# Impact Evaluation of P.A.C.E. Training for Adolescent Girls in Khorda, Cuttack, Jagatsingpur and Puri Districts of Odisha

Submitted to GAP Foundation

By Prof. Supriya Pattanayak, PhD Prof. Smita Mishra Panda, PhD Prof. Bibhunandini Das, PhD



Centurion University of Technology and Management Ramachandrapur, PO: Jatni, Khordha, 752050, Odisha <u>http://www.cutm.ac.in</u> 30<sup>th</sup> May 2020

# CONTENTS

Sl.No		Торіс	Page No	
		List of Abbreviations	4	
		List of Tables	5	
		List of Figures	5	
		Acknowledgement	6	
		Executive Summary	7	
1		Introduction and Rationale		
	1.1	Introduction	9	
	1.2	Research Background	9	
	1.3	Rationale	10	
	1.4	Aims and Objectives	10	
2		"Life Skills": Conceptual development and differentiation		
	2.1	Defining 'life skills'	11	
	2.1	Life Skill education	11	
	2.2	Formal versus non formal approaches	12	
	2.3	Distinguishing training programs for younger and	12	
	2.4	older adolescents	15	
	2.5	GAP Foundations P.A.C.E. program	13	
	2.6	P.A.C.E. Theory of Change	14	
	2.7	Life skills and empowerment	14	
	2.8	Life skills and employability	15	
	2.9	Life skills and entrepreneurship	15	
3		Methodology		
-	3.1	Framework and approach	17	
	3.2	Research Design	19	
	3.3	Sampling	19	
	3.4	Background of the study area	20	
	3.5	Construction of Questionnaire	22	
	3.6	Training of Research Assistants	22	
	3.7	Data Collection	22	
	3.8	Data Analysis	23	
	3.9	Significance	23	
4	4 1	Findings of Baseline and Endline	24	
	4.1	Introduction	24	
	4.2	Life skills related to younger adolescent girls (age 11-13)	24	
	4.2.1	Self awareness	25	
	4.2.2	Knowledge on gender	25	
	4.2.3	Power and Patriarchy	28	
	4.2.4	Communication skills	29	

	4.2.5	Knowledge on menstrual hygiene	30
	4.2.6	Knowledge on sexual abuse and gender based	31
		violence	
	4.2.7	Level of work preparedness	33
	4.2.8	Impact of training on younger adolescent:	34
		Regression Analysis	
	4.3	Life skills related to older adolescent girls (age 13-17)	
	4.3.1	Self awareness	36
	4.3.2	Knowledge on gender	36
	4.3.3	Power and Patriarchy	39
	4.3.4	Bodily Integrity	40
	4.3.5	Knowledge on menstrual hygiene	41
	4.3.6	Self efficacy through effective communication	42
	4.3.7	Knowledge on gender based violence	43
	4.3.8	Knowledge on gender related resources	44
	4.3.9	Level of work preparedness	45
	4.3.10	Impact of training on older adolescent girls:	46
		Regression Analysis	
5.		Concluding Remarks and Recommendations	
	5.1	Concluding remarks	49
	5.2	Limitations of the study	53
	5.3	Recommendations	54
		References	56
		Annexures	
	1	Sample Interview Schedule	57

# **LIST OF ABBREVIATIONS**

GTET	Gram Tarang Employability and Training Services
HBT	Hamara Bachpan Trust
P.A.C.E	Personal Advancement and Career Enhancement

Sl No	Title	Page No
3.1	Background of the study area	20
4.1	Percentage of young adolescent girls who were aware of self	25
4.2	Percentage of young adolescent girls who were gender sensitive	26
4.3	Expected roles of boys	27
4.4	Expected roles of girls	28
4.5	Most powerful in the family	28
4.6	Least powerful in the family	29
4.7	Knowledge on power	29
4.8	Percentage of younger adolescent girls reporting comfort levels in communicating with others using various communication skills	30
4.9	Awareness on menstrual hygiene	30
4.10	Awareness on sexual abuse and gender based violence	31
4.11	Level of work preparedness	33
4.12	Impact of training on self identity	34
4.13	Impact of training on knowledge about sex and gender	34
4.14	Impact of training on knowledge about verbal and non-verbal communication	35
4.15	Percentage of older adolescent girls who were aware of self	36
4.16	Percentage of older adolescent girls who were gender sensitive	37
4.17	Expected roles of boys	38
4.18	Expected roles of girls	38
4.19	Most powerful in the family	39
4.20	Least powerful in the family	39
4.21	Knowledge on power	40
4.22	Knowledge about perfect body	40
4.23	Source of idea about perfect body	40
4.24	Feeling about their own body	41
4.25	Awareness on menstrual hygiene	42
4.26	Percentage of older adolescent girls reporting comfort levels in communicating with others using various communication skills	42
4.27	Awareness on gender based violence	43
4.28	Perception regarding gender	44
4.29	Level of work preparedness	45
4.30	Impact of training on self identity	46
4.31	Impact of training on knowledge about sex and gender	47
4.32	Impact of training on knowledge about verbal and non-verbal communication	47
4.33	Impact of training on setting future goals	48

# LIST OF TABLES

# LIST OF FIGURES

Figure 1Conceptual Framework that informs the study

# **ACKNOWLEDGEMENTS**

We would like to express our sincere thanks to all the Research Assistants who were involved in the data collection. This was an enormous undertaking and they all diligently went to the field, spending adequate amounts of time in establishing rapport with the adolescent girls and subsequently completing the data collection. Because of the sensitivity of the issues being explored and the adolescent stakeholder group, we necessarily ensured that all the Research Assistants were women. The Research Assistants were (in no particular order) Nandini Mohanty, Lipsa Jena, Anita Nayak, Brahmi Kar, Meghna Mohanty, Priyanka Priyadarshini, Rosalin, Sandhya Rani Bhol, Shilpee Pattanaik, Manorama Pradhan, Pushpanjali Pradhan, Rashmirekha Rout, Subhasmita Swain and Liya Tandi. We think we would fail in our responsibility if we do not thank all the HBT coordinators who identified the sample respondents in the communities and gathered them for interviews on scheduled dates; they were real stars. Further, without the cooperation of the Headmasters/ Headmistresses and Teachers of various schools involved in this program, this report would not have seen the light of day. My sincere thanks to all of them.

Coordinating their efforts in the field at various points in time during the data collection were Payal Nayak, Manjuprava Dhal and Sasmita Parida. We would like to express our sincere thanks to them as well.

Sasmita Parida and Pradeep Sahu undertook the task of completing the data entry of both the baseline and endline data. Without their single mindedness in completing the task, it would have been impossible to complete this report on time.

Finalising the indicators for the study and the construction of the questionnaire involved collaboration of many persons and necessarily underwent several iterations. Chandrabhanu Pattanayak, Supriya Pattanayak, Smita Mishra Panda, Payal Nayak and Bibhunandini Das were actively engaged in the process.

The report writing has been entirely undertaken by Supriya Pattanyak, Smita Mishra Panda and Bibhunandini Das. There was a steep deadline and due to COVID 19, all had to work independently and eventually finalise the report. It has been a wonderful collaborative effort between friends and colleagues.

Finally, we would like to thank Abhinav Madan and Sreejaya Satpathy from GTET, Prashant Das, Achini Herath and Lubna Maelzer from GAP Foundation India and Dharitri Patnaik and Arpita Pattnaik from HBT for stepping in when things went awry, which they always do in such circumstances, not withstanding the onset of the COVID pandemic.

# **IMPACT EVALUATION OF P.A.C.E. TRAINING FOR ADOLESCENT GIRLS**

#### EXECUTIVE SUMMARY

The P.A.C.E. program with GTET and HBT was conceptualised for the life skills training of adolescent girls in schools and the community. It was imperative to conduct an impact assessment to evaluate the efficacy of the life skills training program in such contexts. Further, the proposed training was for a population of 5000 adolescent girls over the period of one year. Therefore, the study was commissioned on a 10% representative sample from every batch of training.

The aim of this research is to evaluate the impact of GAP Foundations P.A.C.E training Program imparted to a sample of 5000 adolescent girls across four districts of Odisha. The impact assessment was carried out on a sample of 500 girls. This was conducted to assess whether such a directed training enhanced young girl's self-confidence, self-efficacy, and life satisfaction; their aspirations, and whether it changed their longer-term marriage and family-related outcomes.

The specific objectives of the research were to conduct a baseline survey and a post training evaluation to assess:

- 1. Whether adolescent girls possess the skills to achieve their goals and to make informed decisions/ choices for improved health, wellbeing and life opportunities.
- 2. Whether adolescent girls can communicate well, have mature relationships and have a greater sense of self.
- 3. Whether adolescent girls possess the skills to be able to prevent or protect themselves from sexual abuse or other kinds of gender based violence.
- 4. To assess the level of work preparedness of adolescent girls.

Data was collected before and after training to understand pre-existing knowledge and attitudes regarding the following constructs: identity and awareness, power and patriarchy, bodily integrity, emotions and relationships, self efficacy, understanding violence, resourcefulness and employability. These were the short term/ immediate outcomes and the assessment was done to understand the efficacy of the training.

Some broad overall assertions regarding the findings are presented below:

- There is a positive impact of life skills training on both younger and older adolescent girls as evidenced in the findings prior to and after training.
- No significant difference in responses along various indicators is seen between adolescent girls based on their location (rural and urban).
- No significant difference in responses along various indicators is seen between adolescent girls based on their age (younger and older).
- While the prior knowledge of older adolescent girls was fairly high when compared to that of younger adolescent girls, contradictory results were observed in some instances.
- The findings are presented based on the objectives that were set out for the study.

The proposed recommendations are to

- (a) strengthen the Training of Trainers; this would enable trainers to assist trainees with the prescribed pedagogy to train adolescents to think critically and not impose their ideas
- (b) A larger cohort of trainers should be retained so that replacement can be immediately effected should anyone leave. The departure of trainers was cited as one of the reasons for the changing training schedule
- (b) structure and formalise the delivery of training, such that quality improves
- (c) train women in the communities as well to complement the training of adolescent girls.

# **Chapter 1**

# **Introduction and Rationale**

#### **1.1 Introduction**

India's demographic dividend lies in its large adolescent and young adult population. Adolescence is a transition period of development and adolescents are considered as the productive members of a society. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19. The literature on adolescence suggests that the five leading characteristics of adolescence are biological growth and development, an undefined status, increased decision making, increased pressures, and the search for self. Often, adolescents are not informed and/or prepared for the rapid pace of physical, emotional and psychological changes that they undergo. Misconceptions about issues related to growing up, make them anxious. They become individuals who are less motivated, less confident and often go astray. During adolescence, young women are often faced with social isolation, economic vulnerability, access to education becomes uncertain due to puberty, and lack of adequate and appropriate health information. While aspirations are high, young women are unaware of the choices available to them, to help them transition from girlhood to womanhood.

Adolescence is a period when the intellectual, physical and all the capabilities are very high and can be shaped with proper training and personality building activities. Imparting life skill training through inculcating life skill education will help adolescents to overcome such difficulties in life. Equipping adolescents with life skills will help them to have a greater sense of self, make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and manage their lives in a healthy and productive manner.

#### **1.2 Research Background:**

Gram Tarang Employability and Training Services (GTET) along with its field implementation partner Humara Bachpan Trust (HBT) proposed to impart life skills training to 5000 adolescent young women as a pilot during a 12 month period. The training was imparted in middle level and high schools, junior colleges and communities (urban and rural) in Khorda, Cuttack, Jagatsingpur and Puri districts. The training for younger and older adolescent girls was conducted as per the available P.A.C.E. (Personal Advancement and Career Enhancement) training modules. A sample of trainees were evaluated based on the indicators to gauge the training outcomes. The purpose of the training was to scale up initiative across the state, based on the learning and the evaluation outcomes of the training.

# **1.3 Rationale:**

The P.A.C.E. program with GTET and HBT was conceptualised for the life skills training of adolescent girls in schools and the community. It was imperative to conduct an impact assessment to evaluate the efficacy of the life skills training program in such contexts. Further, the proposed training was for a population of 5000 adolescent girls over the period of one year. Therefore, the study was commissioned on a 10% representative sample from every batch of training.

Life skills, have been extensively discussed in the field of sports and mental health. Such a study will expand the horizon of life skill education/ training to different contexts with specially designed training modules.

# 1.4 Aims and Objectives:

The aim of this research is to evaluate the impact of GAP Foundations P.A.C.E training Program imparted to a sample of 5000 adolescent girls across four districts of Odisha. The impact assessment was carried out on a sample of 500 girls. This was conducted to assess whether such a directed training enhanced young girl's self-confidence, self-efficacy, and life satisfaction; their aspirations, and whether it changed their longer-term marriage and family-related outcomes.

The specific objectives of the research were to conduct a baseline survey and a post training evaluation to assess:

- 1. Whether adolescent girls possess the skills to achieve their goals and to make informed decisions/ choices for improved health, wellbeing and life opportunities.
- 2. Whether adolescent girls can communicate well, have mature relationships and have a greater sense of self.
- 3. Whether adolescent girls possess the skills to be able to prevent or protect themselves from sexual abuse or other kinds of gender based violence.
- 4. To assess the level of work preparedness of adolescent girls.

# Chapter 2

# "Life Skills": Conceptual development and differentiation

# 2.1 Defining "life skills"

Life skills are defined as psychosocial abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. They are loosely grouped into three broad categories of skills: cognitive skills for analyzing and using information, personal skills for developing personal agency and managing oneself, and interpersonal skills for communicating and interacting effectively with others (UNICEF, https://www.unicef.org/lifeskills/index\_7308.html, accessed 2020).

Life skills are defined as 'those internal personal assets, characteristics and skills such as goal setting, emotional control, self-esteem, and hard work ethic that can be facilitated or developed ....' (Gould & Carson, 2008, p. 60). Literature (Collins, Gould, Lauer, & Chung, 2009) suggests that individuals who are most effective at teaching life skills are those who have philosophies that place prime importance on life skills development. Many of the life skills are relational and are learned through the socialisation process and by working in groups and teams, but can be enhanced when particular outcomes are targeted with adequate care and empathy. Opportunities for application of the life skills learned should also be provided. It is well documented (Trottier & Robitaille, 2014) that life skills learnet in one domain can easily be transferred to others.

World Bank's (2013) Adolescent Girls Initiative (AGI) notes that life skills programs are designed to teach a broad set of social and behavioural skills - also referred to as 'soft' or 'non-cognitive' skills - that enable individuals to deal effectively with the demands of everyday life. Programs can build on any or all of the following skills:

- decision-making (e.g. critical and creative thinking, and problem solving);
- community living (e.g. effective communication, resisting peer pressure, building healthy relationships, and conflict resolution);
- personal awareness and management (self-awareness, self-esteem, managing emotions, assertiveness, stress management, and sexual and reproductive health behaviours and attitudes).

Life skills are considered particularly important during adolescence, as it is a period of great turmoil and turbulence; adolescents experience new feelings, physical and emotional changes,

excitement, questions, and difficult decisions. Differences between men and women are more pronounced and gender norms take a stronger hold in governing young people's aspirations and behaviors during this period. During adolescence, life skills can help young people overcome the challenges of growing up and improve the quality of their lives. However, it is generally acknowledged that these skills can be augmented at least up until the end of adolescence. Overall, life skills matter for health, education and labour market outcomes, not to mention, relational outcomes.

#### 2.2 Life skill education

Life skills education is a structured programme of needs- and outcomes-based participatory learning that aims to increase positive and adaptive behaviour by assisting individuals to develop and practise psycho-social skills that minimize risk factors and maximize protective factors. Life skills education programmes are theory- and evidenced-based, learner-focused, delivered by competent facilitators, and appropriately evaluated to ensure continuous improvement of documented results (World Bank 2013).

Life skills are imparted formally through schools, informally through community organisations or in the context of a program designed for other purposes (livelihoods, vocational training, etc). Sometimes they focus entirely on 'soft skills' and at others they are a subset of skills focussed on employability.

#### 2.2 Formal versus non-formal approaches

The informal approaches involve imparting life skills to people within communities. For this an assessment of the community and various stakeholders should be conducted to help tailor the programs. Various participatory tools can be employed to determine what issues need to be included in the life skills curriculum. Either locally adapted curricula or in its absence, international best practices adopted for local cultures can be used for training purposes. This may entail translating the curriculum into the local language, changing names and situations for role plays, etc. The more formal approaches are those which are structured in content and in delivery. They are also delivered in more formal settings such as institutions, organisations where life skills could be offered as management development programmes or schools and colleges where life skills could be integrated into the curriculum. In this instance an informal approach was adopted, though the content and the number of hours of delivery were predefined.

#### 2.3 Distinguishing training programs for Younger and Older Adolescents

Adolescence refers to the period of human growth that occurs between childhood and adulthood. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19. Adolescence can be separated into three stages: early adolescence, middle adolescence, and late adolescence.

As previously mentioned, the five leading characteristics of adolescence are biological growth and development, an undefined status, increased decision making, increased pressures and the search of self. Life skills, in addition to taking into account the five characteristics of development in adolescence, also have to take into account age, education levels, place of residence, the cultural context to name a few. Therefore, a number of life skills programme are designed to cater to early and middle adolescence. In this programme also a focus was on younger and older adolescent girls.

#### 2.4 GAP Foundation's P.A.C.E. programme

GAP Foundation's P.A.C.E. (Personal Advancement & Career Enhancement) programme, launched in 2007, aimed to improve the lives of female garment workers and their families. It further gives women the foundational life skills, technical training and support they need to advance in the workplace and in their personal lives (GAP Inc., 2018).

Two aspects that distinguish P.A.C.E. are its focus on trainers and its robust curriculum, designed to engage people with diverse needs. As the program expanded, GAP Foundation invested extensively in the people who delivered the program and continually refined the curriculum to make sure it can be adapted to different settings and learning styles (GAP Inc., 2018).

The curriculum includes topics on communication, problem solving and decision making, time and stress management, health and wellness, financial literacy and more. Additional plans to widen P.A.C.E.'s scope in the communities include an educational program for girls aged 11-17 and a new curriculum aimed towards women's leadership.

While GAP focuses on trainers, it has to place the same measures when entering into partnerships to deliver the programme. Otherwise, no matter how robust the curriculum, the outcomes will be compromised.

#### 2.5 P.A.C.E. Theory of Change

P.A.C.E. Theory of Change notes that following the training, participants will have an understanding and acquire knowledge in seven areas: self awareness - emotional and physical; capacity to express views clearly and confidently; drivers and impediments of personal growth and negotiating through it; gender and safety and security; financial management, financial support structure, execution excellence and entrepreneurial skills; basic human rights – health and WASH; Legal and social entitlements. This will lead to the following two outcomes: improved self esteem and resilience; and, improved skills and confidence to seek and claim own rights, both individually and collectively. Needless to say these are related. These two further contribute to three broad outcomes: Personal Change - Improved aspirations and capabilities, Interpersonal (Relational) Change – increased balance in gender power relations and their ability to negotiate through it, and Environmental Change - Improved ability to manage their external environment to make her own choices. The theory of change notes that the expected impact was advancing gender equality among women and girls to lead a better quality of life by realizing their full potential as leaders, influencers, entrepreneurs and professionals and this will happen at the level of individual, household, community and workplace (GAP Inc, 2018).

#### 2.6 Life skills and Empowerment

Empowerment is defined as a process of increasing personal, interpersonal or political power so that individuals can take action to improve their life situations (Rothman, Erlich & Tropman, 1995, p 205). Rubin and Rubin (1992, p 62) note that empowerment is the sense of efficacy that occurs when people realize that they can solve their own problems that they face and that they have the right to contest unjust decisions.

Facilitating empowerment of adolescent girls is a critical outcome of life skills training. By engaging in role playing, storytelling and various other activities, there is an increase in participation, development of critical thinking, problem solving, communication, leadership skills and many more attributes.

Albertyn et al (2001) indicate that, in the long term, there was a shift from micro-level personal issues to more external issues and growth in terms of women's critical thinking ability. Women had a more positive outlook on life, greater feelings of confidence and self-respect, and a heightened feeling of control over life circumstances. With the passage of time, there was

retention of change and signs of continued growth during the following three months in the workplace. Further such programs enhance the capacity of people to be their own change agents (Tsey et al, 2005).

The aim of the life skills training in this instance was also the empowerment of adolescent girls and enabling them to lead a life of dignity, with self respect and preparing them for their life ahead, daring to dream.

# 2.7 Life skills and Employability

Women constitute half the world's population – and half the world's economic potential. Their participation in the labour market is critical for poverty reduction and yet their participation in labour market has stagnated worldwide. There is enough evidence to suggest that their income supports health, education and well being of their families. However, women are disproportionately represented in precarious work – low-paid, low-skilled and insecure jobs. Training plays an important role in accessing opportunities in the world of work, but women find accessing technical and vocation education and training difficult. They often lack basic functional literacy and numeracy skills (ILO. https://edmsp1.ilo.org/KSP/en/Issues/Genderequality/index.htm, accessed 23 May 2020). Therefore, accessing vocational skills along with life skills gives them a better chance to enter the labour market.

In this effort to impart life skills to older adolescent girls, the aim is to assess the level of work preparedness and provide them with a repertoire of skills to become part of an increasingly competitive and demanding work force.

# 2.8 Life skills and Enterprise

'Enterprise competencies consist of knowledge (about the specific project or business), specific projects skills and general capability; that is, the ability or predisposition to set up and run projects' (Johnson 1988 in Caird 1992 p7). Further, Caird (1992) categorised the range of 'enterprise' skills into seven groups, noting the breadth of skills, lack of specificity and rationale for the concept of enterprise competency. They are: **Personality Variables, Communication Skills, Managerial Skills, Analytical Skills, Career Skills, Knowledge and Attitudes.** The convergence with life skills undoubtedly highlights the need for policy

makers and practitioners to integrate the two, to consider a career pathway that has an enterprise as its outcome.

# Chapter 3

# Methodology

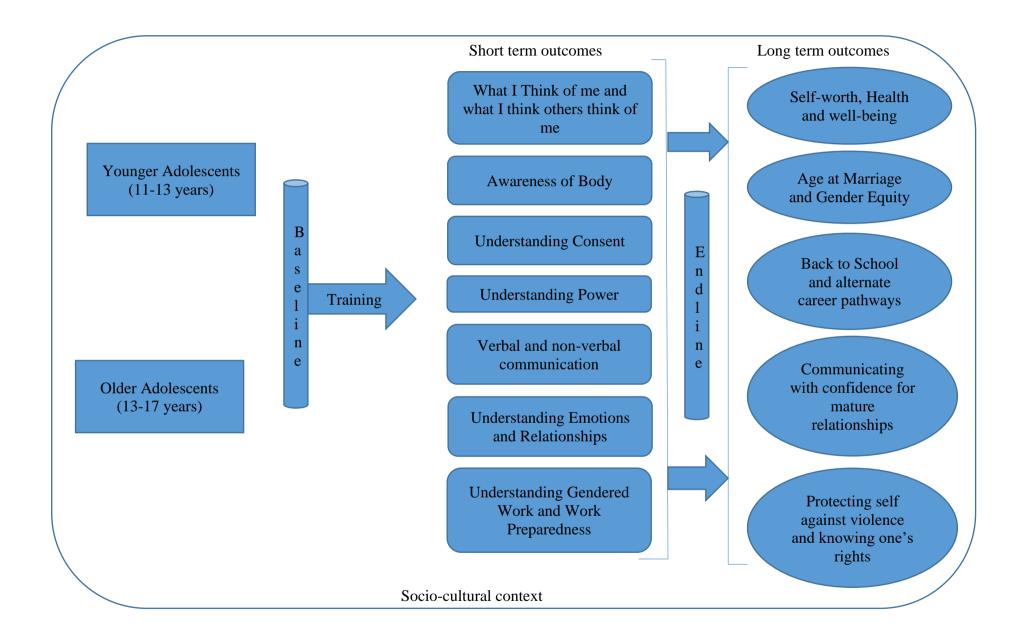
#### 3.1 Framework and Approach

This impact assessment was undertaken to explore the attainment of life skills by younger and older adolescent girls. As already mentioned, adolescence is a period of turmoil as young people lack confidence, and have an unstable and insecure sense of self at this stage. Developmentally, a distinction is made between younger and older adolescents for the purposes of training and assessment. The P.A.C.E. training modules also are based on this distinction. Accordingly, the training and assessment were conducted along these lines.

The baseline data was collected to understand pre-existing knowledge and attitudes regarding the following constructs: identity and awareness, power and patriarchy, bodily integrity, emotions and relationships, self efficacy, understanding violence, resourcefulness and employability. These were the short term/ immediate outcomes and the assessment was done to understand the efficacy of the training.

Once the adolescents were identified and the training calendar finalised by the training partner, HBT, the P.A.C.E. training was rolled out. From each batch a 10% sample of respondents for the baseline/ endline were selected. Some long term outcomes are expected, but this can only be assessed in a follow-up survey of the respondents in a year's time or more. These long term outcomes are: self worth, health and well being; age at marriage and gender equity; back to school and alternate career pathways; communicating with confidence for mature relationships; and, protecting self against violence and knowing one's rights. The figure below is a pictorial depiction of the conceptual framework.

#### Figure 1: Conceptual framework that informs the study



# 3.2 Research Design:

The research design or conceptual frame of the study involved the following steps:

- An ethics clearance was attained from the University Ethics Clearance Committee.
- The study covered rural and urban areas across 4 districts of Odisha; urban locations of Bhubaneswar and Cuttack and rural areas of Puri, Khorda and Jagatsinghpur districts.
- The baseline study was conducted over the period during which the P.A.C.E. training was imparted by HBT. The attempt was to ensure that the sample was truly representative (training calendar attached).
- To conduct the baseline study, statistically representative sample was calculated by using Solvin's formula.
- The base line covered all the clusters by using stratified random sampling.
- A structured questionnaire was constructed and administered for data collection for the baseline and endline (questionnaire was designed, pre-tested, and required changes incorporated, translated to Odia and then administered to the sample population).
- The endline data was collected soon after the training.
- The study primarily used descriptive statistics for analyzing baseline data.
- The research used difference in difference equation for analyzing the impact evaluation.

# 3.3 Sampling:

A sample of 500 adolescent girls (taking a 10% sample from every training group) was drawn and a structured questionnaire was administered to them prior to the start of the training programme. This constituted the baseline. The same questionnaire was again administered soon after (the delay from training to endline varied from one week to one month) the training was completed to assess the level of knowledge, attitude and values gained along various parameters that would eventually shape their lives and future. The data so gathered was analysed using various tools to assess the impact of the training. Since, attitudes, practices and values change slowly, a longitudinal assessment will be undertaken after a year to assess the changes.

# Sample Size Calculation

The study used Solvin's formula to find out the sample of a population of 5000 adolescent girls already identified by HBT. The sample will be drawn at 95 per cent confidence level which gives alpha level of 0.05.

$$n = \frac{N}{1 + Ne^2}$$

 $= 5000/1 + 5000(0.05)^{2}$ =370.37 Where, n is number of samples N is total population

E is Error tolerance level<sup>1</sup>

This implies that 371 sample (round figure) shall be representative enough for collecting data. However, in order to capture the diversity, to avoid incomplete and missing responses from some of the respondents, the study proposes 500 samples which are 10 per cent of total population.

Method of 10 per cent sample from each cluster

To select 10 per cent sample from each cluster, stratified random sampling will be used. All clusters in three districts will be taken as strata. The study will cover 500 sample of a population of 5000.

To ensure representative sample from each district, proportionate stratified random sampling was used in the study. The study covered 10% of sample from all clusters separately and the sum of 10% sample was 500 (if the decimal point is more than .5, then next number will be taken. For instance, if it is 7.6; then a sample of 8 was considered and if it is 7.5; then a sample of 7 was considered).

# 3.4 Background of the study area:

The study covered rural and urban areas across three districts of Odisha; urban locations of Bhubaneswar and Cuttack and rural areas of Jagatsingpur, Puri and Khorda districts.

Table 3.1: Background of the Study Area			
District	Slums/ Schools	<b>Block/ Sub division</b>	
	Rental Basti/ Colony / CRPF Baramunda Nodal School Gandamunda	-	
	Sitanath UP School	-	
Khordha (Bhubaneswar Urban)	Chandrashekharpur Govt. High School - Phase-Ii	NA	
	Bapuji Nagar School	_	
	Mandap Sahi		
	Tarini Sahi		
	Tarini Nagar, Salia Sahi		

<sup>&</sup>lt;sup>1</sup> The term tolerance level has different meanings. Here, it is used as a measure of error, which is basically the same thing as a significance level.

	Tarini Basti	
	Brahmeswar Nodal U.P School	7
	Govt. High School, Chandrasekharpur,	
	Phase-II	
	Aerodrome UP School	
	Godam Sahi	
	Bayababa Sahi	
	Harijan Basti-Unit-6	
	OCC Basti	
	Ambedkar Slum	
	Tapoban High School	
	Dhirikuti	
	Ouat	
	Mochi Sahi	
	Sriram Nagar, Saliasahi	
	Patharbandha	
	Store Sahi	
	Patia Girls High School	
	Bjb College Colony Project U.P School	
	Kedarpalli	
	Govt. High School, Rental	
	(Chandrasekharpur) =Phase 1	
	University High School	
	Berhampuria Basti	
	Haisonpur	
	Tulsipur Bauri Sahi	
	Radhakishorepur	
	Tulsipur Nodal UP School	
	Mahatabngar	
	Goudabada Sahi	
	Khan Nagar	
Cuttack (Urban)	Imampada	NA
	Krushak Bazar	
	Puri Ghat, Pana Sahi	
	Puri Ghat, Bauri Sahi	
	Kathajodi Sahi	
	Tulsipur Govt.High School	
	Tulsipur,Harijan Sahi	
	Dhabaleswar Gada Community	1
	Nadikula Sahi	
	Nolia Sahi	_
Jagatsinghpur (Rural)	Gadakujanga	— Ersama
	Puri Zilla School	
Puri (Urban)	Dhobakhala/Tarini Sahi	NA
····· (······)	Bijay Nagar -Puri/Tarini Sahi	

	Betrix School, Lokanath Road	
	Nabin Nagar	
	Harachandi Sahi	
	Gadadhar High School	
	Biswaambar Govt. High School	
	Gop Damodar Girls High School	Gop
	Konark Girls High School, Roulapatna	Konark
	Konark High School	KOHALK
	Gop Girls High School	Gop
	Konark SSD High School	Konark
	Kendrapati	A storen so
Puri (Rural)	Astaranga High School	Astaranga
	Saraswati Shishu Vidya Mandir	
	Kakatpur High School	
	Kantapada High School,Kakatpur	Kakatpur
	Govt. Bhagabati Nodal Bidyapitha, Bajapur High School	Kakatpui
	Lataharana Nodal School	

#### **3.5 Construction of Questionnaire:**

Two questionnaires were constructed, one for younger adolescents (11-13) and a second for older adolescents (13-17). The questionnaire was designed after a detailed study of the training material and in discussion with the training providers; indicators to be measured were identified for the same. The construction of the questionnaire underwent several iterations. The questionnaires were subsequently translated to Odia and were pre-tested. Following the pre-testing, some redundancies were excluded while a few additional questions were incorporated.

#### **3.6 Training of Research Assistants:**

Ten Odia literate Research Assistants (RA's) were trained by the coordinator on the administration of the questionnaires. The coordinator then accompanied the research assistants to the field to ensure that there was no deviation in the data collection from what was intended. Needless to say, there were some casualties along the way, with some RAs dropping out and being replaced. Therefore, training of the RAs also had to be undertaken at regular intervals.

#### 3.7 Data Collection:

Data collection had to be done in close collaboration with the training provider (HBT). Once the training calendar was prepared, the baseline data collection began. HBT could only start the training after the baseline data collection was completed. While every attempt was followed to conduct the endline data collection immediately after the completion of the training (within a week), in some instances there was a delay. However, this was only in a small number of cases. It was only due to the onset of the Covid 19 pandemic and the pursuant lockdown that the endline data collection had to be abandoned. Due to this, 285 endline questionnaires were completed instead of the 500.

During baseline data collection, especially with younger girls, substantial amounts of time had to be spent in building rapport and developing trust and confidence. Further, several parameters being assessed had to be explained as they were otherwise unable to respond. For example, power relationship, decision making in the family, menstruation, to name a few

#### 3.8 Data Analysis:

The data was analysed using SPSS, based on the conceptual framework outlined above. With baseline data, Double Difference or Difference in Difference Equation was used to assess the impact. Difference in difference is studied by using descriptive statistics. As most of the variables are qualitative, the study has captured maximum number of occurrence for most of the variables. Under descriptive statistics, the study has analysed percentage change across different indicators before and after training. Other than that, in order to understand the impact of training, the study has adopted regression analysis for specific indicators. Since most of the variables are in binary form, logistic regression has been used. The regression equation is:

$$Y_i = \beta_0 + Training + Religion + Age + Literacy + \varepsilon$$

Where  $Y_i$  represents dependent variable which is regressed by training as the main independent variable and other three variables are used as covariates.

#### 3.9 Significance:

The impact assessment of the P.A.C.E. training programme was conducted to assess the effectiveness of the life skills training in changing the knowledge, attitudes and values of adolescent girls. Life skills are behaviours that enable individuals to adapt and deal effectively with the demands and challenges of life. Equipping adolescents with life skills will help them to gain a better understanding of self, make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and manage their lives in a healthy and productive manner.

# **Chapter 4**

# **Findings of Baseline and Endline**

# 4.1 Introduction

This section discusses the findings of the baseline and endline study of adolescent girls on different parameters across the study areas. Different parameters are analysed to understand different skills required for any adolescent girls like communication, awareness about bodily changes, work preparedness and many more.

Following introduction, knowledge before and after the training of younger adolescent girls has been assessed in section 4.2. The knowledge has been assessed by taking into consideration different parameters. Having discussed the case of younger adolescent girls, the report focuses on older adolescent girls in section 4.3.

We would like to make some assertions overall regarding the findings:

- There is a positive impact of life skills training on both younger and older adolescent girls as evidenced in the findings prior to and after training
- No significant difference in responses along various indicators is seen between adolescent girls based on their location (rural and urban)
- No significant difference in responses along various indicators is seen between adolescent girls based on their age (younger and older)
- While the prior knowledge of older adolescent girls was fairly high when compared to that of younger adolescent girls, contradictory results were observed in some instances
- The findings are presented based on the objectives that were set out for the study.

# 4.2 Life Skills related to Younger Adolescent Girls (age 11-13)

As discussed, first the study focuses on young adolescent girls. To understand the knowledge that adolescent girls have gained along various paramenters, the training focusses on seven areas: self awareness - emotional and physical; capacity to express views clearly and confidently; drivers and impediments of personal growth and negotiating through it; gender and safety and security; financial management, financial support structure, execution excellence and entrepreneurial skills; basic human rights – health and WASH; Legal and social entitlements.

#### 4.2.1 Self awareness

An attempt is made to capture the indicator self-awareness. Table 4.1 captures the percentage of younger adolescent girls who can confidently introduce themselves before and after training.

Table 4.1: Percentage of young adolescents girls who were aware of self				
Parameters	<b>Before Training</b>	After Training		
Daughter/Sister	69.8	87.4		
Name/Age	77.1	94.6		
School/Community	68.8	85.6		
Own Qualities	10.4	30.5		
Feel Good	78.6	86.8		
Note: Figures are in percentages				

Source: Primary data, 2019-20

Different variables were measured to comprehend how the sample adolescent girls value their self-identity. The respondents were asked to introduce themselves and the researcher noted down their observation of this. The responses were not mutually exclusive. Before training (baseline data), out of the sample, while introducing themselves, 69.8 per cent girls mentioned that they were daughters or sisters of someone while, 77.1 per cent introduced themselves by name and age. Further, the responses also indicated that 68.8 per cent girls highlighted their schools and community, however only 10.4 per cent younger adolescent girls emphasised their personal qualities while introducing themselves. Other than these indicators, while enquiring into how they felt while introducing themselves, 78.6 per cent respondents reported that they felt good while doing so prior to training.

Following the training, it was found that in case of all the indicators, there was an increase in responses. 87.4 per cent respondents reported that they introduced themselves as the daughter or sister of someone. 94.6 per cent respondents introduced themselves by their name and age. Similar trends were found for other indicators as well.

#### 4.2.2 Knowledge on gender

Having discussed the self-awareness indicators, next an attempt is made to understand the social construct of gender. Table 4.2 discusses different indicators to assess whether younger adolescent girls were sensitive to gender.

Table 4.2: Percentage of younger adolescent girls who were						
	gender sensitive					
Parameters		<b>Before Training</b>	After Training			
Sex Vs. Gender		21.4	54.5			
Decision	Men	23.4	31.1			
Makers	Women	6.8	3.6			
IVIAKEIS	Both	65.6	65.3			
Equal decisions for all the family members		80.2	92.8			
Favoured	Father	23.4	51.5			
Decision	Mother	6.8	7.2			
Makers	Both	65.6	41.3			
Boys preferred over Girls		33.9	24.6			
Note: Figures are in percentages						

Source: Primary data, 2019-20

The first parameter about gender sensitivity relates to the knowledge about the difference between sex and gender. Before training, 21.4 per cent of respondents informed that they understood the difference between sex and gender while after training, 54.5 per cent respondents could differentiate between sex and gender. This outcome of training was inadequate and needs to be delved into. However, for other indicators, the analysis revealed contrary results. Prior to training, 23.4 per cent of younger adolescent girls emphasised that their father should be the decision makers at home, and quite in contrast 31.4 per cent respondents made the same assertion after training. Further, prior to training, 6.8 per cent respondents reported that their mother should be the decision maker which declined to 3.6 per cent after training. Where joint decisions by father and mother were concerned, there was minimal difference in the responses prior to (65.6 per cent) and after (65.3 per cent) the training. To the question as to who was the favoured decision maker in the family and how, before training 23.4 per cent of the respondents mentioned that fathers should be the decision makers which increased to 51.5 per cent after training. The responses regarding mother as a favoured decision maker in the family were not very encouraging either before or after training. Before training 6.8 per cent emphasised that mothers were the most favoured decision maker which marginally increased to 7.2 per cent after training. The number declined after training from 65.6 to 41.3 per cent for those who preferred both parents as decision makers. However, it was encouraging to note that while 33.9 per cent of younger adolescents reported boys were preferred over girls prior to training, only 24.6 per cent asserted so following the training. Some of the reasons articulated for a preference of boys over girls are as follows: (i) mothers are fond of sons (ii) boys are courageous and can earn, but girls will get married, (iii) boys protect and maintain families, (iv) boys will carry forward the family name and (v) boys will bring home

a dowry. Some of the reasons are also a matter of concern and should be taken into account in future trainings.

The study also attempted to enquire into how young adolescent girls understood the expected roles and responsibilities of girls and boys. In tables 4.3 and 4.4, the results on expected roles of boys and girls are presented.

Table 4.3: Expected roles of boys				
Parameters	<b>Before Training</b>	After Training		
Protectors	72.9	60.5		
Intelligent	74.0	59.3		
Emotionally	68.2	49.7		
Stronger	08.2	49.7		
Not express	60.9	31.7		
Weakness	00.9	51./		
Note: Figures are in percentages				

Source: Primary data, 2019-20

Four parameters were covered to understand expected roles of boys. The responses were not mutually exclusive as respondents have given multiple responses. 72.9 per cent of respondents mentioned that boys were powerful, hence they were considered as the protectors. This opinion declined to 60.5 per cent after training. Similarly, prior to training 74.9 per cent think that boys are more intelligent and hence they should be employed and provide for the family which declined to 59.3 per cent post training. In addition to these indicators, 68.2 per cent of respondents felt that boys were emotionally stronger and hence could take better decisions, which declined to 49.7 per cent post training. 60.9 per cent respondents held that boys should not cry or express any weaknesses which declined to 31. 7 per cent after training. Since these questions were presented in the form of statements which are normative, the responses so derived indicate the positive impact of training.

Having discussed the expected roles of boys, table 4.4 highlights the expected roles of girls. Like boys, roles of girls are also understood by considering four indicators. They are patience or tolerance, better in household work, spirituality and beauty that make them carers, homemakers and gaurdians of culture.

Table 4.4: Expected roles of girls				
Parameters	<b>Before Training</b>	After Training		
Patient/tolerant	90.1	90.1		
Household work	81.3	58.1		
Spirituality	76.6	52.7		
Beauty	66.7	44.3		
Note: Figures are in percentages				

Source: Primary data, 2019-20

From the analysis, it is evident that there was no change in responses for the indicator patience and tolerance. 90.1 per cent of respondents felt that girls need to be more patient and tolerant both prior to and following the training. Before training more than 81 per cent of girls had a feeling that they should be better in all kinds of household work like cooking, cleaning, sewing etc. However, after training this number declined to 58.1 per cent Coming to the beauty indicator, before training, 66.7 per cent respondents felt that they should look pretty whereas, 44.3 per cent respondents agreed with this view after training. Again, since these questions were presented in the form of statements which are normative, the responses so derived indicate the positive impact of training. Being a carer is a valued trait in society, therefore, the above response is not surprising. Likewise there are adequate role models in society to indicate that household work being shared leads to gender equality outcomes.

# 4.2.3 Power and Patriarchy

This section deals with analysis on power and patriarchy. Different parameters are used to understand the knowledge of power, power relations and draw some inferences on the understanding of patriarchy. Tables 4.5 and 4.6 indicate who young adolescents view as bing most and least powerful in the family. Before training 64.6 per cent of respondents mentioned that fathers were most powerful in the family which has increased to 86.2 per cent. Similarly, when it comes to least powerful 2.1 per cent respondents were saying that fathers are least powerful in the family which has reduced to 0.6 after training. Patriarchy reigns supreme as evidenced in the responses. It is also not surprising that younger adolescents saw themselves to be the least powerful in the family, as often, they were also the youngest in the family.

Table 4.5: Most Powerful in the Family			
Indicator Before Training		After Training	
Father	64.6	86.2	
Mother	7.8	5.4	
Others	10.9	3.6	
Myself	0	0.6	
Parents	0.5	1.2	

Table 4.6: Least Powerful in the Family						
Indicator	ndicator   Before Training   After Training					
Father	2.1	0.6				
Mother	17.2	24.6				
Others	33.3	2.4				
Myself	9.4	0.6				
Note: Figures are in percentages						

Note: Figures are in percentages Source: Primary data, 2019-20

Source: Primary data, 2019-20

Table 4.7 discusses older adolescents knowledge on power. Before training 19.8 per cent of respondents reported that power can shift from one person to another which has increased to 31.7 per cent after training. Similarly before training, only 18.8 per cent were able to identify the source of power which has increased to 48.5 per cent after training. This is extremely valuable and indicates the effectiveness of training.

Table 4.7: Knowledge on Power				
Parameter	<b>Before Training</b>	After Training		
Can power shift from one person	19.8	31.7		
to the other				
Ability to identify the source of	18.8	48.5		
power				
Similarity of your family's power	49.0	64.7		
relation with other families				
Note: Figures	are in percentages	•		

Source: Primary data, 2019-20

# 4.2.4 Communication Skills

In this section an attempt was made to understand how effectively adolescents communicate and with whom are the levels of comfort higher. Table 4.8 features the communication indicators in detail. Three parameters are used to understand the communication skills.

Table	Table 4.8: Percentage of younger adolescent girls reporting comfort levels in communicating with others using various communication skills										
Paramete	ers		Befo	re Tra	ining			Afte	er Trai	ning	
Free comr	nunication			68.8		68.3					
	Scale $\longrightarrow$	1	2	3	4	5	1	2	3	4	5
Lavalaf	Grandfather	8.9	7.8	7.8	14.6	15.1	10.8	4.8	4.2	9.0	13.8
Level of comfort	Grandmother	5.7	7.3	16.7	15.6	20.8	6.0	7.8	10.8	10.8	26.9
connort	Father	8.9	6.8	15.6	32.8	29.2	9.0	9.6	16.2	22.8	37.1
	Mother	2.1	4.7	2.6	10.9	75.5	0.6	1.2	5.4	15.0	77.8

	Elder Brother	7.3	9.4	6.3	6.8	13.0	8.4	6.6	12.0	9.6	5.4
	Younger Brother	10.9	9.9	7.8	10.4	15.1	12.6	16.2	7.2	8.4	9.6
	Elder Sister	1.6	3.6	7.3	9.9	21.9	3.6	3.6	3.6	11.4	21.0
	Younger Sister	8.3	3.6	8.3	8.9	9.4	4.8	4.2	7.8	12.6	9.0
	Any other	1.6	.5	3.1	1.0	5.7	3.0	1.2	3.0	1.2	4.8
Verbal Vs.	. Non-verbal			49.0					74.3		
		Not	e: Fig	gures a	re in pe	ercenta	ges				

Source: Primary data, 2019-20

From the table 4.8, it is evident that prior to training, 68.8 per cent of adolescent girls could freely communicate with family members, which had marginally declined to 68.3 per cent after training. The second indicator that measured communication skills, was the level of comfort in communicating with other family members. Overall, the level of comfort in communication was better with female members of the family (grand mother, mother, older sister) though an exception is communicating with father which has also improved which can also be considered as a positive impact of the training. From the evidence, it was seen that girls were relatively comfortable in communicating with their mothers as 75.5 per cent reported 5 on a scale of 1 to 5 (where 1 is the minimum and 5 is the maximum) and, there was a marginal increase after training to 77.8 per cent giving a score of 5 to mothers. When it came to articulating the difference between verbal and non-verbal communication, before training 49.0 per cent reported that they understood the difference which increased to 74.3 after training.

# 4.2.5 Knowledge on Menstrual Hygiene

Young adolescents require to understand that health and WASH constitute basic human rights. For them, menstruation is a vital process that not only requires hygiene practices (WASH) to be followed but also self-care which overall lead to a healthy life. This section deals with menstruation practices followed by younger adolescent girls.

Table 4.9: Awareness on menstrual hygiene				
Parameters		Before Training	After Training	
Knowledge on M	Ienstruation	49.0	58.1	
M-4	Sanitary Pad	32.8	49.7	
Material used during menstruation	Disposable Cloths	1.6	.6	
	Reusable Cloths	0	0.6	
mensuuation	Others	0	49.1	
	Once a Day	0	0.6	

How often is the cloth used washed	Every time while changing	1.6	4.2		
How are	Open Sunlight	21.9	51.5		
clothes/	Under the dress	0.5	2.4		
underwear	Hidden dark place	1.6	5.4		
dried	Others	0.5	1.2		
How often and	Once a day	1.0	11.4		
How often are	Twice a day	4.2	4.8		
external genitals cleaned	More than twice	26.6	34.1		
gennais cleaned	Don't wash daily	0	49.7		
Note: Figures are in percentages					

Source: Primary data, 2019-20

From table 4.9, it can be inferred that before training 49 per cent of adolescent girls had knowledge about menstruation which increased to 58.1 per cent after training. While enquiring into the type of material used, 32.8 per cent respondents used sanitary pads during menstruation which increased to almost 50 per cent after training. This could also mean that young adolescents impressed upon their mothers the importance of the use of sanitary pads, which is a great outcome of the training. None of the sample respondents informed that they wash the cloth (used for hygiene) only once a day. Only 21.9 per cent of sample respondents informed that before training they dried the cloth or underwear in open sunlight which increased to 51.5 per cent after training. Another hygiene practice is how often they wash the external genital area during menstruation. The findings indicate that after training 34.1 per cent of adolescent washed the external genital area more than twice in a day. This is a matter of great concern since the percentage is still very low; menstural hygiene and self care are critical to the overall well being of adolescent girls.

# 4.2.6 Knowledge on Sexual Abuse or Gender Based Violence

This section focuses on knowledge of younger adolescent girls regarding sexual abuse or any kind of gender based violence. To identify the knowledge on sexual abuse, a young girl needs to differentiate not only, between good and bad touch, but also be aware of dealing with situations if she is not comfortable with someone's company. This will assist her in the future to acknowledge power relations and take the right decisions (including consent) for her. Table 4.10 summarises the findings on some of these indicators.

Table 4.10: Awareness on sexual abuse and gender based violence					
Parameters	Before Training	After Training			
Avoid the Person	30.2	10.2			

Not comfortable	Discuss with Mother/family	51.0	73.1			
with someone's	Share with friends	3.6	3.0			
company	Adjust with the situation	4.7	10.2			
Right over one's bo	dy	70.8	96.4			
	Hug	69.8	65.3			
Not a good tough	Shaking hands	14.6	4.8			
Not a good touch	Confusing touch	67.7	73.1			
	Touching private parts	79.2	97.0			
	Encourage to watch/ hear sexual acts	22.4	1.2			
An act with a bad	Sex urge	7.3	2.4			
intention	Sexual comments	1.6	3.0			
	Pornographic picture	1.0	90.4			
	All of the above	67.7	1.2			
Gender based viole	nce	48.4	71.3			
	Physical	2.6	89.2			
Different forms of	Emotional	2.1	90.4			
Violence	Financial	.5	92.8			
	Sexual	.5	89.2			
	Note: Figures are in percentages					

Source: Primary data, 2019-20

It was observed, that while the percentage of respondents were contradictory along some indicators before training such as avoiding a person because of a feeling of discomfort (declining from 30.2 per cent to 10.2 per cent) or adjusting with the situation (increasing from 4.7 per cent to 10.2 per cent), the number of respondents who discussed the matter with their mothers or any other family member substantially increased from before training to after training (from 51 per cent to 73.1 per cent). Before training, 70.8 per cent of girls expressed that they had rights over their own bodies, which increased to 96.4 per cent after training. Coming to what was not a good touch and an act with a bad intention, 69.8 per cent reported that hugging was not a good touch which reduced to 65.3 per cent after training. Similarly, before training 67.7 per cent girls reported that confusing touch was not a good touch which increased to 97.0 per cent after training. Coming to an act with a bad intention, after training 90.4 per cent reported that sending/ sharing pornographic picture was a bad thing which was 1.0 per cent before training. These findings signify the importance of life skills training for adolescent girls.

When assessing the knowledge on gender based violence, it was observed that 48.4 per cent of the respondents considered women or girls were prone to violence by virtue of their gender

prior to training, which increased to 71.3 per cent following training. In discussing different forms of violence, respondents before training were not significantly aware of different forms of violence such as physical, emotional, financial or sexual. Following training, there was a significant change in the level of awareness about different forms of violence among the adolescent girls. However, some of the ways issues of violence could be addressed as articulated by younger adolescents were that girls should behave well and their work should be perfect with no cause for complaint and proper training and sensitization of all stakeholders. This reasoning is reverting to a conservative attitude and training should focus on this aspect.

#### 4.2.7 Level of Work Preparedness

The level of work preparedness of young adolescents was measured through various indicators like their future aspirations, alternative opportunities available, and time management. Table 4.11 emphasises the level of work preparedness of the respondents.

Table 4.11: Level of work preparedness				
Parameters		Before Training	After Training	
	Housewife	3.6	1.2	
Future	Professional	62.5	25.7	
Goals	Entrepreneur	2.6	1.8	
	Any other	13.5	71.3	
Alternat Opportu		28.6	57.5	
Gathered Information		2.6	100.0	
Time M	anagement	68.8	89.8	
	Note: F	igures are in percent	ages	

Source: Primary data, 2019-20

Looking at the level of work preparedness of the respondents, it was observed that before training 62.5 per cent reported that they wanted to be professionals without having much knowledge on alternative opportunities which changed following the training. The positive impact of training is that following training, participants were able to articulate a minimum of 21 different resources available to them beginning with a greater focus on education (naming courses like Nursing, B.Ed, MBBS and Institutions like the Odissi Research Center), to understanding what talent they possess (such as drawing, dancing, acting, etc), to reaching out to other family members and teachers, to participating in co-curricular activities such as NCC, to name a few.

# 4.2.8 Impact of training on younger adolescent: Regression Analysis

Having discussed the impact of training on various parameters, the analysis presented in this section is about impact of training on some specific indicators through logistic regression. Since most of the outcome variables are qualitative and binary in nature, the study has employed logistic regression models. Separate models are being run for different indicators. Table 4.12 presents impact of training on self-identity. Two variables have been considered for self-identity, (i) whether they feel good about introducing themselves and (ii) whether they hesitate while introducing themselves.

Table 4.12: Impact of training on self identity						
Independent	Dependent Variable	Dependent Variable- Whether they feel good while introducing				
Variable		themselves				
	Coefficient	Odd ratio	P Value			
Training**	.676	1.96	0.031			
Religion	.208	1.23	0.704			
Age	059	.942	.314			
Literacy	.868	.868	.707			
Constant**	1.88	6.559	.020			
Log Likelihood=-163.95796						
	Number of Observations= 359					
	** significant at	5 per cent level				

The dependent variable is regressed by four independent variables where training to the participant is the main independent variable and others are control variables. The analysis indicated that if an adolescent received training then the chance of feeling good while introducing themselves increased 0.96 times than the adolescent who had not received training. Other than training, we did not find any significant relationship with other variables.

Under gender sensitivity, respondents were asked whether they could differentiate between sex and gender. The response variable was in binary form. The respondents who could differentiate between sex and gender, were assigned the score one and others zero.

Table 4.13: Impact of training on knowledge about sex and gender					
Independent	Dependent Variable	e- Whether participant	s could differentiate		
Variable	t	between sex and gende	er		
	Coefficient	Odd ratio	P Value		
Training***	1.323	3.75	.000		
Religion	.476	1.61	.429		
Age	050	.950	.272		
Literacy**	.877	2.40	.040		
Constant**	-1.852	.156	.016		

Log Likelihood = -211.23504
Number of Observations= 359
*** significant at 1 per cent level
**significant at 5 per cent level

Table 4.13 indicates that if a participant received training, then the chance of differentiating between sex and gender increases 2.75 times than the participants who do not receive training (baseline). Similarly, if a participant is continuing her education then also the chance of differentiating between sex and gender increases 1.40 times than the participants who do not continue their education.

Other than these two indicators, analysis was also conducted on the impact of training on communication. Respondents were asked whether they could freely communicate with others or not. When this variable was run with training and other control variables, no significant relationship was evident. The reason could be that there was not much change in the responses following training (refer table no 4.8). Another communication variable was whether the participants could differentiate between verbal and non-verbal communication. Table 4.14 presents the result on this.

Table 4.14: Impact of training on knowledge about verbal and non-verbal				
communication				
Independent	Dependent Variable- Whether participants had knowledge on verbal and non-verbal communication			
Variable				
	Coefficient	Odd ratio	P Value	
Training***	.995	2.706	.000	
Religion	.329	1.389	.473	
Age	.036	1.037	.383	
Literacy	.101	1.106	.745	
Constant	807	.445	.188	
Log Likelihood = -227.44754				
Number of Observations= 359				
*** significant at 1 per cent level				

From the table 4.14, it is observed that training had positive and significant relationship in differentiating between verbal and non-verbal communication. If a participant received training, then the probability of differentiating between verbal and non-verbal communication increased 1.70 times from baseline. In this case too, apart from training we did not find any significant relationship for other variables.

#### 4.3 Life Skills Related to Older Adolescent Girls (age 13-17)

This section is a discussion on older adolescent girls with respect to their self-identity, power and patriarchy, understanding of gender, health and hygiene and other parameters.

#### 4.3.1 Self awareness

Awareness about respondents' awareness regarding their awareness of self and identity were explored. Table 4.15 discusses the indicators that focus on self-identity, which related to the comfort level in introducing themselves.

Table 4.15: Percentage of older adolescents who were aware of self				
Parameters	<b>Before Training</b>	After Training		
Daughter/Sister	70.9	86.8		
Name/Age	82.7	93.0		
School/Community	67.0	88.6		
Own Quality	12.3	32.5		
Feel Good	77.1	93.0		
Note: Figures are in percentages				

Source: Primary data, 2019-20

The prior knowledge of older adolescents on self identity was significantly better than younger adolescents. Needless to say, the responses were not mutually exclusive either. Before training, while introducing themselves, 70.9 per cent older adolescent girls mentioned that they were the daughters or sisters of someone while the figure increased to 86.8 per cent after training. 82.7 per cent reported that they introduced themselves by their name and age prior to training and 93.0 per cent respondents introduced themselves by their name and age following training. The research found that 67.0 per cent of girls additionally mentioned their schools and community in self introduction, however only 12.4 per cent of older adolescent girls mentioned their personal qualities while introducing themselves. Other than these indicators, while enquiring into how they felt about introducing themselves, prior to training, 77.1 per cent respondents reported that they felt good about introducing themselves. After training, it was found that in the case of all indicators, there was an increase in responses.

# 4.3.2 Knowledge on gender

Table 4.16 discusses knowledge on gender sensitivity. Almost same parameters as those for younger adolescents were used to understand awareness on gender sensitivity.

Table 4.16: Percentage of older adolescent girls who were gender sensitive						
Parameters		<b>Before Training</b>	After Training			
Sex Vs. Gender		28.5	71.1			
	Men	17.9	27.7			
Decision Makers	Women	4.5	7.0			
	Both	73.7	64.0			
Equal decisions for all the family members		81.0	93.0			
Farrand	Father	25.1	48.2			
Favoured	Mother	5.6	5.3			
Decision Makers	Both	5.0	46.5			
Boys preferred over Girls		43.0	30.7			
	Note:	Figures are in percentages	8			

Source: Primary data, 2019-20

Prior to training, 28.5 per cent respondents informed that they were aware of the difference between sex and gender while after training, 71.1 per cent respondents reported that they could differentiate between sex and gender. Similarly, 17.9 per cent of adolescent girls, before training, mentioned that their fathers should be the decision makers which increased to 27.7 per cent after training. In comparison, before training only 4.5 per cent reported that their mother should be the decision makers which increased to 7.0 per cent after training. The unexpected result was that, 73.7 per cent of older adolescent girls before training mentioned that both father and mother should be the decision makers, which became 64.0 per cent after training. While discussing the favoured decision makers with the respondents, before training the study found that 25.1 per cent emphasised fathers to be the favoured decision makers which rose to 48.2 per cent after training. The number is not very encouraging in case of mothers being the favoured decision maker either before or after training. Before training, 5.6 per cent respondents mentioned that their mothers to be the most favoured decision makers which declined to 5.3 per cent after training. Those who preferred both parents as decision makers their number increased after training from 5.0 to 46.5 per cent. Similarly, before training 43.0 per cent of older adolescents mentioned boys are preferred over girls and the number has reduced to 30.7 per cent after training. Some of the reasons for the preference of boys are the following: (i) boys can do what girls cannot, therefore girls are constrained by their gender, (ii) boys will look after their parents whereas girls will move away from their parents, (iii) girls do not get proper education, therefore they are married off, (iv) because only boys perform the funeral rituals after the death of the parents, (v) because boys can earn and take care of the family. Some of the reasons are also a matter of concern and should be taken into account in future trainings.

Table 4.17 and 4.18 discuss how older adolescent girls understand their roles and responsibilities in comparison to boys.

Table 4.17: Expected roles of boys						
Parameters	<b>Before Training</b>	After Training				
Protectors	65.4	67.5				
Intelligent	61.5 45.6					
Emotionally	59.8	47.4				
Stronger	39.0	47.4				
Not express	53.6	29.8				
Weakness	55.0	29.0				
Note	e: Figures are in percen	tages				

Source: Primary data, 2019-20

The responses mentioned in table 4.17 are not mutually exclusive as respondents have provided multiple responses. 65.4 per cent of respondents mentioned that since boys were powerful, hence they were considered as the protectors. This opinion, post training rose to 67.5 per cent. However, when it came to discussions on boys being more intelligent or emotionally stronger, the percentages declined post training. Further, while 53.6 per cent respondents believed that boys should not express any weaknesses, after training, 29.8 per cent felt that boys should not cry. Since these questions were presented in the form of statements which are normative, the responses so derived indicate a positive impact of training.

Having discussed the expected roles of boys, in table 4.18 expected roles of girls have been discussed. Like boys, roles of girls are also understood by considering four indicators. The indicators in this case are patience or tolerance, better in household work, spirituality and beauty.

Table 4.18: Expected roles of girls								
ParametersBefore TrainingAfter Training								
Patient/tolerant	89.5							
Household work	74.9	64.9						
Spirituality	72.1	58.8						
Beauty 54.2 45.6								
Note	: Figures are in percen	tages						
Car	was Primary data 2010	20						

Source: Primary data, 2019-20

From the analysis, it was observed that there was a minimal increase in responses for the indicator patience and tolerance making them better carers. However, for other three indicators, there is a positive impact of training. Before training more than 74.9 per cent of girls had a feeling that they should be better in all kinds of household work like cooking, cleaning, sewing

etc, making them better homemakers. However, after training it has reduced to 64.1 per cent. Coming to the beauty indicator, before training 54.2 per cent respondents felt that, they should look pretty whereas it declined to 45.6 per cent after training. Again, since these questions were presented in the form of statements which are normative, the responses so derived indicate the positive impact of training. Being a carer is a valued trait in society, therefore, the above response is not surprising. Likewise there are adequate role models in society to indicate that household work being shared leads to gender equality outcomes.

#### 4.3.3 Power and patriarchy

This section deals with analysis on power and patriarchy. Different parameters are used to understand the knowledge of power, power relations and draw some inferences on the understanding of patriarchy. Tables 4.19 and 4.20 indicate who older adolescents view as being most and least powerful in the family. Prior to training, 72.6 per cent of older adolescents emphasized that father was the most powerful figure in the family which marginally reduced to 71.9 per cent after training. Similarly when it comes to least powerful, 1.7 per cent older adolescents mentioned that fathers were the least powerful which marginally increased to 2.6 per cent post training. While older adolescents did not see themselves as most powerful either before (0) or after training (1.8 per cent), following training they did not see themselves as least powerful, the scores declining from 17.3 percent before training to 0.9 percent following training. Mother being perceived as the least powerful needs further probing as it could also be a proxy for domestic violence.

Table 4.19: Most Powerful in the Family						
Indicator   Before Training   After Training						
Father	72.6	71.9				
Mother	11.2	15.8				
Others	8.9	1.8				
Myself 0 1.8						
No	te: Figures are in pe	ercentages				

Source: Primary data, 2019-20

Table 4.20: Least Powerful in the Family						
Indicator Before Training After Training						
Father	1.7	2.6				
Mother	21.2	21.1				
Others	33.0	4.4				
Myself 17.3 0.9						
No	ote: Figures are in pe	ercentages				

Source: Primary data, 2019-20

In analysing knowledge on power, table 4.21 indicates that there is a significant increase in identifying the sources of power after training. Before training 22.3 per cent of respondents were able to identify the sources of power which increased to 61.6 per cent.

Table 4.21: Knowledge on Power							
Parameter	<b>Before Training</b>	After Training					
Can power shift from one	35.2	35.7					
person to the other							
Ability to identify the	22.3	61.6					
sources of power							
Similarity of your family's	55.9	56.3					
power relation with other							
families							
Note: Figur	es are in percentages	2					

Source: Primary data, 2019-20

# 4.3.4 Bodily Integrity

The section on bodily integrity attempts to ascertain what is the knowledge of older adolescent girls regarding a 'perfect body' and where do these ideas emerge from.

Table 4.22: Knowledge on Perfect Body					
<b>Before Training</b>	After Training				
24.6	5.3				
21.8	7.0				
44.1	42.1				
3.4	0.9				
2.2	43.8				
ures are in percentag	ges				
	Before Training   24.6   21.8   44.1   3.4   2.2				

Source: Primary data, 2019-20

Table 4.22 indicates that the knowledge of perfect body that includes all body types increased significantly post training, from 2.2 per cent to 43.8 per cent. Also the perception that a good looking body and a body without a disability is a perfect body also significantly declined, which is a positive impact of the training. But the percentage of older adolescent girls who thought that a body without any health issues is a perfect body remained almost similar before and after training which probably indicates that this aspect needs further clarification during training.

Table 4.23: Sources of idea about Perfect Body							
Parameters Before Training After Training							
Parents/ Family members	67.0	58.8					
Peers/ Friends	12.8	7.0					

Role model/ Actress	3.4	7.0				
Media	2.8	12.3				
Others	3.4	13.3				
Note: Figures are in percentages						
Source: F	Primary data, 2019-2	0				

Table 4.23 explores what were the sources of ideas about the perfect body. Whereas still parents continue to be the primary source of ideas about the perfect body before and after training, role models/ actresses (from 3.4 to 7.0 per cent) and media (from 2.8 to 12.3 per cent) as sources of idead significantly increased post training. This requires further deconstruction during training.

Table 4.24: Feeling about their own Body						
<b>Before Training</b>	After Training					
19.6	3.5					
6.1	1.8					
3.9	26.8					
0.6	0.9					
55.3	65.3					
9.5	1.8					
res are in percentage	S					
	Before Training   19.6   6.1   3.9   0.6   55.3					

Source: Primary data, 2019-20

Table 4.24 highlights that the percentage of older adolescent girls who feel good about their own body increased from 55.3 per cent to 65.3 per cent which is a positive outcome of the training. However, this contradicts the result of those who feel that they are tool tall or short which increased from 3.9 per cent to 26.8 per cent.

# 4.3.5 Knowledge on menstrual hygiene

The older adolescent girls were aware of the bodily changes that accompanied menstruation. The following were listed: bodily pains and cramps, weakness, mood swings, stress, emotional disturbance, desire to remain isolated, no desire to work and feeling matured.

There were some cultural practices that affected adolescents most. They were inability to attend marriages and other auspicious occasions, inability to wear new clothes, inability to interact with all family members, especially male family members, inability to enter the kitchen and touch anything.

Table 4.25 depicts the scenario on menstrual hygiene and related health issues of older adolescent girls.

Table 4.25: Awareness on menstrual hygiene							
Parameters		Before Training	After Training				
Knowledge on M	enstruation	82.1	94.7				
	Sanitary Pad	84.4	94.6				
Material used	Sanitary Pad Disposable Cloths Reusable Cloths Others Once a Day Every time while changing Open Sunlight Under the dress Hidden dark place Others Once a day Twice a day	1.7	.9				
during menstruation	Reusable Cloths	.6	4.5				
mensuluation	Others	13.4					
How often is	Once a Day	.6	2.6				
the cloth used washed	Every time while changing	2.8	90.4				
How are	Open Sunlight	54.2	90.4				
clothes/	Under the dress	3.9	3.5				
underwear	Hidden dark place	6.1	1.8				
dried	Others	0.6	2.6				
How often one	Once a day	3.9	18.4				
How often are	Twice a day	18.4	7.0				
external genitals cleaned	More than twice	58.7	67.5				
genitais cleaneu	Don't wash daily	0.6	5.3				
	Note: Figures	are in percentages					

Source: Primary data, 2019-20

From table 4.25, it can be interpreted that prior to training 82.1 per cent older adolescent girls had knowledge about menstruation which increased to 94.7 per cent after training. While enquiring into the kind of material used during menstruation, 84.4 per cent respondents mentioned the use of sanitary pads, which increased to 94.6 per cent using sanitary pads after training. None of the sample respondents informed that they wash the cloth once in a day. Only 54.9 per cent of sample respondents inform that before training, they dried their clothes or underwear in open sunlight which increased to 90.4 per cent after training. Another hygiene practice is how often they cleaned their external genital areas during menstruation. The study found that after training, 67.5 per cent of adolescent cleaned themselves more than twice a day.

## 4.3.6 Self-efficacy through effective communication

Self-efficacy of older adolescent is measured through effective communication skills. For older adolescent girls some extra indicators are taken to gauge effective communication skills. Table 4.26 presents how effectively older adolescents communicate with family members.

Table 4.26: Percentage of older adolescent girls reporting comfort levels in communicating with others using various communication skills											
Paramet	Parameters Before Training After Training										
Free com	munication	61.5 75.4									
	Scale $\longrightarrow$	1	1 2 3 4 5			5	1	2	3	4	5
	Grandfather	10.1	11.7	7.8	5.0	8.4	3.5	.9	4.4	11.4	6.1

	Grandmother	8.9	11.7	9.5	9.5	17.9	7.9	9.6	14.0	0.9	14.9
	Father	8.4	7.8	19.6	31.3	26.3	11.4	10.5	20.2	20.2	28.1
	Mother	.6	2.2	6.1	10.1	78.8	0	0.9	5.3	18.4	72.8
Level	Elder Brother	3.9	6.7	8.9	12.3	15.1	5.3	11.4	12.3	7.0	7.9
of comfort	Younger Brother	8.4	3.9	9.5	8.4	10.6	8.8	11.4	15.8	9.6	7.0
	Elder Sister	0	3.9	5.6	8.9	28.5	1.8	3.5	5.3	9.6	32.5
	Younger Sister	3.4	6.7	6.7	8.9	17.9	4.4	7.0	6.1	17.5	11.4
	Any other	2.8	1.7	1.7	2.8	5.6	0	1.8	4.4	3.5	4.4
Restricted in expressing Opinion				46.4					46.5		
	Note: Figures are in percentages										

Source: Primary data, 2019-20

From table 4.26, it is evident that prior to training 61.5 per cent of older respondents reported that they could freely communicate which increased to 75.4 per cent after the training. While discussing level of comfort in communicating with family members, the findings were of respondents giving high rating to mothers before and after training. Overall, the level of comfort in communication was better with female members of the family (grand mother, mother, older sister) though an exception is communicating with father which has also marginally improved. This can be considered as a positive impact of the training. There was not much difference observed for the indicator restricted in expressing opinion. Before training 46.4 per cent reported that they felt restricted in expressing opinion as a female which remains almost the same, i.e. 46.5 after training.

# 4.3.7 Knowledge on gender based violence

This section deals with awareness of respondents on gender issues and gender related violence. Table 4.27 deals with these issues.

Table 4.27: Awareness on gender based violence				
Parameters Before Training After Training				
Gender based vio	olence	61.5	80.7	
	Physical	11.2	75.4	
Different forms	Emotional	7.8	80.7	
of Violence	Financial	1.1	82.5	
	Sexual	1.7	81.6	
	Note: Figur	es are in percentages		

Source: Primary data, 2019-20

Prior to training, only 61.5 per cent of older adolescent girls believed that women or girls are prone to violence by virtue of their gender which increased to 80.7 per cent after training. Discussing different forms of violence, it was observed that, before training, respondents were not aware of different kinds of violence like physical, emotional, financial or sexual. There was a significant change in awareness about different forms of violence among older adolescent girls. It is observed that not only respondents learn about different forms of violence but also, they were aware of different categories under these forms of violence. For instance, respondents reported almost more than 10 types of physical violence. Some examples of physical violence and their causes as reported by the respondents were: (i) violence that occurs due to suspicion of the woman, (ii) violence that occurs due to the woman not performing household work, (iii) violence that occurs due to not fulfilling the dowry demands and (iv) disobeying. Likewise, some examples of emotional violence reported were abuse arising from family conflicts, abuse due to disobedience, and rescinding on dowry payments. The main examples of sexual violence are rape, and forceful sex because girls do not raise their voices.

When asked what actions can be taken to address issues of violence against women; prior to training some of the responses were husbands should understand and respect their wives, not to argue with men, punish the criminal and take matters into own hands and beat the perpetrator. While following training, some of the responses were, change society's mindset with adequate awareness generation through mass media, women should be empowered to raise their voice without fear, women should be educated and should enter the labour market/ work force.

## 4.3.8 Level of Resourcefulness

This section deals with the understanding on respondents' knowledge on resourcefulness. Various parameters are used to understand the level of resourcefulness.

Table 4.28: Level of Resourcefulness			
Parameters	<b>Before training</b>	After training	
Perception about housewives	23.5	14.9	
Importance of paid work for women	62.6	77.2	
Can women do same work as men	54.7	71.9	
Resources required for future career	8.4	65.8	
Being a girl limits the kinds of work you can take up	50.8	59.8	
Can you plan for the future	59.8	83.9	

Can you work as a driver, a vehicle maintenance person or pilot	44.1	75.4	
Support of any family members for studying	60.3	93.9	
Believe in saving and investment	69.3	93.9	
Note: Figures are in perentages			
	1 2010 20		

Source: Primary data, 2019-20

Table 4.28 indicates that before training 23.5 per cent of respondents thought that women who stay at home were engaged in reproductive tasks alone and that did not account for work. There is positive change towards this perception after training. After training this declined to 14.9 per cent. Similarly before training, 62.6 per cent of respondents believed that paid work is important which increased to 77.2 per cent. It is not surprising that to a conceptual quation like whether being a girl limits the kinds of work you can take up has a limited response (50.8 to 59.8 per cent), however when specific responses are sought as to whether they could be a driver, vehicle maintenance person or pilot, the responses shot up (44.1 to 75.4 per cent). Almost all indicators are showing positive trend after training. Out of all indicators, there has been an exponential increase in identifying resources required for future career. Before training, only 8.4 per cent of respondents were able to list out the resources required for the future which increased to 65.8 per cent. Some of the resources that the respondents mentioned were education, money, family support, good health, hard work, training, knowledge etc. By responding to the question regarding whether they could garner the support of family members if they had to choose between studying and household chores, before training 60.3 per cent had given positive response, which increased to 93.9 per cent after training.

## 4.3.9 Level of work preparedness

This section deals with the understanding on the importance of gainful employment. Table 4.29 presented the level of work preparedness by the respondents.

Table 4.29: Level of work preparedness			
<b>Before Training</b>	After Training		
15.6	86		
7.8	82.1		
91.1	92.0		
	Before Training 15.6 7.8		

Source: Primary data, 2019-20

From the analysis, it is observed that only 15.6 per cent were interested for a job which rose to 86.0 per cent after training. Similar change was observed for the indicator - skills required for securing a job. It was found that only 7.8 per cent were aware of the skills required before training which changed to 82.1 per cent. There was not much change in case of the indictor whether being on time was a good thing or bad as already more than 91 per cent mentioned that it is a good practice prior to the training.

The requirements of skills for securing a job were articulated by older adolescent girls as good education leading to excellent qualifications, requirement of a competency in some skill (computers), skills for appearing in interviews, and possessing all the necessary documentation.

When exploring into what they would do with the money they earned, the following were the responses: will give it to parents or buy something for them, will save the money for a rainy day, will support the family, will construct a house, will save for further education, and will invest for society (build a child care center).

# 4.3.10 Impact of training on older adolescent girls: Regression Analysis

Similar to the analysis on younger adolescents, the impact of training on some specific indicators was assessed. Table 4.30 presents analysis on self-identity.

Table 4.30: Impact of training on self identity					
Independent	Dependent Variable- Whether they feel good while introducing				
Variable	Coefficient	Odd ratio	P Value		
Training***	1.193	3.297	0.005		
Religion	.058	1.05	.921		
Age*	268	.764	.072		
Literacy	.068	1.07	.866		
Constant**	5.045	155.28	.034		
Log Likelihood = -123.57062					
	Number of Observations= 293				
***significant at 1 per cent level					
	** significant at 5 per cent level				
	*significant at	1 per cent level			

From the analysis, it was observed that if an adolescent received training then the chance of feeling good while introducing themselves increases 2.29 times than the adolescent who had not received training (baseline). Similarly, the study also analysed impact of training on knowledge about sex and gender. Here also question asked was whether participants could

differentiate between sex and gender. The participants who could differentiate between sex and gender were given one while others were given zero.

Table 4.31: Impact of training on knowledge about sex and gender					
Independent	Dependent Variable- Whether participants could differentiate				
Variable	ł	between sex and gende	r		
	Coefficient	Odd ratio	P Value		
Training***	1.64	5.16	.000		
Religion	223	.799	.641		
Age	203	.815	.181		
Literacy**	.960	2.613	.015		
Constant	1.455	4.28	.539		
	Log Likelihood = -170.5441				
Number of Observations= 293					
	*** significant at 1 per cent level				
	**significant at	5 per cent level			

Table 4.31 presents result of impact of training on knowledge in differentiating between sex and gender. The result indicates that if a participant received training, then the chance of differentiating between sex and gender increases 4.16 times than the participants who did not receive training. Similarly, if a participant continued her education then the chances of differentiating between sex and gender increased 1.61 times.

Having discussed the impact of training on self-identity and social construction of gender, the study further analysed the impact of training on communication.

Table 4.32: Impact of training on communication				
Independent	ndent Dependent Variable- Whether participants can freely			
Variable		communicate		
	Coefficient	Odd ratio	P Value	
Training***	.618	1.856	.028	
Religion	.265	.839	.555	
Age	175	1.304	.186	
Literacy	535	.585	.138	
Constant	3.208	24.74	.124	
Log Likelihood = -181.02257				
Number of Observations= 293				
*** significant at 1 per cent level				

Table 4.32 indicates that if a participant received training, then the probability of freely communicating with others increased by 0.85 times than the participants who did not receive training (baseline). The study did not find any significant relationship with other indicators.

Table 4.33: Impact of training on setting future goals					
Independent	Dependent Variable- Whether they respondents can set goals				
Variable	for future				
v arrable	Coefficient	Odd ratio	P Value		
Training***	1.058	2.881	.000		
Religion	.574	.888	.368		
Age	117	1.775	.207		
Literacy	.411	1.508	.221		
Constant	1.269	3.558	.536		
Log Likelihood = -171.26852					
Number of Observations= 293					
***significant at 1 per cent level					

Table 4.27 presents the result on impact of training on setting future goals. The dependent variable is whether respondents can set or plan for their future or not. The result indicates that training has significant impact on setting future goals. The probability of deciding future goals is 1.88 times higher in case of respondents who have undergone training than the respondents without training.

# **Chapter 5**

# **Concluding Remarks and Recommendations**

This chapter is divided into three sections: first the concluding remarks. The second section deals with the limitations of the study and the third section provides some recommendations based on the results and observations in the field.

## **5.1 Concluding Remarks:**

Overall, there has been a positive impact of the life skills training on both younger and older adolescent girls as evidenced in the findings prior to and after P.A.C.E training. However, in all indicators the prior knowledge of older adolescent girls was fairly high when compared to that of younger adolescent girls. Universally, the importance of life skills training was highlighted. Almost all respondents emphasised that they had begun to put into practice that which they had learned from the training.

<u>Knowledge of self</u>: Both younger and older adolescents expressed an enhanced sense of selfworth after training. They were able to confidently present themselves and articulated a far greater aspiration for the future.

**Knowledge on gender:** Younger and older adolescents could articulate the difference between 'sex' and 'gender' far more clearly. It was surprising to note that 53.6 percent of older adolescents reported before training that it was alright for boys to express weakness, but this declined to 29.8 per cent after training. Again contradictory results were seen in the percentage of responses of older adolescent girls, before and after training, regarding man as the decision maker in the family, it increased from 17.9 percent to 27.7 per cent. When questioned about both the man and woman being joint decision makers, this declined from 73.7 per cent to 64 per cent. Likewise, for father as the favoured decision maker the percentage increased from 25.1 to 48.2 and for mother it declined from 5.6 to 5.3 per cent. These results could be attributed to stereotypes being promoted through the training or alternately a misinterpretation of the question.

It was observed in the field that younger adolescents were more vague in articulating society's perception of 'good' and 'bad' girls. Older adolescents on the other hand had more accurate knowledge about 'sex' and 'gender'. Younger adolescents tended to perceive the male members to be the decision makers in the family; whereas, older adolescents could highlight the impacts of power on their day to day lives and could clearly report how gender affected

their access to resources. Questions of patriarchy in terms of decision making was reported and there were some contrary results in this which are discussed in the limitations of the study.

**Communication skills:** Both younger and older adolescent girls were more confident about communicating with others, after training. Needless to say, due to the heightened self worth and self efficacy, older adolescent girls reported improved social interaction outside home and community. In the case of older adolescent girls, 46.4 per cent reported that they felt restricted in expressing opinion as a female before training which remained almost the same, i.e. 46.5 after training. The training should focus on issues such as this.

<u>Knowledge on menstrual hygiene</u>: Needless to say, there was an increased understanding of puberty, the onset of menstruation and bodily changes as well as changes in emotions that occur during adolescence. Older adolescents had a more positive body image, increased self-esteem and confidence about their physical appearance. Prior to training, this knowledge was far lesser, especially in the case of younger adolescents. There were however, some contrary results for both younger and older adolescents related to menstrual hygiene.

Knowledge on sexual abuse and gender based violence: Both younger and older adolescents were able to identify different acts of violence in their surroundings and daily lives. They also reported that they had a better understanding of different forms of violence and their causal factors. However, some contradictory results are highlighted here. It was observed, that while the percentage of respondents were contradictory along some indicators before training such as avoiding a person because of a feeling of discomfort (declining from 30.2 per cent to 10.2 per cent) or adjusting with the situation (increasing from 4.7 per cent to 10.2 per cent), the number of respondents who discussed the matter with their mothers or any other family member substantially increased from before training to after training (from 51 per cent to 73.1 per cent). Before training, 70.8 per cent of girls expressed that they had rights over their own bodies, which increased to 96.4 per cent after training. Coming to what was not a good touch and what was an act with a bad intention, 69.8 per cent reported that hugging was not a good touch which reduced to 65.3 per cent after training. Similarly, before training 67.7 per cent girls reported that confusing touch was not a good touch which increased to 73.1 per cent post training. Though 79.2 per cent of respondents had a sense that touching private parts is not a good touch that increased to 97.0 per cent after training. Coming to an act with a bad intention, after training 90.4 per cent reported that sending/ sharing pornographic picture was a bad thing which was 1.0 per cent before training. These findings signify the importance of life skills training for adolescent girls.

*Level of work preparedness:* Older adolescent girls could articulate a vision for further education. When questioned regarding what they would do if they had to make a choice between purchasing something they had always wanted and spending money on paying for exam fees, over 95% agreed that they wanted to spend it on furthering their education. Older adolescent girls were far more confident regarding accessing different career opportunities and gainful employment.

The positive impact of training for older adolescent girls was that they were able to articulate a minimum of 21 different resources available to them beginning with a greater focus on education (naming courses like Nursing, BEd, MBBS and Institutions like the Odissi Research Center), to understanding what talent they possess (such as drawing, dancing, acting, etc), to reaching out to other family members, to participating in co-curricular activities such as NCC, to name a few. They were further able to understand and articulate the importance of punctuality and other behaviours important at the workplace.

Further, the regression analysis indicates a positive impact of training for both younger and older adolescents. The impact of training on self identity showed that having undergone training gave them that much more confidence to introduce themselves and feel good about it. In relation to the ability to differentiate between sex and gender, the result indicated that if a participant received training, then the chance of differentiating between sex and gender increased several fold than the participants who did not receive training. In relation to communication, the results indicate that if a participant received training with others increased by 1.85 times than the participants who did not receive training.

*Findings based on objectives:* Keeping in line with the P.A.C.E. Theory of Change, following the training, participants have an understanding and acquire knowledge in six areas: self awareness - emotional and physical; capacity to express views clearly and confidently; drivers and impediments of personal growth and negotiating through it; gender and safety and security; financial management, financial support structure, execution excellence and entrepreneurial skills; basic human rights – health and WASH. This has led to the following two outcomes: improved self esteem and resilience; and, improved skills and confidence to seek and claim own rights, both individually and collectively. Needless to say these are related. These two

have further contributed to three broad outcomes: Personal Change – Improved aspirations and capabilities, Interpersonal (Relational) Change – increased balance in gender power relations and their ability to negotiate through it, and Environmental Change – Improved ability to manage their external environment to make her own choices. The overall impact of the theory of change, that is, advancing gender equality among women and girls to lead a better quality of life by realizing their full potential as leaders, influencers, entrepreneurs and professionals which is meant to happen at the level of individual, household, community and workplace will only be clearly realised after a period of time (GAP Inc, 2018).

The findings of this study based on the objectives point towards the outcomes as outlined in the P.A.C.E. theory of change. A summary of the same is provided below:

1. Whether adolescent girls possess the skills to achieve their goals and to make informed decisions/ choices for improved health, wellbeing and life opportunities.

Both younger and older adolescent girls were limited in their understanding of the difference between sex and gender, capacity to express their views clearly and confidently, in taking informed decisions for improved health (especially menstrual hygiene and reproductive health), well being and life opportunities prior to training. While there were areas of concern, which in some instances could be attributed to poor training, poor articulation during the baseline/ end line or general misinterpretation at various points, predominantly the results have been favourable, in that adolescent girls have benefited significantly from the life skills training. The girls were able to articulate about different resources and opportunities available to them for their future.

2. Whether adolescent girls can communicate well, have mature relationships and have a greater sense of self.

Post training, both younger and older adolescents were far more confident and were able to communicate with greater ease and comfort than before. They had a greater sense of self, evidenced by their ability to introduce themselves to others, especially highlighting their personal qualities. In the case of younger adolescents, if a respondent received training then the probability of feeling good while introducing themselves increased 96 percentage points than the respondent who had not received training. In the case of older adolescent girls, it was observed that if a person undertook training then the probability of feeling themselves increased 2.29 times than the person who had not received training. Their communication with various

family members was easier and better though the communication with mother and other female members remained far better than with male family members. Further, in the case of younger adolescent girls, if a participant had undergone training, then the probability of differentiating between verbal and non-verbal communication increased 1.70 times. In the case of older adolescent girls, a participant who had undergone training had an increased probability of freely communicating (1.85 times) then those not undergoing training.

3. Whether adolescent girls possess the skills to be able to prevent or protect themselves from sexual abuse or other kinds of gender based violence.

Following the training, younger adolescents were more conversant with issues of sexual abuse and other kinds of gender based violence. The knowledge of older adolescent girls with issues of sexual abuse and other kinds of gender based violence prior to training was already quite significant, but here too there was an increase in the knowledge post training.

4. <u>To assess the level of work preparedness of adolescent girls</u>. Older adolescent girls, following training, were able to articulate their aspirations better, were more aware of the resources and opportunities available to them to enter the labour market/ work force. They were clearly aware what they needed to be successful and possess a skill set in their endeavour to find a career.

## 5.2 Limitations of the study

1. <u>Contradictory Responses</u>: While there were significant differences on various indicators before and after training, there were also several limitations. For example, the finding related to decision making in the family were found to be quite contrary. Prior to training, 23.4 per cent of younger adolescent girls emphasised that their father should be the decision makers, and quite in contrast 31.4 per cent respondents made the same assertion after training. Further, prior to training, 6.8 per cent respondents reported that their mother should be the decision maker which declined to 3.6 per cent after training. This could mean one of several things, (i) the meaning of decision making was not adequately explained to participants during training (ii) the trainers themselves had little clarity and tended to emphasise traditional mindsets; this could also be attributed to poor ToT or (iii) that gendered roles tend to endure over a period of time.

In relation to bad touch, after training 90.4 per cent reported that sending/ sharing pornographic picture was a bad thing which was 1.0 per cent before training. What appears a bit surprising was the latter finding. To us, it appeared that probably in some instances the research assistants were not able to provide better examples for respondents to have arrived at this conclusion.

A matter of great concern was the finding that 49.7 percent of respondents reported that they did not clean their external genitals even once a day. While on the other categories, that is once a day, twice a day, more than twice a day, the responses increased, the last response can only be an error in understanding.

Another finding that requires explanation was that before training 43.0 per cent of older adolescents mentioned boys were preferred over girls and the number reduced to 30.7 per cent after training. While this finding appears positive, but the question was about society's preference and not their own. This requires a much more critical engagement to explore the complexities of choices people make.

2. <u>Standardized Questionnaires</u>: This impact assessment could have been supplemented with the use of some standardized instruments, especially related to self-efficacy.

#### **5.3 Recommendations**

1. GAP may consider providing a framework for the IA and Project Implementation Team to work in tandem to gain deeper insight in the delivery of the program. The framework should be contextualised and be project specific involving all stakeholders.

2. The training schedules should have been structured well. It was the observation of the IA team that the training scheduled was being constantly changed (for a variety of reasons sometimes beyond the control of the training providers) which made it extremely difficult for the team to plan the data collection.

3. A larger cohort of trainers should be retained so that replacement can be immediately effected should anyone leave. We were often informed that trainers had left. This was one of the reasons for the changing training schedule.

4. The IA team strongly believes that the training of trainers could be strengthened. On several occasions during the data collection, the adolescent girls did not respond. This is further borne out by the contradictory responses and reinforcement of traditional views. In some instances,

it appeared that ideas had been imposed on the adolescents rather than critical/ analytical approaches being used as a training methodology, especially for older adolescents.

5. The training schedule should be formally delivered. Only then, adolescents can clearly articulate the lessons learned. Instead, the number of hours to be delivered was sought to be met. Adolescent respondents often reported that no activities were conducted during the training. Some of them had to reflect hard to even report whether they had been trained. This could be for various reasons, latency, that is the time elapsed between the training and the end line, poor quality of training, interference with other learning, misunderstanding of the question during baseline/ end line, to name a few.

6. It might be useful to do an assessment of the trainers before the training is rolled out. In some instances, the outcomes of the training should have been far better than was achieved. Clearly the outcome of training with regard to the knowledge on menstruation while improving, (from 49% to 58%), is problematic in itself. Likewise, the shift post training of the percentage of young adolescent girls who washed their external genitals was from 58.7 per cent to 67.5 per cent. These aspects of the training should have been emphasised since there are so many misconceptions and blind beliefs surrounding menstrual hygiene.

7. Overall, we consider that adolescents would benefit if women are also trained. It has to be complementary, otherwise some efforts may be in vain. No matter how much young girls are trained, the traditional views of mothers could be counter productive to any gains due to the training.

## REFERENCES

<u>Albertyn</u> RM, <u>Kapp</u> CA, <u>& Groenewald</u> CJ, 2001, Patterns of Empowerment in individuals through the course of a life skills programme in South Africa, Studies in the Education of Adults, Vol 33, No 2, pp 180-200.

Caird S, 1992, Problems with the Identification of Enterprise Competencies and the Implications for Assessment and Development, Management and Education Development Vol. 23, No.1, 6-17.

Collins K, Gould D, Lauer L, & Chung Y, 2009, Coaching life skills through football: Philosophical beliefs of outstanding high school football coaches, International Journal of Coaching Science, Vol.3, No.1, pp 29-54.

GAP Inc., 2018, Global Sustainability Report, https://www.gapincsustainability.com/sites/default/files/Gap%20Inc%20Report%202018.pdf

Gould D, & Carson S, 2008, Life skills development through sport: Current status and future directions, International Review of Sport and Exercise Psychology, Vol 1, pp. 58-78.

Ibarraran P, Ripani L, Taboada B, Villa JM & Garcia B, 2014, Life skills, employability and training for disadvantaged youth: Evidence from a randomized evaluation design, IZA Journal of Labour and Development, Vol 3, No 10, pp 1-24

ILO, https://edmsp1.ilo.org/KSP/en/Issues/Genderequality/index.htm, accessed on 23 May 2020.

GAP Inc, 2018, P.A.C.E. Theory of Change, Ver 1.4

Rothman, J. Erlich, J.L. & Tropman, J.E., 1995. Strategies of community intervention. (5<sup>th</sup> edition) Peacock. Itasca, Illinois.

Rubin, H.J. & Rubin, I.S. 1992., Community Organizing and Development. Macmillan. New York.

Trottier C, & Robitaille S, 2014, Fostering life skills development in high school and community sport: A comparative analysis of the coach's role, The Sport Psychologist, Vol. 28, pp 10-21.

Tsey K, Travers H, Gibson T, Whiteside M, Cadet-James Y, Haswell-Elkins M, McCalman J & Wilson A, 2005, The role of empowerment through life skills development in building comprehensive primary health care systems in Indigenous Australia, Australian Journal of Primary Health, Vol 11, No 2, pp 16-21.

UNICEF, https://www.unicef.org/lifeskills/index\_7308.html, accessed on 23 May 2020.

## ANNEXURES

## **Annexure 1: Sample Questionnaire**

### **Baseline Questionnaire Adolescent Life Skill Training (Older Adolescents)**

**Research Team:** Dr. Supriya Pattanayak, Dr. Smita Mishra Panda, Prof. Chandrabhanu Pattanayak, Dr. Bibhunandini Das, Prof Payal Nayak from Centurion University of Technology and Management, Bhubaneswar, comprise the core research team

### **INFORMED CONSENT**

# (Please read consent agreement loudly to the interviewee and take consent before start of the interview)

We seek your consent for interviewing you in connection of research study entitled Impact Evaluation of P.A.C.E. Training in Odisha. We will ask few questions which will take between 15-20 minutes of your valuable time. Your participation in this study is completely voluntary. It is important to us that you answer as many questions as possible. The results of this study may be published but your identity will remain confidential.

#### **Statement of Consent**

The purpose and nature of this research have been sufficiently explained and I agree to participate in this study.

Name Date Signature

# **Interviewer Information** Name of Interviewer Date **1. General Information** Respondent's Name: Age (in year): Marital Status: Unmarried Married Others Caste: Religion 2. Education Status Have you been to school: (Y/N) Are you continuing your education: (Y/N) Name of your school/college: Which class/Year you are studying in: If No: how far have you studied: ✤ Up to Primary (Class V) ✤ Up to Upper Primary (Class VII) ✤ Up to Secondary (Class X) ✤ Up to Higher Secondary (Class XII) Reason for never going to school/ leaving school (Drop out): Parents never studied Inability to afford education No family/Parent's Support ✤ No interest in education No future aspiration regarding employment Burden of household chores/ taking care of siblings ✤ Health issues/ illness School/College at a long distance ✤ Safety issues Early Marriage Due to puberty ✤ Any other, please specify -----3. Identity and Awareness: a. Who do you say you are?\_\_\_\_\_ Parameters covered: Age • Education ٠ Class • Caste •

- Religion
- Talent

- Physical features
- Relationship with others
- b. What you say while introducing
  - I am daughter/sister of Mr.-----
  - My name is ----- and I am a girl of --- years
  - I read in class--- of --- school and stay in ---- community
  - I am a good student/athlete/writer/singer/dancer/.....
- c. Do you feel good introducing yourself? Y/N, Why?
- d. Do you hesitate sometimes while introducing yourself? Y/N Interviewer's observations:
  - Audible and firm voice while introduction
  - Straight and confident posture
  - Makes eye contact
- e. List some of your strengths
- f. Can you identify others who are like you? Y/N, If Yes, what are the qualities that they share with you?
- g. Social Constructs of Gender
  - Can you differentiate between 'Sex' and 'gender'? Y/N
  - Other than physiology, what are differences between girls and boys.
  - How does society perceive a 'good' or a 'bad' girl?
  - Who according to you should be decision makers in the house?
    - i. Men
    - ii. Women
    - iii. Both
  - Are all decisions in the family equal for all members? Y/N
  - Who is more favoured in the family decision making and how?
  - Are boys preferred over girls and why?
  - What are the expected roles from boys
    - i. Boys are powerful hence they are the protectors
    - ii. Boys are more intelligent and hence employed and provide for the family
    - iii. Boys are emotionally stronger and hence can make better decisions
    - iv. Boys should not cry or express weakness
  - What are the expected roles from girls
    - i. Girls are more patient, tolerant therefore they are carers
    - ii. Girls are better at cooking, cleaning, sewing, etc. therefore they are homemakers
    - iii. Girls are more spiritual hence guardians of culture and religion
    - iv. Girls are expected to look pretty
  - What is meant by the term 'transgender'?
  - Given a chance, would you like to have a transgender person as a friend?

# h. About Power, Patriarchy & gender discrimination

- a. Who do you think is more powerful in your family? List five ways?
- b. Who is least powerful in your family? List five ways?
- c. Is this power imbalance useful? Y/N, For whom? How?

If Yes, How			If No, How
Male	Female	Male	Female

- d. Can power shift from one person to the other in any circumstance? Y/N
- e. Can you identify the sources of power? Y/N. If Y, What are they?
- f. Do you see any similarity of your family's power relation with other families?
- g. Would you like to have a third child if you have had two daughters?
- h. Would you allow your daughter or sister to attend a party late in the night?
- 4. Bodily Integrity
- i. What according to you a 'Perfect body' is?
  - A good looking body meeting all beauty standards
  - A body without any disability
  - A body without any health issues
  - Don't know
  - All body types
- j. Where do you think the idea of 'Perfect body' comes from?
  - Parents/family members
  - Peers/Friends
  - Role Models/Actress
  - Media
  - Others, please specify ------
- k. What you feel about your body?
  - I am too thin/fat
  - I am not fair/good looking
  - I am tall/short
  - I am disabled
  - I feel good about my body
  - Can't say
  - 1. Can you name all your body parts? Y/N

# m. Menstrual Practice & related health issues

Do you know about menstruation? Y/N

If yes what is it?

- It is a physiological/natural process
- ✤ It is a sin/curse of God

- ✤ It is a bodily disorder
- It is the process of removing dirty blood from body
- ✤ I don't know clearly

Do you know the bodily and emotional changes during menstruation? (Y/N) If yes what are they?

Do you think cultural practices make menstruation a bad thing (Y/N) If yes which practices affect you most?

- Isolation
- ✤ Restrictions to kitchen, temple, public places
- ✤ Not touching male members of the family
- ✤ Not allowed to participate in auspicious occasion
- Any other (specify)

What type of material do you use to manage menstruation (You can mark more than one option)

- Disposable sanitary pads
- Disposable Cloths
- Reusable cloths
- ✤ If others, please specify ------

If you use cloth, how often do you wash the cloth?

- ✤ Once a day
- Every time I change that cloth

Where do you put your cloths/underwear to dry?

- Open sunlight
- Under the dress
- Hidden dark place
- ✤ If others, please specify

How often you wash your external genital during menstruation?

- Once a day
- ✤ Twice a day
- More than twice a day
- ✤ I don't wash daily

Will you go out for a social occasion such as a marriage if you are menstruating?

## n. Emotion handling/Stress Management

Do you think emotions/feelings are natural to all human beings (Y/N)? What do you do when faced with different emotions?

Emotions	Response to them
Happiness	
Sadness	
Fear	

Anger	
Surprise	
Laugh	

# Module 2

# o. Self-efficacy

Can you freely communicate with your family members? (Y/N)

What is the level of comfort in communicating with: (On a scale of 1 to 5, where 1 is minimum and 5 is maximum)

Family members	Scale (1 to 5)
Grandfather	
Grandmother	
Father	
Mother	
Elder Brother	
Younger Brother	
Elder Sister	
Younger Sister	
Any other family members (Specify)	

Being a female, do you feel restricted in expressing your opinion in different situations? (Y/N)

Issues	Family members with whom you will discuss
Financial	
Social	
Education	
Recreational activities	

# p. Healthy Relationships

Who in the family takes decisions regarding the following?

Family members	Save/Spend/Make big purchases	Study further	What kinds of clothes to wear	Going out of the house to work	Going out to meet friends
Myself					
Grandfather					
Grandmother					
Father					
Mother					
Elder Brother					
Younger Brother					
Elder Sister					

Younger Sister			
Any other family			
members			
(Specify)			

## q. Incidence of gender based violence

Do you think women and girls are prone to violence by virtue of their gender? Y/N Can you list the different forms of violence against women and their causes?

Forms of	Causes
Violence	
Physical	
Emotional	
Financial	
Sexual	

What can be done to address issues of violence against women?

If a friend is a victim of gender based violence, would you advice her to go to the police?

If a friend is a victim of gender based violence, would you go with her to the police?

## Module 3: Resourcefulness

Do you think girls/ women who stay at home do no work?

Do you think paid work for women is important?

Do you think you can do the same kind of work as boys?

What skills would you require to increase your prospects for paid work?

Can you list out the resources required for your future career?

If not where do you think you can access this information?

Do you think being a girl limits the kinds of work you can take up?

Do you think you can plan/ set goals for your future?

Do you think you can work as a driver, a vehicle maintenance person or a pilot because you like these jobs?

If you had to choose between studying and doing household chores, would you be able to gain support of any family member?

What would you do with the money you earned?

Do you believe in saving/ investing and how would you save/ invest money you earned?

## Module 4: Employability

Do you know how to go about looking for a job?

Do you know the requirements/ skills for securing a job?

Do you feel being well dressed and on time for a meeting is a good thing?

If you earned some money and have to pay for an examination that you have to take or buy a dress that you have wanted for a long time, what would you spend it on?