ABSTRACT
Analyzing large datasets from a variety of sources (a.k.a. big data) has become an important task of business practices. In marketing, new kinds of customer data—from click-through information to conversations over social media—allow modern marketers to use novel approaches to understanding consumer behaviors, identifying targets, optimizing prices, customizing messages, and recommending products (Chintagunta et al., 2016). In response to the demand for analytics skills in today's increasingly data-driven workplace, many business schools have developed or began to build courses to teach big data and business analytics (Wixom et al., 2014). In analyzing business data, both scholars and practitioners have used R, which is a popular open-source program specializing in statistical testing and modeling. In academia, R has been taught mostly at the graduate level in courses on information systems or management science. The current trend of incorporating business analytics into undergraduate curriculum has prompted several attempts to teach R to undergraduate business students (Haan et al., 2015; Hill & Kline, 2014). However, there have been few pedagogical studies in marketing that examine teaching methods of R in undergraduate classes and the responses of undergraduate marketing students to learning R.

This article presents a teaching case of R to 26 undergraduate students (21 marketing majors) in a business analytics course at a medium-sized university located in the southeastern United States. It describes details about teaching methods and materials, including course topic and textbook selections, teaching material and class exercise developments, together with datasets and packages used for R operation and
exam formats. A survey conducted at the end of the semester showed that, in general, students were satisfied with teaching methods and materials. In the survey, students described their learning of R as “challenging” and “difficult”, but also as an “interesting” experience. The gender of students and the level of prior experience in computer programming did not affect perceived difficulty of the course and course satisfaction. However, students who chose the course in line with their personal interests revealed a lower level of perceived difficulty and greater satisfaction than other students who took the course merely to earn credit hours.

The article concludes that teaching R in undergraduate marketing classes can be a viable and beneficial option to teach business analytics, especially for students with a strong motivation to learn big data and business analytics. Several challenges and limitations that need to be considered in future classes were discussed and suggestions from individual students were reviewed.

REFERENCES

