

INCIDENCE OF SOME ORAL-BASED HABITS AMONG COLLEGE STUDENTS AND THEIR CORRELATIONS WITH USE OF ORAL STIMULANTS¹

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Summary.—This study explored the incidence of three personal habits and their correlates with popular tensional outlets. The 108 men and 202 women college students estimated how often they bit their fingernails, picked their noses, chewed on pencils or other objects, used specific tobacco products, used specific caffeine products, chewed gum, and exercised. Also, they rated their happiness on a seven-point scale in Likert format. The fingernail-biting incidence observed here was higher than was reported in previous samples of young adults, and more men than women were nail-biters. More men than women admitted to nose-picking; and about 61% of persons of either sex reported being occasional object-chewers. Men were more likely to exercise, use tobacco products, or consume iced tea than were women but were less likely to chew gum. The intercorrelations among the habits were not significant, and they were unrelated to lower self-reports of happiness. Both men and women who were object-chewers reported drinking greater amounts of cola beverages; otherwise, the relationships between these habits and product uses were not significant.

Several personal habits may result in personal distress and convey negative impressions regarding the performer; therefore, it is relevant to examine what conditions might relate to their origin and expression. These habits have been described as “tensional outlets” (Gesell & Ilg, 1946) or as “habit disorders” (Bakwin & Bakwin, 1972). Of these, fingernail-biting has been the subject of occasional research interest; yet there remains uncertainty as to its incidence and possible implications. Wechsler (1931) reported that nail-biting reached its peak of about 44% at about age 13 years for both sexes but declined rapidly afterwards. Pennington (1945) reported that about 21.5% of naval recruits were nail-biters. Coleman and McCalley (1948a) reported that 29.3% of male and 19.3% of female college students were nail-biters, but Bakwin and Bakwin (1972) asserted that nail-biting occurred only occasionally in adults. They further estimated that this habit occurs about one and one-half times as frequently in girls as in boys. Deardorff, Finch, and Royall (1974) reported, by way of contrast, that only 12.2% of school-age children in their sample were nail-biters.

Kanner (1960), in reviewing the possibility of nail-biting being an indicator of psychopathology, noted that between 1908 and 1931 this activity had been variously described as a “stigma of degeneration,” as “an exquisite psychopathic symptom,” or as due to an “unresolved Oedipus complex.” However, he reported that 66% of children were nail-biters at some time or

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other. Coleman and McCalley (1948b) found earlier that, while nail-biting occurred more frequently among the maladjusted, it did not serve as a sufficient basis for diagnosing maladjustment. Finally, Klatte and Deardorff (1981) reported that nail-biting positively correlated with anxiety scores for adults.

Nose-picking has also been characterized as a tensional outlet (Gesell & Ilg, 1946) or as a habit "disorder" (Bakwin & Bakwin, 1972). However, a literature search provided no data on its prevalence. Ilg and Ames (1955) suggested that it tends to occur largely among children aged three to six years.

Observers occasionally notice people biting or chewing on objects such as pencils, pen points, or eraser tips, but for these activities there are likewise no data on incidence.

Also, if these primitive behavior patterns do involve forms of tension reduction, it is meaningful to inquire whether they are less likely to occur in individuals who use tobacco products, drink caffeinated beverages, chew gum, or who exercise (all of which have been described by observers as means for tension reduction or relaxation) due to substitution. It is further noteworthy that three out of four of these possible tension outlets involve oral activity.

While earlier views (Kanner, 1960) referred to possible maladjustments relating to nail-biting, there was no evidence that practitioners of these habits tend to be less happy. The purpose of this research was to study the incidence of various oral habits separately by sex in a comparatively large sample of college students. It was also desired to assess whether certain activities such as smoking or other tobacco products, caffeinated beverages, gum chewing, and exercise correlated with nail-biting, nose-picking, or chewing on objects. Finally, it explored whether performing these habits and happiness were correlated.

METHOD

The subjects were 108 men and 202 women who were enrolled in university-level psychology classes (mean age = 20.3 yr., $SD = 3.9$). They indicated their sex, age, and the number of times per day they used specific tobacco products, specific caffeine products (see Table 1 below for specific types), and chewed gum. They further estimated how many times per day they bit their fingernails, picked their noses, and chewed on pencils or other objects. Finally, they reported whether they exercised regularly and estimated their happiness on a seven-point scale. Data from seven additional persons were eliminated from analysis because they failed to complete one or more of the items on the questionnaire.

RESULTS

Since the distributions of frequencies for many of the variables (coffee, tea, and cola beverage consumption excepted) fell short of the requirements for analysis with parametric statistics, the actual frequencies were converted into "yes-no" form, and nonparametric statistics were used.

Table 1 presents separately for men and women the percentages of indi-

TABLE 1
PERCENTAGES OF INDIVIDUALS USING EACH PRODUCT OR PERFORMING EACH ACTIVITY,
PLUS CHI-SQUARED TESTS FOR SEX DIFFERENCES

Product or Activity	% Men	% Women	χ^2	<i>p</i>
Snuff	6.5	0.5	7.89	< .01
Chewing tobacco	6.5	0.0	10.62	< .01
Cigarettes	22.2	16.3	4.74	< .05
Cigars	1.9	0.0	1.43	
Pipe tobacco	1.9	0.0	1.43	
Any tobacco product	33.3	16.8	10.04	< .01
Coffee	21.3	13.9	2.32	
Hot tea	4.6	6.4	0.15	
Iced tea	81.8	63.9	9.58	< .01
Chewing gum	65.7	90.0	26.23	< .001
Cola beverages	92.6	87.1	1.63	
Bites fingernails	47.2	34.2	4.53	< .05
Picks nose	49.1	21.3	24.13	< .001
Chews on objects	61.1	61.4	0.01	
Exercise	73.1	48.5	16.44	< .001

viduals using each product or engaging in each activity. Some men and women reported scattered use of other tobacco products, but most tobacco usage involved cigarettes. All forms of use were combined for analysis. Men were more likely than were women to use some form of tobacco product, drink iced tea, bite their fingernails, pick their noses, and exercise. Women were more likely to be gum-chewers. The men ($M = 6.0$, $SD = 1.0$) and women ($M = 6.0$, $SD = 1.0$) did not differ in mean ratings of happiness ($t_{308} = .00$).

Table 2 presents the Pearson correlations between activities or product uses and the habit disorders. The only significant value indicated that persons who consumed more cola beverages per day were also more likely to

TABLE 2
PEARSON CORRELATIONS BETWEEN ACTIVITY OR PRODUCT USE AND THE HABITS

Product Use	Nail-biting		Nose-picking		Object-chewing	
	Men	Women	Men	Women	Men	Women
Tobacco use	.12	.04	.09	-.11	.04	.11
Gum chewing	-.06	.06	.12	-.07	.15	.08
Exercise	.07	-.01	.14	.08	-.14	-.06
Nail-biting			-.00	.11	.15	.12
Nose-picking	-.00	.11			.14	.04
Object-chewing	.15	.12	.14	.04		
Colas consumed (No.)	.07	.03	.17	-.03	.27*	.17†
Coffee or tea consumed	.04	-.12	.01	-.04	.06	.01
Happiness self-rating	.05	-.03	.06	.04	-.14	-.09

Note.—Degrees of freedom for men = 106, for women = 200.
* $p < .02$. † $p < .01$.

chew on various objects. Otherwise, these results indicate that people who perform the habits of nail-biting, nose-picking, or object-chewing are neither more nor less likely to use those products, to exercise, or to be happy.

DISCUSSION

The nail-biting reported by college students here indicated somewhat higher percentages than those reported by Wechsler (1931) and Pennington (1945). This habit, usually associated with childhood, seems to persist into early adult life for these college students at rates higher than previously reported. Contrary to Bakwin and Bakwin's (1972) suggestion, the data here indicate that nail-biting occurred more frequently among men than women. It would be interesting to see whether these high percentages occur similarly with older adults.

The reported incidence of nose-picking was unexpectedly high; however, it must be remembered that there were no previous reports as to the incidence of this behavior and these figures include any form of nose-picking activity. The sex difference may be due to women being more heavily socialized against overt displays of such activity. Subsequent studies of this practice using other age groups would be needed to evaluate just how widespread is the behavior.

The low intercorrelations among the different oral habits or product uses also suggest that there is little evidence for persons having a multiplicity of oral habits. The data indicated that performing regular exercise did not correlate significantly with these habits so it is unclear whether some people both exercise and use these outlets in dealing with tension or whether these behaviors may not serve as "tension outlets."

The present results suggest these behaviors are relatively common in this sample of college students. The use of the common stimulants did not correlate either with the two oral activities or with nose-picking. However, consumers of greater quantities of cola beverages were also more likely to chew on objects. This particular result is consistent with an excess stimulant interpretation of the presence of these habits. However, since neither nail-biting nor nose-picking correlated with quantity of cola beverage consumption, it seems unlikely that these habits might reflect simple overstimulation.

Since the correlations between self-ratings of happiness and the practice of each of these habits were uniformly low and nonsignificant, the mere presence of these behaviors does not allow us to view the performer as necessarily unhappy. Further investigation should address whether these behaviors are linked to other potential indices of maladaptation instead of being simply socially discouraged behaviors that have no implications beyond their lack of attractiveness.

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