



Propensity to undergo cosmetic surgery and risky body modification among indoor tanning bed users: An illustration from female college students

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Significance. The number of people purchasing beauty-enhancing procedures that are potentially harmful to one's health has increased in the United States. Numerous studies have investigated the factors influencing Americans to participate in two harmful, yet popular, beautification procedures: cosmetic surgery and tanning (Mowen, Longoria, & Salle, 2009). The interrelationships of risky body-modification behaviors (i.e. indoor tanning) that lead to other body-modification behaviors have not been well documented. Interestingly, the interrelationship between tanning behavior and weight management has been documented with a population of adolescent boys. For example, dieting is more frequently practiced by adolescent boys who tan when compared to their counterparts who do not tan (Demko, Borawski, Debanne, Cooper, & Strange, 2003). Additionally, steroid use and unhealthy weight loss strategies were significantly higher among the same adolescent boys who used indoor tanning methods (Miyamoto, Berkowitz, Jones, & Saraiya, 2012). These findings illustrate that voluntary indoor tanning bed use may be associated with certain types of risky body-modifying behaviors. In order to further explore this topic of interest, the goal of our research is to identify the motivation to undergo cosmetic surgery and to engage in specific types of risky body-modification behaviors that counteract the well-being of frequent tanning bed users.

Theoretical perspective. According to Sekelman (2003), the term body decoration includes three separate categories: body painting, body adornment, and body modification. Body painting is defined as temporarily coloring parts of the body. Body adornment specifically refers to the use of apparel and beauty products to make the individual more attractive. While most body decoration is temporary, body modification includes the intentional use of voluntary, high-risk procedures that have a lasting effect, such as body piercing, tattoos, and plastic surgery. In particular, body tanning can have a detrimental health effect which can be long lasting. Research has shown that one of the strongest predictors of intentional UV exposure is the belief that a tan improves one's appearance and attractiveness (Cafri et al., 2008). Interestingly, indoor tanning bed use is identified as a highly intentional undertaking even though it is understood to be associated with a high risk of skin cancer. Further understanding is needed of the compounding behaviors practiced by those who are highly motivated to expose themselves to UV-rays in order to acquire an ideal image. Therefore, the following hypotheses are established. H1: indoor tanning bed users are more likely than nonusers to intend to engage in overall plastic procedures. Specifically, indoor tanning bed users are more likely to engage in botox (H1a), plastic surgery (H1b), and rhinoplasty (H1c). H2: indoor tanning bed users are more likely than nonusers to intend to engage in body modification. Specifically, indoor tanning bed users are more likely to intend to engage in diet pill use (H2a), diuretics use (H2b), weight lifting (H2c), tattoos (H2d).

Methods. 353 female college students participated in this study. The majority of the participants were Caucasians, 78%, with an average age of 20.9 years old. The specific body modifications tested in this study included botox, plastic surgery, and rhinoplasty as a plastic surgery group, and diet pills, diuretics, weight lifting, and tattoos as a risky body modification group

Results. The results revealed that indoor tanning bed users ($n = 107$) are more likely than nonusers ($n = 246$) to intend to engage in plastic procedures (H1). Specifically, a Mann-Whitney U test revealed the following behaviors were in the expected direction and significant in: (a) botox injections ($U = 10552.00$, $z = -3.69$, $p < .001$); (b) plastic surgery ($U = 10439.50$, $z = -3.68$, $p < .001$); and (c) rhinoplasty ($U = 10947.00$, $z = -3.14$, $p < .01$). In addition, indoor tanning bed users are more likely than nonusers to engage in risky body modifications (H2). Specifically, a Mann-Whitney U test revealed the following specific behaviors were in the expected direction and significant in: (a) diet pill use ($U = 11575.50$, $z = -2.36$, $p < .05$); (b) diuretics use ($U = 11697.00$, $z = -2.07$, $p < .05$); (c) weight lifting ($U = 10569.50$, $z = -2.95$, $p < .01$); and (d) tattoos ($U = 11399.00$, $z = -2.05$, $p < .05$).

Discussion and conclusion. These results add to the body of knowledge in that individuals who engage in indoor tanning bed use are more likely to engage in risky, yet voluntary, body modification such as plastic surgery and risky weight management behaviors. These findings are in line with the previous research that body shape and weight concerns have been associated with frequent indoor tanning, perhaps due to individuals' belief that a tanned appearance makes one's body shape appear more attractive (Cafri et al., 2008). Presently, tanning and plastic surgery are perceived by many as body modification behaviors. Given their apparent increase and interconnection, identification of the characteristics of people who engage in tanning and other risky body modification is important to develop the comprehensive understanding of body-tanners.

Reference

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