Literature Review

Based on previous studies of the lottery we know that there are no ways to increase the probability of a ticket, but there are methods to maximize your winnings (Sutens, Ho). These studies show that previous results have no impact on future results (gamblers fallacy) and numbers that are frequently chosen are due to mere coincidence (hot hand fallacy). However, these studies also point out that following these gambling ideologies could actually be detrimental as picking popular numbers could increase the risk of having to split winnings with others (Sutens)

In a study against selected lotteries, it was found out that numbers with single digits (especially 1 and 9) and numbers with repeating digits, excluding numbers containing 7 and multiples of 7 (except for 7 and 77), were preferred by players (Otekunrin). The same study also found that players often chose numbers that were spread out and thus appeared to be random. This desire to pick numbers that appeared to be random was also seen in another where it was seen that combinations with greater variance between numbers were more attractive (Krawczyk)

The consensus among all of these studies is that all individual combinations are equally likely. Despite this, one could potentially increase their odds of winning by picking numbers in specific "behavior patterns" as these patterns obey different probabilities (Gianella). This study compared theoretical and observed probabilities of winning combinations and found that there were certain patterns that appeared more often than others.

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