

## **CHAPTER-V**

### **Major Findings and Discussion**

#### **5.0 Introduction**

The current chapter discusses the overall study's concluding aspects. It looks at the impact of the intervention program that is the Academic Resilience Module on the Secondary level students in the flood affected areas of Majuli district, Assam. The major findings and discussion of the study are listed under the respective objectives followed by an overall discussion of the findings along with the study's educational implications. The researcher has also stated numerous valuable directions in the form of limitations of the research and recommendation for future investigation for the benefit of the researchers, teachers and stakeholders involved in the area of Positive psychology and education.

**5.1 Findings in relation to Objective 2-** To study the overall Effectiveness of Intervention Program for fostering Academic Resilience among Secondary Level Students in Flood Affected Areas of Majuli district in Assam.

1. There is no significant difference between the mean Academic Resilience score of Students of Control and Experimental group at the pre-test level that is before the Intervention.
2. There is a significant difference between the mean Academic Resilience score of Students of Control and Experimental group at the post-test level that is after the Intervention.
3. There is a significant difference in the adjusted mean scores of Academic Resilience of Students of Control and Experimental group at the post-test level that is after the Intervention by considering their pre-test as covariate.
4. There is a significant difference between the mean Academic Resilience score of Students of Control and Experimental group at the Delayed post-test level.
5. There is no significant difference in the mean Academic Resilience score of Students of Control group at the post-test and delayed post-test level.
6. There is a significant difference in the mean Academic Resilience score of Students of Experimental group at the post-test and delayed post-test level.

## 5.2 Discussion

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental group. But at the post-test level that is after the treatment significant difference was found in the mean Academic Resilience score of Control and Experimental group. And the mean score of the experimental group was found to be more than that of the control group which depicts the effectiveness of the treatment that is the Intervention program on the secondary level students of the flood affected areas of Majuli district in Assam. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group. And the mean score of the experimental group was found to be more than that of the control group which depicts the effectiveness of the treatment on the secondary level students of the flood affected areas of Majuli district in Assam. Figure 4.1 clearly depicts the effectiveness of the treatment that is the Intervention program (Academic Resilience module) on the experimental group.

With reference to the Control group no significant difference was found in the mean Academic Resilience score at the post-test and delayed post-test level. But a significant difference was found in the mean Academic Resilience score of the experimental group at the post-test and delayed post-test level. The mean score at the delayed post-test level was found to be more than that at the post-test level which defines the improvement of the students of the experimental group from the intervention program. From figure 4.17 the improvement of the Academic Resilience mean score of the secondary level students in the flood affected areas from pre-test to the delayed post-test is clearly depicted. This clearly shows the effectiveness of the intervention program in fostering Academic Resilience among flood affected students of Majuli district, Assam.

The result corroborates with the findings of- Kottalil and Gafoor (2012) found mean post-test scores of achievement in the experimental group provided with the child focused intervention for fostering academic resilience was higher than that of the control group. Singh and Vidhu (2013) found that reattribution training is effective in enhancing academic resilience among adolescents and adolescents. Arif and Mirza (2017) found that intervention greatly improved secondary level students' academic resilience those at

risk of failure. Raj and Vijayalaxmi (2017) found the intervention program very effective in improving Academic Resilience skills among adolescents. Kaur and Kumar (2017) found improvement in the resilience and academic performance of the experimental group from post-test to follow-up and pre-test to follow-up. Kaur and Kaur (2017) found majority of the adolescents to be highly resilient. Zarina and Julius (2017) found significant improvement in the Resilience and academic performance from post-test to follow-up and pre-test to follow-up in the experimental group. Mirza and Arif (2018) found the intervention significantly effective in the improvement of academic resilience of students from public secondary school. Kaur (2018) found a positive impact from the resilience building intervention program among elementary school students. Karpagavalli (2019) found a significant improvement between pre-test and post-test results on resilience among experimental group as a result of the intervention program. Mailanchi and Kumar (2019) found the effectiveness of positive psychological intervention on the adolescents of the experimental group and also stated that after the three month follow up scores of resilience and well-being were found to be more in comparison to the pre-test scores. Green, Ferrante, Boaz, Kutash and Wheeldon-Reece (2021) concluded the intervention program- Speaking to the potential, Ability and Resilience inside every kid (SPARK) Pre-teen mentoring curriculum to be effective during early adolescence. Robinson et al. (2021) reported their Resilience Enhancement Programme for Students (REP-S) to be effective. Wangchuk (2021) found the resilience development program to have a positive impact on student's personality traits and academic achievement. He also suggested that educational institutions must take resilience-building programmes into consideration to assist young people in making wise life decisions. Leventhal, Cooper, DeMaria, Priyam, Shanker, Andrew and Leventhal (2022) stated Youth First intervention program on resilience as effective in enhancing the psychosocial skills of adolescents. Liu, Bruner and Ammigan (2022) found Success Training for Academic Resiliency intervention program effective in the Academic achievement of undergraduate students. Williams, Berthelsen and Laurens (2022) stated that there may be greater opportunity for a child to follow a resilient pathway if early classroom experiences concentrate on specific cognitive and non-cognitive skill development according to the needs of child.

**5.3 Findings in relation to Objective 3:** To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to Socio-emotional skill.

1. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Socio-emotional skill at the pre-test level that is before the intervention.
2. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Socio-emotional skill at the post-test level that is after the Intervention.
3. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Socio-emotional skill at the delayed post-test level.

#### **5.4 Discussion**

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental group with reference to the Socio-emotional skill. But at the post-test level that is after the treatment significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Socio-emotional skill. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Socio-emotional skill. Figure 4.3 and 4.9 clearly depicts the improvement in the Academic Resilience mean score of the experimental group with reference to the Socio-emotional skill dimension.

The result corroborates with the outcomes of the following research investigation described in terms of protective factors. Wills and Hofmeyr (2018) stated that socio-emotional skills emerge as strong correlates of Academic Resilience. Various studies related to resilience have forwarded different factors that enhance resilience which comes under the Socio-emotional skill. Studies in connection with the protective factors under the Socio-emotional skills are as follows. McMillan and Reed (1993, 1994) stated the factors that enable student's resilience at the time of risks are interpersonal relationship, responsible etc. Wang, Haertal and Walberg (1993) stated student's involvement and belonging are some of the important factors of Academic Resilience. Bergeman, Bisconti and Wallaca (2006) suggested positive emotion as an important

feature of psychological resilience. Cavazos et al (2010) stated interpersonal relationships as the resiliency factor. Cicchetti (2010) stated emotion regulation as one of the predictors of resilience. LeMoine and Labelle (2014) stated that at individual level some of the factors for effective intervention in building resilience among at risk youth are emotional or personal competence. Norris (2014) found that academically successful and resilient students possess a positive behaviour and positive relationship. Sharma (2014) stated emotion regulation as one of the predictor of resilience. Sharma and J (2015) found adjustment as significant predictor of resilience in adolescents. Bhat (2019) found that emotional competence and psychological resilience have linear relationship with mental health. Kavathekar and S (2019) found communication skills as one of the characteristics of educationally resilient students. Mailanchi and Kumar (2019) found emotional competence as predictor of wellbeing among adolescents without dyslexia. Devi and S (2020) stated managing emotions as one of the factors of resilience. Jalala, Latifoglu and Uzunboylu (2020) reported that supportive school environment, resilience topics in the curriculum, resilience workshop, etc. acts as strength factors in building resilience among school children. Green, Ferrante, Boaz, Kutash and Wheeldon- Robinson et al. (2021) reported that Resilience Enhancement Programme for Students (REP-S) is effective for handling interpersonal problems. Reece (2021) concluded that the intervention program was successful in developing better communication among the early adolescents. Liu, Bruner and Ammigan (2022) stated Socio-emotional engagement as one of the important variable of Success training for Academic Resiliency intervention program. Loannidou and Michael (2022) reported that positive emotions place an important role in enhancing resilience.

**5.5 Findings in relation to Objective 4:** To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Motivation level.

1. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Motivation level at the pre-test level that is before the intervention.
2. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Motivation level at the post-test level that is after the intervention.

3. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Motivation level at the delayed post-test level.

## **5.6 Discussion**

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental group with reference to the Motivation level. But at the post-test level that is after the treatment significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Motivation level. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Motivation level. Figure 4.3 and 4.9 clearly depicts the improvement in the mean Academic Resilience score of the experimental group with reference to the Motivation dimension.

The result corroborates with the outcomes of the following research investigation described in terms of protective factors. Mostafa and Lim (2020) found a positive significant relationship between motivation and resilience. Various studies related to resilience have forwarded different factors that enhance resilience which comes under the dimension of Motivation. Studies in connection with the protective factors under the dimension of Motivation are as follows- McMillan and Reed (1993, 1994) stated the factors that enable student's resilience at the time of risks are high intrinsic motivation, realistic goals and optimism. Wang, Haertal and Walberg (1993) stated student's sense of purpose is one of the important factors of Academic Resilience. Bergeman, Bisconti and Wallaca (2006) suggested positive emotion as an important feature of psychological resilience. Martin and Marsh (2006) stated persistence as important predictor of Academic Resilience. Fallon (2010) stated that academic optimism is a significant predictor of academic resilience. Cavazos et al (2010) stated goal setting and intrinsic motivation as the resiliency factors. Mampane (2014) found out committed and achievement oriented as some of the factors supporting resilience of the middle adolescent learners from the township schools. Norris (2014) found that academically successful and resilient students possess a positive attitude, positive behaviour, have clear goals, aspirations and motivation. Paul, Subalukshmi and Mala (2014) emphasized on building academic motivation to enhance resilience. Sharma and J (2015) found

academic achievement as significant predictor of resilience in adolescents. Kutlu, Yavuj and Bulut (2016) stated intrinsic motivation as one of the internal protective factors of academic resilience. OKE et al (2016) found that students are likely to be more confident with their academic work and more interested in academic activities if they feel motivated, satisfied with and overcome the most complex academic and school situations. Arif and Mirza (2017) included optimism in their module to foster academic resilience and found it significantly effective. Kaur and Kaur (2017) found optimism and self-esteem is significantly and positively related with resilience of adolescents. And a favourable association was found between resilience and life satisfaction. Bala (2018) stated optimism as one of the characteristics of students who possess Academic Resilience. Mirza and Arif (2018) stated optimism and sense of purpose in life as protective factors of Academic Resilience. Kavathekar and S (2019) found achievement orientation, high level motivation, commitment, goal identification, hard work, etc. as some of the characteristics of educationally resilient students. Devi and S (2020) stated positive views, as one of the factors of resilience. Jalala, Latifoglu and Uzunboylu (2020) reported that positive thinking, care, resilience topics in the curriculum, resilience workshop, etc. acts as strength factors in building resilience among school children.

**5.7 Findings in relation to Objective 5:** To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Cognitive level.

1. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Cognitive level at the pre-test level that is before the intervention.
2. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Cognitive level at the post-test that is after the intervention.
3. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Cognitive level at the delayed post-test level.

## **5.8 Discussion**

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental

group with reference to the Cognitive level. At the post-test level that is after the treatment no significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Cognitive level. Even though statistically no significant difference was found between the mean Academic Resilience score of Control and Experimental group after the intervention with reference to their Cognitive level but the mean score of the experimental group was found to be more than that of the mean score of the control group after the intervention. Therefore there is certainly an increase in the Cognitive level among the experimental group after the intervention. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Cognitive level. Figure 4.4 and 4.10 clearly depicts the improvement in the mean Academic Resilience score of the experimental group with reference to the Cognitive dimension.

The result corroborates with the outcomes of the following research investigation described in terms of protective factors. Various studies related to resilience have forwarded different factors that enhance resilience which comes under the Cognitive dimension. Studies in connection with the protective factors under the dimension of Cognitive are as follows- McMillan and Reed (1993, 1994) stated the factor that enables student's resilience at the time of risks is positive choices. Cavazos et al (2010) stated goal setting as the resiliency factor. Kamali and Fahim (2011) found a significant relationship between critical thinking and resilience. Benitez and Canales (2013) reported critical thinking as a protective factor of resilience. Norris (2014) found that academically successful and resilient students have clear goals, is a problem solver and organized, etc. Sharma and J (2015) found Social problem solving as significant predictors of resilience in adolescents. Arif and Mirza (2017) included creativity in their module to foster academic resilience and found it significantly effective. In Chuen(2018) study the findings showed that among early adolescents, decision-making significantly influenced the relationship between resilience and risky behaviours; decision-making skills should be taught to adolescents at a young age because making decisions has a significant impact on whether or not they engage in risky behaviours in daily life. Mirza and Arif (2018) stated creativity as one protective factor of Academic Resilience. Kavathekar and S (2019) found self- goal identification as one of the characteristics of educationally resilient students. Green, Ferrante, Boaz, Kutash and Wheeldon-Reece



(2021) concluded that the intervention program was successful in developing decision-making and problem-solving abilities among the early adolescents.

**5.9 Findings in relation to Objective 6:** To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Meta-cognitive level.

1. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Meta-cognitive level at the pre-test level that is before the intervention.
2. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Meta-cognitive level at the post-test level that is after the intervention.
3. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Meta-cognitive level at the delayed post-test level.

### **5.10 Discussion**

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental group with reference to the Meta-cognitive level. But at the post-test level that is after the treatment significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Meta-cognitive level. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Meta-cognitive level. Figure 4.5 and 4.11 clearly depicts the improvement in the mean Academic Resilience score of the experimental group with reference to the Meta-cognitive dimension.

The result corroborates with the outcomes of the following research investigation described in terms of protective factors. Devi and S (2020) stated that meta-cognition has significant influence on resilience and academic achievement of higher secondary scheduled caste students. Kaur and Kumar (2017) found significant relationship between academic resilience and meta-cognition. Various studies related to resilience have forwarded different factors that enhance resilience which comes under the Meta-cognitive dimension. Studies in connection with the protective factors under the

dimension of Meta-cognition are as follows- McMillan and Reed (1993, 1994) stated the factors that enable student's resilience at the time of risks are internal locus of control, taking personal responsibility for their success and failures, positive choices, etc. Bergeman, Bisconti and Wallaca (2006) suggested positive emotion as an important feature of psychological resilience. McTigue, Washburn and Liew (2009) stated self-regulation as one of the factors that enhance resilience. Cavazos et al (2010) stated internal locus of control as the resiliency factors. Mampane (2014) found out internal locus of control as one of the factors supporting resilience of the middle adolescent learners from the township schools. Norris (2014) found that academically successful and resilient students possess a positive attitude and positive behaviour. Sharma (2014) stated emotion regulation as one of the predictor of resilience. Sharma Anagnostaki et al (2016) found that students having internal locus of control have higher academic achievement inspite of risk. Holbrook (2016) stated some of the resilient characteristics of students in rural Appalachia out of which three comes under the above five dimensions- internal locus of control, self-efficacy and operating highly self-regulatory behaviours. Arif and Mirza (2017) included internal locus of control in their module to foster academic resilience and found it significantly effective. Bala (2018) stated internal locus of control as one of the characteristics of students who possess Academic Resilience. Mirza and Arif (2018) reported internal locus of control as a protective factor of Academic Resilience. Annalakshmi (2019) stated self-regulation as the single predictor of resilience. Devi and S (2020) stated positive views, internal locus of control as some of the factors of resilience. Hart and Coombe (2020) stated Positive coping strategies are the protective factors that assist pupils to be academically resilient. Jalala, Latifoglu and Uzunboylu (2020) reported that positive thinking, care, resilience topics in the curriculum, resilience workshop, etc. acts as strength factors in building resilience among school children. Darabi, Hosseinzadeh, Kahkesh and Nayodi (2023) found that self-regulation training helped senior high school male students increase their academic resilience. Sullivan, Carter, Houle, Ding, Hautmann and Yang (2023) stated that resilience training can boost the ability to use adaptive coping mechanisms to handle stressors connected to studies.

The researcher have observed that with reference to the cognitive level no significant difference was found between the groups at the post test level but the mean score of experimental group was found to be more in comparison to the pre-test level and also in relation to the control group. Again with reference to the meta-cognitive level significant difference was found between the groups at the post-test level. These findings could be due to the protective factors that are being incorporated under both the dimensions. Zara-Ee (2007) stated that Cognitive strategies are different from meta-cognitive strategies. For example, under Cognitive dimension the protective factors that were included are- Decision making, Creativity, Problem solving, Critical thinking; on which it is difficult for an individual to develop within a specific time frame which requires a rigorous practice. But under Meta-cognitive dimension, the protective factors that were included are- Self regulation, Reflective thinking, Positive coping strategies and Internal Locus of Control; out of which an individual can work on improving their Self- regulation, Positive coping strategies and Internal Locus of Control within a specific time frame due to which this kind of differences may arise. Gorde (2021) stated that better academic outcomes are produced by enhanced metacognitive awareness and academic resilience;metacognitive awareness and academic resilience could be employed as techniques in an intervention model for students with low academic achievement levels in order to foster a deeper knowledge of the person's cognitive processes.

**5.11 Findings in relation to Objective 7:** To study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to their Self-belief level.

1. There is no significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Self-belief level at the pre-test level that is before the intervention.
2. There is a significant difference between the mean Academic Resilience score of Control and Experimental group with reference to their Self-belief level at the post-test level that is after the intervention.
3. There is a significant difference between the mean Academic Resilience score of Control and Experimental group reference to their Self-belief level at the delayed post-test level.

## 5.12 Discussion

At the pre-test level that is before providing the treatment there was no significant difference in the mean Academic Resilience score of the Control and Experimental group with reference to the Self-belief level. But at the post-test level that is after the treatment significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Self-belief level. Again at the delayed post-test level significant difference was found in the mean Academic Resilience score of Control and Experimental group with reference to the Self-belief level. Figure 4.6 and 4.12 clearly depicts the improvement in the mean Academic Resilience score of the experimental group with reference to the Self-belief dimension.

The result corroborates with the outcomes of the following research investigations described in terms of protective factors. Various studies related to resilience have forwarded different factors that enhance resilience which comes under the dimension of Self-belief. Studies in connection with the protective factors under the dimension of Self-belief are as follows- Cicchetti (2010) stated self-esteem as one of the predictors of resilience. LeMoine and Labelle (2014) stated that at individual level some of the factors for effective intervention in building resilience among at risk youth are self-esteem and self-efficacy. Narayan (2015) stated that sattvic self-concept positively predict resilience. Kutlu, Yavuj and Bulut (2016) stated self-confidence as one of the internal protective factors of academic resilience. Arif and Mirza (2017) included self-concept, self-esteem, self-efficacy, etc., in their module to foster academic resilience and found it significantly effective. Kaur and Kaur (2017) found optimism and self-esteem is significantly and positively related with resilience of adolescents. A favourable association was found between resilience and life satisfaction. Bala (2018) stated positive self-esteem as one of the characteristics of students who possess Academic Resilience. Mirza and Arif (2018) reported self-concept, self-esteem and self-efficacy as protective factors of Academic Resilience. Robbins, Kaye and Catling (2018) found self-esteem as one of the significant predictor of resilience. Kavathekar and S (2019) found self-confidence, understanding oneself, etc. as some of the characteristics of educationally resilient students. Mailanchi and Kumar (2019) found self-efficacy, self-esteem, as predictors of wellbeing among adolescents without dyslexia. Loannidou and Michael (2022) stated that self-esteem enhance one's resilience.

With reference to the five dimensions no significant difference was found in the mean Academic resilience score of the Control and Experimental group in the pre-test level that is before the intervention. But after the intervention that is in the post-test level significant difference was found in the mean Academic Resilience score with reference to the four dimensions that is- socio-emotional skill, motivation, meta-cognitive and self-belief of the Control and Experimental group and no significant difference was found in the mean Academic Resilience score in case of Cognitive dimension. Even though statistically no significant difference was found between the mean Academic Resilience score of Control and Experimental group after the intervention with reference to their Cognitive level but the mean score of the experimental group was found to be more than that of the mean score of the control group after the intervention. Therefore there is certainly an increase in the Cognitive level among the experimental group after the intervention. Again in the delayed post-test level which was conducted after a duration of eight months from the post-test level a significant difference was found in the mean Academic Resilience score with reference to the five dimensions that is- socio-emotional skill, motivation, cognitive, meta-cognitive and self-belief of the Control and experimental group. From this it can be understood that the above five dimensions or say the protective factors are very important in fostering Academic Resilience among the secondary level students of the flood affected areas of Majuli district in Assam. Williams (2011) stated that protective factors across multiple contexts of student's lives contributed to their academic success despite adversity. Kottalil and Gafoor (2012) stated that the protective factors play an important role in inculcating academic resilience of secondary school students those at risk.

Figure 4.13, 4.14 and 4.15 gives a clear depiction of the improvement of the mean Academic Resilience score of the experimental group in comparison to the control group with reference to the five dimensions and thus determines the effectiveness of the Intervention Program.

**Table 5.1- Master chart showing the experimental effect of the Intervention Program (ARM) based on Mean Scores and t test scores**

Experimental effect dimensions of Academic Resilience	Experimental effect based on Mean Scores						Experimental effect based on t test scores					
	Where EG did better than CG from pre-test to post-test	Where CG did better than EG from pre-test to post-test	Where no difference is found between EG and CG from pre-test to post-test	Where EG did better than CG from post-test to delayed post-test	Where CG did better than EG from post-test to delayed post-test	Where no difference is found between EG and CG from post-test to delayed post-test	Where EG did better than CG at 0.05 level from pre-test to post-test	Where CG did better than EG at 0.05 level from pre-test to post-test	Where no difference is found between EG and CG at 0.05 level from pre-test to post-test	Where EG did better than CG at 0.05 level from post-test to delayed post-test	Where CG did better than EG at 0.05 level from post-test to delayed post-test	Where no difference is found between EG and CG at 0.05 levels from post-test to delayed post-test
Overall	✓			✓			✓			✓		
Socio-Emotional Skill	✓			✓			✓			✓		
Motivation level	✓			✓			✓			✓		
Cognitive level	✓			✓					✓	✓		
Meta-cognitive level	✓			✓			✓			✓		
Self-belief level	✓			✓			✓			✓		
<b>Total</b>	<b>6</b>	<b>Nil</b>	<b>Nil</b>	<b>6</b>	<b>Nil</b>	<b>Nil</b>	<b>5</b>	<b>Nil</b>	<b>1</b>	<b>6</b>	<b>Nil</b>	<b>Nil</b>

The above master chart shows 6 experimental effects based on the last two objectives of the study that is- to study the overall Effectiveness of Intervention Program for fostering Academic Resilience among Secondary Level Students in Flood Affected

Areas of Majuli district in Assam and to study the Effectiveness of Intervention Program for fostering Academic Resilience among Secondary level Students in Flood Affected Areas of Majuli district in Assam with reference to its five dimensions:

- a. Socio-emotional skill
- b. Motivation level
- c. Cognitive level
- d. Meta-cognitive level
- e. Self-belief level

The mean level analysis of the study shows that in all the 6 cases the experimental group did better than the control group from the pre-test to the post-test level and post-test to the delayed post-test level. Again in the t test analysis out of 6 cases, in 5 cases the experimental group did better than the control group from the pre-test to the post-test level and in 1 case no difference was found between Control and Experimental group. But from the post-test to the delayed post-test level, in all the 6 cases the experimental group did better than the control group. From the master chart it can be said that in no case it was found that the control group did better than the experimental group. Taking into consideration all these inferences, it can be concluded that the intervention program that is the Academic Resilience module was effective in developing academic resilience among the secondary level students in flood affected areas of Majuli district in Assam.

### **5.13 Overall discussion**

The researcher has observed the experimental group throughout the intervention. The students were seen to be really interested with the activities conducted throughout the intervention. The Academic Resilience Module includes various activities apart from the basic concept related to the topics under the five dimensions. Such as under the Socio-emotional skill dimension activities like- Chinese whisper game and Listen, interpret and draw were conducted to improve the communication skill of the students. Role play activity was performed to improve the adjustment skill of the students. Various relaxing and calming exercises were taught to help them manage their emotions at the time required. Self-evaluation activity was performed to make them know about their level of optimistic thinking and positive self-talk from which they could work on themselves, etc. Again under the Motivation dimension activities like- They were

encouraged to give a thought on their aim in life and the things they do on daily basis to achieve it. Various tips were also provided to the students to stay optimistic, curious and persistent. Under the Cognitive dimension activities like- consequence test, line figure completion test, new relationship test were conducted to develop their creative ideas. Traffic Jam Exercise was performed to make them understand about problem solving. Debate and discussion was also conducted to develop their critical thinking, etc. Under the Meta-cognitive dimension activities like- freeze game, musical chair was conducted to make them understand about self-regulation. They were also asked to write their problems and reflect on it as how they could minimize it. Self-evaluation activity was performed to make them know about their locus of control from which they could work on themselves. Various ways were also discussed through which they could develop their internal locus of control. Under the Self-belief dimension activities like- they were asked to write a paragraph on themselves and their strength and weaknesses to make them know about their self-concept. Apart from this a self-evaluation activity was conducted to help them to know their level of self-esteem. Various tips were also given to the students to enhance their self-concept and self-esteem, etc.

From the observation it is noticed that the students were interested to perform the activities and was always ready and excited for the next day. They were trying to improve on the skills they were lacking and were found to be much active in the class in comparison to the few classes at the starting of the intervention. After interaction with the students the researcher found that many students were engaged in helping their parents due to their financial problem. Majority of the families' livelihood depends on agriculture but due to flood crops get destroyed along with other properties. As Mwape (2009) stated that the impact of flood is in almost every aspect such as agriculture, health, education, housing, water, sanitation and property. Rahman (2014) stated that flood has adverse impact on socio-economic status of livelihoods and has established that flood sustainability and depth have a vital role on livelihood patterns. Therefore some families had to go through a lot and lay a lot of responsibilities on the students. All this ultimately have affect in the Academics of the students.

Basit, Rahman, Ibrahim and Jumani (2011) stated that among flood affected students under 11-18 years, the level of distress is high and had to face a lot of problem in order to continue future education. Chaudhary and Timsina (2017) also concluded that flood directly impacts on student's performance mainly students of secondary level; the



school had to be closed due to the flooding, and it took a week and many long days to reopen. The number of school hours lost had an impact on the standard of education. Chaudhary and Timsina also found that the students desire to attend classes had reduced, students attending school decreased during the flood disaster, their performance suffered, which finally causes them to drop out, were unable to advance to the upper class and their vulnerability to disaster issues was increasing. Mwape (2009) reported that 17% of the households included in the sample said that flooding in some way had harmed school infrastructure, 38% said that flooding has disrupted school for their children, numerous causes were given for the disturbance, including a road being impassable (32%), and a school being flooded (9%).

Apart from all this the participants were of the opinion that they would love to study and do classes in this way in future as they feel relax and refreshed. Thus all these activities along with the basic concepts related to each unit have led to an improvement in all the five dimensions of Academic Resilience according to the result and have ultimately enhanced the Academic Resilience of the students. As Zarina and Julius (2017) have stated that the intervention should focus on personal characteristics, level of stress, high risk behaviour and level of resilience to optimize resilience and reduce stress in adolescents. Loannidou and Michael (2022) also reported the need of creating prevention and intervention programs to boost and support children's mental resilience. Morote et al. (2022) stated that there is a need for educational programmes that focus on personal, emotional, social, and community resilience skills in addition to academic accomplishment. Apart from this there should also be focus on providing training to parents and educators in developing their resilience skills which will in return be effective in promoting their students' resilience skills. Lastly, on the basis of the findings it can be concluded that the Intervention program turned out to be effective on the secondary level students of the flood affected areas of Majuli district in Assam.

#### **5.14 Educational implications of the study**

The results of the study prove that it is possible to enhance Academic Resilience among the Students through Intervention Program. The following educational implications could be stated from the study are as follows:

1. This study highlights the need of enhancing the Academic Resilience of students from different disadvantageous background.

2. This study throws light on educational planners to understand the situation of students in flood affected area, its impact on their education and take initiatives to organise such intervention program.
3. This study will help the teachers to understand the ways of building Academic Resilience among the Secondary Level Students and also can make parents aware of such ways.
4. This study will encourage the teachers, researchers to develop various intervention programs on academic resilience for the students in other disadvantaged situation and make provisions according to their requirement.
5. Researchers and teachers interested in this area can adopt the Academic Resilience Scale to assess the Academic Resilience level of the secondary level students from different background.
6. Researchers and teachers can also adopt and adapt the Academic Resilience module according to the requirement for providing intervention program to the secondary level students from different background.

### **5.15 Limitations of the Study**

1. The present study was limited to quantitative approach.
2. Though the researcher has tried to control the various threats in the present study but there may be some extraneous variables that may affect the process of experiment. (prevailing Covid-19 pandemic situation)

### **5.16 Suggestions for further research**

1. The present study has been conducted in the flood affected areas of Majuli district in Assam. Such studies can also be conducted in other flood affected areas of Assam, India.
2. Future studies could focus on other disadvantaged situations or with students from different background other than flood as risk factor.
3. Future studies can focus on other protective factors to develop the intervention program such as- within family protective factor, within school protective factor and within community protective factor for development of Intervention Program on Academic Resilience.
4. Future studies could also focus on students from different levels other than Secondary level students.

5. Future studies could also focus on qualitative approach even mixed method approach for indepth understanding of Academic Resilience of students.
6. Future studies could focus on caregivers such as parents and educators providing training which empowers them and promote their resilience skills. This way they can be more effective in promoting their students' resilience skills.