CHAPTER V

FINDINGS, DISCUSSION, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The research has come up with some interesting and useful results that have significant implications in terms of the research as well as practice. Now, it is possible to discuss the findings, based on the critical analysis, interpretations and inferences.

5.1 Findings of the Study

Objective: - 1.   To study the effect of "Internet Addiction" on personality factors.

Objective: - 1.1   To study the effect of "Internet Addiction" on personality factor 'neuroticism'.

Hypothesis: - 1.1   There will be no significant effect of "Internet Addiction" on personality factor 'neuroticism'.

Finding (1):   Finding reveals that the main effect of the severity of internet addiction is found significant. Hence the hypothesis "There will be no significant effect of internet addiction on personality factor neuroticism" is **rejected.**

Objective: - 1.2   To study the effect of "Internet Addiction" on personality factor 'extraversion'.

Hypothesis: - 1.2   There will be no significant effect of "Internet Addiction" on personality factor 'extraversion'.

Finding (2):	Finding shows that the level of internet addiction significantly influences the extraversion personality factor. So, the hypothesis "There will be no significant effect of internet addiction on personality factor extraversion" is **rejected.**
Objective: - 1.3	To study the effect of "Internet Addiction" on personality factor 'openness to experiences.
Hypothesis: - 1.3	There will be no significant effect of "Internet Addiction" on personality factor 'openness to experiences.
Finding (3):	Finding indicates that level of internet addiction does not influences the 'openness to experiences' personality factor. Thus, the hypothesis "There will be no significant effect of internet addiction on personality factor openness" is **not rejected.**
Objective: - 1.4	To study the effect of internet addiction on personality factor 'agreeableness'.
Hypothesis: - 1.4	There will be no significant effect of internet addiction on personality factor 'agreeableness'.
Finding (4):	The finding reveals that the level of internet addiction influences the personality factor agreeableness. Hence the hypothesis "There will be no significant effect of internet addiction on personality factor agreeableness" is **rejected.**
Objective: - 1.5	To study the effect of internet addiction on personality factor 'conscientiousness'.

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Hypothesis: - 1.5   There will be no significant effect of "Internet Addiction" on personality factor 'conscientiousness'.

Finding (5):   The finding indicates that the severity of internet addiction does not influences the personality factor 'conscientiousness'. So, the hypothesis "There will be no significant effect of internet addiction on personality factor conscientiousness" is **not rejected.**

Objective: - 2   To study the effect of type of courses on personality factors.

Objective: - 2.1   To study the effect of type of courses on personality factor 'neuroticism'.

Hypothesis: - 2.1   There will be no significant effect of type of courses on personality factor 'neuroticism'.

Finding (6):   Finding reveals that the type of courses does not influences the personality factor 'neuroticism'. Thus, the hypothesis "There will be no significant effect of type of courses on personality factor neuroticism" is **not rejected.**

Objective: - 2.2   To study the effect of type of courses on personality factor 'extraversion'.

Hypothesis: - 2.2   There will be no significant effect of type of courses on personality factor 'extraversion'.

Finding (7):   Finding indicates that the type of courses does not influences the personality factor 'extraversion'. So, the hypothesis "There will be no significant effect of type of courses on personality factor extraversion" is **not rejected.**

Objective: - 2.3   To study the effect of type of courses on personality factor 'openness to experiences.

Hypothesis: - 2.3   There will be no significant effect of type of courses on personality factor 'openness to experiences.

Finding (8):   Finding reveals that the type of courses influences the personality factor 'extraversion. Thus, the hypothesis "There will be no significant effect of type of courses on personality factor openness" is **not rejected.**

Objective: - 2.4   To study the effect of type of courses on personality factor 'agreeableness'.

Hypothesis: - 2.4   There will be no significant effect of type of courses on personality factor 'agreeableness'.

Finding (9):   Finding shows that the type of courses influences the personality factor agreeableness. Hence the hypothesis "There will be no significant effect of type of courses on personality factor agreeableness" is **rejected**.

Objective: - 2.5   To study the effect of type of courses on personality factor conscientiousness.

Hypothesis: - 2.5   There will be no significant effect of type of courses on personality factor conscientiousness.

Finding (10):   Finding reveals that the type of courses does not influences the personality factor neuroticism. So, the hypothesis "There will be

no significant effect of type of courses on personality factor conscientiousness" is **not rejected.**

Objective: - 3	To study the interactive effect of "Internet Addiction" and type of courses on personality factors.
Objective: - 3.1	To study the interactive effect of "Internet Addiction" and type of courses on personality factor 'neuroticism'.
Hypothesis: - 3.1	There will be no significant interactive effect of internet addiction and type of courses on personality factor 'neuroticism'.
Finding (11):	Finding shows that the interaction between "Internet Addiction" and type of courses does not have significant effect on the personality factor 'neuroticism'. Thus, the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on personality factor neuroticism" is **not rejected.**
Objective: - 3.2	To study the interactive effect of "Internet Addiction" and type of courses on personality factor 'extraversion'.
Hypothesis: - 3.2	There will be no significant interactive effect of "Internet Addiction" and type of courses on personality factor 'extraversion'.
Finding (12):	Finding reveals the interaction between internet addiction and type of courses significantly influences the personality factor 'extraversion'. Hence, the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on personality factor extraversion" is **rejected.**

Objective: - 3.3   To study the interactive effect of "Internet Addiction" and type of courses on personality factor openness.

Hypothesis: - 3.3   There will be no significant interactive effect of "Internet Addiction" and type of courses on personality factor openness.

Finding (13):   Finding indicates that there is no interaction between "Internet Addiction" and type of courses. So, the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on personality factor openness" is **not rejected.**

Objective: - 3.4   To study the interactive effect of "Internet Addiction" and type of courses on personality factor 'agreeableness'.

Hypothesis: - 3.4   There will be no significant interactive effect of "Internet Addiction" and type of courses on personality factor 'agreeableness'.

Finding (14):   Finding reveals that the interaction between "Internet Addiction" and type of courses does not influence the personality factor 'agreeableness'. Thus, the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on personality factor agreeableness" is **not rejected.**

Objective: - 3.5   To study the interactive effect of "Internet Addiction" and type of courses on personality factor 'conscientiousness'.

Hypothesis: - 3.5   There will be no significant interactive effect of "Internet Addiction" and type of courses on personality factor 'conscientiousness'.

Finding (15):   Finding reveals that the interaction between "Internet Addiction" and type of courses significantly affected the personality factor 'conscientiousness'. Hence the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on personality factor conscientiousness" is **rejected.**

Objective: - 4   To study the effect of "Internet Addiction" on mental health.

Hypothesis: - 4   There will be no significant effect of "Internet Addiction" on mental health.

Finding (16):   Finding indicates that the severity of internet addiction influences the mental health. So, the hypothesis "There will be no significant effect of internet addiction on mental health" is **rejected.**

Objective: - 5   To study the effect of type of courses on mental health.

Hypothesis: - 5   There will be no significant effect of type of courses on mental health.

Finding (17):   Finding reveals that the type of courses does not influences the mental health. Thus, the hypothesis "There will be no significant effect of type of courses on mental health" is **not rejected.**

Objective: - 6   To study the interactive effect of "Internet Addiction" and type of courses on mental health.

Hypothesis: - 6   There will be no significant interactive effect of "Internet Addiction" and type of courses on mental health.

Finding (18):   Finding reveals that the interaction between "Internet Addiction" and type of courses does not have significant effect on mental health. Hence, the hypothesis "There will be no significant interactive effect of internet addiction and type of courses on mental health" is **not rejected.**

5.2 Discussion of Results

The main goal of the present study was to investigate the effects of internet addiction on personality and mental health of students enrolled in "professional" and "non-professional" courses in various institutions/colleges and universities located in Haryana. Researcher found that severity of internet addiction influenced the 3 personality factors i.e. neuroticism, extraversion and agreeableness and does not influenced other 2 personality factors which are openness to experiences and conscientiousness. The severity of "Internet Addiction" is found to have influenced the mental health of students enrolled in both professional and non-professional courses.

Previous studies revealed that the internet addiction does not influences the personality factors, openness to experiences and conscientiousness (Stieger et al., 2013). The personality factors play an important role in students' addicted behavior (Blachnio, 2017). Other than that, the results of previous researches suggest that higher neuroticism is significantly associated with problematic internet usage of students (PIU).

The outcomes of the present research show that the level of internet addiction has significantly influenced neuroticism which means the people who were more

addicted to internet, experience the feelings of worry, jealousy, anxiety, depressed mood state, frustration, fear and loneliness the components of neuroticism.

Some of the researches pointed out similar results like neuroticism were positively linked with internet addiction (Kuss et al., 2013 & Zamani et al., 2011). "Individuals suffering from neuroticism experience more troubled association and concerned situation. They are more susceptible to experience negative feelings such as depression, anxiety, anger with low tolerance for stress or unpleasant trigger. The individuals who scores high on neuroticism face a lot of problems in daily lives" (Goldberg, 1993). Neuroticism can be a risk factor in terms of internet addiction (Cao et al., 2007 & Yan et al., 2014). Studies have proved that the students, who have neuroticism personality components, have high rates of risky internet usage (Batigun & Kilic, 2011; Floros & Siomos, 2014; Kuss, Griffiths & Binder, 2013). According to NEO-Five Factor Model of personality, "neurotics' individuals experience anger, anxiety, irritability, apprehension, depression and feeling of insecurity/vulnerability". These people are unable to cope with the stress of their life's which signs towards a higher risk of developing "Internet Addiction" (Stoeva, Chiu & Greenhaus, 2002).

Results of present research prove that there is a significant impact of internet addiction on extroversion. Students with internet addiction are found having low level of extraversion personality factor which shows that the people with high internet usage are less likely to do outdoor activities. They are more engaged in internet or online activities as compared to face to face activities. Previous researches also support the results of present study. Students, who have high level of extraversion factor, may possibly turn to digital association less because these people could "establish satisfying

and close interpersonal relationship in their lives" (McCrae & John, 1998). Studies by Batgun & Kilis, 2011; Bulkner et. al., 2012; Rahmani & Lavasani, 2011; Yan, Li, & Sui, 2014 also indicated towards a negative relationship between internet addiction and extraversion factor of personality. According to NEO-FFI (1992) personality factor, extraverted people more inclined to be resourceful, vibrant, sociable, cheerful, inclined towards positive emotion, enthusiastic, active and talkative. According to various studies, students with low level of extraversion use "internet more frequently and they may be at higher risk of internet addiction" (Batigun & Kilic, 2011; Mehroof & Griffiths, 2010; Celik, Atak & Basal, 2012; Tang & Yanf, 2012). The students who have higher extraverted behaviour tend to have positive self-concept and more self-control. They are very much aware that they should not break their social relations. Meanwhile, the students who have introverted trait choose more internet usage because it is easier for them to interact virtually than in actual life. This continuous practice in turn exacerbates their shyness in the actual world and makes them turn towards internet (Luenberg, 2011; West & Brown, 2014; Bandura, 1989).

Results of the present research show that there is no noticeable impact of internet addiction on openness to experience factor of personality. Personality factor openness to experience includes attentiveness to inner feelings, imagination, preference for variety etc. On one hand, findings on internet addiction and personality found that openness to experiences personality factor was beneficial for reducing the internet addiction (Chen, 2009). On the other hand, some researches pointed out that this factor was proved as risk factor for promoting internet addiction (Ozturk et al., 2015). Individuals with high level of openness to experiences have higher curiosity and interest

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levels (Costa & McCrea, 1992). Studies by Durak & Senol- Durak, 2014; McElory et al., 2007; Servidio, 2014; Vander et al., 2009 also found similar results.

Results of present study pointed out that there is significant effect of internet addiction on agreeableness personality factor. Students who have low level of agreeableness tend to show aggressive and hostile behaviour (Costa & McCrea, 1992). A study conducted by Shi & Du in 2019 found that agreeableness contributes to the variance of internet addiction. Agreeable personality factor is explained as reliable, kind hearted, helpful, good-natured, honest, forgiving, honest and credulous people. These students tend to develop "problematic internet usage as a means to satisfy their personal needs" (Ozturk et al., 2015). On the contrary, "normal agreeable people are less likely to show internet addiction given their high quality prosaically interaction" (Servido, 2014).

Findings of this research show that there is significant impact of internet addiction on conscientiousness personality factor. It shows that people with excessive use of internet has less self-discipline and lack of planning quality of task. So, they have lack of orderliness, achievement – striving, cautiousness and self-efficacy. Severity of internet addiction significantly influences the conscientiousness personality factor of students. Higher conscientiousness personality type is mild addicted to internet but low conscientiousness personality type is severe internet addicted. "Conscientiousness individuals are self- disciplined, cautious, with a sense of duty, and motivated to achieve success" (Costa & McCrae, 1992). They can easily control their internet usage and make a proper balance in their work, social and family lives. Students, who have structured behaviour, have lower risk on Internet Addiction in comparison to disorganized students. (Muller, et al., 2013). Findings indicate that high level of

consscientiousness uses internet productively whereas low level of consscientiousness engages in risky usage of internet. The students with low level of consscientiousness are likely to experience problems which are associated to internet addiction (Batigun & Kilic, 2011; Floros & Siomos, 2014; Kim, et al., 2008; Mehroof & Griffiths, 2010; Celik, Atak & Basal,2012; Milani, Osualdella & Di Blasio, 2009; Tang & Yang, 2012).

In the present study, results indicate that internet addiction has various significant effects on mental health. Jahanian (2013) also investigated mental health and internet addiction of students of technical and vocational colleges. Results indicate inverse and significant association between "Internet Addiction" and mental health. Shinde (2014) found that excessive internet users neglect their work, social life as part of mental health among professional students. Results shows that 83% students suffer from anxiety, 84% suffer from physical problems, 73% of them showed average depression symptoms. Research by Orsal et al. (2013); Ko, et at. (2012) & Younes (2016) also pointed out association between mental health and internet addiction. Another study conducted by Madhuri & Vedpal (2016) found negative association between internet addiction and mental health of students.

It is concluded that Internet addiction has significant effects on personality factor and mental health of students enrolled in both professional and non-professional courses.

5.3   Suggestions for Further Research

This research gives insights about as well the effects of "Internet Addiction" on mental health of students enrolled in professional and non-professional courses. It opens up future scope for similar studies that can be conducted on school students as teaching

and non-teaching staff of schools, colleges and/or universities. Some broad suggestions are also there on which further research studies can be conducted:

➢ The present research was conducted on students enrolled in professional and non-professional courses in institution/universities of Haryana. Further research may be conducted with large sample covering more colleges and universities.

➢ The present research was conducted to measure the effect of internet addiction on personality and mental health but further research may be undertaken with the effect of "Internet Addiction" on other variable i.e. academic achievement, physical health, adjustment, relationship with parents & friend circle and socio-economic status etc.

➢ The present research was conducted only on college and university students. Similar study can be conducted on school students with same variable.

➢ The present study was confined only to college going students. Another study may be conducted on teaching and non-teaching staff of schools, colleges and universities.

➢ A comparative study may be conducted between professsionals and non-professionals to measure similar variable.

5.4 Educational Implication of the Study

It should be kept in mind that main purpose of educational research is not only to provide new factual information for the sake of increasing stock of available body of knowledge but it is also very important that it should have some practical

recommendations and suggestions for the purpose of improvement of education system, its processes, and practices. The outcomes of present research;

➢ The college/universities can propose a rule and guideline for using the internet in campus, especially on use of Wi-Fi services.

➢ The institutional administration can create a system which can limit the hours, a student spends in a day on internet.

➢ The educational institutes can offer counselling sessions and support system, specifically for Internet Addiction.

➢ Parents also need to play a significant part in reducing the Internet access to children. It can be done either by having fewer budgets for Internet or by continuous monitoring.

➢ Students need to be fully aware of the pros and cons of excess internet use on their personality and mental health.

➢ The institute administration should provide information and preventive group activities about the appropriate usage of Internet and consequences by its excess usage.