"The Psychology of Intertemporal Tradeoffs"

It is commonly assumed that people make intertemporal choices by 'discounting' the value of delayed outcomes, assigning discounted values independently to all options, and comparing the discounted values. We identify a class of anomalies to this assumption of alternative-based discounting, which collectively show that options are not treated independently but rather comparatively: The time difference, or interval, between the options sometimes counts more and sometimes counts less if taken as a whole than if it were divided into shorter subintervals (superadditivity and subadditivity, respectively), and whether the interval counts more or less depends on the money difference, or compensation, involved (inseparability). We develop a model that replaces alternative-based discounting with attribute-based tradeoffs. In our model, people make intertemporal choices by weighing how much more they will receive or pay if they wait longer against how much longer the wait will be, or, conversely, how much less they will receive or pay if they do not wait longer against how much shorter the wait will be. This model, called the *tradeoff model*, accommodates, in a psychologically plausible way, all anomalies that the discounting approach can and cannot address.