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Social science researchers (e.g., psychology, marketing) have questioned the practice of using undergraduates (UGs) as research participants; by the end of the 20th century, the use of UGs in consumer behavior research was trending upward. Peterson (2001, p. 451) reported that for the *Journal of Consumer Research*, “the percentage using college students has steadily increased, from 23% in the first volume to 89% in the most recent volume.” Further, he noted that “86% of the empirically based articles appearing in the *Journal of Consumer Psychology* since its inception in 1992 have employed college students as subjects” (p. 451). Similar figures have been reported in psychology journals (Sherman, Buddie, Dragan, End, & Finney, 1999).

Using UGs in clothing and textiles (TC) research is also fairly common; Lennon, Burns, and Rowold (1995) found that 34% of 224 studies analyzed used UG participants. The convenience and minimal cost associated with UGs make them a highly attractive data source, particularly for academic researchers in areas where external funding is scarce and demand for research productivity is high. Gächter (2010) argued that in economics, UGs are the perfect participants for theory testing; they demonstrate cognitive sophistication, are educated, and used to learning. Because UGs are readily available, replication is easy and important for establishing empirical regularity. He also emphasized that results from UGs only hold for UGs. In TC research few differences have been found between UG and nonstudent adults on cognitions based on clothing (Kelley, Blouin, Glee, Sweat, & Arledge, 1982; Lennon & Clayton, 1992).

Researchers have also argued against using UGs in research due to lack of generalizability (external validity). Wintre, North, and Sugar (2001) cited evidence indicating UGs are not representative of adults, adolescents, or even the university population. Additionally, researchers have reported that results from UGs are significantly different from results using nonstudent participants (Burnett, & Dunne, 1986; James & Sonner, 2001). Our research purpose was descriptive and entailed investigating the use of UGs samples in CT research. Research questions guiding the study were: How often are UGs used in CT research?, In what topical areas of CT are UGs used?, Is the use of UGs justified?, Do researchers generalize their findings when using UGs?, and What incentives were offered to UGs to participate?

To address our research questions we content analyzed CT research from issues of three journals (*CTRJ*, *JFMM*, *FCSRJ*) spanning 1996 to 2013. Articles were coded by research topic, use of human subjects, subject type, justification of the use of UGs, recruitment of participants, incentive, and whether authors generalized. Data were analyzed using descriptive statistics. Inter-coder reliability averaged .76 across all data categories.

UGs participated in 222 studies (39.8%); 99 consumer behavior studies, 37 soc/psych studies, 32 retailing/merchandising studies, 16 product development studies, 11 culture studies, and 10 design and aesthetics studies. All counts for UGs in other topical areas were 4 or fewer.

Page 1 of 2



In 121 studies the use of UGs was justified. Researchers generalized from UGs in only 28 studies. In 120 studies using UGs, incentive was not mentioned, in 47 studies participants received no incentive, in 18 studies participants received extra credit, in 1 study participation was a course requirement, and in the remaining 17 studies incentives included payment, payment and extra credit, a small gift, drawing for a small gift, and other. Since scholars (Wintre et al., 2001) question the extent to which UGs are representative of a larger population, we coded how often UGs participated in various types of research. Results show that UGs participated in 15.9% of descriptive surveys, 8.7% of the analytic surveys, and 7.5% of the experiments. Since the purpose of descriptive research is to describe a population, UGs should only be used in descriptive survey research to describe UGs. The use of UGs in analytic surveys and experiments can be justified if studying certain topics such as psychological processes (Lennon et al., 1995).

The use of UGs in TC research is lower than found in psychology and only slightly higher than what was found in past TC research spanning different journals and times (Lennon et al., 1995). Since UGs are consumers, it is natural to recruit them for consumer behavior research - the largest research category using UGs. Authors should detail type of incentive used to recruit human subjects and are advised not to generalize from UG samples or to explicitly state the limits to generalizing. Another strategy to improve external validity is to use stimulus sampling in experimental research. Finally, for research using UGs, reviewer guidelines should be developed to suggest providing (a) an appropriate rationale for UG use, (b) descriptive population statistics, and (c) statements limiting generalization.

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