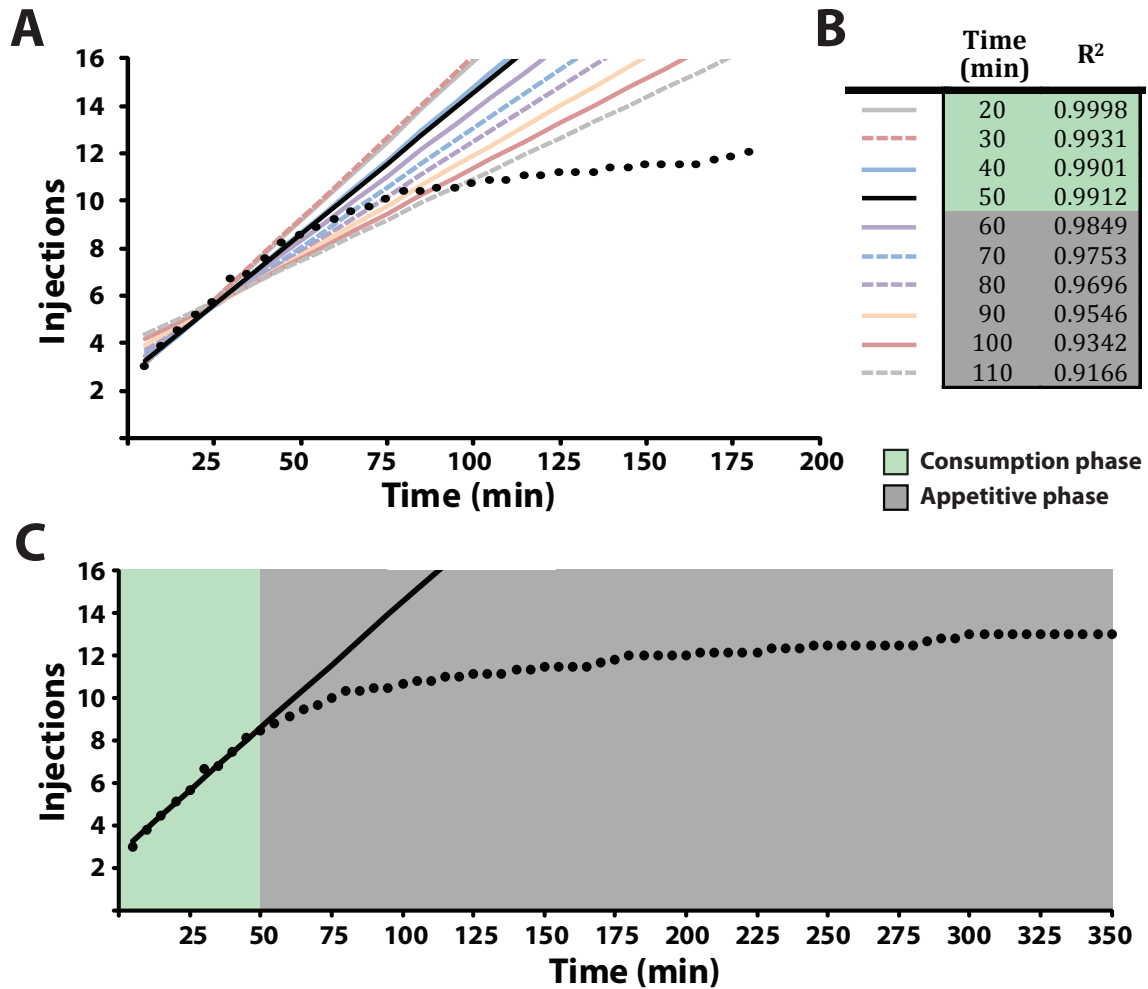


Supplementary Information: Separation of consumption and appetitive phase responding

Our aim was to distinguish features of consumption and appetitive phase responding within a single progressive ratio (PR) session. To do this, we first calculated the cumulative number of injections received after vehicle treatment for each rat, and organized this data into 5 min bins. We then averaged the binned values across animals. Average cumulative response data was then fitted with a series of straight lines starting at the first 5 min time bin (Sup. Fig. 1 A). The first line incorporated data from the first 20 min of the PR session and subsequent lines were created in 5 min increments (Sup. Fig. 1 A). The line that incorporated the greatest amount of time with a R^2 value over 0.99 was used to define the consumption phase (black line in Sup. Fig. 1 A). In this manner, the length of time encompassed by this line was defined as the consumption phase, and the remainder was defined as the appetitive phase (Sup. Fig. 1 C).



Supplementary Figure 1. A representative separation of consumption and appetitive phase responding. Responding for 0.75 mg/kg cocaine is shown. Black dots represent the average cumulative responses in each 5 min time bin. (A) Example fitted lines are shown in 10 min increments, and the single line that met the criteria (see Supplementary Information) is depicted in solid black. (B) The legend displays the total time used to fit each line, as well as the R² value associated with the fit. (C) Average cumulative number of injections across the entire 6 hr session. Time within the consumption phase is shown on a green background whereas time within the appetitive phase is shown on a gray background.