CHAPTER VII
SUMMARY AND CONCLUSION

7.1 Summary

The present investigation aimed to find (a) whether parenting styles, classroom environment, intelligence and academic self-regulation contribute to academic achievement of children (b) whether the relationship between above said variables are different or same across Indian and Iranian cultures (c) how parenting styles, classroom environment and intelligence contribute to children’s academic achievement via their contribution to children’s academic self-regulation in two different cultures. Following were the primary aims of the present study:

1. To find the relationship between parenting styles and academic achievement in Iranian and Indian adolescents.
2. To find whether there is a relationship between classroom environment and academic achievement in Iranian and Indian adolescents.
3. To find which type of academic self-regulation mediates the relationship of intelligence and academic achievement for Iranian and Indian adolescents.
4. To find which type of academic self-regulation mediates the relationships of different parenting styles and academic achievement for Iranian and Indian adolescents.
5. To find which type of academic self-regulation mediates the relationships of different dimensions of classroom environment and academic achievement for Iranian and Indian adolescents.

The secondary aims of the study were:

6. To investigate cultural differences in
   a. Parenting styles
   b. Classroom environment dimensions
   c. Academic self-regulation
7. To investigate gender differences in
   a. Parenting styles
   b. Classroom environment dimensions
   c. Academic self-regulation
On the basis of theoretical orientations and available empirical evidences in Eastern cultures, following hypotheses were framed.

A) Academic self-regulation and academic achievement
   1. Autonomous regulation and academic achievement of Iranian and Indian male and female students will exhibit a positive relationship.
   2. Controlled regulation and academic achievement of Iranian and Indian male and female students will exhibit a negative relationship.

B) Intelligence and academic achievement
   3. Intelligence and academic achievement of Iranian and Indian male and female students will exhibit a positive relationship.
   4. The relationship between intelligence and academic achievement of Iranian and Indian male and female students would be mediated by autonomous regulation.

C) Parenting styles and academic achievement
   5. Authoritative parenting style and academic achievement of Iranian and Indian male and female students will exhibit a positive relationship.
   6. Authoritarian parenting style and academic achievement of Iranian and Indian male and female students will exhibit a negative relationship.
   7. Permissive parenting style and academic achievement of Iranian and Indian male and female students will exhibit a negative relationship.
   8. The relationship between authoritative parenting style and academic achievement of Iranian and Indian male and female students would be mediated by autonomous regulation.

D) Classroom environment and academic achievement
   9. Classroom environment dimensions (teacher support, involvement, investigation, equity and task orientation) and academic achievement of Indian male and female students will exhibit a positive relationship.
   10. The relationship between classroom environment dimensions (teacher support, involvement, investigation, equity and task orientation) and academic achievement of Indian male and female students would be mediated by autonomous regulation.
In view of inadequate research on Iranian classroom environment, no hypothesis was framed with regard to the relationship of classroom environment dimensions and academic achievement of Iranian male and female students.

For secondary aims of the study, the present study also endeavoured to explore the cultural and gender differences in parenting style, classroom environment and academic self-regulation in the two cultures. No specific hypothesis was, however, framed in this regard.

The sample for the present study consisted of 800 adolescents from two nations: 400 from Iran (200 girls, 200 boys) and 400 from India (200 girls, 200 boys). The sample was randomly drawn from various governmental secondary schools of Tehran (Iran) and Chandigarh (India). Adolescents coming from two-parent families and those residing with their parents were included in the current study. The present investigation was restricted to non-coeducational (English / Persian medium) high schools. Subjects came from middle class backgrounds.

These subjects were administered in Parental Authority Questionnaire, What Is Happening In This Class Questionnaire, Academic Self-regulation Questionnaire and Standard Progressive Matrix (Raven).

The data were analyzed in three ways. First, t-ratios were used to compare two cultures in different variables. Second, Pearson’s coefficient of correlation was used to study the inter-correlation among the different variables. Third, a series of path analyses were performed, and beta weights (β’s) from multiple hierarchical regression analysis were used. The three-step procedure for examining mediation proposed by Judd and Kenny (1981) was followed in this study. Major findings are as follows:

**Cultural differences in parenting styles**

1. There was no significant difference between reporting of Iranian and Indian students on maternal authoritative and paternal authoritative styles of parenting.
2. Indian female students reported higher authoritarian parenting style than Iranian female students.
3. Indian female students reported higher maternal permissive style than Iranian female students.
4. Indian male students reported higher paternal permissive style than Iranian male students.
Gender differences in parenting styles
5. Iranian as well as Indian girls reported higher maternal and paternal authoritative styles as compared to boys.
6. Iranian boys, compared to girls, reported higher maternal / paternal authoritarian and permissive styles.
7. There were no differences between Indian males and females on maternal / paternal authoritarian and maternal permissive styles.
8. Indian boys, reported higher paternal permissiveness than their girl counterparts.

Cultural differences in classroom environment dimensions
9. Indian students reported higher student cohesiveness, task orientation and cooperation than Iranian students. Also, Indian males reported more involvement than Iranian males.
10. Iranian students reported higher teacher support than Indian sample. Moreover, Iranian females showed higher investigation than Indian females.

Gender differences in classroom environment dimensions
11. In Iranian sample, girls perceived teacher support, task orientation, involvement, cooperation and equity in classes more than boys.
12. In Indian sample, girls perceived student cohesiveness, task orientation, cooperation and equity in the classes more than boys. However, boys reported investigation in the class more than girls.

Culture differences in self-regulation (autonomous and controlled regulations)
13. Iranian female students were more autonomous regulated than Indian female students. But, in case of boys’ sample there were no cultural differences on autonomous regulation.
14. Indian male students reported more controlled regulation than Iranian male students. But, in case of girls’ sample there were no cultural differences on controlled regulation.

Gender differences in self-regulation (autonomous and controlled regulations)
15. Iranian female students were more autonomous regulation than Iranian male students. But, there was no gender difference on controlled regulation of Iranian students.
16. There were no gender differences on autonomous and controlled regulations of Indian students.

**Academic Self-regulation and academic achievement**
17. Autonomous regulation showed significant positive relationship with academic achievement in Iranian as well as Indian male and female students.
18. There was no relationship between controlled regulation and academic achievement in Iranian as well as Indian male and female students.

**Intelligence and academic achievement**
19. There was a positive and significant relationship between intelligence and academic achievement for both cultures and sexes.

**Parenting style and academic achievement**
20. There was a positive and significant relationship between maternal and paternal authoritative styles and academic achievement in both sexes and countries.
21. Permissive parenting style showed a significant negative correlation with academic achievement in both sexes and cultures.
22. Authoritarian parenting style showed significant negative correlation with academic achievement in boys and girls in Iranian sample.
23. Authoritarian parenting style had insignificant correlation with academic achievement in girls and boys in Indian sample.

**Classroom Environment and academic achievement**
24. All seven-classroom environment dimensions (student cohesiveness, teacher support, task orientation, involvement, investigation, cooperation and equity) showed significant positive correlation with academic achievement in boys and girls in Iranian sample.
25. Six dimensions of classroom environment (student cohesiveness, teacher support, task orientation, involvement, investigation and equity) were found to be positively correlated with academic achievement in Indian girls. The exception was the correlation between cooperation and academic achievement in girls, which was not significant. In Indian boys there were positive and significant links between student cohesiveness, teacher support, task orientation and cooperation
with academic achievement. The exceptions were the correlations between involvement, investigation and equity with academic achievement in boys, which were not significant.

**Academic self-regulation as a mediator**

26. Autonomous regulation mediates the positive relationship between intelligence and academic achievement for both Iranian and Indian male and female students.

27. Autonomous regulation mediates the positive relationship between authoritative parenting style and academic achievement for both cultures and gender.

28. Autonomous regulation did not mediate negative relationship between authoritarian parenting style and academic achievement for both boys and girls in Iranian sample. Neither, did it mediate the relationship between authoritarian parenting style and academic achievement for both boys and girls in Indian sample.

29. In Iranian girls, paternal permissiveness exerted a negative effect on autonomous regulation. Iranian girls who perceived higher paternal permissiveness are likely to have lower autonomous regulation than Iranian girls who perceived lower paternal permissiveness. In Indian boys, maternal permissiveness exerted a negative effect on autonomous regulation. Indian boys who perceived higher maternal permissiveness are likely to have lower autonomous regulation than Indian boys who perceived lower maternal permissiveness.

30. Autonomous regulation mediates a positive relationship between some dimensions of classroom environment and academic achievement for both Iranian and Indian male and female students. In Iranian girls, there was indirect relationship between task orientation, student cohesiveness and equity and academic achievement through autonomous regulation. In Iranian boys, there was indirect relationship between teacher support, task orientation and student cohesiveness and academic achievement through autonomous regulation. Apart from this, in Indian girls, there was indirect relationship between student cohesiveness, task orientation and involvement and academic achievement through autonomous regulation. In Indian boys, there was indirect relationship between student cohesiveness, teacher support and task orientation and academic achievement through autonomous regulation.
7.2 Conclusions

The present piece of cross-cultural research has highlighted some of the differences as well as commonalities in the two cultures (Iranian and Indian).

The authoritarian and permissive parenting styles are being practiced more by Indian parents than Iranian parents. Keeping in mind the emerging trends of authoritative parenting style in India and Iran, one can imply that although both cultures are fast moving toward authoritative parenting style, yet Indian parents are less warm and responsive and have high maturity demands (intolerant to inappropriate behavior) than Iranian parents.

The female findings in two cultures of their perceptions of parents being more authoritative than males indicate that in both cultures family functioning is not nearly so male oriented.

Due to rapid social changes in Iran and India, it seems that strictness; obedience and power-asserting parenting styles toward their girls have changed to warm and responsive style. Parents are providing affection and support in their explanation. They have high maturity demands (e.g., expectations for achievement) for their daughters but foster these maturity demands through bi-directional communication and induction.

Iranian males reporting of higher authoritarian parenting style than their female counterparts may be accounted by the fact that gender-role socialization in Iran remains quite strong despite gradual social change. The Iranian parents seem to be more demanding and controlling of their sons than their daughters as they are expected to be more aggressive and later family decision makers which is instilled in them through discipline and control. Interestingly, no such gender differences emerged in India.

The results showed that students in India perceived their classroom environment more positively than students in Iran. These differences can be attributed to a number of different factors. In India, there is pressure related to an examination-driven curriculum. The more examination-driven curriculum leads to more teacher-centered approaches in the classrooms. Indian students spend more time on task, both in formal and informal hours.

In both cultures female students prefer participation in contrast with male students, who prefer competition. Cohesiveness and cooperation among girls show that
these students are friendly with one another in the class and they work cooperatively across the two cultures.

High autonomous regulation in Iranian female students and high controlled regulation in Indian male students show that although in both cultures parental expectations are high, the most important things are education, good grades and finding good jobs in both cultures and this belief is rooted in every family. Yet when Iranian female students reach high school they internalize these educational values (autonomous regulation) whereas Indian male students do not integrate values and remain externally regulated. Discipline in Indian schools is higher than Iranian schools and researches show that these factors have negative effect on academic self-regulation. Students who are overly controlled not only lose internal motivation but also learn less well.

Intelligent adolescents are capable of doing academic activities on their own without depending upon external factors; they tend to become more and more confident, and self-reliant. These independent and self-determined efforts are consistently reinforced directly and indirectly, which lead intelligent adolescents toward intrinsic motivation (autonomous regulation) and later academic achievement.

Authoritative parents are warm and responsive, providing their children with affection and support in their most of the activities and encouragement of independence. It seems that these interpersonal skills affect internal motivation in form of autonomous regulation and later in school performance. Both parents i.e. mothers' and fathers' healthy and promotive parenting style and internal motivation of children in form of autonomous regulation independently and perhaps even interactively fuel academic performance.

However, in Iranian girls, paternal permissiveness exerted a negative effect on autonomous regulation. In Indian boys, maternal permissiveness also had a negative effect on autonomous regulation of students. Enhancing maternal and paternal authoritative styles and lower paternal permissiveness may be useful to increase autonomous regulation and ultimately the academic performance of Iranian girls and enhancing maternal and paternal authoritative styles and lower maternal permissiveness may be useful to increase autonomous regulation and ultimately the academic performance of Indian boys. Permissive parenting does not provide the support that is
necessary for internalization and thus autonomous regulation and further academic success.

In Iranian girls, it seems that to complete activities and stay on the subject matter, students’ support and cooperation to one another in the class and equally treated by teachers including distribution of praise, questions’ distribution and opportunities to be included in discussions have important roles in autonomous regulation which in turn contributed to academic success of Iranian girls.

In Iranian boys, it seems that students’ help and support to one another in the class, focus on the syllabus in teaching practices and teachers’ support and interest in students can improve autonomous regulation and lead these students to better academic performance.

In Indian girls, it has emerged that Indian teachers emphasize on task, interaction and responsiveness to class that lead students to autonomous regulation and in turn leading to academic achievement.

In Indian boys, students support one another in the class, teacher’s help and interest in students and complete activities planned and stay on the syllabus prepare an autonomy-supportive environment that can increase autonomous regulation and in turn academic achievement.

In addition, parenting characterized by high levels of involvement, demandingness, responsiveness, and monitoring, and classrooms characterized by high levels of rule clarity, task orientation and encouraging student involvement would be linked to autonomous regulation of students and, in turn, to their academic achievement in both cultures.

7.3 Implications

The findings of this research have some implications for parents, teachers and educational systems.

- For Iranian girls, parent training programs and counselor training programs should focus on teaching authoritative parenting characterized by parental warmth, inductive discipline and psychological autonomy granting or democracy for making students high on autonomous regulation i.e. they become internalized.
in their efforts to perform well academically. Parents and counselors should be
aware of negative effect of paternal permissiveness on autonomous regulation.
Moreover, teacher education programs should focus on training of importance of
student cohesiveness, task orientation and equity in the class. These classroom
environment dimensions increase autonomous regulation and, ultimately,
academic achievement of Iranian girls.

- For Iranian boys, the above suggestions should be followed. Along with this, as
the results showed, parenting styles for Iranian boys have swung back and forth
between authoritarian and permissive parenting and the result of both styles is far
less than desirable. To increase adolescent autonomous regulation, permissive
parents could set more rules for their adolescents, and authoritarian parents could
become more flexible with their adolescents. Moreover, teacher education
programs should focus on training of importance of teacher support, task
orientation and student cohesiveness in the class. These classroom environment
dimensions increase autonomous regulation and, in turn, academic achievement
of Iranian boys.

- For Indian girls, the above suggestions should be followed. Along with this,
teacher education programs should focus on training of importance of student
cohesiveness, task orientation and involvement in the class. These classroom
environment dimensions increase autonomous regulation and, ultimately,
academic achievement of Indian girls.

- For Indian boys, the above suggestions should be followed. Along with this,
parents and counselors should be aware of negative effect of maternal
permissiveness on autonomous regulation of Indian boys. Moreover, teacher
education programs should focus on training of importance of student
cohesiveness, teacher support and task orientation in the class. These classroom
environment dimensions increase autonomous regulation and, in turn, academic
achievement of Indian boys.

- Policy and intervention directed toward establishing discipline and control by
parents and teachers are critical. Nonetheless, to be effective, discipline and
control must not be excessive and must be in the context of warmth and support.
• It makes new dimensions for Iranian and Indian students to evaluate their educational experiences. The important research possibilities opened by development of a teacher evaluation instrument are valid for use in Iran.

### 7.4 Suggestions for further studies

• This study is based on adolescent-report of parenting styles, classroom environment and academic self-regulation. In a further study, data collected from parents and teachers could also be supplemented to analyze the practical implications of parents’ reports of parenting styles and teachers’ reports of classroom environment.

• Based on the present study about parenting styles, classroom environment and academic self-regulation, the empirical connection between these variables and academic achievement is clear. To complement this research, further research is needed that can cover the present variables in a broader perspective like other motivational resources, parental involvement, school climate and other kind of parent-child relationship.

• Other personality factors such as self-esteem, self-confidence and behavioral problems may further mediate the impact of parenting styles and classroom environment on adolescents’ academic achievement.

• For further research, it is recommended that this research be replicated at other individualistic countries. The comparison of individualistic and collectivistic countries can reveal more information and evaluate theoretical orientation in academic self-regulation.

• Some experimental studies can be planned to study the effect of parental educational programs by the schools to change the knowledge of parents about child-rearing practices and perspective of teachers about classroom environment.

• Identification of other mediators of the relationship between parenting styles, classroom environment and academic achievement in adolescence can reveal more information.
7.5 Limitations

- One major sampling problem was the difficulty in collective adequate data, resulting in a sample size that was small (400 students in each country) as far as the complexity of the model tested was concerned.
- The sample of children was drawn mainly from the non-coeducational schools of Chandigarh (India) and Tehran (Iran), and was limited only to IX and X classes.
- Research has been done on middle-class families, and the results can only be generalized to a middle-class and may be less applicable to different groups.
- The present study was retrospective in nature and may be replicated by a longitudinal study that examines the impact of parenting styles and classroom environment on academic self-regulation on children over a widespread length of time.
- Since the data are correlational, thus the direction of causality for obtained findings cannot be determined and discussion of results should be considered with probabilities in both countries.
- Some of these tools have been used for the first time in Iran and India. Most of the tools have been created in Western culture and normalizing them in Eastern culture cannot adopt them into Eastern culture completely.