Sports Psychology: Relationship Between Impulsivity and Aggression Levels Among

Adolescent Racers of Go-Kart Racing

in Carmona Racing Circuit

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ABSTRACT

Name of Institution

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Address

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Title

: Sport Psychology: Relationship Between Impulsivity

and Aggression Levels Among Adolescent

Racers of Go-Kart Racing in Carmona Racing Circuit

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Objectives

General:

To determine the relationship between Impulsivity and Aggression Levels among adolescent racers of Go-Kart Racing in Carmona Racing Circuit.

Specific:

- 1. What is the socio-demographic profile of adolescent racers in Carmona Racing circuit?
- A. Age
- B. Gender
- C. Birth Order
- D. Educational attainment/ Organization
- E. Parents Occupation (Source: Career Assessment Inventory- enhanced version)
- 2. What are the influential factors of Go-Kart Racers?
- 3. What is the Level of Impulsivity of the respondents?
- 4. What is the Aggression Level of the respondents?



5. Is there a linear relationship between impulsivity and aggression levels on Go-kart Racing among adolescent Racers in Carmona Racing Circuit?

SCOPE AND LIMITATION

This research was focused on finding out the relationship between the Impulsivity and Aggression Levels among the Adolescent racers of Go- Kart Racing in Carmona Racing Circuit.

This research covered respondents with at least two years experienced as adolescent racers in Carmona Racing Circuit. Twenty-five racers were considered to participate. The researchers chose adolescents because involvement in this sport usually begins in adolescent years. They are the age prone to aggression (refer to related literature).

The researchers chose Carmona Racing Circuit because this is a known Racing Circuit in Cavite area and several racing competition had been conducted therein since 1998 (www.akoc.com), besides the number of the respondents fits to the needs of the researchers.



METHODOLOGY

Research Design

This is a study about the relationship of Impulsivity and Aggression Levels on Go- Kart Racing among Adolescents Racers in Carmona Racing Circuit.

The descriptive-correlational design was used in this study. The descriptive-correlational method was designed to gather information about present existing conditions. The principal aim in employing this method is to describe the nature of a situation and to find new truth. As it exists at the time of the study (Traverse in Sevilla 4, 1992) Gay (in Sevilla, 1992) define the descriptive research as involving collection of data in order to best hypothesize and to answer questions concerning the current status of the subject of the study. In this study, the researchers wanted to find out the relationship of Impulsivity and Aggression Levels on Go-Kart Racing among Adolescent Racers in Carmona Racing Circuit. Descriptive correlational design predicts and explains the relationship between variables (Atkinsons, 2001). Therefore, the collection of data would be of great help in order to come up with the best explanation on the relationship of Impulsivity and Aggression Levels among adolescent Racers in Carmona Racing Circuit. Purposive sampling was used in this study.



Research Respondents

The sample used in this study included 25 participants whom the researchers had taken into consideration regarding their condition and willingness to answer the Aggression Evaluation, a self-made instrument used in this study to measure the levels of aggression toward the person. The researchers also gave the Emotion Profile Index (EPI), a test to measure the independent variable impulsivity levels and dependent variable levels of aggression, within the time frame of 10-15 minutes. This study included those racers whose ages range from 12-20 years old. Respondents have their own karts, showed confidence about themselves during the race. The racers are known to have come from well-to-do families.

Research Instrument

In this study, four instruments were used for the purpose of making the data valid. The instruments were validated by four experts, namely, Mr. Nestor De Quiroz-Physical Education Department, Mr. Siegfred F. Gamueda-Guidance Counselor, Ms. Emmylou F. Blanco-Guidance Counselor

A Demographic Profile was used to gather all the basic information about the respondents such as age, gender, birth order, educational attainment/ organization, and parents' occupation (Source: Career Assessment Inventory- enhanced version). The form was modified and was administered by the researchers to gather data on the said variables.



The Influential Factors questionnaire was also developed to determine the factors that influence the racers to go in to Go-Kart Racing. It was divided into three questions designed to elicit the factors that have influenced the racers to go into Go-Kart racing.

The Aggression Evaluation, which was patterned after the Likert-type questionnaire was also used as an aid to measure the respondents' rate statements, using a scale of 1 to 5.

The "Aggression Evaluation" as the third instrument is a self-made instrument that is used to determine the respondent's aggression profile. It consisted of 24 statements questionnaire based on the definition of aggression. The respondents indicated how appropriate or inappropriate each statement relating to their characteristics, using a 5-point scale. It is measured in three categories of aggression (high, moderate, low) The researchers used qualitative interpretation, which is called absolute norms, to determine if aggression falls into high, moderate, or low range and it was determined through the assistance of a statistician. The title Aggression Evaluation had not been stated in the questionnaire to avoid negative misconceptions. The rating scale and its equivalent are as follows:

19-24 Highly Aggressive

13-18 Moderately Aggressive

7-12 Fairly Aggressive



1-6 Less Aggressive

0 Not Aggressive at all

The fourth instrument is the Emotion Profile Index (EPI) that evaluates the respondent's characteristics of being aggressive and impulsive. It is a 62 item choice test, which is composed of twelve trait items that have separate score of the eight basic emotion dimensions. The chair of the Behavioral Sciences Department gave permission to the proponents to use the instrument.

The Emotion Profile Index (EPI) was administered to the individuals. The subject then was told to read the direction on the front page and were asked if they have any questions. There was a time limit (10-15 minutes) given to the respondents to answer the test. This is a standardized test that measured the three categories of impulsivity (high, moderate, low). The researchers with the assistance of the statistician, made the rating scale for the eleven impulsivity characteristics, and its equivalent are as follows:

10-11 Highly impulsive

7-9 Moderately impulsive

4-6 Fairly impulsive

1-3 Less impulsive



0 Not impulsive

Research Procedure

The data gathering process started by acquiring the test materials for respondents. After securing the instruments, the researchers asked four experts to validate the questionnaires. Then, the researchers contacted Carmona Racing Circuit and asked permission to use the institution and the Go-Kart Racers as the subject of their study. The researchers were asked to coordinate to Mr. Raul Recinto, the manager of the said institution. The researchers gave a letter request and in turn were asked to submit the outline of their study and the questionnaires to be used. A permit was then issued allowing the researchers to conduct and administer their study. The test was administered at the center in Carmona Racing Circuit. Scoring and interpretation followed. The result of the test given was validated with the assistance of the statistician.

The results of Emotion Profile Index were correlated with the respondents' Aggression Evaluation form. Statistical treatment of data followed and the interpretation of the results were also carried out with the assistance of the statistician.

Statistical Treatment

To analyze the data gathered, the following statistical tests were used.



In presenting the demographic profile of the respondents grouped according to age, gender, educational attainment/ organization, birth order and parents' occupation, the frequency and percentage were employed using the formula below.

 $P = \Sigma f$

N

Where: P=percentage

f=frequency

N=total no of respondents

The influential factors in Go-Kart Racing were also grouped according to family, friends and media; frequency and percentage were also employed.

The mean and average mean were computed to answer problem 3 and 4 using the following formula:

 $X = \underline{\Sigma}_{\underline{X}}$

N



Where

X =each of the score in turn

 Σ = summation

N = total no. of respondents

To describe the relationship between Impulsivity Level and Level of Aggression, the Pearson - Product Moment Correlation Coefficient was used. The formula is as follows:

$$r = n \sum XY - (\sum X)(\sum Y)$$

$$[n \sum X^2 - (\sum X)^2] [Y^2 - (\sum Y)^2]$$

Where:

r= coefficient of correlation

 $\Sigma X = \text{sum of all values of } X$

 $\Sigma Y = sum of all values of Y$

 $\Sigma XY = \text{sum of all values of } X \text{ and } Y$

 ΣX^2 = sum of all the squares of X



 $\Sigma Y^2 = \text{sum of all the square of } Y$

n= total number of respondents

Summary of Findings

Based on the study conducted, the following results were gathered:

- Majority of the respondents are within the age range of 12-14 or 56% of the total population. There are a greater number of males who are involved in Go-Kart racing (88%). Most of the respondents are grade school students (40 %). Many of the respondents are the eldest child (60%). While the greatest number of the parents of the racers is mostly involved in enterprising or having their own business (52%).
- The most influential factor for the go-kart racers is there families which is 76%. This means that families have a great effect on the roles and life style of their children. As stated, one of the most important environmental factors is the influence of the family. (Collins et al., 2000; Halverson and Wampler; 1997; Mccoby, 2000) Parents maybe warm and loving or hostile and rejecting, over protective and possessive or aware of their children's need for freedom and autonomy.
- 3. Majority of the respondents have a low impulsivity level with 44%. Impulsivity could mediate performance on arousal-related tasks in either of two ways. First, impulsivity could be related to rate of change of arousal. If this is the case, then low impulsive should always perform better than high impulsive on arousal-related tasks.



Second, impulsivity could be related to diurnal arousal rhythms, with low impulsive becoming alert earlier in the day than high impulsive. As defined go-kart racing is a focused sport wherein concentration is an innate need behavior and boredom must not prevail.

- 4. Majority of the respondents have a moderate aggression level which is 60%. The central issue in personality development is not the channeling and re-channeling of instinctual impulses but the progression from infantile dependence and primary identification with objects to a state of differentiation of self from the object.
- 5. That there is no relationship between Impulsivity and Aggression Levels among adolescent racers of Go-Kart racing in Carmona Racing Circuit. Since the computed r is -0.0188522, which is lower than the tabulated r (0), therefore the null hypothesis is accepted.

CONCLUSIONS

Based on the findings of the study presented, the following conclusions are drawn:

1. That the influential factor for the go-kart racers are their families with 76% of the total population. This means that families have a great effect on the roles and life style of their children, 20% in other influences and 1% to peer groups. Their families appear to become the number one influential factor that influenced almost all the respondents.



- 2. That among the majority of the respondents impulsivity level was low having 44% of the total population. Almost all of the respondents' answer in the Impulsivity level falls under the bracket of 0-3.
- 3. Majority of the respondents' Aggression Level was moderate having 60% of the total population. Almost all of the respondents' answer in the Aggression level falls under the bracket of 9-17.
- There is no relationship between Impulsivity and Aggression Levels among 4. adolescent racers of Go-Kart racing in Carmona Racing Circuit. Therefore the null hypothesis is accepted. It showed that the impulsivity levels of the respondents who have high impulsivity have a moderate aggression. Go-kart racers have different inherent and environmental factors that might have influenced their performance in Go-kart racing.

RECOMMENDATIONS

The study contains information in the field of descriptive correlational research, about the relationship between impulsivity and aggression levels adolescent racers of Go-Kart Racing in Carmona Racing Circuit. However, for further improvement, the following recommendations are hereby forwarded:

1. Future researchers. In making further studies of this topic, future researchers may use this as a basis and guide; however, more details for the research may be added so that readers may have deeper understanding of this topic.



- 2. Readers. They should continue reading more books, articles and sites regarding this topic. This will help broaden their minds about sports psychology.
- 3. Go-Kart Racers. They should read more about this kind of research. This will help them acquire a better understanding of their sport and researches such as this will help them attain at their best performance in every race.

Carmona Racing Administrators. They should advertise this kind of research papers to help costumers; and encourage them to read this and other articles about this kind of sport in order to develop maturity in Kart racing.



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