

Qualitative Exploration of Stress and Coping Mechanisms in Esports

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Introduction: Esports players experience excess stress due to performance expectations.

Aim: This qualitative study was performed with 8 participants about the stress experience and stress coping strategies of esports players.

Method: Voice recordings were made in the study which used the focus group interview method with a semi-structured leading question form about features related to stress and coping. Data were analyzed by identifying thematic content.

Results: Data revealed that players experienced stress due to excitement before matches, individual performance concerns, competitors displaying good performance during games, lack of communication between the team and the desire to win the match. Esports players were identified to use emotion-focused coping methods more than other coping methods in order to deal with stress.

Conclusions: The study recommends that information be given to esports players about what they can do in relation to stress management for effective coping with stress (like nutrition, sleep, physical activity, social support, positive thinking, breathing and relaxation exercises).

Keywords: Electronic Sports, Stress, Coping, Esports Player

INTRODUCTION

The video game industry has shown growth during the last 10 years along with the developments in the field of technology (Argan et al., 2006; Ucuncuoglu & Cakir 2017; Smith et al., 2019). With this growth, popular video games have become a sector currently and the electronic sports (esports) concept has emerged. The esports concept, known for competitive or professional video gaming, is a sport that requiring physical and mental performance where people from different locations in the world meet to play

games facilitated by large electronic sports organizations (Argan et al., 2006; Akin 2008; Hutchins, 2008; Kocadag,2020; Smith et al., 2019).

Taking its place as a sector around the world, the first center in Europe for the esports concept was England. With awards tournaments intensely played in an environment with excessive competition around the world, the ‘Red Annihilation’ tournament was played in June 1997 in Europe (Kampmann, 2001). After the ‘Red Annihilation’ electronic sports tournament, every year sportspeople from many countries around the world continue to organize official and private electronic sports tournaments (Akin 2008).

Esports may cause stress due to competitive performance expectations when played competitively (Leis & Lautenbach, 2020; Pedraza- Ramirez et al., 2020; Smith et al., 2019). Research has identified that sportspeople are under excessive pressure due to performance expectations in competition (Thelwell et al., 2007; Weston et al., 2009; Arnold & Fletcher 2012). With esports becoming more popular with each passing day (Leis & Lautenbach, 2020), there is a need to better understand the effects of stress on players and stress coping methods on performance.

Lazarus & Folkman (1984) defined stress as a situation forcing or exceeding an individual’s resources or relationships with surroundings which negatively affects well-being. Stress occurs within a certAkin process between the person and their surroundings linked to a certAkin situation and displays variability over time (Lazarus & Folkman 1984; Folkman, 2010; Özgan et al., 2008). Assessment of an event as stressful is linked to the individual’s perception and interpretation of the event and their defenses and coping skills (Özgan et al., 2008). Coping with stress is the cognitive, emotional and behavioral efforts made by an individual in order to adjust to stress-inducing situations (Folkman, 2010). Folkman & Lazarus (1985) classified coping with stress as problem-focused and emotion-focused. Problem-focused coping involves understanding the situation that causing stress and strategies to resolve or change this situation.

Emotion-focused coping involves attempts to cope with the emotions caused by the stressful situation and regulation of emotional reactions. In later studies, researchers added three more coping dimensions of avoidance coping, approach coping and search for support (Nicholls & Polman, 2007; Smith et al., 2019). When compared with studies investigating traditional sports, the number of studies about esports performance is very low. Studies related to esports have revealed stress factors encountered by esports players and the need for stress-coping methods (Suinn, 2005; Smith et al., 2019). Studies have been performed about the expertise of esports players (Fanfarelli, 2018), use of mental skills (Himmelstein et al., 2017), effect of coping with stress and mental resilience (Poulus et al., 2020), and stress factors and stress-coping methods (Smit et al., 2019). How a source of stress is perceived by

sportspeople, the intensity of feelings induced and how to cope with stress affects a sportsperson's experience of stress. Due to the fact that esports is competition based and the effect of stress on performance, it is important to know the stress experiences of players and what type of coping methods they use for stress.

METHOD

Design: This study used the descriptive case study pattern method from qualitative research to identify stress factors among esports players and the coping methods they use to cope with these stress factors. Research data revealed the stress case among esports players and their experiences perceptions and feelings about coping approaches.

Participants: Participants in the study comprised all players on an esports team from a university in İstanbul. There is no limitation for the sample numbers in case study pattern research from the qualitative research methods (Erdogan, 2017). As a result, all players on the team participated in the study (N=8).

Data Collection: The study was completed from February-March 2020 with esports team members from a university in İstanbul province. The interview method was used to collect data. Data about demographic and stress-related features of players were obtained with a semi-structured leading question form using the focus group interview method. The questions in the interview guide were developed after reviewing previous qualitative research about stress factors and coping with stress (Smith et al., 2019; Thelwell et al, 2007; Weston et al, 2009).

When collecting data, the researcher recorded detailed notes. Simultaneously, the participants' statements were recorded with a voice recording device. Interviews with players lasted 1-1.5 hours.

Analysis: Data obtained with the semi-structured leading questions form in the research were defined and interpreted with the descriptive analysis method within the framework of previously-determined themes. The recordings taken during interviews with the recording device were transcribed directly. The transcript was compared with the observer's notes and data were reevaluated. Later, it was coded according to the thematic areas determined for descriptive analysis:

- (1) stress experiences and
- (2) coping approaches.

The coded data were separately reviewed by the researchers to ensure consistency in the themes. The study includes the statements of esports players which best describe stress experiences and coping.

Ethics: Before beginning the research, ethical permission was granted by Bahçeşehir University Ethics Committee. Later esports club officials were met and study permission was granted. Before individual and group interviews, every player had the aim of the research explained.

Written consent was obtained to make recordings during the interview and that information would not be used outside the research. All players agreed to participate in the research and players were given numbers in place of names.

RESULTS

Demographic Characteristics of Esports Players

A total of 8 people aged from 18-20 years participated in the study. All players were university students.

Findings obtained from Leading Questions

In this section, two themes were created in line with findings obtained from leading questions: (1) stress experiences and (2) coping approaches.

Theme 1: Stress Experiences

In the study, the majority of players stated they experienced stress before, during and after the matches. They stated the causes of stress were generally excitement felt before the match, individual performance, competitors displaying good performance during the game and the desire to win the match. Additionally, individual stress and performance was more important than team performance; as a result, they stated that individual defeats caused them to become stressed. One player stated they felt nothing before, during and after the match. For example:

“I am motivated by rewards, success, the feeling of defeat, competition, playing well and proving to myself that I can do best. At the same time, these feelings cause me to get stressed.”

“I feel excitement before the match and performance anxiety. This makes me stressed. During the match, I break with all my feelings. I focus on the match.”

“I feel sad if we lose a match, I get stressed. I try to play my best individually. Because individual success is more important than the team effect.”

“I can’t sleep before a match linked to stress and excitement. During the match I return to normal but after the match my mood changes based on the result. If I’ve lost, I am sad and get obsessed but if I’ve won, I am happy.”

“I experience sleep problems before a match. I think about what I will do for hours. If there is a big audience or the competition is hard, I get excited and stressed. During the match, I collect myself. I focus on the match. After the match I am very affected if I lose. It’s bad, but if I win, I am happy.”

Players stated that inadequate communication within the team members caused stress. For example:

“Communication is very important in the game we play and the game focuses on communication. Lack of communication in the team stresses me a lot.”

“Communication accepts no mistakes, if there’s a mistake we lose the match.”

“Individual performance is more important than team performance, but if we don’t act with the team, I get depressed. It affects my individual performance.”

Theme 2: Coping approaches

Coping strategies were defined in line with the coping styles mentioned in the previous literature as emotion-focused, problem-focused, avoidance- focused, approach and search for support.

Emotion-focused coping

Emotion-focused coping involves attempts to deal with the feelings created by the stressful situation and regulation of emotional responses (Folkman & Lazarus, 1985). It is an approach

“I listen to calm music. I take a break from the computer and mentally relax myself. I do this for 5-10 minutes.”

“I listen to music, sometimes rousing, sometimes relaxing.”

“I stretch my feet. I drink tea. I think about things when I win. It affects me positively.”

“I wash my hands with cold water to relax. My hands shake. I drink water. I bring a cushion with me. Touching that feels good.”

“If the time between matches is short, I focus on myself.”

It appeared that participants stated they were negatively affected by some coping approaches. Among these unsuitable strategies were:

“When I’m stressed, I chew gum. I get more stressed as I chew the gum. My chin hurts. To relax afterwards I eat two big hamburger menus.”

“Sometimes, when very angry, I hit the table. If I don’t like my performance, that happens. If my team is directed recklessly and badly, I get annoyed.”

“Losing a game affects my life a lot. If I play badly, I get depressed. But if my performance is good but the team is bad, I don’t mind. If I play badly, I try to collect myself in a few days.”

Problem-focused coping

These are short- or long-term approaches to direct or change the existing stress. Participants said that after they lost a team game, the team members came together to talk and try to resolve the situation. They talked about team and individual errors and recommended solutions, but did not put them into practice.

“We discuss the game for hours after it finishes but our perspectives don’t change much. We don’t change what we know.”

“If the match goes badly, I obsess about it. I am pessimistic. I focus on errors causing us to continuously lose. If we lose the match because of my performance, I feel under a lot of pressure that I should play better.”

Avoiding coping

This involves efforts to distance from the situation causing physical and mental stress in order to avoid stressful situations (Smith et al., 2019).

During the game, they stated that they expended more effort according to their opponents, if the opponent displayed moderate levels of performance, they don’t care much and play comfortably. For example:

“Your performance in the game is determined by your opponent. If your opponent has good performance, I get stressed. I say I should play well. If they have normal performance, I relax and my relaxed attitude is reflected in the game.”

“My stress level changes from opponent to opponent. If there is a poor opponent I play dominantly, if I think they are better than me, I stay back.”

Another avoiding strategy involves staying away from in-game discussions and avoiding communication.

“When we lose a match, I don’t speak about our errors when we come together to review our mistakes. There is no point in making any recommendations.”

For this another player said; “We need to correct our mistakes. As a result, talking about our mistakes changes my thinking.”

Approach coping

Confronting the source of stress involves direct action. Four of the players stated they felt stress linked to the performance of their opponents. Some stated they made efforts to show better performance when their opponent had good performance, while some said it had motivating effect. For example:

“If the opponent player puts a lot of pressure on me during the game, I act accordingly. If they play differently, I get stressed. Because it is difficult to have to change my playing style very rapidly. But I adapt.”

“I play the game according to the opponent. If they’re good, I play well, if bad, bad.”

“If the opponent performance is bad, I want to punish them; if they are good, I get scared. Sometimes I don’t get scared and I adapt myself.”

Search for Support

This represents individuals asking for help from those around them to cope with events causing stress. Players stated that they do not communicate much with other individuals outside the team in a social sense, but communicate with team members and individuals like themselves who use computers. For example:

“Support from my team colleagues relaxes me when I’m stressed.”

“In a social sense, I don’t have time to spend with people. I spend my life on my computer and in school. I don’t even have time to call my mother and father. This situation doesn’t bother me, I think I’m used to it.”

“I’m always at home, I leave the house to go to school. I don’t have time for socializing.”

“Because I’m always on my computer, my socializing is on the computer. Instead of going out and talking to people, I communicate with people who are on their computers like me.”

DISCUSSION

The study revealed the qualitative data about stress and stress-coping approaches among esports players.

As understood from player statements, they use a variety of coping methods to keep their stress under control. The majority of players stated they experienced stress before, during and after matches. The causes of stress were stated to be generally feeling excitement before the match, individual performance, competitors displaying good performance during the game and the desire to win the match.

Additionally, they stated that individual stresses and individual performance were more important than team performance. Expectations related to esports performance may cause stress (Pedraza- Ramirez et al., 2020). Researchers have identified that sportspeople have performance expectations in competitions and are under intense pressure (Thelwell et al., 2007; Weston et al., 2009; Arnold & Fletcher, 2012). In our study, it is thought that the performance of the opposite player determining who wins the match, stated by players to be an external stress factor, may be a source of stress.

Among other stress factors, several players mentioned inadequate in-team communication. Lack of effective communication and linked inadequacy of team work negatively affects esports performance (Himmelstein et al., 2017). Smith et al. (2019) identified inadequate communication between team players and with the game leaders was an important source of stress in a study investigating stress levels of esports players. This result is similar to our study.

In this study, when the stress-coping strategies of esports players were assessed, emotion-focused, problem-focused, avoiding, approach and search for support approaches were dealt with to show the variety of coping strategies used by players to cope with stress.

According to player statements, they used the emotion-focused coping method more than the other coping methods. Research has found that sportspeople use emotion-focused strategies (Weston et al., 2009) to make a focus on attractive stimuli to ensure performance reaches maximum levels, which supports these findings.

Players use methods like taking breaks during matches and listening to music to cope with stress. Studies by Smith et al. (2019) identified that esports players used methods like taking breaks and listening to music to cope with stress. This situation complies with our study.

Participants stated that they used problem-focused and avoiding coping strategies to cope with stress factors related to in-team communication. There were players who stated that communication is important and is indispensable for teams in the problem-focused approach, while other players stated that communication could not change their viewpoints so they did not communicate displaying the avoiding approach.

Smith et al. (2019) showed that communication was openly used to cope with losing matches, additionally, they stated that they used the avoiding

strategy due to perceiving post-game strategizing and discussion of approaches as criticism. This situation is similar to our study (Smith et al., 2019). Effective communication has positive effects in esports (Himmelstein et al., 2017).

The findings obtained in the study show that players experienced stress and used mostly emotion-focused coping methods in spite of a range of coping methods. Some players used positive methods like taking breaks during matches, listening to relaxing music, focusing on the match, and imagining positive images of winning the match.

CONCLUSION

This study provides a general view of stress experiences and stress coping among Turkish esports players. Interviews reflected esports players performance and emotions related to stress they experienced.

The data from this qualitative study cannot be generalized. Additionally, to prevent stress and to ensure effective coping with stress in stressful situations, esports players should be given training and information about what they can do for stress management. These information may include nutrition, physical activity, social relationships-support, sleep, positive thinking and breathing and relaxation exercises. As stress is an important factor among esports players, the number of studies about stress should be increased.

REFERENCES

- Akin E. (2008). Electronic sports: A study on electronic athletes in Turkey (Master's thesis, Anadolu University)
- Argan, M., Ozer, A. & Akin E. (2006) "Electronic Sports: Attitudes and Behaviors of Cyber Athletes in Turkey", 9th International Sports Sciences Congress Proceedings, 9th International Sports Sciences Congress, 3-5 November, Mugla, 1138-1141.
- Arnold, R., & Fletcher, D. (2012). A research synthesis and taxonomic classification of the organizational stressors encountered by sport performers. *Journal of Sport and Exercise Psychology*, 34(3), 397-429
- Erdogan, S. (2017). Qualitative research. In *Research Process, Practice and Criticism in Nursing*, 131-165. Istanbul: Nobel Medicine Bookstore.
- Fletcher, D., & Arnold, R. (2017). Stress in sport: The role of the organizational environment. In C. R. D. Wagstaff (Ed.), *The organizational psychology of sport: Key issues and practical applications* (pp. 83-100). New York: Routledge/Taylor & Francis Group.
- Fanfaneli, J. R. (2018). Expertise in professional Overwatch play. *International Journal of Gaming and Computer-Mediated Simulations*, 10(1), 1-22.
- Folkman, S. (2010). Stress, coping, and hope: *Psycho-Oncology*, 19, 901-909.

- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: study of emotion and coping during three stages of a college examination. *Journal of personality and social psychology*, 48(1), 150.
- Himmelstein, D., Liu, Y., & Shapiro, J. L. (2017). An exploration of mental skills among competitive league of legend players. *Journal International Journal of Gaming and Computer-Mediated Simulations*, 9(2), 1-21
- Hutchins, B. (2008). Signs of meta-change in second modernity: the growth of e-sport and the World Cyber Games. *New Media & Society*, 10(6), 851-869.
- Kampmann, B. (2001). Playing and gaming. *The Int. J. of Computer Game Res.* 3-1.
- Kocadag, M. (2020). An eSport research: psychological well-being differences of teenagers in terms of several variables. *Social Sciences*, 1(1), 31-39.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Leis, O., & Lautenbach, F. (2020). Psychological and physiological stress in non-competitive and competitive esports settings: A systematic review. *Psychology of Sport and Exercise*, 101738.
- Nicholls, A. R., & Polman, R. C. J. (2007). Stressors, coping, and coping effectiveness among players from the England under-18 rugby union team. *Journal of Sport Behavior*, 30(2), 199-218.
- Ozgan, H., Balkar, B., & Eskil, M. (2008). The causes of stress perceived by the students of the faculty of education in the classroom and the effect of personal variables on stress. *Electronic Journal of Social Sciences*, 7(24), 337-350.
- Pedraza-Ramirez, I., Musculus, L., Raab, M., & Laborde, S. (2020). Setting the scientific stage for esports psychology: A systematic review. *International Review of Sport and Exercise Psychology*, 1–34.
- Poulus, D., Coulter, T. J., Trotter, M. G., & Polman, R. (2020). Stress and coping in esports and the influence of mental toughness. *Frontiers in Psychology*, 11, 628.
- Smith, M. J., Birch, P. D., & Bright, D. (2019). Identifying stressors and coping strategies of elite esports competitors. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 11(2), 22-39.
- Suinn, R. M. (2005). Behavioral intervention for stress management in sports. *International Journal of Stress Management*, 12(4), 343.
- Thelwell, R. C., Weston, N. J. V., & Greenlees, I. A. (2007). Batting on a sticky wicket: Identifying sources of stress and associated coping strategies for professional cricket batsmen. *Psychology of Sport and Exercise*, 8(2), 219-232.
- Ucuncuoglu, M., & Cakir, V. O. (2017). A research on the reasons why modern sports clubs show interest in esports activities. *Inonu University Journal of Physical Education and Sport Sciences*, 4(2), 34-47.
- Weston, N. J. V., Thelwell, R. C., Bond, S., & Hutchings, N. V. (2009). Stress and coping in single-handed round-the-world ocean sailing. *Journal of Applied Sport Psychology*, 21(4), 460-474.