Examining The Relationship Between Cigarette Usage and the Influence of Interpersonal Relationships

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Abstract

Tobacco usage continues to be a rampant problem among the American population regardless of age, gender, or ethnicity. Interpersonal relationships have been associated with statistical frequency in the patterns of tobacco usage. The purpose of this study was to examine the relationship between cigarette usage and interpersonal relationships that have motivated an individual to quit smoking. Participants were (N = 23,204) adolescents and early adulthood participants (Mean age = 15.83, SD = 4.53), with 41.8% of the sample reporting they currently use cigarettes and another 36.0% of the sample reporting no current cigarette usage (measured using the Audio Computer-Assisted Self-Interviews (ACASI). From the current study, 45.0% of participants reported their close friends and family did not disapprove of their cigarette smoking, 19.0% reported their close friends and family only somewhat disapproved, and 12.8.% reported their close friends and family very much disapproved of their cigarette smoking. Interpersonal influence that motivated an individual to quit smoking and cigarette usage was measured using a secondary data analysis from the Population Assessment of Tobacco and Health (PATH) Study. It was hypothesized that there is a statistically significant relationship between cigarette usage and interpersonal relationships having motivated an individual to quit smoking. Frequency data revealed that of the 42% of participants who were currently smoking cigarettes, approximately 32% reported having close friends and family who somewhat or very much disapproved of their smoking and motivated them to quit. Consistent with the hypothesis, current cigarette usage was statistically significantly related to interpersonal influence on individuals quitting smoking with a $r = -.150$ ($p < .01$) at the 0.01 level (2-tailed). A simple correlation was conducted using secondary data where both X and Y are random variables beyond the experimenter's control. The findings yield a weak, positive correlation between current cigarette usage and interpersonal influence on individuals quitting smoking. The R^2 and adjusted $R^2 = .022$, and the ANOVA table revealed there is a statistically significant linear relationship between cigarette usage and interpersonal influence on motivating individuals to quit smoking. These results support the rejection of the null hypothesis in which there is no statistically significant relationship between the two variables. Findings of a positive weak correlation suggests other variables are contributing to reported frequency data pertaining to interpersonal influence on cigarette usage. In conclusion, future research studies should investigate other variables such as environmental factors or cultural influences.

Purpose Statement

The purpose if this study was to examine the relationship between cigarette usage and the influence of interpersonal relationships. Explicitly, the study's purpose was to investigate the possibility of a statically significant relationship between cigarette usage and the influence of interpersonal relationships.

Introduction

- Prior studies have discussed and examined the relationship between cigarette usage and the influence interpersonal relationships on the behavior. These studies have revealed negative correlations between the two variable.

- Past literature has highlighted in prior research that stated the disapproval of cigarette smoking and substance use increase in interpersonal relationships, the frequency of usage does decrease.

- Recent studies have acknowledged that the relationship between cigarette usage and the influence of interpersonal relationships, is an important aspects of intervention and prevention methods to be explored.

Literature Review

Im et al. (2015)
-This study investigated the influence of interpersonal and individual triggers concerning quitting smoking in a sample population of Han, China. The authors found that from the two categories, they separated their sample population into quitters and smokers, 48.3% and 24.0% respectively reported that interpersonal triggers contributed theirs to behavior.

Martinez et al. (2015)
-The study examined the relationship between the multi-dimensional interpersonal relationship of urban American Indian youth and the intention to use substances (cigarettes, drinking, and marijuana). Their findings indicated that parental and peer norms were the most robust connectors to future substance use, specifically cigarettes.

Scalici, F. & Schulz, P. J. (2014)
-The aim of this study was to farther clarify the perception of adolescents' intention of smoking concerning parent and peer smoking approval. The sample population utilized by the study was a sample Swiss adolescence population. With a regression model, they confirmed the relationship between parents' and friends' approval, and the intention to some was related. More specifically, they found that 14.9% of participants were more likely to smoke when their parents approved versus those who did not.

Schoenaker et al. (2018)
-Recent studies have begun to investigate the moderating effects of demographics and covariates on the relationship between social norms and their influence on quitting smoking. This study probed several aspects of anti-smoking social norms, which had been listed as the most significant influences to quit. Their findings showed that 64% of the participants admitted that perceived disapproval from family and friends, 31% feel embarrassed, and 11% living with recent quitter helped them to quit smoking.

Villagrana, M.,& Lee, S. (2017)
-These authors studied the racial/ethnic dissimilarities in the influence of perceived parental attitudes on adolescent cigarette, alcohol, and marijuana use. Younger adolescents, in general, especially, African Americans were more likely to use alcohol and marijuana than cigarettes. Moreover, older adolescents, they were all more likely to smoke cigarettes, especially white adolescents. Data revealed that a 40% increased in the projection of cigarette usage among all groups with parent approval, and a decrease with parent disapproval.

Hypothesis

Research Question: What is the relationship between cigarette usage and the influence of interpersonal relationships?

Hypothesis:

H0: There is no statistically significant relationship between cigarette usage and the influence of interpersonal relationships.

H1: There is a statistically significant relationship between cigarette usage and the influence of interpersonal relationships.

Method

N= 23,204

Mean Age= 15.83

Measure:
- Audio Computer-Assisted Self-Interviews (ACASI)

Results

		R01_AC1003: Now smoke cigarettes	R01_AX0070: Extent to which disapproval of your smoking from close friends and family led you to think about quitting in the past 12 months
Pearson Correlation	R01_AC1003: Now smoke cigarettes	1.000	-.150
	R01_AX0070: Extent to which disapproval of your smoking from close friends and family led you to think about quitting in the past 12 months	-.150	1.000
Sig. (1-tailed)	R01_AC1003: Now smoke cigarettes		.000
	R01_AX0070: Extent to which disapproval of your smoking from close friends and family led you to think about quitting in the past 12 months	.000	
N	R01_AC1003: Now smoke cigarettes	23204	23204
	R01_AX0070: Extent to which disapproval of your smoking from close friends and family led you to	23204	23204

**. Correlation is significant at the 0.01 level (2-tailed).

Conclusion

- Consistent with the hypothesis, cigarette usage was statistically significantly related to the influence of interpersonal relationships.
- The findings were consistent with the literature, showing that there is an association between cigarette usage and the influence of interpersonal relationships.
- The increase or decrease in cigarette usage is related to the approval or disapproval of the interpersonal relationship regarding the behavior.
- Findings of a negative weak correlation suggests other variables are contributing to usage of cigarette frequency.
- Limitations: The present study only considered two variables suggesting other variables could contribute to strengthening the relationship cigarette usage and the influence of interpersonal relationships.
- Future research should investigate other variables such as various environmental factors (location, demographics, etc.), and cultural influences (traditions, generational influences, etc.).

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