



LEVEL OF INTELLIGENCE OF SMOKERS AMONG YOUTH

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Abstract

This qualitative study investigates the relationship between intelligence levels and smoking behavior among youth, aiming to provide a nuanced understanding of cognitive patterns, perceptions, and influencing factors. While, existing research has predominantly focused on quantitative measures, the current study adopts a qualitative approach to explore the lived experiences and perspectives of youth smokers. Through in-depth interviews and thematic analysis, the research delves into the cognitive dimensions of intelligence, including decision-making processes, risk perception, and problem-solving abilities. The study seeks to identify patterns in how youth smokers perceive and rationalize their smoking habits, considering the

cognitive factors that may contribute to continued tobacco use. Moreover, it explores the impact of social and environmental factors on the intersection of intelligence and smoking behavior, shedding light on the role of peer influence, family dynamics, and societal norms. By employing a qualitative lens, this research aims to generate rich, context-specific insights into the experiences of youth smokers, moving beyond conventional intelligence metrics. The findings may contribute to the development of targeted interventions, recognizing the diverse cognitive landscape among youth smokers and informing more effective prevention and cessation strategies. The study aligns with the broader goal of promoting public health by addressing the complex interplay between intelligence and smoking behavior among the youth demographic.

Keywords: *Intelligence, Smokers, Young Adults*

INTRODUCTION

INTELLIGENCE

Intelligence is a multifaceted and complex cognitive ability that involves various mental processes, including reasoning, problem-solving, learning, memory, and adaptability to new situations. It is a broad construct that encompasses different forms of intelligence, as well as emotional and social aspects. Intelligence is not solely determined by a single factor but is influenced by a combination of genetic, environmental, educational, and experiential factors.

British psychologist Charles Spearman believed that intelligence could be measured and compared between people and was composed of a single general component, denoted *g*. Spearman downplayed the characteristics that set each intellectual ability apart, focusing instead on their shared characteristics. Some psychologists think that intelligence is a group of different skills

rather than a single component. A theory of intelligence put out by Raymond Cattell in the 1940s separated general intelligence into two categories: fluid intelligence and crystallized intelligence. Acquired knowledge and the capacity to recover it are characteristics of crystallized intellect. One may use crystalized intellect when they take in, retain, and apply knowledge. By proving that one has mastered the material taught in the course, one consistently applies crystallized intelligence. Problem-solving and the capacity to understand intricate linkages are all parts of fluid intelligence. One would utilize fluid intellect to find their way home after being forced to take an unusual route due to road construction as fluid intelligence assists you in overcoming complicated, abstract challenges in your daily life.

ADDICTION

An individual grappling with addiction finds themselves drawn to a substance or behavior due to the pleasurable effects it provides, despite knowing that it leads to harmful outcomes. Addiction encompasses a range of substances like alcohol, opioids, cocaine, and behavior's such as gambling. Research indicates that addictive behavior's share common neurobiological characteristics: they heavily involve brain pathways associated with reward and reinforcement, mediated by the neurotransmitter dopamine. Moreover, akin to other strongly motivated mental states, addiction results in the restructuring of synapses in the prefrontal cortex, which is responsible for higher cognitive functions. This leads to heightened attention towards cues related to the addictive substance or behavior. It is worth noting that these brain changes are reversible once the substance use, or behavior is ceased.

Addiction is a complex condition characterized by persistent engagement in rewarding activities despite experiencing harmful consequences. While commonly linked to substance abuse

like drugs or alcohol, it can also manifest in behaviors such as gambling, gaming, or compulsive eating. Central to addiction is a repetitive cycle of craving, seeking, and indulging in a substance or behavior, despite recognizing its detrimental effects and a loss of control. Addiction's development and progression are influenced by a myriad of factors, including genetic predisposition, biological processes, psychological factors, and environmental influences. Factors such as genetic susceptibility, co-occurring mental health conditions, traumatic experiences, stress, peer influence, and the availability of substances or opportunities for engaging in addictive behaviors all contribute to the complexity of addiction.

RELATIONSHIP OF INTELLIGENCE WITH SMOKING ADDICTION

The comparison of intelligence with smoking addiction gives mixed reviews, highlighting contrasting aspects of the human mind and behavior, the following shows how both are separate from each other:

Nature and Complications

- **Intelligence:** Intelligence is the aggregate capacity of an individual to understand the world and deal calmly with day-to-day challenges.
- **Smoking addiction:** It is a behavioral disorder, which includes compulsive involvement in smoking after knowing the harmful consequences. It contains the following symptoms: cycle of craving, intake, and use of tobacco products which is driven by the addiction to nicotine.

Health Implementations

- **Intelligence:** A great level of intelligence is often linked with better health results. An intelligent person follows healthy lifestyle choices, has higher access to resources, and has better ways to cope with unfavorable situations.
- **Smoking addiction:** The habit of smoking leads to health risks, such as cardiovascular diseases, cancer, respiratory issues, and increased mortality.

Decision-making and Risk-taking Behavior

- **Intelligence:** An intelligent person makes sound decisions that are fruitful to all situations and has enhanced critical thinking and better risk assessment. They understand the consequences of their actions beforehand so that their decisions will not lead to any bad results.
- **Smoking Addiction:** Individuals with an addiction to smoking may have impaired decision-making, related to the use of tobacco instead of being aware of the consequences of their actions, such as higher doses of nicotine. more dependence on nicotine leads to an override of positive decision-making processes.

Capability to Change

- **Intelligence:** Intelligence is not static, it grows over time through experiences, education, and mind stimulation. Long-term involvement in learning and cognitive processes can make a big change in cognitive vitality.
- **Smoking addiction:** The addictive behavior is a treatable condition, quitting smoking can lead to withdrawal symptoms initially but later, it will lead to positive health outcomes. There are several ways to adapt to the change: medications, meditation, therapies, and

professional help can allow people to overcome their nicotine dependence.

REVIEW OF THE LITERATURE

Trinidad and Johnson (2002) investigated the correlation between emotional intelligence (EI) and the use of tobacco and alcohol among adolescents (TAU). The study involved 205 adolescents of various ethnic backgrounds (52% male) from middle schools located in southern California, with an average age of 12.63 years. Among them, 153 attended public schools, while 52 attended parochial schools. The assessment of students' EI utilized a condensed version of the Multifactor Emotional Intelligence Scale, Student Version, developed by Mayer, Salovey, and Caruso in 1997. The findings revealed a negative association between EI and both the overall extent of tobacco and alcohol usage, as well as individual measures specific to tobacco and alcohol. It is plausible to suggest that adolescents with heightened EI may possess enhanced cognitive abilities to discern social cues effectively and recognize and resist peer pressure.

Fried et al. (2003) investigated cognitive performance evaluated in 145 adolescents aged thirteen to sixteen, whose prenatal exposure to marijuana and cigarettes had been determined. These individuals were part of an ongoing longitudinal study involving a predominantly middle-class, low-risk sample. The assessment included tests measuring general intelligence, academic achievement, memory, and various aspects of executive functioning (EF). Like findings from earlier assessments, a robust correlation was observed between prenatal maternal cigarette smoking and cognitive measures, particularly overall intelligence, and auditory processing. Conversely, prenatal exposure to marijuana was linked to poorer performance on tasks requiring visual memory, analysis, and integration.

Jacobsen et al. (2005) investigated potential impacts of tobacco smoking on cognition in adolescents, we compared daily adolescent smokers with nonsmokers. The authors assessed various cognitive functions including verbal working memory, verbal learning and memory, selective and divided attention, as well as mood, symptoms of nicotine withdrawal, and tobacco craving in 41 adolescent daily smokers and 32 nonsmokers matched for age, gender, and education level. Our analyses were adjusted for factors such as general intelligence, reading ability, parental education, baseline mood symptoms, and lifetime exposure to alcohol and cannabis. The authors found that among adolescent smokers, cessation of tobacco use led to increased tobacco cravings, nicotine withdrawal symptoms, and feelings of depression. Additionally, adolescent smokers displayed deficits in working memory accuracy regardless of recent smoking activity, with more pronounced impairments observed in those who started smoking at a younger age. During smoking cessation, adolescent smokers experienced further declines in working memory and verbal memory performance. Notably, male smokers tended to initiate smoking earlier than female smokers and exhibited greater impairments in tests of selective and divided attention compared to female smokers and nonsmokers. These findings suggest that adolescent daily tobacco smokers may face immediate challenges in verbal and working memory following smoking cessation, along with long-term cognitive declines, consistent with evidence suggesting that the neurotoxic effects of nicotine are more severe when exposure occurs during earlier stages of development.

Limonero et al. (2006) examined the influence of Perceived Emotional Intelligence (PEI) on tobacco and cannabis use among 133 psychology undergraduates, comprising 114 women and 19 men, aged 18 to 27, with a mean age of 21.52 years ($SD = 5.42$). PEI was evaluated using a shortened version of the Trait Meta-Mood Scale (TMMS), originally developed by Salovey et al. (1995) and adapted into Spanish by Fernández-Berrocal et al. (2004). The TMMS assesses an

individual's ability to recognize, comprehend, and regulate emotions. The primary findings suggest that students who use tobacco or cannabis exhibit lower levels of the Repair component of the TMMS and tend to initiate tobacco or cannabis use at a younger age. Conversely, Emotional Clarity appears to be associated with occasional cannabis use, with students scoring high on this component showing lower consumption. However, the Emotional Attention component of the TMMS does not seem to be linked to substance use. These initial findings suggest a correlation between certain components of the TMMS and tobacco or cannabis use. However, further investigation is needed to understand the specific implications of each PEI component on substance use.

METHODOLOGY

AIM

To investigate and understand the relationship between intelligence and smoking addiction among youth through qualitative analysis.

RESEARCH OBJECTIVE

HYPOTHESIS

The level of intelligence is lower among youth smokers as compared to non-smokers.

TOOLS

The data was collected through interviews as a part of qualitative analysis. It guides with open-

ended questions that explore the research topic “level of intelligence of smokers among youth” Include prompts and probes to elicit detailed responses from participants. The questionnaire contains 20 questions that participants need to answer.

SAMPLE

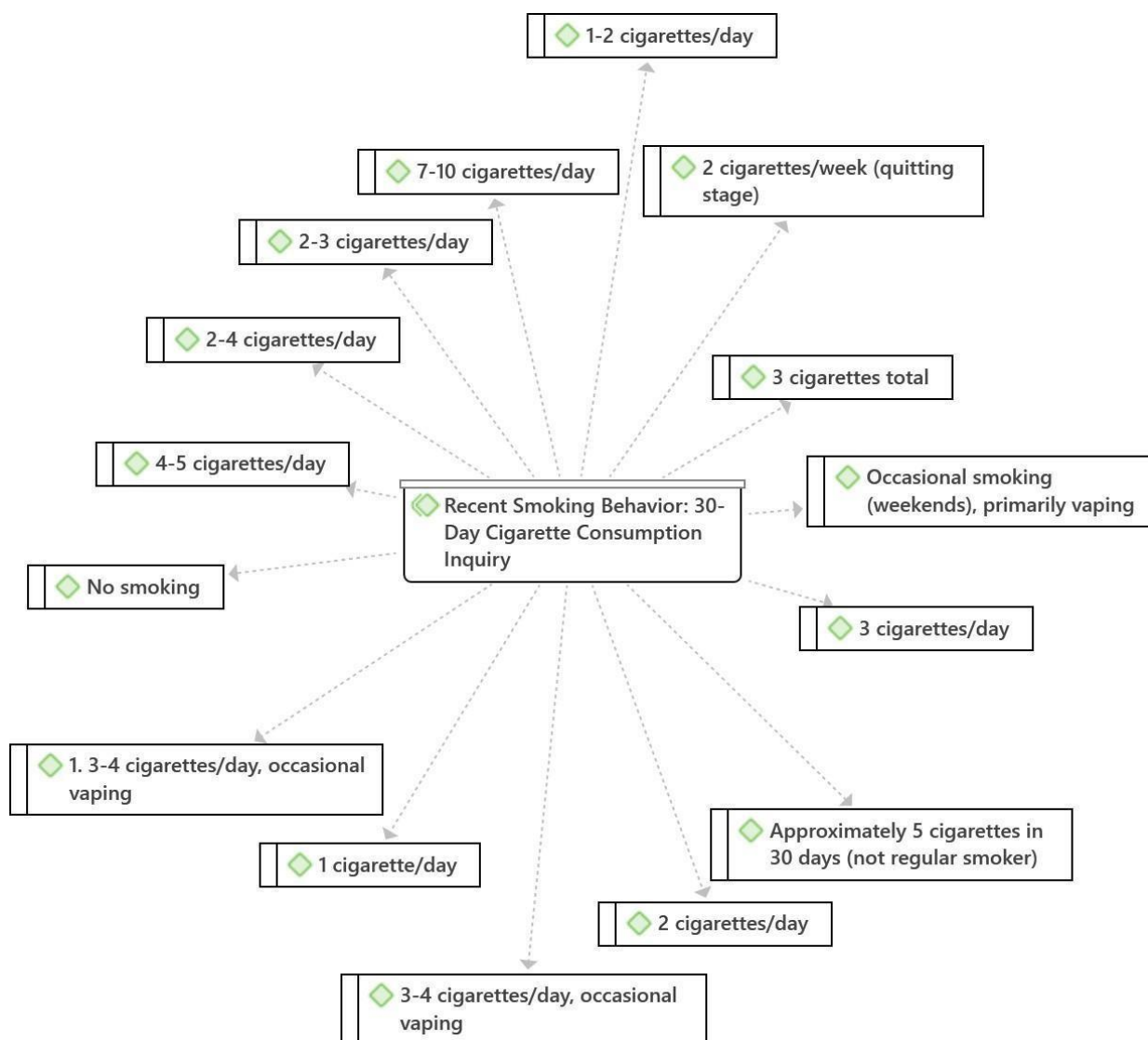
For this research, a total sample size of 20 youth smokers was taken.

QUALITATIVE ANALYSIS

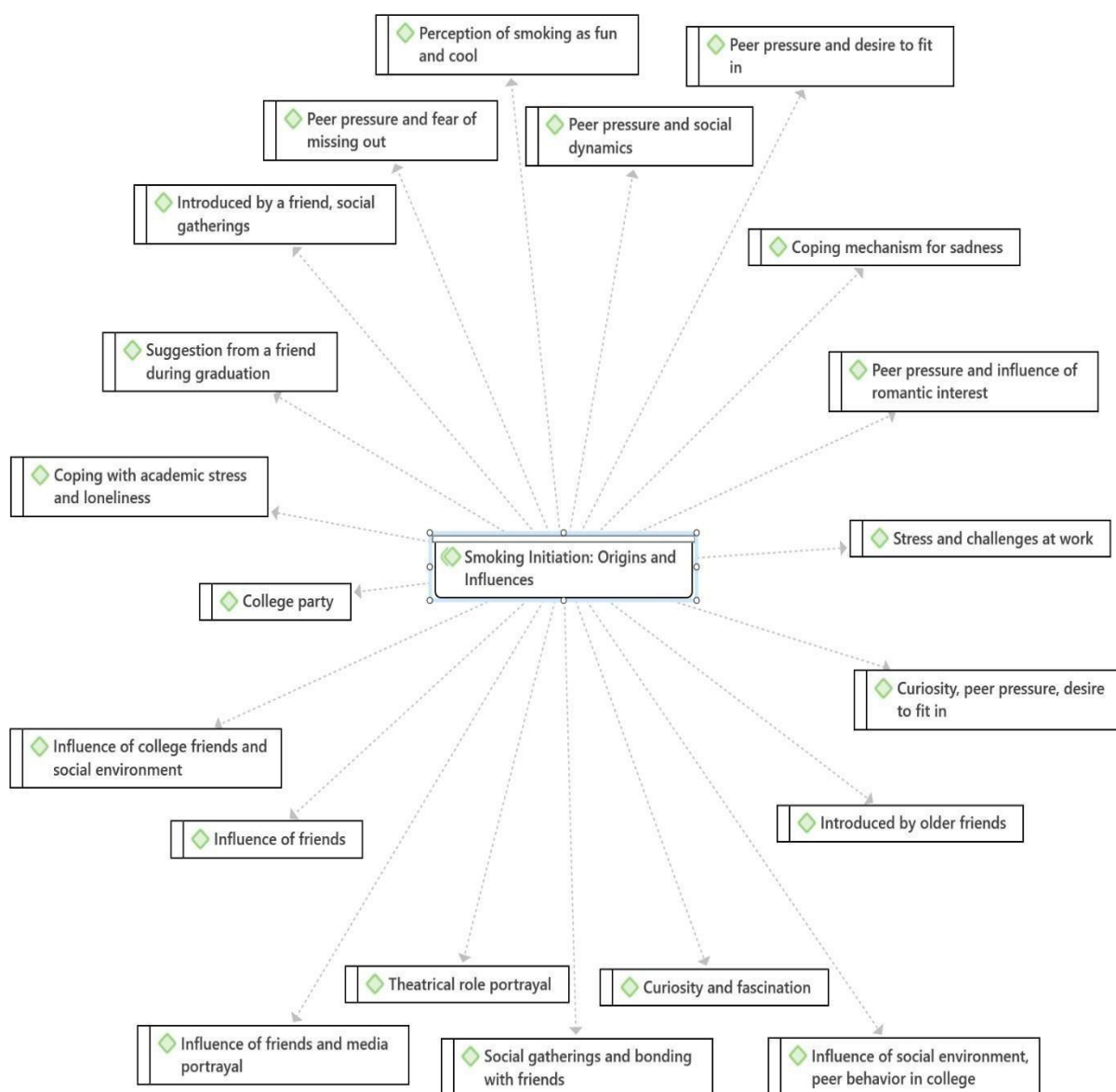
It includes understanding the subjective opinions, experiences, and social contexts.

RESULT

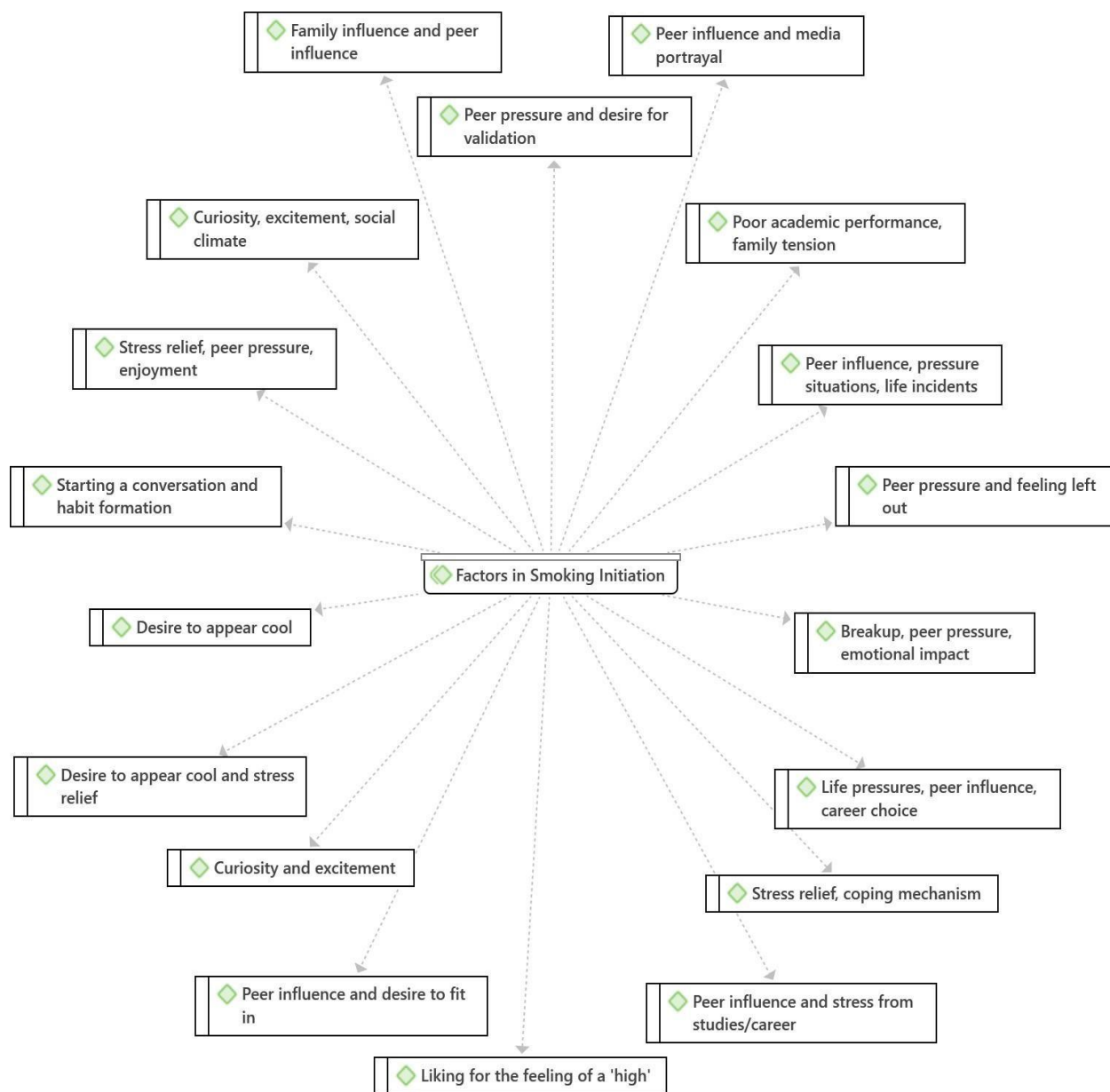
Theme 1: Recent smoking behavior: 30-day cigarette consumption inquiry.



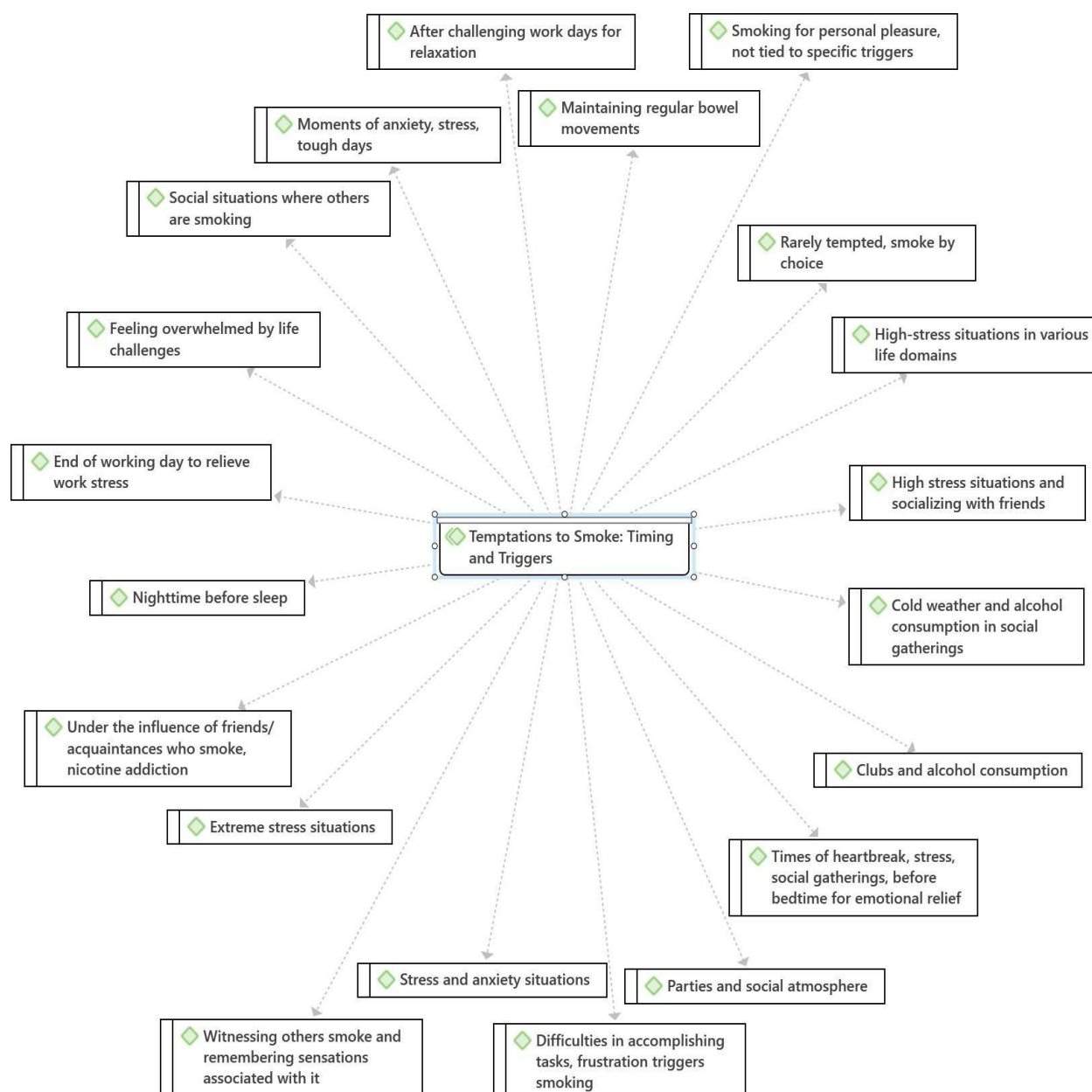
This data depicts how often several individuals smoked for 30 days, thereby illustrating the average of around 3 cigarettes per day by an individual. Additionally, some data suggested several individuals are in their quitting stages where they didn't smoke or smoked very infrequently for one month.

Theme 2: Smoking initiation: origins and influences

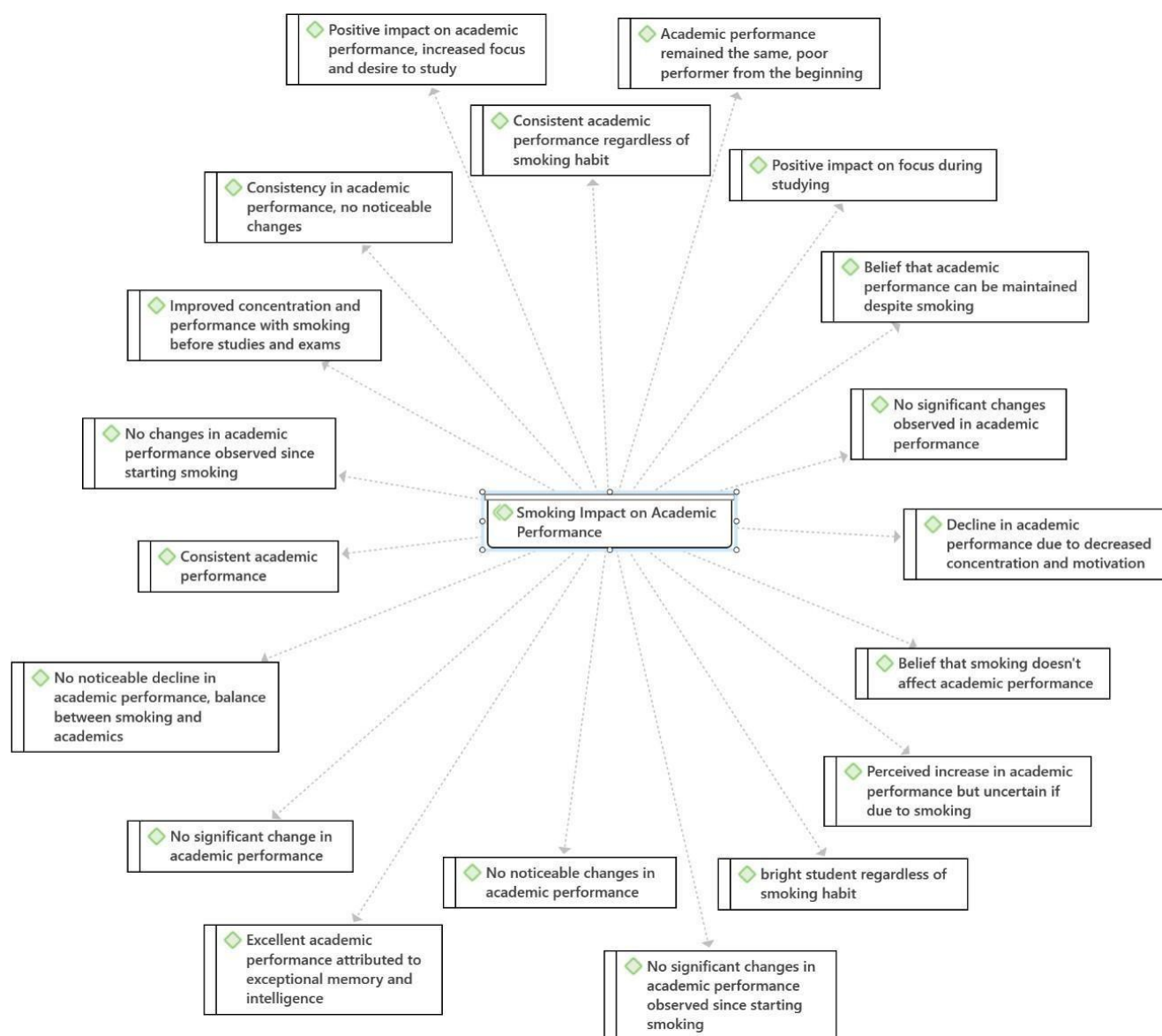
This data illustrates the different individuals who initiated their smoking journey where in the most common factors that contributed to the decision of individuals to start smoking were peer pressure, curiosity, social environment, to act cool in a social group or to tackle stress. These patterns were particularly shown in teenage years during the start of college life.

Theme 3: Factors in smoking initiation

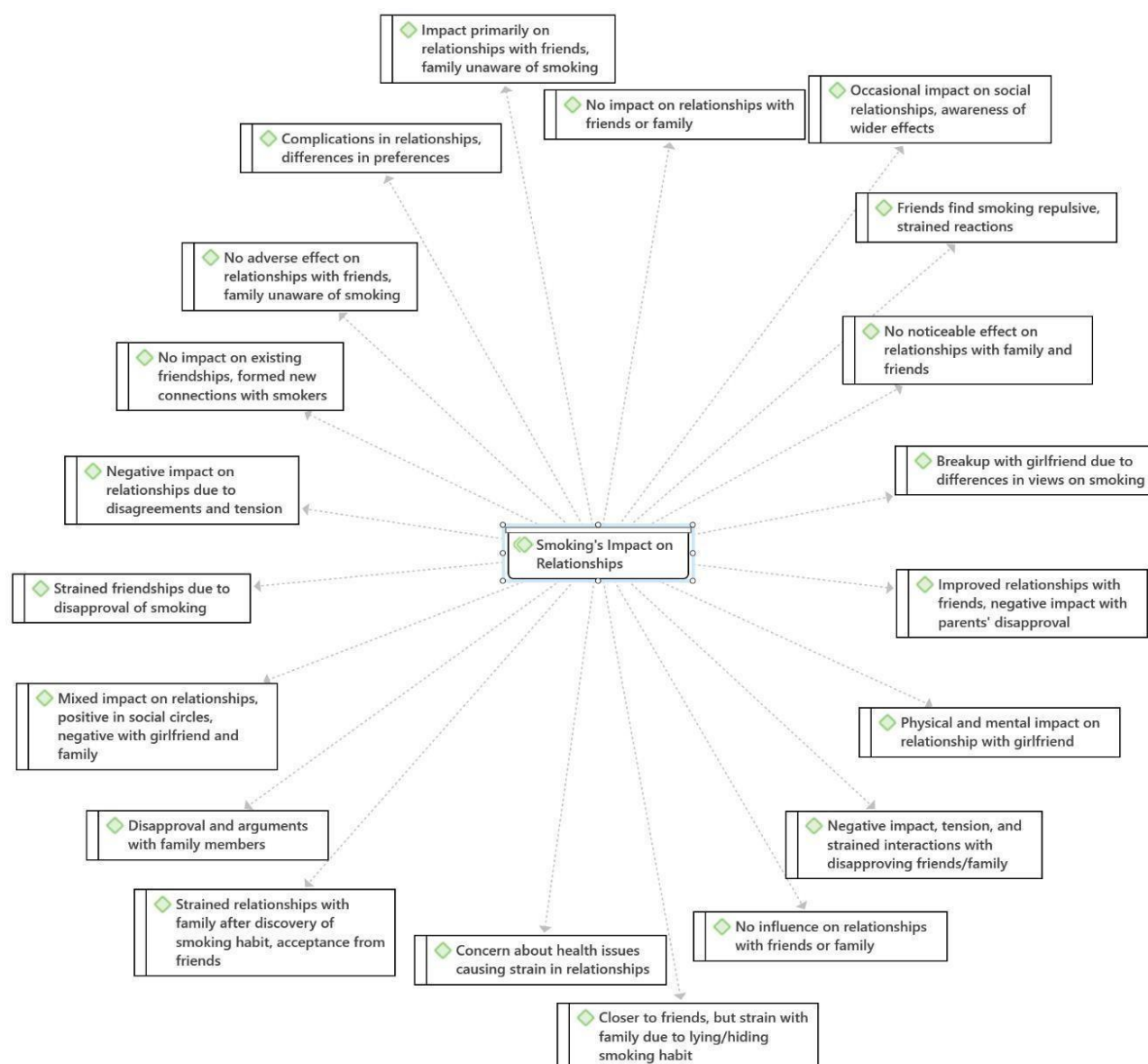
This data depicts the primary factors that influenced individuals to start smoking which mainly included peer pressure, stress alleviation and a way for them to fit in a social environment. Various other factors included academic stress, and how smoking is shown in media.

Theme 4: Temptations to smoke: timings & triggers

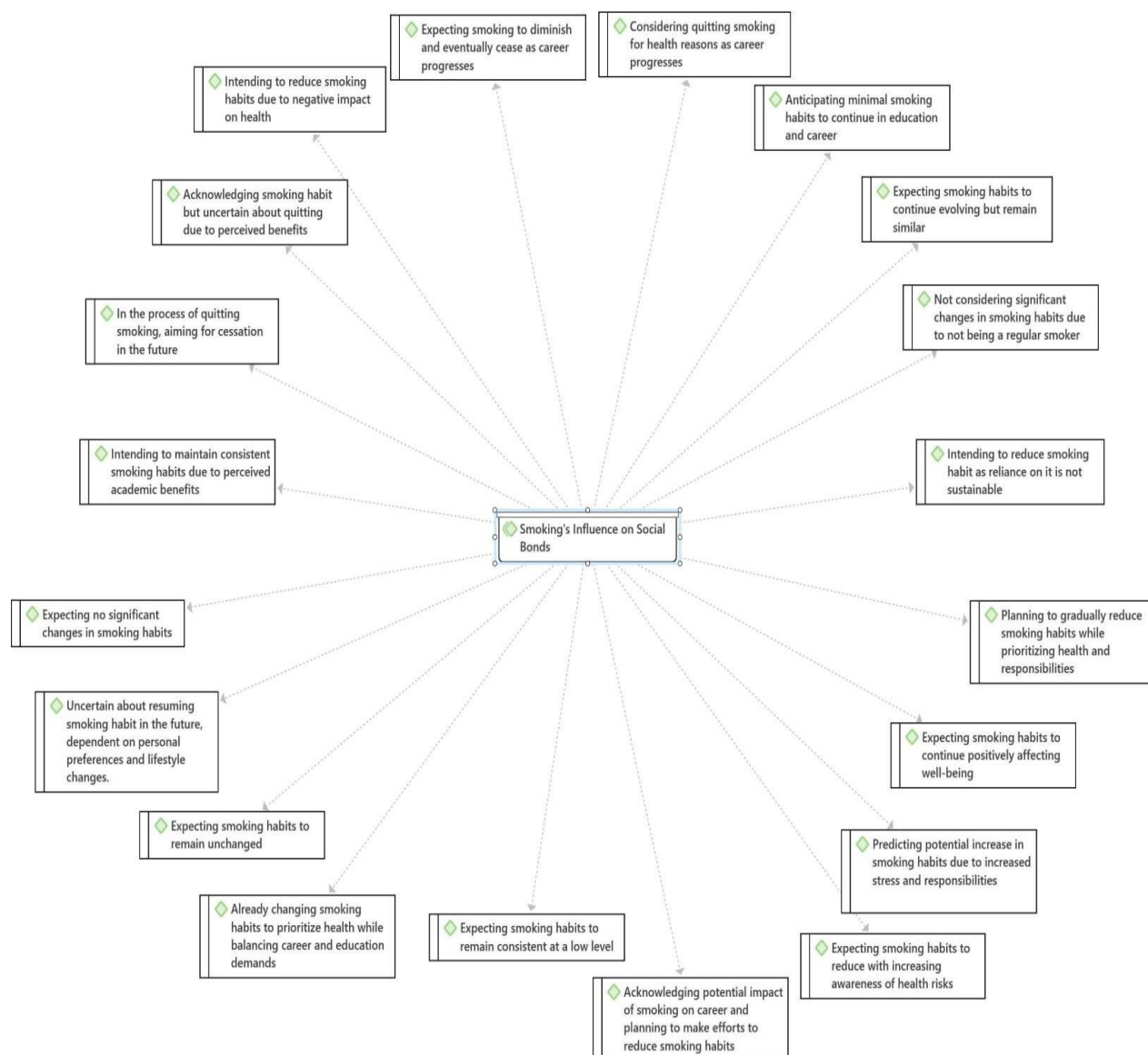
This data depicts various situations that triggered smoking behaviors, which included majorly stress and the social environment. Some people considered it as a habit that tempted them to smoke as per their routine, while few individuals considered smoking as a relaxation method. Notably, stress was the major reason that tempted people to smoke as part of a coping mechanism.

Theme 5: smoking impact on academic performance

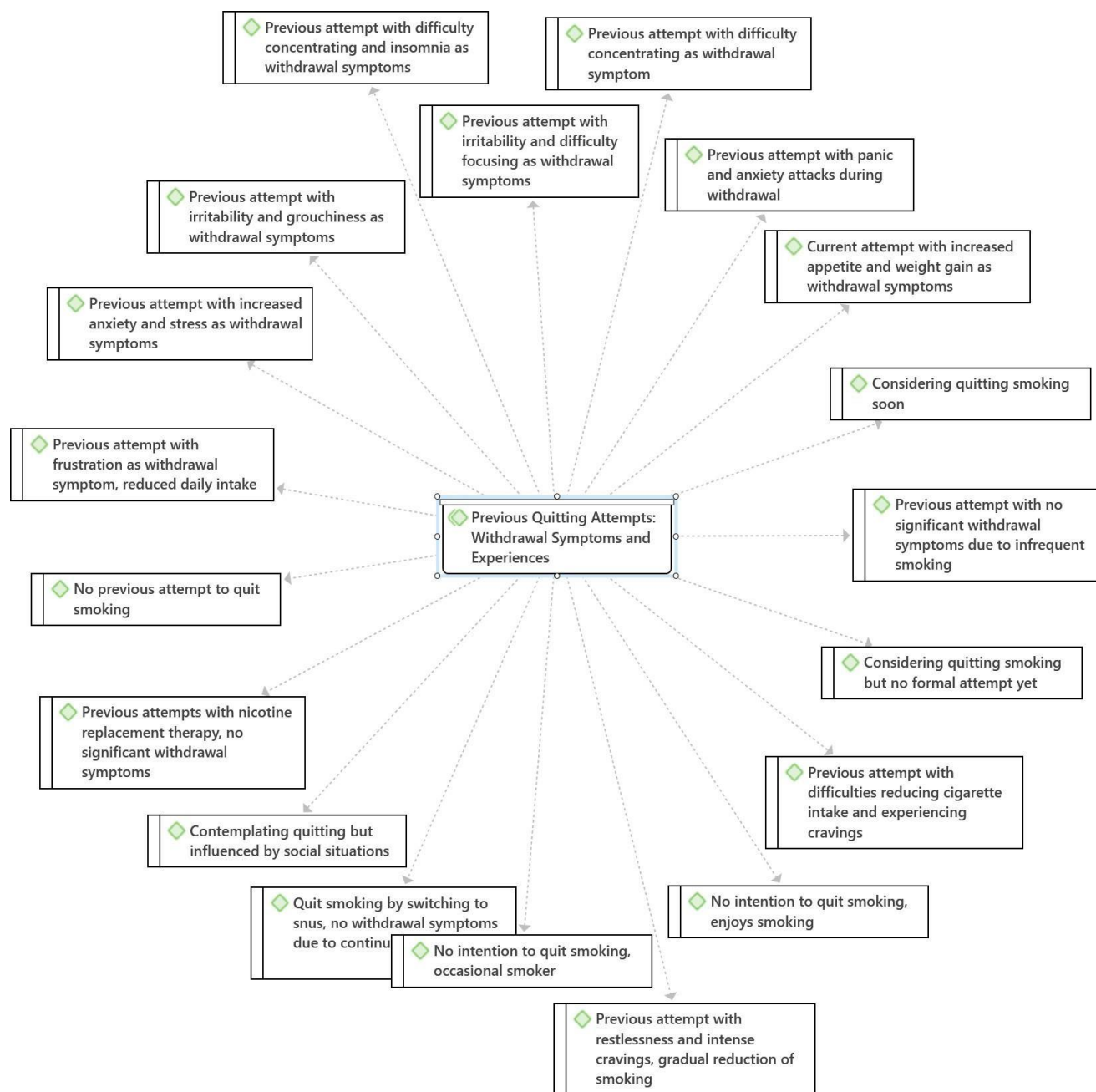
A mixed response has been received in this data where the individuals try to point out the impact of smoking on their academic performance. Some think that it has helped them enhance focus thereby positively impacting their academic performance. Some think it has been neutral while few suggested there was some negative impact as well.

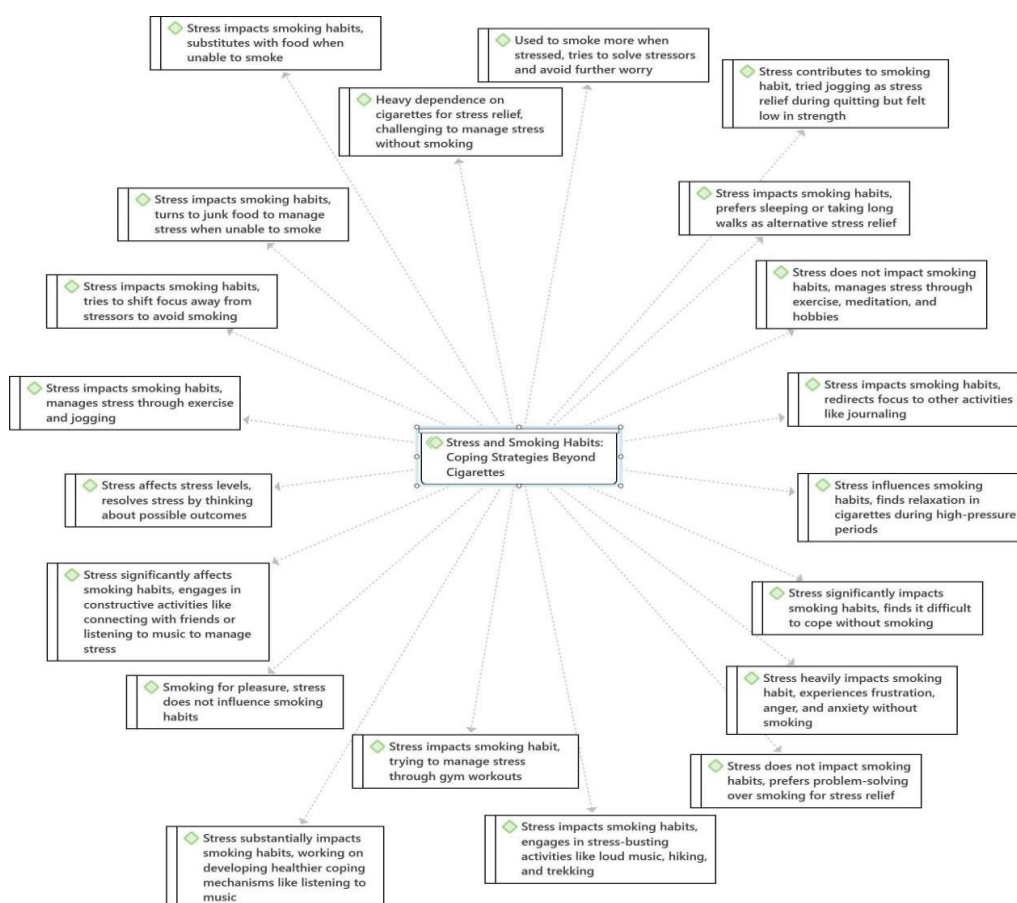
Theme 6: Smoking impact on relationship

This data shows how people think their relationships have been affected by their smoking behaviors, though the relationship varies equally among individuals. few people think that it negatively impacts their relationships as their friends and family don't approve of this habit due to health concerns. At the same time, few others think that it positively impacted their relationship with friends as they considered smoking to bond within social groups.

Theme 7: Smoking Influence on Social Bonds

As people advance in their schooling and careers, the replies show differing expectations and intentions for their smoking behaviors in the future. Some expect less or no smoking because of health issues or shifting priorities, while others predict more or even longer smoking because of stress or advantages they believe in.

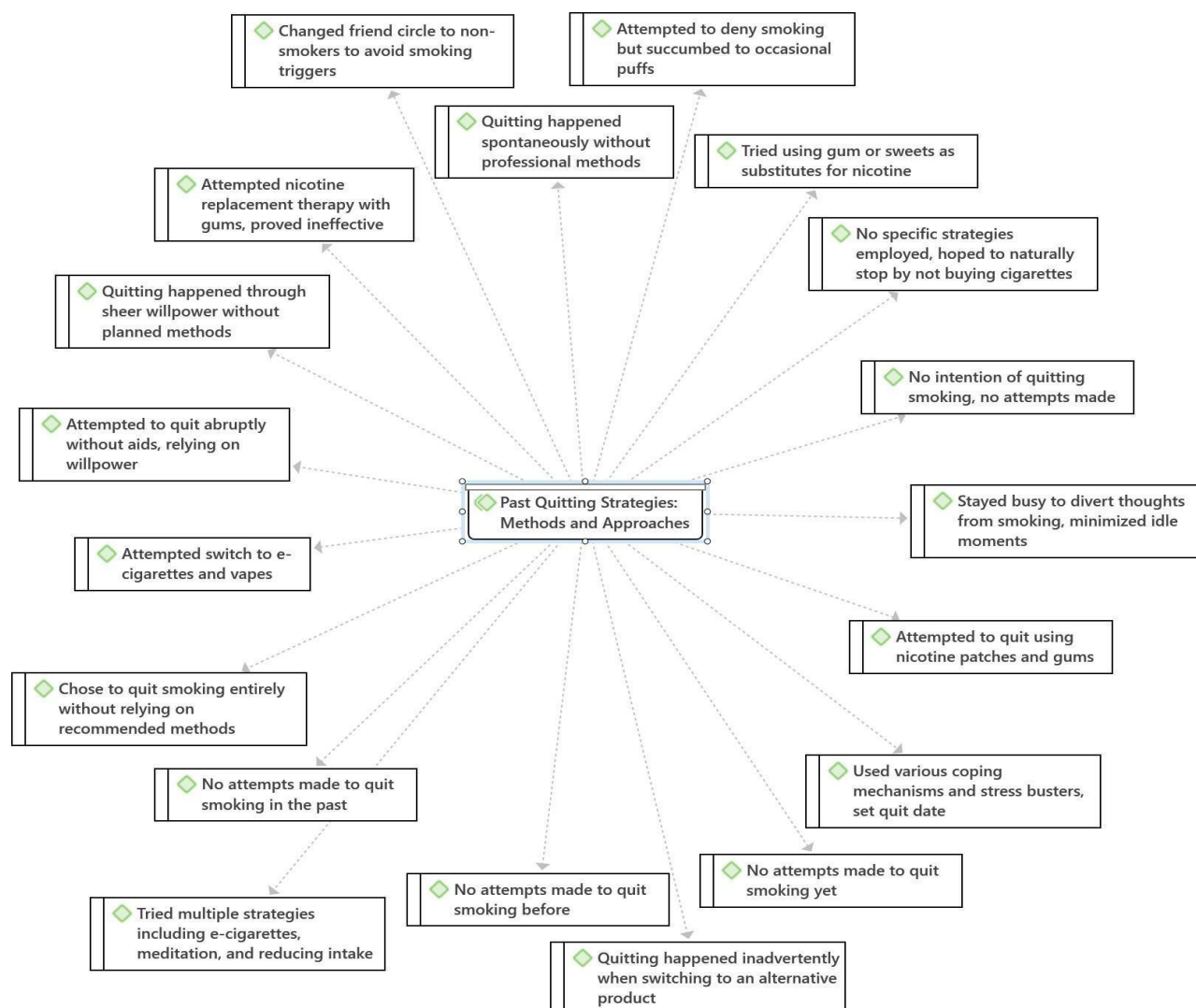
Theme 8: Previous quitting attempts: withdrawal symptoms and experiences

Theme-9: Stress and smoking habits: coping strategies beyond cigarettes

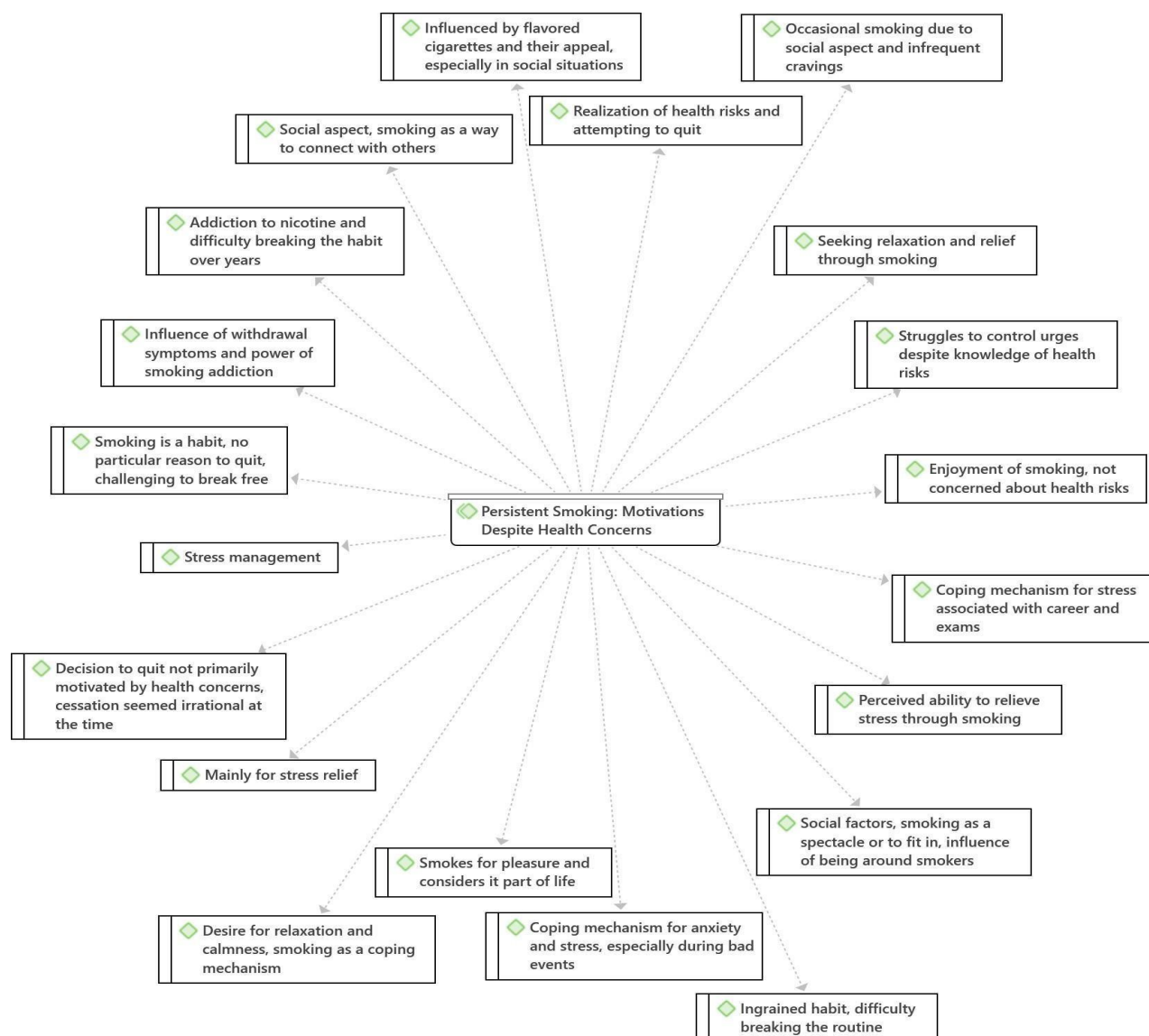
There were a variety of responses in this data which depicts if people have ever tried quitting smoking before and what withdrawal symptoms they experienced. Most of the people tried going with nicotine gums and e-cigarettes as a medium to try quitting smoking while others took a cold turkey approach where they just resisted the temptation of it. Similarly, different patterns were shown in withdrawal symptoms among individuals, some experienced little to no symptoms, while others experienced anxiety, irritability, and a lot of cravings while trying to quit. Responses indicate varied impacts of stress on smoking habits, with some relying on cigarettes as a coping mechanism, while others employ alternative methods such as exercise, journaling, or engaging in hobbies. These strategies reflect individual differences in managing stress without turning to smoking.

Theme 10: Perceptions of smoking health risks: awareness and information

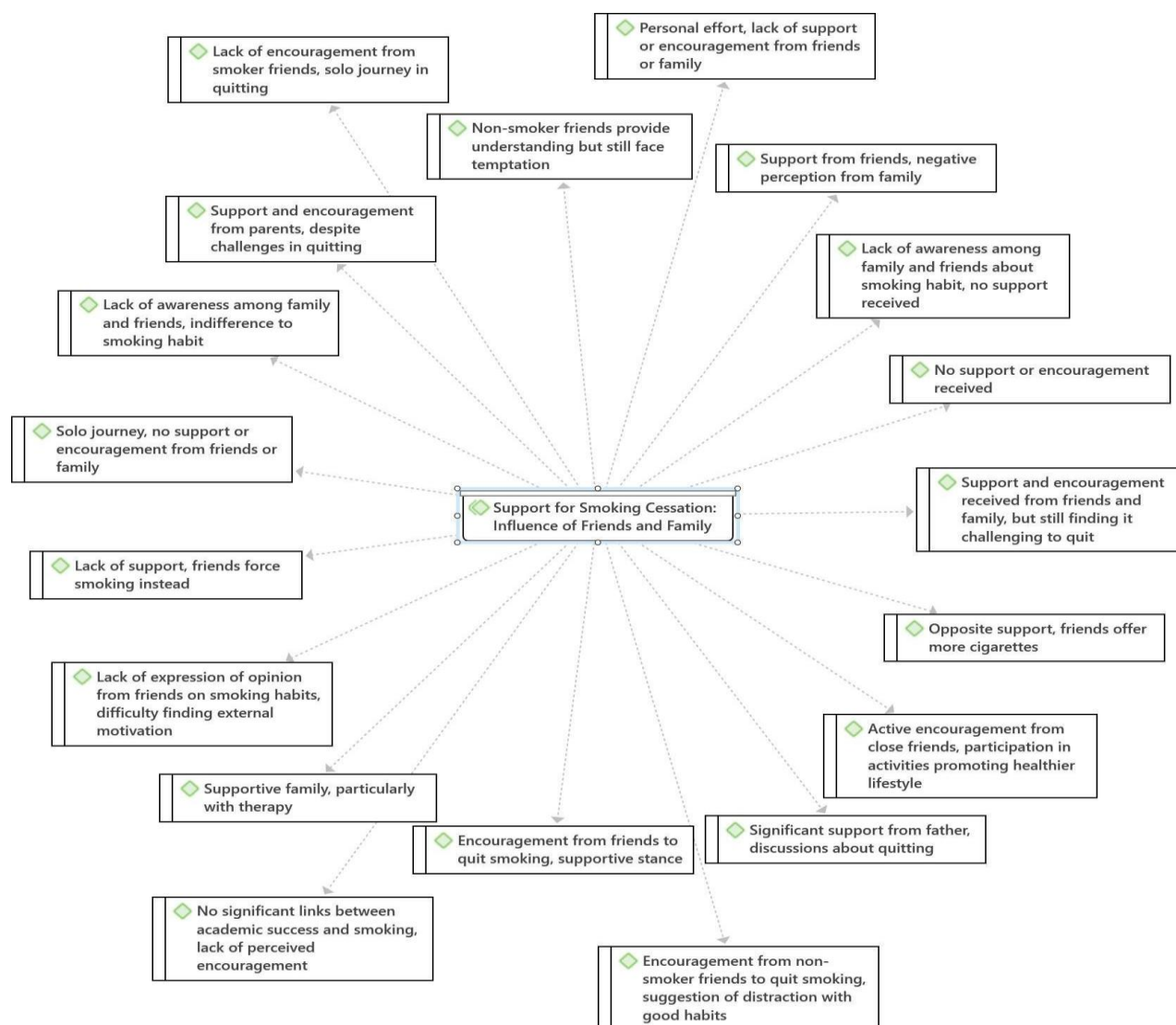
This data was more deviated towards the positive side as it depicted that most smokers felt adequately informed about the risk associated with smoking as according to them many initiatives have been taken by the government about it. Out of all, very less amount of people was aware of the risks associated with smoking as well which is a matter of concern for our younger generation.

Theme 11: Past quitting strategies: Methods and approaches

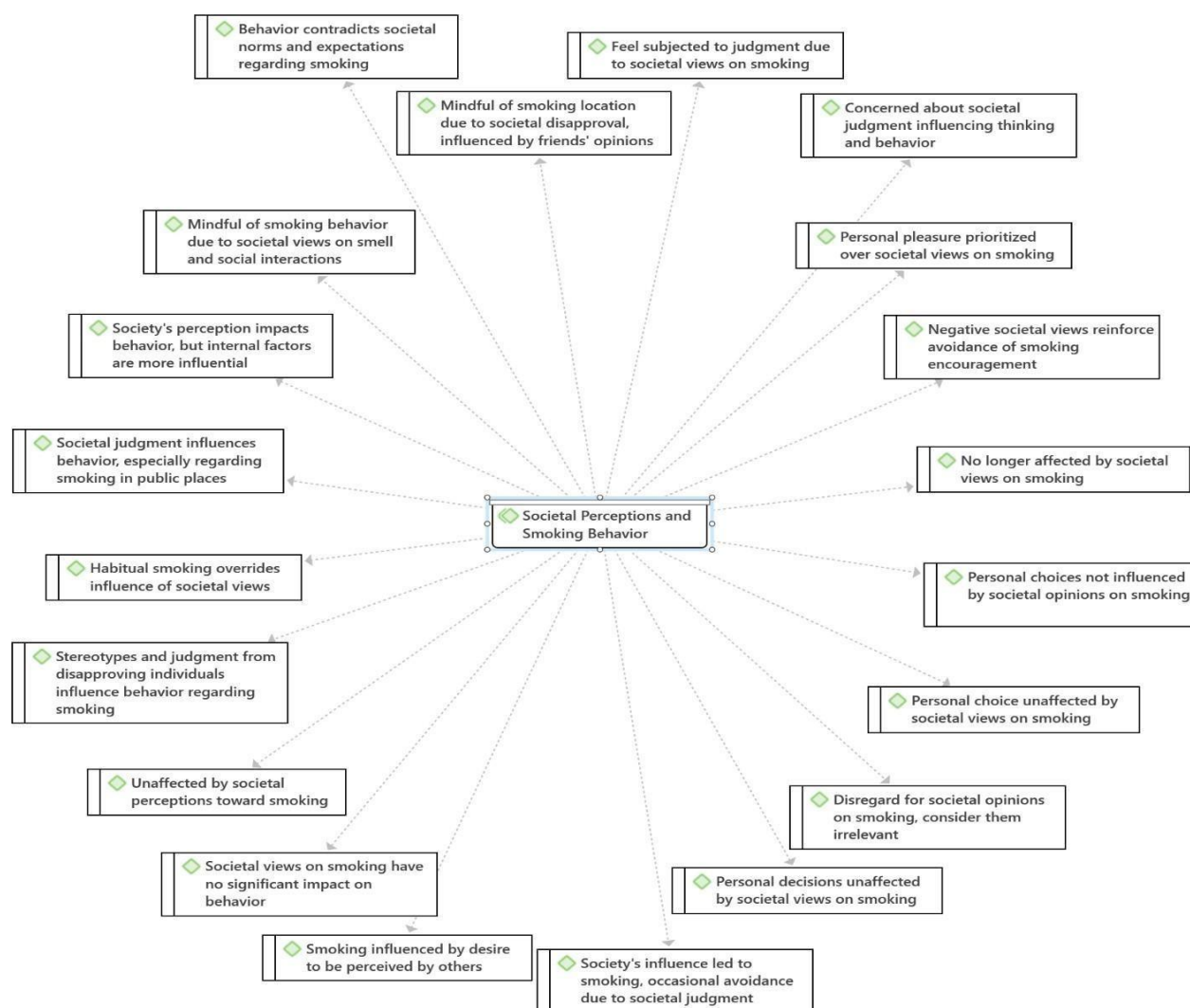
This data depicts what strategies and methods individuals have tried to quit smoking. Few individuals considered nicotine patches, nicotine gums and e-cigarettes as their preferred methods, while few relied totally on their willpower and resisting the temptations. Notably, few people didn't go with any strategy but for them, the quitting happened abruptly, while few others didn't have any intention to quit.

Theme 12: Persistent smoking: Motivation Despite health concern

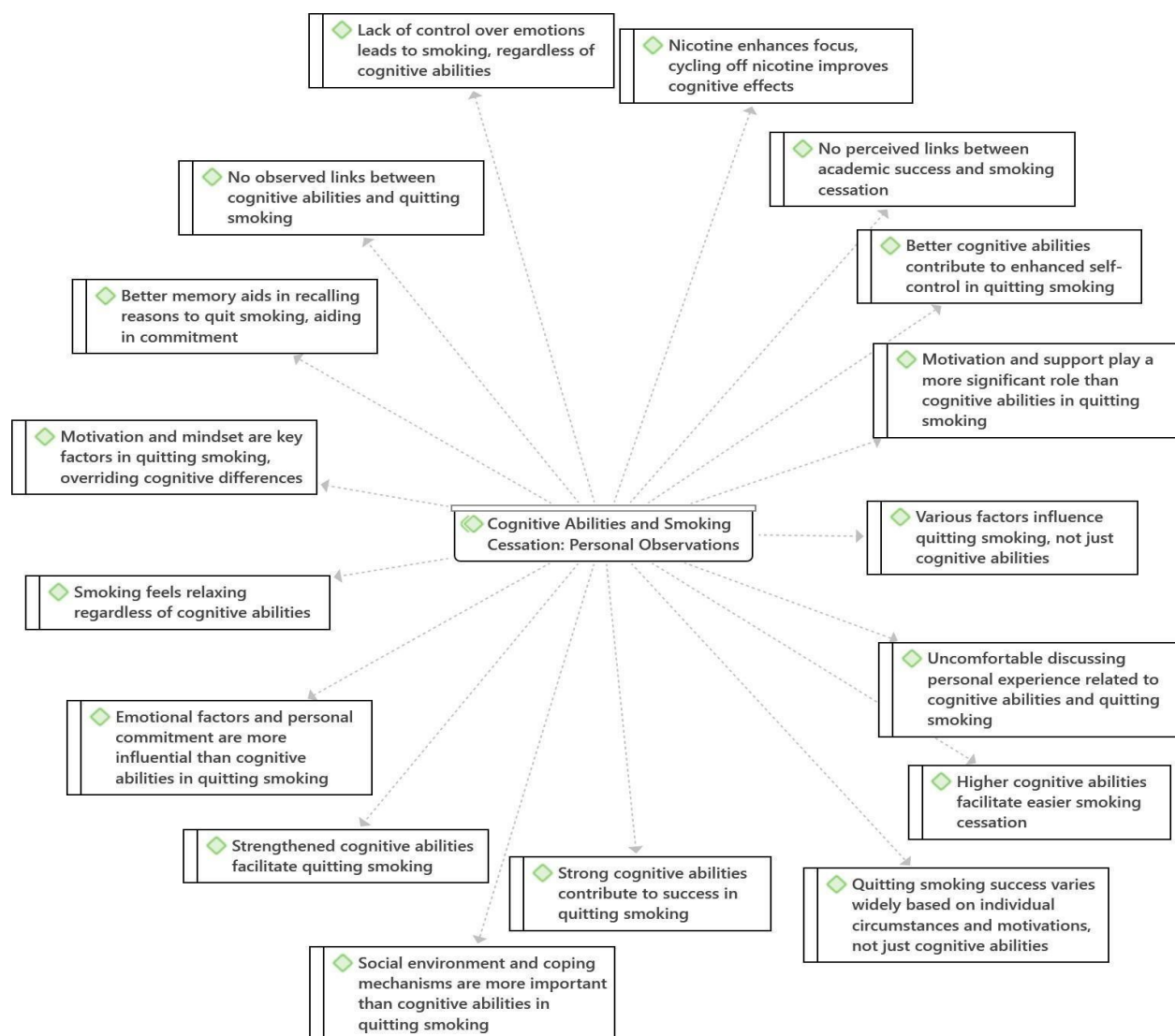
There are many reasons as per the data found why people continue to smoke, despite health reasons which include some considering it as a coping mechanism in terms of high-pressure work and stress. Few suggested it is a habit that can be very difficult to quit. Few others think that it doesn't cause any health issues and choose to smoke because they like it.

Theme 13: *Support for smoking cessation: influence of friends and family.*

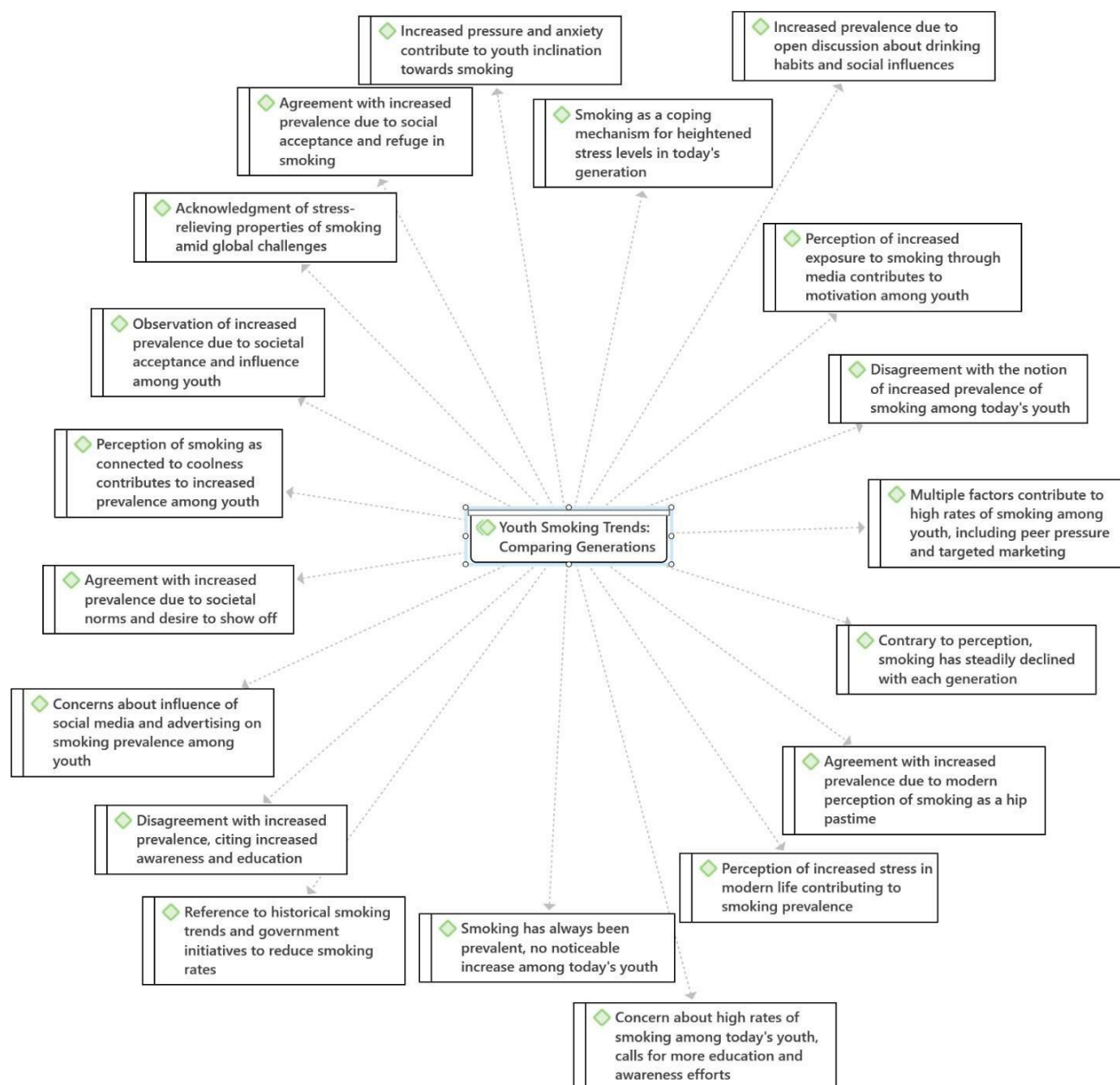
Again, the mixed response was received in data that depicted if smokers got any encouragement from family and friends. The data gave us a balanced result suggesting that a few friends and families acted as a great part of their quitting journey while for others it was a solo run to try and quit smoking considering that few had to hide their smoking behaviors from their families and friends.

Theme 14: Societal perceptions and smoking behavior

This data shows how people's smoking habits are impacted because of societal views. Some people were subjected to judgement from society and were against the idea of smoking generally in public, while others didn't get affected in any way by the societal views and continued to smoke as chose to do what they wanted to without caring about the society. Women who smoke were subjected more to this societal judgement as according to them it's hard for them it's hard to come out in public and smoke without getting judged. Few initially cared about the views but with time started to ignore those perceptions from society.

Theme- 15: Cognitive Abilities and smoking cessation: personal observation

This data showed how people think that cognitive abilities can affect any individual's cigarette-quitting journey. As per the data, responses were in favor of none as few agreed to this point and few considered it as utterly nonsense. The ones who agreed justified their agreement by explaining that the ones with good cognitive abilities can progress better in trying to quit smoking as they can plan, manage, and execute the strategies properly. The ones who disagreed think that cognitive abilities alone cannot help a person quit, while other external factors like motivation and mindset are key factors in trying to quit smoking.

Theme 16: Youth smoking trends: Comparing generations.

The data showed that people's views were divided on whether smoking is prevalent in the young generation. While some people agreed considering that the younger generation is more under stress as compared to the older generation, and the other factors they included to justify their agreement were peer pressure, for people to fit in a social environment. Additionally, other groups of people

disagreed with this statement stating that smoking has always been there.

DISCUSSION

Smoking addiction refers to a higher dependence on tobacco or nicotine products leads to strong cravings, seeking, and not being able to quit it easily despite awareness of the unhealthy consequences. The nicotine-addictive nature makes it difficult to control the intake of smoking. It allows them to feel pleasure by releasing the dopamine in brain.

Regularly using it can increase the tolerance level and the body requires a higher dose to feel its effects. The strong dose can impair the power of dealing with everyday challenges and lead to adverse effects on various factors including psychological, behavioral, physical, or emotional well-being. To deal with daily hassles, people take nicotine in large quantities that calm their minds allow them to make sound decisions and increase their reasoning in problem-solving. As the review of literature explains the youth are more influenced by their peers to indulge themselves in smoking habits. Others express that everyday stress is difficult to handle sometimes, they take nicotine as an effective coping way to deal with stress and relax their minds. The treatment for smoking addiction can be taken as follows- cognitive behavioral therapy (CBT), allows the individual to replace their negative thought patterns with rational thinking, and relaxation techniques allow the body to be conscious and feel positive energy while calming the mind, in severe cases, the medication is prescribed to control the craving of nicotine and decrease the effects of withdrawal symptoms and make it easier for an individual to quit it.

The therapy is given to replace the nicotine by giving an alternative to it instead of smoking, consists of inhalers or gums. This study aimed to see the level of intelligence of smokers among

youth compared to non-smokers. The purpose of the research, a total sample size of 20 youth smokers, who voluntarily participated in the study. The data was collected through the qualitative analysis using the interview method. The data are tabulated in the themes to generate the code and then converted into the maps to represent them in the open network.

The research consists of 16 themes, every theme has 20 codes that represent the responses given by the participants. the result indicates that the participants were infrequent with the use of nicotine in a month, the most influencing factors were peer pressure, stress, relationship problems, disturbed family relationships, work-life pressure, and academic performance. The habit of smoking allows the participants to release their stress and use it as a coping mechanism. the result shows that smoking is more prevalent among youth in the present generation as compared to the ancestors' times. The habit of smoking makes changes in academic performance whether it is good or bad, for some it enhances their focus in academic areas. Most people are aware of the negative consequences of smoking habits and the addictive ones have found alternatives to nicotine to replace it with gums or other ways.

CONCLUSION

The study shows a negative correlation between the level of intelligence of smokers among youth compared to non-smokers. The study aligns with the understanding that nicotine dependence affects the individual's ability to understand the negative health outcomes of smoking. These results have important implications for understanding how the addiction to smoking impaired decision-making and affects the ability to navigate and manage the dependent behavior and make quitting more challenging.

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