

# Free card counting and mathematics research paper example

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Card counting is usually a casino card game and strategy that is mostly used in black jack casino games (Simonson, 2011, pp. 77). The card counting strategy is mainly used to determine whether the hand that follows in the play is most likely to give an advantage probably to the player or to the dealer. The card counters are considered to form a class of players who are exceptional. They usually make attempts of decreasing the inherent casino house's edge by tactically keeping a running tally of the low and high value cards that are seen by the players. Card counting gives the players the opportunity to place their bets more though at lower risks whenever the counts give a minimized likelihood of losses with increased levels of advantages whenever there is an unfavorable play count.

The card counting also provides players with an opportunity to change the decisions within the game that greatly depend on the composition of the cards remaining (Skar & Elizabeth, 2012, pp. 46). Card counting is also referred to as card reading. The card reading is also about the ability to obtain sufficient counts on the distributions, number and the highest card locations within any trick takings game so as to give an optimum point to the winning tricks. All these factors show that there is a relationship between card reading and mathematics. Card counting uses statistical evidences in its most but common variations of counts. It is especially visible in the play where higher cards do benefit the players more than they do benefit the dealers. The lower cards are also found to benefit the dealers more than the players.

The concentration of the cards has a statistical determination of the winner in the game. When there is a higher concentration of 10s, the deck increases

the probability of the player a natural blackjack (Simonson, 2011, pp. 117).

The chance is also expressed in the form of a ratio in which the chance of the higher numbers leading to the player being favored is said to pay a 3: 2 which is a ratio. The absolute values on the cards also count thus the card game essentially relies on a mathematical concept of counting. The systems in card counting also assign mathematical values such as positive values, zero value and negative values. When cards are dealt their counts are usually adjusted depending on the value counts of the cards. Thus, the system of adjustment depends on the mathematical rules of addition and subtraction to deal with the values that are assigned to the cards.

The other mathematical aspect that card counting use is correlation. The primary goal of systems found in card counting aims at assigning various points and values that do have a correlation to the cards (Simonson, 2011, pp. 171). It is referred to as the ' effect of removal' of a card. It enables players make a guess of the house advantages on the basis of the cards consumed. The correlation adds some level of complexity to the whole card counting system. Either, the betting correlation uses permutations especially on the card that have not been dealt with so as to offer expectations to the players that are positive. It offers optimum strategy to players in the game. There is also other mathematical aspect like the balanced and running counts that the card counting strategy uses. The balanced counts use more of a mathematical system called the Hi-Low system that helps in the conversion of the running counts to true counts all of which have mathematical meanings.

Therefore, it can conclusively be said that be stated that there is a strong

relationship between card counting in casino games and mathematics (Skar & Elizabeth, 2012, pp. 144). The card counting systems uses mathematical concepts in allocating card values and even uses the concepts further when adjusting the card during any given count. Either, in the counting design and betting, the card counting system totally relies on permutation that is a mathematical concept. It, therefore, means that without these mathematical concepts card counting game cannot proceed. The mathematical concepts thus form an important part of the card counting game. It helps various stages of the card counting game within casinos to proceed since they rely on them in totality. It can, therefore, be clear that there is a direct relationship between the card counting game and mathematics.

The one per person (OPP) studies the card counting system and its advantages especially in gambling (Skar & Elizabeth, 2012, pp. 201). The OPP research studies reveal that the card counting system is one of the simplest mathematical works that put in practice that is most put used to count low cards between 2 and 6 indicating them as +1 which is then subtracted from the hands available. It includes those of the dealers and has greatly helped in betting and gambling. The research study relied heavily on simulations with the results agreeing to the fact that counting is more profitable either, it further shows that the earnings from card counting do form a significant fraction of returns that link with the conventional way of counting. The study analyzed the mathematics behind OPP through card counting explaining how it works. It further shows the reasons as to why certain modifications on the concept have never worked while there are those that have been successful.

The study further employed the usage of shuffling and sequencing that gave further information on the card combinations (Simonson, 2011, pp. 156).

Most systems were found to count higher combinations with lower cards being subtracted from them. Correlation counting was also studied on the blackjacks and the busted hands. The authors further recommended that counting should be done on the ashtrays that had most of the dubious theories. This counting can be similar to the card counting. Through card counting observations, it was revealed that the OPP system can be approximated in counting of the cards. This study gave an explanation on the OPP system comparing with the Jake Smallwood's KWIK Counts. The explanation was based on the removal effects which concluded that the OPP system was more effective than Jake Smallwood's systems explaining further why the OPP system is mainly used in the hand held games.

There is a rhetorical strategy applied on this strategy study of the card count. An example is when counting sevens as 1 in a bid to improve the OPP counts (Simonson, 2011, pp. 164). The research shows that this has a fixed effect on the overall negative effects of the seven on the OPP count. Either, this procedure has a negative aspect of it in the sense that it creates an imbalance within the system later. The counting of sevens as 1 has the effect of unbalancing the system by a positive four. The volatility of the OPP counting system is not that prominent. The research shows that it is almost half volatile as other counting strategies. It is rhetorical to say that the OPP is the most effective of all the counting systems yet when the sevens are counted as 1 the net effect has the tendencies of making the OPP even more volatile compared to any other counting method (Sklar & Sherr Sklar, 2012,

pp. 181). The selective counting has also contributed to some level of rhetoric within the card counting systems. When determining whether a player will have some advantage over the dealer the numbers of the individual card are usual cards.

### **An interview with an academic professional**

Q1: Is there a relationship between card counting and mathematics?

A: Yes there is a relationship between card counting and mathematics.

Q2: How does the relationship come about?

A: Card counting uses mathematical concepts within its systems, as card counting is more of a calculated game of chance.

Q3: What are the mathematical concepts used in card counting?

A. There are several mathematical concepts that can be used in card counting but the most common are. Permutation, simulation, sequence and addition and subtraction

### **Q4: How are the mathematical concepts applied in card counting?**

A: Addition and subtraction is used in determining possibility of player/dealer winning. Sequence and permutation is used in determining next chance of play and is used to also determine the probability of getting higher scores in the game while Simulation is used in estimating opponent's next card play count.

### **Works Cited**

Saliu, Ion. Probability Theory, Live!: More Than Gambling and Lottery It's About Life! Bloomington, IN: Xlibris Corporation, 2010. Print.

<https://assignbuster.com/free-card-counting-and-mathematics-research-paper-example/>

Simonson, Shai. 2011. Rediscovering Mathematics: You Do The Math.

[Washington, D. C.]: Mathematical Association Of America.

Sklar, Jessica K., And Elizabeth Sherr Sklar. 2012. Mathematics In Popular Culture Essays On Appearances In Film, Fiction, Games, Television And Other Media. Jefferson, N. C.: Mcfarland.