

RESEARCH REPORT

Factors That Affect Grade Nine Students in Rawalpindi, Pakistan

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We conducted the research in partnership with two schools in Rawalpindi, Pakistan, in response to concerns over the effects of non-educational video gaming and texting on students' school experiences. Educational professionals wanted to refer to research findings when they advised parents to monitor their children's video gaming and texting activities. Our research purpose was therefore to examine the correlations between various factors and school experiences in grade 9. The factors included social relations (e.g., friends), extra-curricular activities (e.g., work), and leisure-time activities (e.g., playing video games and texting).

Data Collection

Complete sets of data were obtained for 205 grade 9 students:

- Academic performance data consisted of the students' final marks (percentage grades in English, mathematics, and science – biology, chemistry, and physics).
- Survey data consisted of the students' answers to 36 questionnaire items: demographics, parental support, peer relationships, extracurricular activities, school activities, self-esteem, self-advocacy, video games, and texting. (See Appendix A.)

Data Analysis

We used Spearman rho calculations to determine correlations. Correlational research requires a minimum of 30 research subjects to produce statistically significant correlations. Separating the 205 grade 9 students by gender created numerically strong data sets of 95 males and 110 females, which was important in order to test the assumption that "boys play video games, but girls text" – as conveyed to us by school professionals, parents, and other adults in the general community.

Results

Because of the nature of data collected by Likert-scale surveys, and because our quantitative survey questionnaire was "homemade," we did not anticipate collecting statistically significant findings. We were essentially testing the waters to see whether any correlations would arise. They did. Non-educational video gaming correlated with school experiences and relationships with parents and peers. Recreational texting also correlated with school experiences and relationships with parents and peers. Other interesting correlations involved other non-academic activities, peer relationships, school experiences, and self-concept.

The following tables summarize these correlations.

Time Spent Playing Video Games	Strength of Correlation	Strength of Prediction
<u>Males</u> The more hours that adolescent boys play video games the more they feel good when they play video games. . . . the more importance they attach to playing video games. . . . the more they are told that they play video games too much.	moderate moderate moderate	limited limited limited

Positive Video Game Experiences	Strength of Correlation	Strength of Prediction
<u>Males</u> The more importance that adolescent boys attach to playing video games the more they feel sleepy in school. . . . the more text messages they send during school classes.	moderate moderate	limited limited
<u>Females</u> The more adolescent girls feel good when they play video games the less they like their teachers. . . . the more they are encouraged by their parents to do well in school. . . . the less they work during the week.	good moderate moderate	fair limited limited

Negative Video Game Experiences	Strength of Correlation	Strength of Prediction
<u>Males</u> The more adolescent boys lie about how much time they play video games the more they feel that they “mess up” everything.	moderate	limited
The more adolescent boys think they play video games too much the more hours they spend sending text messages.	moderate	limited
The more adolescent boys are told that they play video games too much the more hours they spend sending text messages. . . . the more text messages they send during school classes.	moderate moderate	limited limited

Time Spent Texting	Strength of Correlation	Strength of Prediction
<u>Males</u> The more hours that adolescent boys spend sending text messages the more they feel that texting is important to them. . . . the more they enjoy texting with their friends. . . . the more they think that they spend too much time texting. . . . the more they miss school because of texting. . . . the more they are told that they spend too much time texting. . . . the less they like their teachers.	fair moderate good moderate good moderate	moderate limited fair limited fair limited
The more text messages that adolescent boys send during school classes the more they feel that texting is important to them. . . . the more they enjoy texting with their friends. . . . the more they think that they spend too much time texting. . . . the more they miss school because of texting. . . . the more they lie about how much time they spend texting. . . . the more they feel sleepy in school. . . . the less they fall behind in their assignments.	moderate fair moderate moderate fair moderate moderate	limited moderate limited moderate moderate limited limited

Time Spent Texting (continued)	Strength of Correlation	Strength of Prediction
<u>Females</u> The more hours that adolescent girls send text messages the more they lie about how much time they spend texting.	moderate	limited
The more text messages that adolescent girls send during school classes the more they lie about much time they spend texting.	fair	moderate

Negative Texting Experiences	Strength of Correlation	Strength of Prediction
<u>Females</u> The more adolescent girls are told that they text too much the less they are encouraged by their parents to do well in school.	moderate	limited
The more adolescent girls lie about how much time they spend texting the more hours they work during the week.	moderate	limited

Other Non-Academic Activities	Strength of Correlation	Strength of Prediction
<u>Females</u> The more adolescent girls work during the week the more they like their teachers.	moderate	limited

Positive Peer Relationships	Strength of Correlation	Strength of Prediction
<u>Males</u> The more adolescent boys get along with their friends the better they feel being in a classroom.	moderate	limited

Recommendations

We are convinced that school counsellors need to include “the potential dangers of video gaming and texting” at the forefront in dealing with grade 9 students and their parents. We know logically that any activity that lures students away from their schoolwork will eventually have deleterious effects on academic performance.

Several of our correlations appear to warrant further investigation. The research should be repeated, preferably with an enhanced instrument, using a longitudinal research design. Someone needs to track the academic progress of students who continue to play video games or text, or who increase their time playing or texting, in comparison to other students who do not. A longitudinal design would facilitate both types of comparison.

About the Researchers

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