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# Chapter 8: Identifying Struggling Students: Exploring Student Factors Such as Gaming Addiction Which Lead to Grade Retention and Other Challenges

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Abstract: April 25, 2016, Crown Prince Mohammad Bin Salman introduced his Saudi Vision 2030 to address and decrease the country's dependency on oil production (Rashad, 2016). From this goal came the program, Khebrat, which was designed with a specific aim to diversify the Saudi Arabian school system by allowing teachers, school counselors, and school administrators travel to other countries to observe and learn from an immersion program within those school systems. Through the Khebrat process, participants undergo intensive language studies in their placement countries then develop a Capstone Project and guiding paper which would be translated into Arabic for implementation into the Saudi Arabia's school systems. The goal being to add to the existing transformations being made and improving student engagement and overall scholastic success (Alayyafi, 2018). This project and paper were formulated during the immersion phase into an Orange county, Florida Charter School, where the goal of this Capstone is to improve awareness to internet gaming via workshops and discuss the literature which indicates a wide array of symptomatic expression such as depression, social isolation and awkwardness, physical problems such as eye strain and carpal tunnel syndrome, and broken important support networks such as parents and teachers. Understanding that at the core of a Capstone paper and project, it is the goal of the Khebrat participant to provide a unique or original idea that would benefit the school system of Saudi Arabia. These aspects were investigated through a 15-minute zoom media presentation to 4 other KSA school counselors from all over the Kingdom who completed a 6item mixed method survey. The school counselors agreed that the project was both unique and needed as well as a considerable amount of qualitative information was rendered to assist with implementation.

# 1Introduction

Jeddah is the largest city in the Makkah Province with nearly four million people and is the second largest after Riyadh in Saudi Arabia (General Authority of Statistics, 2019). The city serves as the gateway to the Islamic holy cities of Mecca and Medina and rests on the coast of the Red Sea. The current economic growth of Jeddah is through developing capital investment in scientific and engineering leadership which ranks it in the Innovation Cities Index (2thinknow Innovation Cities- Emerging 11 Index, 2009).

April 25, 2016, Crown Prince Mohammad Bin Salman introduced his Saudi Vision 2030 with the goal of to decrease the country's dependency on oil production and sales by diversifying its economy and develop public service sectors such as health, education, infrastructure, recreation and tourism (Rashad, 2016). KHEBRAT is one such program designed with a specific aim to diversify the Saudi Arabian school system by allowing teachers, school counselors, and school administrators travel to other countries to observe and

learn from an immersion program within those school systems (Alayyafi, 2018). This is a paper detailing a Capstone Project which is part of the KEBRAT experience with a reflection of an immersion phase into Orlando Florida's Orange County school system.

This Capstone Project journey begins from observations made as a teacher for 8 years and school counselor for 2 year in middle school in the Kingdom of Saudi Arabia (KSA). Often students find themselves referred to the school counselor's office as a result of unacceptable behaviors such as fighting with others, not paying attention in class, disrespecting the teachers, and other aberrant behaviors. One observation is the use of electronic equipment such as phones, tablets, and computers for competitive gaming and solo gaming. These aberrant behaviors also may ultimately lead to the student's inability to pass to the next grade.

Sometimes when teachers send these students to the counselor, they may be emotionally unable to effectively solve the problem. Oftentimes due to systemic restrictions, the school counselor has no recourse but to refer the student to the supervisor to address the problem. Some further research is indicated to expand the systemic process and specifically define and address appropriate courses of actions. This Capstone project is to write a detailed process and coordination plan that addresses such challenges.

# 2 Literature Review

The Kingdom of Saudi Arabia (KSA) is well underway with its Vision 2030 (Nurunnabi, 2017). As such, the Ministry of Education (MoE) has begun multiple implementations in schools meant to increase students' enthusiasm, provide access to appropriate learning and teaching resources, as well as improve and introduce necessary learning and teaching methods. The Kingdom is prepared to continue to invest in education and training so that their young men and women are equipped for the jobs of the future. In 2016, as part of this country-wide overview, the National Transformation Program 2020 compiled their list of areas needing focus in their education sector (Fallatah, 2016). From this, performance indicators were identified for obtaining favorable results. Unfortunately, at present these challenges remain largely unanswered. For example, there have been disparities found between education and training outputs according to labor market requirements. In addition, Almudara (2019) discusses observation made in the Kingdom's primary and secondary school system. One is an increased use of behavioral management systems a means to help each student focus and absorb the class material that is necessary for their continued personal and scholastic growth. This includes openly using cell phones and other devices which has prompted the current zero-tolerance approach to discipline, a measure once utilized only for the most serious of offenses with extreme measures as suspensions and expulsions of students. For the most part, these disciplinary policies have greatly decreased inappropriate cell phone and harmful devise use of students (Almudara, 2019) but many other classroom disruptions continue. These disruptions not only distract that student but negatively impacts the classroom as a whole.

Many schools have implemented changes to the use of student and faculty handbooks, syllabi, modify teaching strategies, peer instruction, collaborative decision making and discussion groups, specific feedback, appreciation measures, and sequential consequences for discipline. It has been found that most of the schools performed substantially well in terms of assuring discipline because the ministry has developed a system and booklets are handed over

to students and faculty once they start their duties, which was not a practice before Vision 2030.

Overall, in many schools, 45% of the teachers stated that they did not utilize an induction program for fresh students but 100% of the teachers gave a handbook of code of conduct to students and a total of 99% of the teachers reported that the school discipline was consistently applied from class to class and worked the same as indicated in the printed handbook. An observation noted that in 100% of schools, disciplinary rules were not posted on a school's wall

(Almudara, 2019).

Khan (2016), a doctor from a Jeddah area clinic, notes that according to experts and doctors in his observations have concerns for children as the main victims of technology. He said that because of the latest technology a number of children have come to his clinic with eyesight problems due to sitting for hours in front of TV, computer screens or mobiles. The news article in Arab News went on to describe that a survey done by Saudi social experts also revealed the frequent use of latest technology by children is destroying not only their health but also affecting their behavior, making them lazy, weakening their imaginative thinking abilities and decreasing concentration levels. According to the survey, children are becoming addicted to technology, which directly affects their behavior. Fifty-nine percent of children who use smartphones, tablets or computers showed less interest in other activities; 37 percent of children who use smartphones or tablets to play video games prefer being alone or don't like to go out and mingle with people; and 10 percent of children, due to excessive focus on games, are unable to pay proper attention to their studies. The survey exhibited that children spending four to five hours a day on videogames on tablets become aggressive if they aren't allowed to play. Children are spending five hours or more on tablets and video games than they spent five years ago. According to the survey, in almost 40 percent of homes in the Kingdom children are playing video games every day. Almost 3 million video games are sold annually in the Kingdom, and a child in the Kingdom spends nearly SR1,500 on video games. In addition, there are 19.6 million Internet users in the Kingdom. Almost 72.8 percent of the people here use smartphones, when SR111 billion was spent in the Kingdom for buying smartphones and the latest technology. University students who average about 5 hours daily are found to be significantly high as well in the Kingdom of Saudi Arabia. Out of 2367 study subjects, 27.2% stated that they spent more than 8 hours per day using their smartphones. Seventy-five percent used at least 4 applications per day, primarily for social networking and watching news. As a consequence of using the smartphones, at least 43% had decrease sleeping hours, and experienced a lack of energy the next day, 30% had a more unhealthy lifestyle (ate more fast food, gained weight, and exercised less), and 25% reported that their academic achievement been adversely affected. There are statistically significant positive relationships among the 4 study variables, consequences of smartphone use (negative lifestyle, poor academic achievement), number of hours per day spent using smartphones, years of study, and number of applications used (Alasaimi, et. al., 2016).

Video game addiction falls into the category of "Internet gaming disorder," which is closely related to impulse control disorder and often compared with gambling addiction. Currently within the DSM-5, Internet gaming disorder is considered to be the "persistent and recurrent use of the Internet to engage in games, often with other players, leading to clinically significant impairment or distress as indicated by five (or more) criteria in a 12-month period".

The diagnostic criteria include a preoccupation with gaming, withdrawal symptoms, tolerance (i.e. spending more time gaming), lack of control, loss of other interests, use despite negative consequences, deception, mood modification, and losing a relationship, job, or similarly important aspects of life (APA, 2013).

Along with the previously discussed Kingdom gaming addiction statistics, the United States and Australia report about 8%, 10% in China, 4% in Korea, and 3% in Germany (Saquib, et.al., 2017). The consequences can be dire having a negative impact upon each affected individual. Saquid, et. al. (2017) note many studies that have indicated behavioral, school, and familial impacts as a result of gaming addiction. These have been noted on a neurocellular level through brain imaging and have a wide array of behavior expressions such as depressed symptoms, anxiety, impulse control, poor self-control, poor social and coping skills.

Electronic gadgets availability among the youth in Arab countries in the Gulf region probably are similar to other countries worldwide (80% have a laptop or desktop; 67% of the remaining 20% who do not possess one have access to one) (Jacobson, Bailin, Milanaik, & Adesman, 2016). The focus has been on screen time in published data as related to video games studies. Two Emirati studies and one Bahraini study reported the proportion of their study participants that had greater than 2 h/day of screen time was 37% (age 5–15 years), 85% (age

11–16 years), and 65% (age 15–18 years) respectively (Henry, Lightowler, & Al-Hourani, 2004; Musaiger, Bader, Al-Roomi,&D'Souza, 2011; Yousef, Eapen, Zoubeidi,&Mabrouk, 2014). The corresponding prevalence was even higher in Saudi Arabia (The Arab Teens Lifestyle Study, age: 14–19 years, male: 84%, female: 91%) (Al-Hazzaa et. al., 2014). Although screen time and video game addiction are probably easily correlated, most likely Internet gaming disorder is distinctly different from excessive use so consideration and caution should should be extended to individual context and distress caused to the addict.

Saquid, et.al. (2017) suggest the need for a broader net and participant number to determine the extent of the Kingdom's internet addiction problem as well as specific concentration on the types of games that are being played (violent vs. non-violent), the amount of time spent on them, and the duration of the addiction. In addition, it has yet to be determined whether video game addiction is a solitary behavioral problem or whether it coexists or leads to other types of addiction, such as substance use leading to distinguishing the psychological distress being from additional risk factors such family environment, interpersonal relationship, and academic performance (Saquid, et. al., 2017).

The purpose of this Capstone project is to work with the existing evolution of school counseling procedures and streamline the process with more consistent, standardized pathways to ensure student success. Therefore, a special focus and proposed action is indicated for one aspect of aberrant behavior in school students; Obsessive gaming and gaming addiction.

## 3 Methods

As part of the Khebrat process, each Saudi member must first undergo intensive language studies in their placement countries. This is a vital step in a multi-layer approach to gleaning the information to successfully formulate a Capstone paper which describes the implementation of a project meant to compliment Vison 2030 (Alayyafi, 2018). Upon successfully learning English, next the goal was to gain ideas which would be translated into

Arabic for implementation into Arabia's school systems. The goal being to add to the existing transformations being made and improving student engagement and overall scholastic success. As with this Capstone project, this was gained through research and observations made while in an immersion phase within an

Orange county, Florida grade school. One noted observation which began before coming to the United States was the propensity of students presenting to the school counselor due to obsessive technology use during school. This prompted the observation of the prevalence of other students using their electronic devices as competition with each other on-line or solo use of gaming programs. The children where noted to discuss their use to excessive degrees at home as the literature suggests. Discussion with parents who were consulted due to their own child or simply observing others suggested a sense of futility and hopelessness at the prospect of changing the excessive gaming behaviors.

Some studies have noted the challenge of Internet Addition, specifically gaming among school age children and offered a guideline to treatment (eg. Torres-Rodriguez, et. al., 2017) or reviewed a treatment such as Participatory Learning School and Family- Based Interventions for Preventing Game Addiction (Apisitwasana, et. al., 2018). The latter has shown significant efficacy up to 3 months with 4th and 5th graders in Thailand.

For the current Capstone project, a much-needed workshop will be presented with the facts presented herein and a discussion of the effective treatments will be discussed primarily from Appendix A. Treatments for process addictions are discussed in the Appendix B workshop, each having shown some measure of efficacy and will be briefly discussed as a reference for any workshop attendee wishing to go further than what the awareness from the workshop offers (see Appendix B).

Also, similarly as part of the Methodology of this Capstone paper and project, a 5-slide presentation has been designed highlighting personal information about the Capstone developer and presenter as well as the development and purpose of the Capstone project. At the core of a Capstone paper and project is the "uniqueness" or how original the idea is as well as the usefulness of the purpose of the project. The information is being offered through a 15 minute zoom media presentation to 4 other KSA school counselors who will be completing a 6 item mixed method (4 quantitative, 1-5 Likert scale questions, and 2 qualitative questions) survey (See Appendix A) looking at raw data, statistical means, as well as useful qualitative information and word patterns.

# 4 Results

As stated in the Methodology section of this paper, at the core of a Capstone paper and project is it's "uniqueness" or how original the idea is as well as the usefulness of the purpose of the project. With this, the project idea is tested by being offered through a 15 minute zoom media presentation to 4 other KSA school counselors who will be completing a 6 item mixed method (4 quantitative, 1-5 Likert scale questions, and 2 qualitative questions) survey (See Appendix A) looking at raw data, statistical means (averages), as well as useful qualitative information and word patterns.

The goal of the survey is not to "test" the idea but elicit as much useful insights from fellow school counselors from KSA prior to offering the finished project to others in the

Kingdom. From the zoom presentation the results for the quantitative questions using the scale of 1 to 5, where 5 is very much and 1 is not at all, the ratings were averaged from the 4 other school counseling participants' feedback:

- 1) How unique or original is this information for KSA, 1-5? 4 average
- 2) How open to this information do you think relevant people will be to this information, 1-5? 5 average
- 3) How well do you see the KSA Ministry of Education accepting this proposal, 1-5? 5 average
- 4) How useful do you see the Capstone being proposed to your area in KSA, 1-5? 5 average

# **Qualitative Questions**

Write a brief answer that you see helpful to the success of this project:

- 5) How may this be more accepted by people in KSA? Very needed. Children manage time. Use internet gaming that promotes learning and opening up in counseling. Workshop and trainings needed.
- 6) How may this be more accepted by the Ministry of Education? Convince because it is a growing problem in KSA.

## **5 Conclusions**

April 25, 2016, Crown Prince Mohammad Bin Salman introduced his Saudi Vision 2030to the Kingdom of Saudi Arabia (KSA) as a means to address and decrease the country's dependency on oil production (Rashad, 2016). From this goal came the program, Khebrat, which was designed with a specific aim to diversify the Saudi Arabian school system by allowing teachers, school counselors, and school administrators travel to other countries to observe and learn from an immersion program within those school systems (Alayyafi, 2018).

As part of the Khebrat process, each Saudi member must first undergo intensive language studies in their placement countries. This is a vital step in successfully formulating a Capstone paper which describes the implementation of a project meant to compliment Vison 2030 (Alayyafi, 2018). Upon successfully learning English, next the goal was to gain ideas which would be translated into Arabic for implementation into the Saudi Arabia's school systems. The goal being to add to the existing transformations being made and improving student engagement and overall scholastic success.

This Capstone idea came from observations made while in the Khebrat immersion phase in an Orange county, Florida school. The goal of this Capstone is to improve awareness to internet gaming via workshops and discuss the literature which indicates a wide array of symptomatic expression such as depression, social isolation and awkwardness, physical problems such as eye strain and carpal tunnel syndrome, and broken important support networks such as parents and teachers. This has a devasting impact on development and scholastic growth. This idea is in line with the Vision 2030 concept, which focuses on promoting the scientific and professional aspects of the craft of school counseling.

At the core of a Capstone paper and project is how unique or original the idea is as well as the usefulness of the purpose of the project. These aspects of this project idea was

investigated through a 15 minute zoom media presentation to 4 other KSA school counselors who completed a 6 item mixed method (4 quantitative, 1-5 Likert scale questions, and 2 qualitative questions) survey (See Appendix A) looking at raw data, statistical means (averages), as well as useful qualitative information.

The goal of the survey was to elicit as much useful insights from fellow school counselors from KSA prior to offering the finished project to others in the Kingdom. The results of that zoom presentation indicated that; 1) The raters felt the idea was very unique or original. 2) The information was relevant to the citizens of KSA. 3) The proposal could be easily accepted by the KSA Ministry of Education. 4) The proposed idea would be useful in each rater's area of KSA. Furthermore, the qualitative questions gathered some useful information such as; 5) How may this be more accepted by people in KSA? The idea is very needed. Families are challenging sometimes. Opens family to different ways to do counseling. Opens student up in counseling. Workshop and trainings needed. Helps to inform that children managing time is key. Use internet gaming that promotes learning and opening up in counseling. 6) How may this be more accepted by the Ministry of Education? They will need convincing because it is a growing problem that is not specifically addressed in KSA policy. It is relatively low cost as well.

From these points, we can clearly see that counselors have a big role in the education process, especially concerning student mental health, education statues, and problem solving. When the counselors are well educated and well prepared, students find themselves in safer, more competent hands. Getting others involved in the process helps to offered people a sense of pride and involvement and may ease the workload of the existing staff.

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## Appendix A

2020 Capstone Result Data Survey

**Quantitative Questions** 

On a scale of 1 to 5, where 5 is very much and 1 is not at all, rate the following:

- 1) How unique or original is this information for KSA, 1-5?
- 2) How open to this information do you think relevant people will be to this information, 1-5?
- 3) How well do you see the KSA Ministry of Education accepting this proposal, 1-5?
- 4) How useful do you see the Capstone being proposed to your area in KSA, 1-5?

## **Qualitative Questions**

Write a brief answer that you see helpful to the success of this project:

- 5) How may this be more accepted by people in KSA?
- 6) How may this be more accepted by the Ministry of Education?

### Appendix B

Video game addiction:



An evidence-based guide

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https://www.parentingscience.com/video-game-addiction.html

Some kids spend long hours playing video games. Do they suffer from video game addiction?

Not necessarily. Kids might play <u>video games with disturbingly violent themes.</u> They might spend too much time on the couch, becoming more sedentary and socially reclusive.

Kids might sometimes neglect their chores or homework, and they might fail to develop the ability to entertain themselves. — ADVERTISEMENT But such problems don't mean that a child suffers from an *addiction*.

#### What's an addiction?

Originally, the term referred to a physiological dependence on a drug. Nowadays, people use "addiction" to describe all sorts of excessive behavior, like eating too much chocolate.

But while researchers avoid this usage, they recognize that some pastimes, like gambling, can become pathological and resemble true addiction.

And some kids who play video games meet the clinical criteria for an "addiction" in this sense.

Video games dominate their lives. Playing gives them a sense of euphoria, or at least a sense of relief from unpleasant feelings. Kids experience "withdrawal" if they are denied access to games. And gaming interferes with everyday life, including school and social relationships.

So pathological gaming is about more than how much time your child spends playing game. It's about video games taking over his or her life.

How many kids are in this fix? To get an idea, let's consider this screening tool developed by Douglas Gentile.

## The Video Game Addiction Questionnaire

Gentile surveyed a random sample of 1178 American youth (aged 8 to 18), asking kids to answer each of the questions below with either a "Yes," "No," or "Sometimes."

Kids were considered to be pathological gamers if they responded with a "Yes" or "Sometimes" to at least 6 of these 11 questions:

- 1) Over time, have you been spending much more time thinking about playing video games, learning about video-game playing, or planning the next opportunity to play?
- 2) Do you need to spend more and more time and/or money on video games in order to feel the same amount of excitement?
- 3) Have you tried to play video games less often or for shorter periods of time, but are unsuccessful?
- 4) Do you become restless or irritable when attempting to cut down or stop playing video games?
- 5) Have you played video games as a way of escaping from problems or bad feelings?
- 6) Have you ever lied to family or friends about how much time you play video games?
- 7) Have you ever stolen a video game from a store or a friend, or have you ever stolen money to buy a video game?
- 8) Do you sometimes skip household chores in order to spend more time playing video games?
- 9) Do you sometimes skip doing homework in order to spend more time playing video games?
- 10) Have you ever done poorly on a school assignment or test because you spent too much time playing video games?
- 11) Have you ever needed friends or family to give you extra money because you spent too much money on video game equipment, software, or game/Internet fees?

When lumped together "Yes" and "Sometimes" responses, about 20% of the sample met the criteria for a video game addiction.

When only "Yes" responses, about 8% of the kids qualified as pathological gamers.

Either way, that's a lot of addiction, and the problem seemed to affect kids across a wide range of background. Pathological video game use was unrelated to cultural variables, like race or the type of school attended.

Moreover, pathological gaming has been reported all around the world.

In the U.S. and Australia, the estimate is around 10%

In Spain, the rate of game addiction has been estimated at around 10%. Video game addiction is also a major concern for some researchers in East Asia. And in Singapore and China, the prevalence of pathological gaming may be around 8-9.

But despite their varied backgrounds, game addicts have certain things in common. Pathological gamers spent about twice as much time playing games (24 hours per week). They are more likely to have game systems in their bedrooms. And also report more trouble paying attention in school poorer grades, and more health problems.

Researchers found that children in Singapore who met clinical criteria for a video game addiction performed worse at school. Interestingly, this study found no correlation between time spent playing games and school performance.

## It was the symptoms that indicated obsession or addiction that predicted poor schoolwork, not playing.

#### What does it all mean?

As noted above, you don't have to suffer from a video game addiction to have a problem. So, what's important about identifying pathological game habits?

Scientific research on the subject is scarce at this point, but clinicians advise that pathological gaming should be taken more seriously. It isn't "just a phase" that will get better on its own. Your child might benefit from the same treatment therapies that work for pathological gamblers or substance abusers--therapies like cognitive behavioral counseling, peer support groups, and "12 step" programs (which seem helpful insofar as they motivate kids to stay on track).

There are now specific treatments being developed to address the challenge of Obsessive or addictive gaming in school children, eg

Participatory Learning School and Family- Based Interventions for Preventing Game Addiction which has shown significant efficacy up to 3 months with  $4^{th}$  and  $5^{th}$  graders in Thailand.

#### Some thoughts about flow

It also seems wise to be vigilant about gaming experiences that might overwhelm a child's sense of self-control. People can become completely immersed in video games, losing awareness of the passage of time, of their real lives outside the game.

Psychologists call this experience *flow*, and it's not a unique characteristic of video games. Plenty of other activities—including highly productive ones, like sculpting or composing music—can also create a sense of flow.

But some video games seem to have a peculiarly powerful effect, and I wonder how realistic it is to expect kids to keep their gaming habits in check.

Do the studies overestimate rates of video game addiction? Let's assume they do. We're still left with evidence that some kids—by their own admission—are letting video games displace other aspects of their lives.

In addition to monitoring our children's habits—and setting limits— we might also think seriously about ways to cope with the allure of video game flow.

Some studies suggest that the most "addictive" video games are the fantasy role-playing games, especially for kids who are shy or unpopular. So perhaps concerned parents should try to steer susceptible kids away from such games, and towards less overwhelming options, like electronic board games, puzzles, sports games, or simulation games.

And maybe parents can offer kids other, more productive or developmentally stimulating ways to enjoy a sense of flow. Kids can

lose themselves in the exploration of local wildlife or the construction of a model bridge. But do they?

It's interesting to consider that while video games have become more popular, other opportunities for unstructured play have been shrinking. I'm not suggesting that video games are responsible. But perhaps the availability of video games has facilitated a major change in our lifestyles.

Kids used to spend most of their free time outdoors, playing without the direct supervision of adults. Today, this is considered too dangerous, and for children who live in high-crime neighborhoods, the danger may be real. In a study of American fourth graders, researchers found that gaming addiction rates were higher among kids who perceived their environments as less safe.

Are video games taking up the slack? Perhaps electronic games would exert less power over our kids if kids had more to do.