

Codebook for “Social Behaviors and Daily Fantasy Sports Risk Behavior”

Source: Division on Addiction, Cambridge Health Alliance

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Funder: DraftKings, Inc.

Related publication: Tom, M. A., Williams, P. M., Edson, T. C., & LaPlante, D. A. (2019). Understanding the Relation between Social Behaviors and Daily Fantasy Sports Risk Behavior. *Journal of Gambling Studies*. <https://doi.org/10.1007/s10899-019-09911-7>

Study description: In daily fantasy sports (DFS) contests, participants form a roster of athletes scheduled to perform in a pre-determined list of sporting contests or games. Each participant has the opportunity to win cash prizes, depending on the performance of the athletes on their roster and the performances of the athletes on the other participants' rosters. Some contests have higher variances than others (i.e., lower percentages of participants winning and higher payouts versus higher percentages of participants winning and lower payouts) and can be considered riskier propositions. DFS operators have mechanisms for interacting with friends on their servers (e.g., referral programs and incentives, friend lists, private contests). To determine whether use of these mechanisms (i.e., social behavior) was associated with preference for higher variance contests (i.e., risk behavior), we analyzed player records ($N = 11,130$) from a DFS service. We constructed a measure of risk behavior, player risk score, that is based on DFS contests' entry fees and payout structures. We observed that players referred to the DFS service by a friend and those who had a reciprocal friendship had similar player risk scores. However, those who referred a friend, both generally and among players with reciprocal friendships, were more likely than others to have greater player risk scores, and greater numbers of friend referrals also was associated with higher player risk scores. Although the observed effect sizes were small, the results point to a possible relationship between referring others to play and risk activity.

We prepared the data as a comma-delimited, plain text file.

There are eight variables in this data set.

- UserID is NOT the user ID's provided by DraftKings, Inc. The table is one-user-per-row, so the row numbers serve as user ID's for this data set.
- Group describes how we partitioned the cohort. In the paper, we split the cohort into an exploratory sample (8904 users, 80%) and a confirmatory sample (2226 users, 20%). Here, "1" means the exploratory sample and "2" means the confirmatory sample.
- HasRAF says whether or not this player was referred by another player (1 for yes, 0 for no).
- RAFBonusYes says whether the user received cash through the Refer A Friend program (<http://www.draftkings.com/refer-a-friend-terms-2018>) (1 for yes, 0 for no).
- RAFBonusCount is the number of different days the player received cash through the Refer a Friend program.
- RAFBonusCash is the total amount of cash the player received through the Refer A Friend program.
- HasMutualFriend answers the question "Does this user have another user who they have added as a friend who has also added them as a friend?" Said another way, if we make a directed graph showing who added whom as a friend, would the two users be linked by a double-sided arrow? Again, 1 means yes and 0 means no. We did not have records of who added whom first (i.e, the user in our data set or the other person).
- RiskScore contains the users' player risk score. See the paper for the definition of player risk score. See the associated R code for some example calculations.