Title
Metrics on Restaurant Ordering Behavior

I want to submit an abstract for:
Conference Presentation

Corresponding Author
Guenter Schamel

E-Mail
gschamel@unibz.it

Affiliation
Free University of Bozen-Bolzano

Keywords
leader effect; choice behavior; restaurant menu; metrics; strategy

Research Question
Purpose is to empirically analyze the effect of an initial choice made by the first person (or the leader) on the ordering behavior of other diners on a restaurant table.

Methods
To measure similarities and price differences of orders (meals, drinks) on a restaurant table relative to the leader ordering first and effects related to the choice environment (social, monetary considerations).

Results
Leaders considerably influence the choice of others at restaurant tables. The leader effect is mitigated by whom and how the meal is paid for and there is a gender effect.

Abstract
Purpose of the paper is to empirically analyze the effect of an initial choice made by the first person (or the leader) on the ordering behavior of other diners on a restaurant table. We measure the similarity and price differences between orders (meals, drinks) at a restaurant table relative to the leader ordering first and effects related to the choice environment (i.e. considering social and monetary considerations).

There exists a considerable amount of normative and positive research on the effects that the choices made by a leader have on those made by the followers. Economists and psychologists acknowledge the fact that choices constitute an important source of information for other decision makers observing them. That is, whenever a decision maker posts his choice he transmits information to observers regarding his preferences and additional otherwise private information determining the choice.

The behavior of economic agents in sequential decisions and the related choice environment is important in many areas of economics, as the literature on panics and herds has shown (Chamley, 2003). Hsee and Hastie (2006) survey the literature on behavioral-decision making, which challenges the standard economic-rationality
assumption stating that decision makers are able to make choices in their own best interests. From a normative perspective, herding behavior implies that economic agents ignore their own preferences and private information and (rationally) follow the choice made by preceding decision makers (Banerjee, 1992; Bikhchandani et al., 1992).

This dichotomy has led the empirical literature on consumer choice to develop laboratory experiments that provide an alternative approach to the leader-follower and herding behavior of decision makers determined by social conventions and relations instead of probability-based rational signaling structures. For example, this literature has shown how identity communication and reinforcement may lead to different consumer choices relative to other peers composing a given majority or group (Berger and Heath, 2007). The susceptibility of consumers to interpersonal influence as well as its main differences across cultures has been highlighted by Mourali et al. (2005). In this regard, Kim and Drolet (2003) emphasized the importance of cultural conventions regarding uniqueness when seeking variety in choices.

In the literature, we also find that public awareness or scrutiny affects choice behavior. Agents tend to have more variety in their consumption decisions when knowing that their behavior is subject to public scrutiny (Ratner and Kahn, 2002).

The effect of social influence as an element inherent to consumption has been highlighted by Raghunathan and Corfman (2006), who examined how the perception of an interpersonal agreement with members of a group increases the enjoyment of a shared experience. In a different context, Mead et al. (2011) show that social exclusion may also provide very powerful incentives regarding purchase behavior. They argue that socially excluded people are willing to spend and consume strategically, sacrificing their personal and financial well-being in order to increase their social well-being.

A possible area for the validation of experiments to test peer effects on the choices of decision makers is given by the ordering behavior of diners composing a restaurant table. In this context, our study represents a real-world laboratory experiment providing an alternative to analyzing consumption behavior of agents based on social relations instead of rational signaling structures.

Previous empirical research in this area reveals that, if known, orders of other diners have a considerable influence on the choice behavior of the remaining ones (Ariely and Levav, 2000). Moreover, it has been shown that the duration of a meal (Bell and Pliner, 2003) and the amount of food consumed (de Castro and Marie Brewer, 1992; Herman et al., 2003) tends to increase as the number of people one is eating with increases. Moreover, when deciding what to order the effect of peer choices and group decisions may outweigh the effects of nutritional information and caloric intake (Ellison, 2014). Quester and Steyer (2009) identified thresholds determining whether decision makers order differently from their peers or conform with the group.

This paper provides a static empirical approach to the behavior of agents with respect to the choice made by the leader. A possible formal theory could model optimal behavior with search for variety taking place when ordering something different than the leader and that deviations are justified when socially acceptable or the dis-utility received from deviation is not enforceable.

The behavioral data analyzed has been gathered from a moderately-high priced Italian restaurant in Munich. We analyze a substantial sample describing the ordering behavior of about 600 diners composing 200 tables of different sizes (from 2 to 10 people). The empirical analysis performed reveals that leaders, both male and female, have a considerable influence on the choice behavior of the remaining persons on the table and how under different circumstances, table mates are affected by the orders of the leader. For example, we can show that the leader effect is mitigated by whom and how the meal is paid for and that there is a gender effect.

The main implication of our study in practical terms goes beyond the restaurant setting considered and into the strategic positioning of economic agents when providing evaluations or reports before others are able to do so.
References:

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