022 found that close to 1 of every 100 middle school children and nearly 3 of every 100 high school students testified that they had smoked cigars in the past 30 days. An article released by Adyar Cancer Institute. The Tamil Nadu Tobacco Survey 2015-16 predicted that there were about 17 lakh people in the Coimbatore district and rural population covering up to 3.8 per cent in the urban areas consumed nicotine-rich products". The canonical correlation analysis demonstrates the collective relationship between the risk factors and resilience among the youth, where it resulted in showing substance use and health issues were predictors for low ingenuity and challenge orientation and the lower the support-seeking, the higher the risk of attempting suicide. A study by Lee et al. (2024), involving 5,511 youth participants, found that resilience levels were significantly lower among individuals who reported suicidal ideation, planning, or attempts across lifetime, past year, and past month timeframes. With this, youth tend to find it challenging to detect a way out of their problems or risks. Results also indicated that there was a positive effect of the sensitisation programme on youth risks and resilience, where risks showed a lower score and resilience increased during the post-sensitisation except for the dimension of adaptability. The results of repeated measures indicated that the sensitisation programme for youths on the measures of risk behaviours and resilience showed a significant effect during post-sensitisation.