

# COMPARISON OF POWER, SPEED, AGILITY AND REACTION TIME IN RELATION WITH PLAYING POSITION AMONG ULTIMATE FRISBEE ATHLETES

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#### **ABSTRACT**

The purpose of the study is to compare power, agility, speed and reaction time in relation to the playing position assigned among UiTM Ultimate Frisbee players. Sixteen (N=16) athletes (8 handler and 8 cutter players) were participated in the present study and the age were ranged between 19 to 24 years old. The athletes were tested using Vertical Jump Test, 505 Agility Test, 30 Meter Sprint Test and Ruler Drop Test. The level of significance was set at .05 (p=.05). The obtained data analyzed using SPSS 22.0 for mean and standard deviation. The independent sample T-test was employed to compare the differences of power, agility, speed and reaction time between handler and cutter. The results showed that there were no significance difference in power (p=.324), agility (p=.192), and speed (p=.522) between playing position (handler and cutter). There was a significance difference on reaction time (p=.027) between playing position (handler and cutter).

**Keywords:** Ultimate Frisbee, power, agility, speed, reaction time, playing position, handler, cutter.

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#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 BACKGROUND OF THE STUDY

Ultimate Frisbee also known as "Ultimate", is a relatively new sport which has increased in popularity in the recent years (USA Ultimate, 2010). The components of Ultimate resemble an invasion type field sport played with a plastic flying disc weighing 175 g. The objective of the sport is to pass the disc between players until a player catches the disc in the end-zone for a point. According to United States of America Ultimate (2015), Ultimate Frisbee was formed in 1968 by a group of students at Columbia High School in Maplewood, New Jersey. Although Ultimate Frisbee fit many traditional sports in its athletic demand, it is different like most other sports due to its focus on self-officiating, where the game did not require a referee and it all are based on the spirit of the player to play in a fair manner without violating any of the rules. This concept called Spirit of the Game, it is integrated into the basic philosophy of the sport, written into the rules, and practiced at all levels of the game from local leagues to the World Games.

The game of Ultimate Frisbee is played by two teams with a Frisbee disc on a field with end zones located at the end of both side of the field, similar to American football. The objective of the game is to gain point by catching the disc in the opponent's end zone by passing from one another. A player must stop running while in control of the disc but may rotate or pivot and pass to any of the other receivers on the field. Ultimate Frisbee is a transition type game where the players move quickly from offense to defence on turnovers that occur with a dropped pass, an interception,

#### **CHAPTER TWO**

#### LITERATURE REVIEW

The literature review is divided into six section. The first section of the literature review discussed on the Ultimate Frisbee Player which was the population of the present study. The second section of the literature review was about speed components while the third section of the literature review was about agility component followed by power and reaction time. The last section discussed on the playing position factor.

#### 2.1 ULTIMATE FRISBEE PLAYER

Stated by the National Governing Body for Sport Ultimate in United Kingdom and North Ireland (2008), Ultimate Frisbee (known simply as Ultimate to athletes) is a fast paced, non-contact, mixed team sport played with a flying disc (or Frisbee) marries features of a number of invasion games, such as American Football and netball, into a simple yet, demanding game. Seven players from each team a required at each point in time inside the field and usually have a roster consisting of between 14 to 27 people for each teams. Ultimate Frisbee consist of two playing position classified as a cutter and handler position.

Handlers are generally better throwers of the team and they work with the cutters to keep the disc in play and prevent stagnation in movements. Cutters, on the other hand, tend to be more athletic and work up-field in order to progress the disc and score. Substitutions are unlimited but were only allowed in between points when play has stopped. Ultimate is one of the few team sports which is co-ed and both genders can