Body Modifications as They Relate to College Major, G.P.A., High Risk Behavior, and the Quest for Independence

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Abstract

This study examines the difference between college students with and without body modifications, with regard to different factors relating to college life: college major, G.P.A., high-risk behavior, and the quest for independence. Sixty-six college students from various locations in Indiana and Michigan participated by filling out a survey covering these areas of interest. All participants were between the ages of 18 and 28. Four hypotheses were tested: (1) College students will obtain most of their body modifications after entering college as a means of expressing their independence; (2) A relationship will exist between a college student’s number of body modifications and his/her willingness to engage in high-risk activities on a regular basis; (3) A relationship will be found between the number of body modifications and the student’s G.P.A.; and (4) A pattern will emerge with regards to the area of study that a student with body modifications is likely to select. Of the four hypotheses stated, only hypotheses one and four were weakly supported. In general, college students with and without body modifications proved to be more similar than different.
Body Modifications as They Relate to College Major, G.P.A., High-risk Behavior, and the Quest for Independence

Historically, every culture has had many ways to demonstrate group membership. Many, surprisingly, have had a quite similar method: body modifications. “Tattooing, piercing, and other adornments have been used for centuries in rites of passage, in religious rituals, or as a form of tribal identification— in all cultures” (Miller, 1997, p. 1). Many cultures continue to use the art of body modifications for decoration and/or to enhance attractiveness. Elongated necks, foot binding, stretched earlobes, and branding the skin are some of the more common extreme body modifications still practiced around the world today (McNab, 1999).

Our culture has not adopted such extremes, but mainstream body modifications have become “…as American as baseball, Mom, and apple pie” (DeMello, 2000, p.44). Miller (1997) informs us that “…in our Western culture, we’re witnessing a renewed interest in tattooing, piercing, and other body modifications” (p.3). From adolescents to the elderly, each age group is represented in the trend toward mainstream body modification.

Even though body modification has been a controversial topic since its entrance into the mainstream of society, according to Miller (1997), “…these permanent marks are what define us as human beings. They are a means of self-expression and a vehicle of self-awareness: two qualities that separate us from other living things on this planet” (p.1). However, just because they are a means of self-expression, does not mean they are considered a social norm. Miller (1997) states that “…although these practices have always been around, they have usually bounced back and forth between acceptability and
outsider status” (p.3). Drews, Allison, and Probst (2000) found that “[body modifications] have been most frequently associated with groups such as the military, bikers, juvenile delinquents, prostitutes, criminals, and persons of low economic status in general” (p.475). What is one to think, then, when trends show that the popularity of body modifications is increasing among college students?

Are college students with body modifications to be considered a deviant subculture? When comparing the behavior of tattooed and non-tattooed college students, Drews et al. (2000) found that tattooed college students participated in more high-risk behaviors than non-tattooed college students. Does this support the generalization of deviance attributed to tattooed populations in our society? Or could it be that college students are choosing body modifications as a form of self-expression? As Miller (1997) states, “…body art can be very powerful for two reasons: they give us control over our own bodies and they express things about our inner selves that words alone often cannot articulate” (p.5).

What kinds of “things” might these college students be expressing with their body modifications? Do their body modifications, possibly, express inner wounds from past events that cannot be forgotten (Psychology Today, 2005, p.35)? Or are they an expression of the quest for independence and individual identity that young adults seek, once they leave home? Having an interest in this idea, my first hypothesis is that college students will obtain most of their body modifications after entering college as a means of expressing their independence.

In addition to my first hypothesis, I will also be testing other factors and their relationship to body modification. For example, if people with body modifications are
deviant, and if this generalization also holds true for college students with body modifications, a relationship will exist between a college student’s number of body modifications and his/her willingness to engage in high-risk activities on a regular basis. Furthermore, if body modifications are a marker of deviance, a relationship will also be found between the number of body modifications and the student’s G.P.A. Finally, if the deviance model holds, my fourth hypothesis is that a pattern will emerge with regards to the area of study that a student with body modifications is likely to select. In other words, students involved in some program of study designed to lead to more conventional careers (Business, for example), would be expected to have fewer body modifications than students majoring in humanities, social sciences, or studying in an occupational program.

Method

Participants

The participants for this study came from a convenience sample of college students at Lake Michigan College and other colleges located in Michigan and Indiana. Thirty-nine females and 27 males (n=66) contributed to this research. The participants’ ages ranged from 18-28.

Attrition

Of the 77 surveys administered, only 66 were complete. Of those 11 discarded, missing data necessary for the research and participants falling outside the age bracket were the key factors.
Apparatus

A 20-question survey was used to obtain the data for this research (see Appendix A). The first part of the survey asked the participants’ age, gender, G.P.A., and college major. The second part included questions about the participants’ body modifications and factors concerning the topic. The last part of the survey measured the participant’s tendency to engage in high-risk activities on a regular basis.

Procedure

Participants were asked to fill out the survey, measuring the amount of body modifications and high-risk activity participation. The surveys were distributed to participants during classes at Lake Michigan College and via-email to the participants attending the other colleges. The surveys were collected upon completion.

Results:

Surveys were reviewed and separated in two groups: participants having body modifications and participants who reported not having body modifications. The first hypothesis, “college students will obtain most of their body modifications after entering college as a means for expressing their independence,” was tested using only the surveys completed by the participants having body modifications. Of the 66 surveys completed, 33 participants reported having body modifications. Of those 33, 87 total body modifications were indicated. Forty-four of these were obtained after entering college, which was 51% of the total number of body modifications. The remaining 49% were obtained before entering college. Thus, the first part of hypothesis one, “college students will obtain most of their body modifications after entering college…” was not strongly supported by the data.
As to part two of hypothesis one which reads “as a means for expressing their independence,” this quest for independence can be illustrated in the next three graphs. When asked if anyone (friend/family) had opposed the decision to obtain a body modification, 21 said yes and 12 said no. All participants who encountered an opposing force still went through with the procedure. Furthermore, when the participants went against the wishes of those who opposed the decision, ten were unaffected, ten felt slightly bad, and one felt guilty.

In general, when asked if the participants would let someone (friend/family) influence their decision, 22 participants answered yes and 11 answered no. Taken
together, the responses to these three questions do not support the hypothesized desire for independence.

The second hypothesis, “a relationship will exist between a college students’ number of body modifications and his/her willingness to engage in high-risk activities on a regular basis,” was calculated by using the responses to question numbers 1-5, 6, and 12-16 on the survey. A maximum of twenty-four points would be earned for high-risk activity. The two groups, participants with and without body modifications, were calculated separately. A Mann-Whitney Rank Sum Test was used to compare this data, resulting in $T=972.500$ and $P=0.062$, $n(\text{small})=33$ and $n(\text{big})=34$. Therefore, no statistically significant difference between the two groups was found. However, participants with body modifications had a mean risky-behavior score of 5.35 and participants without body modifications had a mean of 3.51. So, although there was not a significant difference, the results were in the predicted direction.
The third hypothesis, “a relationship should be found between the student’s number of body modifications and his/her G.P.A.,” was calculated using the student’s current G.P.A. and total number of body modifications. The mean G.P.A. for each group of participants was determined, revealing that participants with body modifications had a mean G.P.A. of 3.176 and participants without body modifications a mean G.P.A. of 3.133. A t-test was used to compare the G.P.A.’s of students with and without body modifications. The results were of t=0.379 with 64 degrees of freedom and P=0.706. Therefore, a statistically significant difference between the input groups was not found.

To further examine the data, G.P.A. was separated into four groups: 2.0-2.5, 2.6-3.0, 3.1-3.5, and 3.6-4.0. Two participants with body modifications were in the 2.0-2.5
range, 16 in 2.6-3.0, 12 in 3.1-3.5, and three in 3.6-4.0. Four participants without body modifications were in the 2.0-2.5 range, nine in 2.6-3.0, 14 in 3.1-3.5, and six in 3.6-4.0.

Clearly, the third hypothesis was not supported.

The fourth hypothesis, “a pattern will emerge with regards to the area of study that a student with body modifications is likely to select,” was tested for the two groups. They were asked to indicate their current major. The majors were then categorized by conventional, liberal arts, and undecided majors. Participants with body modifications consisted of nine conventional majors, seventeen liberal arts majors, and seven undecided majors. Seventeen conventional majors, twelve liberal arts majors, and four undecided majors were indicated by participants without body modifications.
The percentages of participants with body modifications for each major were then calculated. 34.6% currently had conventional majors, whereas 58.8% had liberal arts majors and 63.6% were undecided. Therefore, a pattern did emerge with regard to choice of major, and hypothesis four was supported.
Discussion

Although much of the information found gave insight into the research questions, not having statistically significant differences made the results inconclusive. Of the four hypotheses tested, only two had results in the predicted direction. The findings were surprising because of the expectation that significant differences would be found between college students with body modifications and college students without body modifications. None, however, were significant between the two groups.

The first hypothesis, “college students will obtain most of their body modifications after entering college as a means for expressing their independence,” was only partially supported. The number obtained after entering college was more than the number obtained before college, yet the percentages found were so close that confidence in the findings was difficult to have. The second part of the hypothesis, the body modifications will be obtained “as a means for expressing their independence,” was not supported. 64% said someone opposed their decision to get a body modification, and yet they still went ahead with the procedure. In addition, 52% of these participants felt at least some guilt. If a person were doing this to express independence, one would question why they would feel guilty for their actions. Also, 22 of the 33 participants with body modifications said they would, in general, let someone influence their decision towards obtaining a body modification. Would this, also, mean they would let someone influence their decision towards obtaining a body modification, or only to not go ahead with the procedure? A reason the results for the former question may have not supplied sufficient evidence could have been the result of an anomaly in the survey. When
participants were asked if they would let someone (friend/family) influence their decision towards obtaining a body modification, only those college students with body modifications were questioned. By doing so, this removed those responses by participants which have already experienced this event; that is, they were influenced by others and did indeed change their mind, and they did not obtain a body modification. For future research on the topic, more data from students without body modifications should be taken into account.

The second hypothesis that “a relationship will exist between a college students’ number of body modifications and his/her willingness to engage in high-risk activities on a regular basis,” was not supported, although the results were in the predicted direction. College students with body modifications were expected to have a larger high-risk activity score than college students without body modifications. Participants with body modifications had a mean of 5.35 and those without body modifications had a mean of 3.51. These findings do support the hypothesis and were what was expected. This could, possibly, support the idea of college students with body modifications being a deviant subculture. However, the difference between the two means is not significant enough for one to draw that conclusion.

The third hypothesis, “a relationship should be found between the student’s number of body modifications and his/her G.P.A.” was not supported. In relation to college students with body modifications possibly being a deviant subculture, it was hypothesized that participants with body modifications would have a lower mean G.P.A. than those without body modifications, where in fact, the opposite was found. Participants with body modifications had a higher mean G.P.A. (3.176) than those
without (3.133). On the other hand, the difference between the two is not great enough to conclude that one group achieves higher grades in college than the other.

The fourth hypothesis, “a pattern will emerge with regards to the area of study that a student with body modifications is likely to select,” was supported. Before the results were reviewed, it was believed a pattern would emerge with regard to participants without body modifications entering more conventional majors and those with body modifications entering more liberal arts (or having undecided majors). This was supported by the research. Possibly, the societal norm of being “clean cut” and professional, which conventional careers (e.g. business) require, is carried out by the individuals well before entering the business world. In addition, the social acceptability among liberal arts and undecided students to have body modifications could be taken advantage of by students selecting those majors.

The content of the survey, unfortunately, may have swayed many participants’ responses. Asking personal questions about everyday behavior may have made some participants answer in a socially desirable way. For example, a couple participants, while in the middle of the filling out the survey, asked if their athletic coach would be seeing their responses. They were reassured that the surveys were completely confidential. Being aware of these reactions, one wonders if participants may have been less than truthful in their answers. To decrease the chances of the social desirability factor contaminating future research, restating the questions more efficiently and discussing the confidentiality of the surveys with the participants beforehand would be advised.

For future research on this topic, more participants would be beneficial. Having only 66 surveys completed correctly resulted in a very small sample size. More than 100
were initially distributed, but those not included were either incorrectly filled out or not
returned. Also, having a convenience sample may have swayed the results. Coming
from a more rural area, it may not be as acceptable for a college student to have multiple
body modifications. To ensure more conclusive results, a random sample from more
diverse locations would be valuable.
References


Appendix A

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE: _________</td>
<td>ARE YOU: male / female ?</td>
<td></td>
</tr>
<tr>
<td>CURRENT G.P.A: _________</td>
<td>COLLEGE MAJOR: ________________________________</td>
<td></td>
</tr>
<tr>
<td>1.) Do you have any tattoos?</td>
<td>YES or NO</td>
<td>If yes, how many? __________ **If no, skip to question (3).</td>
</tr>
<tr>
<td>2.) How many of your tattoos were obtained AFTER entering college?</td>
<td>_________</td>
<td></td>
</tr>
<tr>
<td>3.) Do you have any piercings (excluding pierced ears)?</td>
<td>YES or NO</td>
<td>If yes, how many? _______ **If no, skip to question (5).</td>
</tr>
<tr>
<td>4.) How many of your piercings were obtained AFTER entering college?</td>
<td>_________</td>
<td></td>
</tr>
<tr>
<td>5.) Do you have any other “mainstream” Body Modifications (branding,</td>
<td>YES or NO</td>
<td>If yes, please explain:</td>
</tr>
<tr>
<td>decorative scarification, etc…)?</td>
<td>**If you do not have ANY Body Modifications(including tattoos and piercings), skip to question (12).</td>
<td></td>
</tr>
<tr>
<td>6.) Have you ever obtained a Body Modification while under the influence of drugs/alcohol?</td>
<td>YES or NO</td>
<td></td>
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<tr>
<td>7.) Did anyone (friends/family) oppose your decision to get any Body Modification(s)?</td>
<td>YES or NO</td>
<td>If yes, did you still go ahead with the procedure? YES or NO **If no, skip to question (9).</td>
</tr>
<tr>
<td>8.) How did you feel going against their wishes? (circle one)</td>
<td>Unaffected---------------Slightly Bad-----------------Pretty Guilty</td>
<td></td>
</tr>
<tr>
<td>9.) Would you let someone (friend/family) influence your decision towards obtaining a Body Modification?</td>
<td>YES or NO</td>
<td></td>
</tr>
<tr>
<td>10.) How much of an effect do you think one or more of your Body Modifications will have on future employability? (circle one)</td>
<td>Will Have No Effect---------A Slight Problem, But Workable--------Will Be Very Difficult</td>
<td></td>
</tr>
<tr>
<td>11.) Do you plan on removing any of your Body Modifications when you’re ready for post-college employment?</td>
<td>YES or NO</td>
<td></td>
</tr>
<tr>
<td>12.) How often do you participate in drug use? (circle one)</td>
<td>EVERYDAY----ONCE A WEEK----ONCE A MONTH----HARDLY EVER----NEVER</td>
<td></td>
</tr>
<tr>
<td>13.) How often do you drink alcohol? (circle one)</td>
<td>EVERYDAY----ONCE A WEEK----ONCE A MONTH----HARDLY EVER----NEVER</td>
<td></td>
</tr>
<tr>
<td>14.) How often do you drive while intoxicated? (circle one)</td>
<td>EVERYDAY----ONCE A WEEK----ONCE A MONTH----HARDLY EVER----NEVER</td>
<td></td>
</tr>
<tr>
<td>15.) If unmarried, how often do you have unprotected sex? (circle one)</td>
<td>EVERYDAY----ONCE A WEEK----ONCE A MONTH----HARDLY EVER----NEVER</td>
<td></td>
</tr>
<tr>
<td>16.) How often do you smoke cigarettes? (circle one)</td>
<td>EVERYDAY----ONCE A WEEK----ONCE A MONTH----HARDLY EVER----NEVER</td>
<td></td>
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</table>