CHAPTER – V

SUMMARY AND CONCLUSION

The present chapter contains a brief summary of the research problem, sample, tools used and the statistical analysis utilized in the study. Also presented are the conclusions drawn, limitations observed, implications of the research, suggestions and directions for future research.

The number of students with disabilities pursuing postsecondary education continues to increase and with this change there must be an increase in the knowledge and awareness of faculty members who are perceived as primary mentors for students having LD. Although the research interest in the field of special needs and LD has gained importance in the Western region, there is lack of sufficient research in the UAE context.

Therefore the present study attempted to design a training program for faculty members to improve their psychological attitudes, beliefs, perceptions, interaction and knowledge regarding LD with reference to higher education.

The objectives of the present study were

1. To understand and determine the influence of socio-demographic factors on the faculty knowledge, willingness, attitudes and interaction towards students having LD.

2. To determine the need and importance of a training program for faculty members on LD.
3. To arrive at a successful training module for faculty in higher education that focused on a) Knowledge of LD and b) Knowledge of LD along with training on psychological skills that can be replicated in other colleges.

4. To determine the impact of the two training programs on the two experimental groups A and B that focused on improving their knowledge, willingness, attitudes and interaction towards students with LD.

5. To highlight the importance of providing the faculty psychological skill training along with training on knowledge of LD by comparing the outcomes of the training program between the two experimental Groups A and B.

Based on the review of related literature, methodology for the present study was designed. The present study was conducted in two phases. While Phase -1 concentrated on designing the training program, Phase -2 comprised of the actual conduction of the program.

Phase one comprised of the preparatory stage, carried out in five stages such as understanding the scenario, review previous literature, planning and designing the training program, materials required, finalization of the training program. In phase two, the investigation adopted an experimental design, described as “pre-post experimental group design”, using the type technique (Johnson & Christensen, 2010).

The sampling procedure adopted to select the faculty members for the present study was the Multistage Sampling Design (Scheaffer, Mendenhall, & Ott, 1990).
Sampling: First stage sampling included selection of colleges from the emirates of Abu Dhabi, Dubai, Al Ain and Sharjah using convenient sampling to increase the logistical ease, and since these emirates are strategically and centrally located compared to the smaller emirates. The second stage of sampling used the self-selected sampling or volunteer sampling (Cabral, 2008) in which the faculty members volunteered to attend the training program. The third stage of sampling included the allocation of faculty members from each of the colleges to the two experimental groups A and B for the implementation of training program using simple random sampling (Jamison, 2006).

Questionnaire method: Questionnaire method was adopted to collect the data from the faculty members to determine the effect of the training program. The tools were administered individually. The subjects were given three questionnaires and care was taken to see that the subjects filled in the forms manually and individually without discussing. Socio demographic details formed the first part of the questionnaire. Faculty Survey on Learning Disability by Murray, Flannery, and Wren, (2008), Survey Instrument of Teacher Attitudes towards Disability by Zyoudi, Sartwai, and Dodin (2011) and The Interaction of Disabled Persons Scale (IDP) by Gething and Wheeler (1992) were the surveys used by the investigator. The Cronbach’s alpha (Kerlinger, 2001) reliability for all the tools were found to be highly reliable. The validity of the tools was found to be highly significant using construct validity.

Using the structured questionnaire, the data was collected from the faculty members who undertook the training program during the period of September 2012 to February 2013. The collected data was coded based on the scoring procedures developed for individual scales and then analyzed. Using the appropriate statistical tests, the mean differences, analysis of variance, ‘t’ tests and paired sampling and ANOVA was computed with the help of SPSS version 11.0 and AMOS 5.
Sample Characteristics

The selected faculty members were found to be almost equally represented by both the genders, with 51.3% females and 48.8% of males in the experimental group A and 55.0% of females and 45.0% of males in the experimental group B. The ages of faculty members ranged from 25 years and above. The maximum percentage of faculty were between 46 to 55 years of age. Nearly 78% of faculty members had educational qualifications up to the Masters level. The faculty members in the study were a heterogeneous mixture, with respect to their educational qualification. They were across several disciplines and very diverse in terms of gender, age, teaching experience and nationalities.

The results are summarized as follows;

Effect of socio-demographic factors on faculty towards LD

This investigation was designed to understand the influence of demographic factors on the effect on mentoring of faculty members towards students with LD. The results of the present study explain the influence of gender on the faculty knowledge, willingness, attitudes and interaction towards students having LD.

From the results, it was found that socio-demographic factors resulted in significant in the faculty members prior to the training. The mean values of faculty members based on gender reveal that female faculty had more knowledge about LD, were more willing to provide accommodations and support to students with LD, had more positive attitudes and open to more interactions and communication with students having LD.
The results also indicate that before the implementation of the training program, there was no significant difference in the faculty knowledge, willingness, attitude and interaction towards students with LD with regard to the age of the faculty.

The results establish that before the implementation of the training program, there was significant difference in the faculty knowledge, willingness, attitude and interaction towards students with LD based on the academic rank, teaching experience and frequency of contact with students having LD.

**Comparisons of faculty knowledge, willingness, attitudes and interaction between experimental groups A and B before the training**

Prior to the training both the experimental groups A and B were administered the surveys to measure their knowledge of LD, willingness to provide accommodations and support, attitudes and interaction towards students with LD. The three surveys were conducted on both the groups prior to imparting training to them. The results of the survey indicate that the two experimental groups did not show any significant difference before the training was imparted.

It was inferred that since the faculty of both the experimental groups A and B, were from the same group of colleges, and since the colleges had not conducted any prior training on LD there was no significant differences in the faculty’s knowledge, willingness, attitudes and interaction towards students with LD. It was therefore essential to focus on training the faculty on LD that can further enhance their attitudes and willingness to mentor students with LD.
The findings from the present study confirmed that the faculty attitudes towards students having LD had no significant differences before the intervention program was provided to faculty.

**Comparison of the effect of the training program on the faculty knowledge, willingness, attitudes and interaction towards students with LD, in the experimental Group A**

Faculty are most of the time looked up as the primary mentors of students. Students having LD are increasing in number with every passing year and it is the role of higher educational institutions to educate the faculty on dealing with students having different learning needs.

The experimental group A was provided training to improve their knowledge towards LD only. No training was provided to the experimental group A on psychological skills. The results of the survey showed that after the implementation of the training program the experimental group A showed significant increase in their knowledge of LD.

Previous research has established that along with improving the knowledge of the faculty towards LD, it is also very important that their willingness both to provide accommodations and to advocate for students with LD also needs to improve, in order to ensure that they are effectively able to help the students with LD. Hence as a part of training imparted to the faculty to improve their knowledge of LD, they were also trained to increase their willingness to provide accommodations and to advocate for students with LD.
As a result of the training on the experimental group A, they also showed a significant increase in their attitudes and interaction towards students with LD.

The above results prove that the training program resulted in a significant increase in the knowledge, willingness, attitudes and interaction of the faculty towards students with LD.

**Comparison of the effect of the training program on the faculty knowledge, willingness, attitudes and interaction towards students with LD, in the experimental Group B**

The experimental group B was provided the same training on the knowledge towards LD as provided to experimental group A. However, the experimental group B received additional training in psychological skill also, which focused on improving their attitudes and interaction towards students with LD. After the training, experimental group B showed a significant increase in their knowledge and willingness of LD.

Due to the training, the experimental group B showed a significant increase in their attitudes and interaction towards students with LD. It can be inferred that, since the faculty in experimental group B underwent intensive training aimed at improving their interaction towards students with LD, their scores showed a significant increase after the implementation of the training program.

The above results prove that the training program had a significant increase in the knowledge, willingness, attitudes and interaction of the faculty towards students with LD.
Comparison of the effect of the training program on the faculty knowledge, willingness, attitudes and interaction towards students with LD, between the experimental group A and experimental group B

This section discussed promising trends in support of students having LD in higher education. The effect of the intervention program between the experimental group A and experimental group B was analyzed on the knowledge, willingness, attitudes and interaction of the faculty towards students with LD.

Existing research largely focused on measuring the impact of the training program on the knowledge of the faculty and measuring the changes in the attitudes and interaction of the faculty due to the corresponding increase in their knowledge.

The effect of the training showed that the experimental group B showed a significant increase in their knowledge of LD when compared to the experimental group A. This underlined the importance of training the faculty in psychological skills as a part of their overall training in LD and establishes a clear link between training the faculty on psychological skills and the corresponding improvement in the overall knowledge of faculty towards LD.

The effect of the training showed that the experimental group B exhibited a significant increase in their willingness towards students with LD. The results confirmed that a training program which includes psychological skills training will have the maximum impact on improving the willingness of the faculty towards student with LD, which will ultimately lead to better mentoring and support being provided to the students with LD.
The effect of the training showed that the experimental group B exhibited a significant increase in the attitudes of the faculty towards students with LD when compared to experimental group A. The results clearly showed that the experimental group B which underwent psychological skills training designed to improve their attitudes towards students with LD showed significant increase in their score when compared to experimental group A.

The effect of the training also showed that the experimental group B exhibited a significant increase in the interaction of the faculty towards students with LD when compared to experimental group A. These results confirm the effectiveness of the training program in improving the interaction of the faculty towards students with LD. They also establish the importance of having dedicated training to improve the faculty interaction towards students with LD and not merely relying on the improvement in the knowledge of the faculty to result in improving their interactions also.

Hence it was clearly found that the experimental group B which underwent psychological skills training exhibited significant increase in their knowledge, willingness, attitudes and interaction towards students with LD when compared to experimental group A.

5.1 Conclusions

Looking into the results of the analysis, to study the impact of the training program on the faculty members, all the proposed assumptions of this research were found confirmed theoretically and statistically. In general, gender, academic rank, teaching experience and frequency of contact with students having LD, have major
influence on the knowledge, attitude, willingness and interaction of faculty members students with LD.

When comparing the two experimental groups of faculty members, it is found that the faculty members who were provided with psychological skills training and training on the knowledge of LD had better scores on knowledge, willingness, attitudes and interaction towards students with LD when compared to faculty members who were provided with training on LD only. It can be inferred that an on-going professional training for teaching professionals will enable them to be abreast with the most up-to-date information so that students with LD can be mentored through psychological and support services.

5.2 Implications of the Study

The results of the present study imply the following;

1. As increasing number of students having LD enter higher education, mentoring by faculty becomes essential in their lives. A training program for the faculty members was developed as a potentially important source of practice to help students with LD achieve their educational pursuits in higher education.

2. A growing body of research point towards faculty beliefs, attitudes, interactions and practices as important factors, to mentor students to have a positive experience. Based on recommendations from previous studies, a successful training module to train faculty mentoring of students having LD was developed that can be replicated not only on faculty of other higher educational institutions but also on teachers in primary and secondary education.
3. This work suggested the need to design training programs that focuses on both knowledge of LD and psychological skills such as attitudes, willingness and interaction towards students with LD. The finding led to proving the importance of psychological skills training along with training on knowledge of LD.

4. Comparing the differences in the outcomes of the training program between the two experimental groups A and B suggested the need to provide faculty training on the knowledge of LD with special focus on psychological training which enhanced the impact of the learning. It seems critical to provide all faculty of higher education with the knowledge and soft skills in the field of LD.

5. Generalizability of the findings based on faculty knowledge, attitudes, willingness and interaction towards students having LD was strengthened in this study as the faculty members were from different nationalities and from greater number of colleges across the federal colleges of the UAE.

5.3 Limitations

According to Lunenburg and Irby (2008), delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the research study. This research study had the following limitations:

1. The sample of this research was limited to some of the federal colleges only and not all the colleges.

2. The research study was delimited to a period of data collection that occurred from September 2012 – February 2013.
3. This research study was delimited to the use of paper / pencil test pre and post intervention.

4. This research was delimited to federal colleges and not private colleges of the UAE.

5. The faculty might have responded favorably because serving students with LD is considered acceptable.

5.4 Recommendations for Further Research

The field of postsecondary education for LD is essentially in its nascent stage particularly in the UAE. Faculty members in the 21st century can best respond to the needs of those with LD by getting trained in employing a set of strategies that will meet the needs of all learners. The present study leads to areas in which further research is warranted.

1. Consideration to develop a valid and workable definition of LD for the postsecondary population and acknowledge the invisible disability.

2. A "best practices handbook" on teaching and accommodation strategies could be developed by qualified professionals and norm it to the student population of the UAE as they are predominantly second language learners.

3. A multidisciplinary team involving the faculty members, staff, student services department, senior management and the student himself / herself should be involved in working towards student success.

4. In-house cost effective diagnostic tool should be developed to evaluate the postsecondary adult population on LD.
5. Research in the area of LD should be promoted and training teachers on LD should be made mandatory.

6. Future should focus on including suitable training programs in the curriculum of teacher education courses and ensure all teachers are equipped to teach students with LD.

7. Colleges and Universities should appoint disability coordinators and LD specialists to plan and execute training programs for faculty.

8. Finally, future research should be conducted on innovative best practices that will support students with LD in higher education to independently meet the demands placed by the institution.