

## Impact of video game playing on mental health and hardiness of high school students

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### ABSTRACT

The present study examined the impact of Video game playing on hardiness and mental health of High School Students. For this purpose, a number of total 200 students were selected from video game player (100s) and non-video game player (100s) from High School. The Singh Psychological Hardiness Scale constructed by Arun Kumar Singh and Mental Health Checklist, constructed by Pramod Kumar was used for the purpose of measuring variables under study. The Mean and t-test was used for the purpose of statistically analyses the obtained. The results indicate that hardiness and mental health of video game player have higher than non-video game player.

**Keywords:** *Video Game, Video game player, Non-video game player, Hardiness, Mental Health, High School Student*

Today's world is one that is largely composed of technology. In a relatively short span of time we have been immersed in a world of high-definition television, Face book, YouTube, internet radio, "green" cars, outrageous thrill rides, 3-D technology, etc. But no area of technology has become as prominent as that of video gaming. According to Anand (2007), the penetration of video games into the United States alone is huge, with at least 90% of homes having children that have played (rented or owned) video games. This is a record level that continues to increase. 55% of console players and 66% of online players are over 18. There are additionally others that have discovered diminished scholarly execution in connection to an association in playing video games.

Our understanding of video game addiction is still in its early stages however episodic proof and early research recommends that a few people play video games in an addictive and harmful way. The media has regularly highlighted sensational cases of injury or demise that have supposedly resulted from video game addiction (ABC News, 2011; Macleans, 2008; Mail Online, 2011). In reaction to the expanding reports of video game addiction, the American Medical Association proposed the expansion of analysis for video game addiction to the next revision of the Diagnostic and Statistical Manual of Mental Disorders, the fifth edition (DSMV).

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The American Psychiatric Association responded with a cautionary statement against prematurely classifying video game addiction as a mental disorder and suggested that more research is needed before it can be considered for inclusion as a formal diagnosis (APA, 2007). While the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSMIV-TR; APA, 2000) avoided use of the word “addiction”, recent research increasingly supports the validity of a broad conceptualization of addiction that encompasses both behavioural and substance addictions (el-Guebaly, Mudry, Zohar, Tavares & Potenza, 2012; Grant, Potenza, Weinstein & Gorelick, 2010).

At last, they noticed that playing video games removed time from school exercises, schoolwork, social communication, and so on. At that point, there are those in the examination field who have concocted unbiased outcomes. Late years have seen real improvements in the PC and game industry. Apparatuses, for example, diversions, computer-generated reality, and applications for cell phones may cultivate learning, upgrade inspiration, advance subjective and conduct change, bolster psychotherapy, support strengthening, and improve psychological capacities.

The three interrelated solidness dispositions of commitment, control and challenge are thought to impact two fundamental instruments that upgrade the wellbeing and execution of people encountering unpleasant conditions (Maddi, 1999a). In recent years, the mental toughness build has developed as a cradle in the connection among stressors and disease and has been appeared to upgrade execution, direct and morale (Maddi, 1999b). **Commitment** is defined as a “tendency to involve oneself in (rather than experience alienation from) whatever one is doing or encounters” (Kobasa, Maddi & Kahn, 1982: 169). **Control** is depicted as an “inclination to feel and go about as Psychological strength speaks to a solitary inactive variable (Britt, Adler, & Bartone, 2001), **Challenge** is described as a “belief that change rather than stability is normal in life and that the anticipation of changes are interesting incentives to grow thrasher than threats to security” (Kobasa et al., 1982: 169), comprised of three obliquely related attitudes, that is commitment, control and challenge. On the off chance that one is powerful (instead of vulnerable) even with the changed possibilities of life” (Kobasa et al., 1982: 169).

According to the 2004 World Health Report of the World Health Organization (WHO), approximately 20% of individuals under the age of 18 years suffer from developmental, emotional or behavioural problems, and one in eight could be diagnosed with a psychiatric disorder. Worldwide, increasing attention has been focused on the primary prevention of mental illness and a number of initiatives targeting young persons have been undertaken to promote mental health and reduce vulnerability to mental illness.

Reviews of the literature suggest that the most promising programs for developing mental health are comprehensive school-based programs, with their wider approach, that is, the promotion of generic coping, competence, and social skills, as opposed to focusing on specific behavioural problems. In 2008 the Mental Health Unit of the ISS (Italian National Institute of Public Health) obtained a grant from the Ministry of Health to develop a school-based program for promoting mental health and preventing mental illness.

The specific objectives of the program are: i) to provide students with the skills to maintain or improve their mental health when faced with the demands of everyday life; and ii) to provide students with information about mental illness so that they can recognize the signs

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early in themselves and reduce the stigma attached to those who suffer from it. As the main output, a student manual was developed to guide students in implementing the program.

### **METHODOLOGY**

#### *Sample*

The participants for the present investigation were purposively drawn from high schools of Moradabad. Participants comprised of 200 students 100s Video Game player and 100s Non-Video Game player were selected for the study.

#### *Design*

A group design was used in the research. In this the variable Video Game Player of high School Students were consisted of two groups, i.e., who play video game and other who were not play video game.

#### *Instrument:*

Two measures were used in this study,

**Singh Psychological Hardiness Scale** constructed by Arun Kumar Singh (2008) was used to assess hardiness level of respondents. The test was comprised of total 30 items to be answered by subject opting one of the five options- 'Strongly Agree', 'Agree', 'Neutral', 'Disagree' and 'Strongly Disagree'. The Scale was found to be a highly reliable and valid scale. The test - retest reliability of the scale was found to be 0.862 which is significant at .01 levels. Likewise, the internal consistency reliability of the scale indicated by the coefficient alpha is found to be 0.792 which also is significant in regard to validity of the scale. The overall coefficient of concordance is 0.74 which is also significant. The index of reliability which is also taken as measures of validity is highly satisfactory. The index of reliability gives the relationship between obtained scores and their theoretical true scores. The index of reliability based upon test-retest reliability coefficient is .92 and based upon coefficient alpha is .89 which means that the test measures true ability to the extent expressed by r of .92 and .89. Percentile norms have been developed for describing the degree of psychological hardiness. An individual scoring 120 or above on SPHS is classified as high hardy while an individual scoring 79 or below is classified as low hardy.

**Mental health check list (MHC)** developed by Kumar was used to assess the mental health status. It consists of 11 items, includes with 6 mental and 5 somatic items, presented in a 4-point rating format. The split half reliability, correlating the odd even items has been found to be .70 with index of reliability of .83. The test retest reliability has also been studied. It has been found to be .65 with an index of reliability of .81. The retest was given with a time interval of two weeks. The t-value of .70 and .65, respectively have been found to be significant at .01 level of confidence, showing that the test is reliable both in terms of its internal consistency and stability of scores. The researcher calculated that reliability by using test- retest method on her own population. It was found to be .62. Its presented in a 4-point rating format, 4 marks are given for 'always', 3 for 'often', 2 for 'at time', and 1 for 'rarely'. High score on MHC is indicative of poor mental health.

## RESULTS

*Table: Mean, S.D and t-value two groups of subjects for hardiness and mental health*

| Measures      | video game player |        |      | Non-video game player |       |       | t-value |
|---------------|-------------------|--------|------|-----------------------|-------|-------|---------|
|               | Ss N              | Mean   | S.D  | Ss N                  | Mean  | S.D   |         |
| Hardiness     | 100               | 130.94 | 6.38 | 100                   | 94.36 | 11.38 | 28.17** |
| Mental Health | 100               | 18.85  | 3.77 | 100                   | 28.75 | 4.76  | 17.88** |

### *Hardiness and Video Game Player*

The study of above Table-1 indicated that the obtained t-score for the two groups of video game player was showing a significant effect on hardiness at .01 level of significance [t-Score (98, 1) =17.87); p<.01]. This means that the two groups of video game player differ significantly in hardiness at .01 level of significance. The obtained mean score indicated that the hardiness score of video game player (Mean-130.94, SD-6.38) was significantly higher in hardiness as compared to the subjects who non-video game player (Mean-94.36, SD-11.38).

### *Mental Health and Video Game Player*

Further the Table-1 also indicated that the obtained t-score for the two groups of video game player was showing a significant effect on mental health too at .01 level of significance [t-Score (98, 1) =28.15); p<.01]. This means that the two groups of video game player differ significantly in mental health at .01 level of significance. The obtained mean score indicated that the mean mental health scores of video game player (Mean-18.85, SD-3.77) was significantly lower in mental health as compared to the subjects who non- video game player (Mean-28.85, SD-4.76). As per the checklist scoring method, higher scores mean poor mental health and lower scores means better mental health. This means that the subjects who play video game have better mental health as compared to subjects who don't play video game.

## DISCUSSION

The result in the table reveals that video game player was significantly harder than subjects who do not play video game. Hardiness as a one-dimensional construct, as well as a multi-dimensional nature with steps: commitment, control and challenge (Benishek et al., 2005; Benishek & Lopez, 2001; Creed et al., 2013; Kamtsios & Karagiannopoulou, 2014).

When students play video game then they have a tendency to accept control, commitment and challenge more than do not play video games. Playing video games not only enhances them cognitively but there are changes in behaviour also. So, video game player are more positive than do not play video game.

Hardiness provide positive framework for students to react toward academic challenges. Hardiness is the individual state of resilience toward academic failure: Individual who have academic hardiness display a willingness to engage in academic challenges, commit to follow all academic activities, what's more, have command over scholastic execution for greatest outcomes (Kobasa, Maddi & Kahn, 1982).

Hardiness evolved from the concept of hardiness that born from existential psychology (Ferreira, 2012). This hardiness is viewed in terms of humans in search of authenticity by creating personal meaning through self-reflection, decision-making, and actions that encourage growth (Kobasa,1979; Maddi & Kobasa, 1984). Scholarly toughness is reflected

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in the learning, development situated character style (Sheard & Golby, 2007). High levels of hardiness show authentic life; not looking for ways to avoid stressful events, but the individual draws strength from the difficulties facing and overcoming obstacles as a challenge. (Carr, Kelley, Keaton, & Albrecht, 2011).

The result in the same table reveals that video game player were significantly healthier than who do not play video game. According to Carter et.al (1959) - Mental health can be defined as the absence of mental disease or it can be defined as a state of being that also includes the organic, mental or social elements which add to a person's psychological state and capacity to work inside the earth.

Who video game player has better mental health as compared to subjects who do not play video game. While there are a few negatives to playing computer games—there's no denying that they prevent us from getting outside! There are also some benefits. Surprisingly, playing computer games can help our physical, mental, and enthusiastic wellbeing.

On the off chance that you experience the ill effects of dyslexia, there is some fantastic news. Video gaming has demonstrated a few advantages in conquering the psychological inability. While researchers don't fully understand dyslexia and why it only affects some people, there are some theories, and there's no denying the results of the studies. Now, computer games involve a physical aspect. There is Just Dance, the Wii Fit, Guitar Hero and that's just the beginning. They include you standing and moving around the room. You can fabricate your muscles, improve stance, and spotlight on weight reduction. There are additionally amusements made explicitly to help train the cerebrum.

The Wii Fit has a game that causes you to do math issues, hitting balls to respond to the inquiries by moving your hips. You are working physically and mentally at the same time. There are others where you will need to perform memory tasks, or you'll be asked to answer other questions. Your memory and other cognitive abilities are boosted. You'll also feel good about yourself as your memory improves and you beat your high scores. So, while you get a boost of serotonin, you'll also get a boost of cells. Your hippocampus grows, and you're at a lower risk for developing the likes of Alzheimer's and dementia in later life (Reed K. 2017).

### CONCLUSION

From the results and discussion, it can be concluded that video game player were significantly harder and they have better mental health than who do not play video game in their life.

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