

Seeking the Light from the Smoke: A Case Study of Chain Smokers on Smoking Cessation in Mandaue City, Philippines

Rachel Kate G. Limalima*, Glyza A. Kadusale, Mikaela Gepiga, Blaise Mariel Colimbo, John Clyde Alquiza, Jhayzee Mae Marco, Mary Fair Ruval O. Estrera, Roberto D. Samson, Jr., Romel C. Mutya For affiliations and correspondence, see the last page.

Abstract

This study explored an in-depth analysis of the faces of smoking cessation of chain smokers. Specifically, this study investigated the meaningful events encountered by chain smokers that led them to start smoking cessation, the struggles they experienced when they began smoking cessation, and the adaptive mechanisms of chain smokers to continue smoking cessation. This study utilized a qualitative case study research design using Braun and Clarke's data analysis method to describe an in-depth dissection of a phenomenon involving six participants through semi-structured interviews. Participants were recruited using purposive sampling technique and passed the inclusion criteria. Findings revealed five themes: (1) relevance of quitting smoking, (2) risks of smoking, (3) roadblocks from the goal, (4) rewards from quitting smoking over time, and (5) intrinsic and extrinsic motivations towards smoking cessation. The findings show that various factors led the chain smokers to start smoking cessation. Most of the participants quit smoking owing to health risks and environmental risks. Family support greatly helps smokers to manage relapse. The study recommends that the government health center expand and make people more aware of the smoking cessation programs and create a program that will provide a health systems approach that focuses on promoting and integrating clinical best practices to increase smokers to quit smoking successfully.

Keywords: Cigarette Smoking, Smoking Cessation, Case Study, Chain Smoker

Introduction

Smoking is a significant risk factor for developing lung cancer, the leading cause of mortality in both men and women globally. It potentially harms nearly every organ of the human body, causes a slew of diseases, and harms the health of smokers and those interacting with smokers. In the long run, smoking causes more health problems, such as an increased chance of stroke and brain damage (Leshargie et al., 2019). The Centers for Disease Control and Prevention (CDCP, 2020) states that at least 30 people live with a significant smoking-related illness for every person who dies. Despite the magnitude of the disease burden associated with smoking, approximately a billion people worldwide smoke cigarettes, with 80 percent living in low- and middle-income countries (World Health Organization, 2022). Numerous people attempt to stop smoking but fail due to the substance of nicotine, which is as addictive as heroin, cocaine, and alcohol. Thus, quitting smoking is frequently unsuccessful due to withdrawal, stress, and weight gain.

Studies have been conducted on the different barriers to quitting smoking (Gregor & Borrelli, 2012; Martin et al., 2016; Tombor et al., 2013). Stubbs et al. (2017) found that perceived stress may comprise a barrier to smoking cessation in low-middle-income countries. Vulnerable groups experience common barriers to smoking cessation, in addition to barriers that are

unique to specific vulnerable groups. Individual-level, community-level, and social network-level interventions are priority areas for future smoking cessation interventions within vulnerable groups (Twyman et al., 2014). As a result, quitting smoking is one of the most essential yet complex steps a person can take to improve their health, and most smokers attempt to quit several times before abstaining from smoking. With all the information gathered, the researchers find it relevant to conduct this research which will describe the in-depth details of the faces of smoking cessation of chain smokers.

Smoking cessation attempts to get smokers to stop and overcome strong urges to smoke (Vangeli et al., 2011). The advantages of quitting smoking cannot be overstated. Those chain smokers who successfully quit smoking experience a rapid and sustained reduction in the likelihood of developing a cardiac disease or experiencing a cardiac event. Smoking cessation interventions have been tested and are now routine practice in some hospitals (McRobbie et al., 2008). Nonetheless, smoking cessation is a top public health priority. Unfortunately, nicotine withdrawal symptoms are shared when people stop smoking. Many smokers experience other symptoms after a day or two of quitting smoking, including increased appetite, constipation, mouth ulcers, coughing, and weight gain (West, 2017; West & Shiffman, 2016).

This study investigated the lived experiences of chain



smokers on smoking cessation. The findings of this study will be valuable for adapting strategies for controllable smoking cessation or proposing smoking cessation programs. To provide an in-depth, detailed examination of smoking cessation among chain smokers, resulting in more excellent knowledge and more successful methods to be developed, promoted, and implemented to make a positive difference in the lives of chain smokers.

Literature Review

Smokers Attitude Towards Smoking

Cigarette smoking is now widely accepted to be addicting. A significant point of contention is whether daily smoking causes a change in a person that compels him or her to continue smoking, depriving the person of personal control over their behavior. Volkow (2015) defined addiction as a disease of free will. The opposing position is that smoking remains voluntary behavior that the person chooses to continue or not (Jones et al., 2016). Free will generally involve conscious control (Shepherd, 2012). Responsibility requires that the person knowingly accept the consequences of his or her actions.

In addition, smokers' addiction to smoking was explained by Freudian theorists using a psychoanalytic theory developed by Sigmund Freud to view smoking as caused by fixation at the oral stage. According to the hypothesis, the oral personality considers the mouth to be the most significant source of pleasure, leading to excessive consumption of food, alcohol, or narcotics (Ellis A, 2012). The addictive substance nicotine also played a role in their addiction. According to the National Institute on Drug Abuse (2022), consuming nicotine, whether through cigarettes or vaping, causes the release of the chemical dopamine, which is known to create mood-altering changes that make the person feel better for a short time. Higher cigarette prices were adapted to address the high cigarette consumption problem. However, this idea pushed price-sensitive smokers to seek lowerpriced or tax-free cigarette sources to maintain their smoking behavior. By this, established smokers may reduce their cigarette consumption and partially switch to cheaper smokeless or other combustibles. Such situations would lead to dual product use, linked to higher levels of nicotine addiction (Tomar et al., 2010).

De Houwer et al. (2006) investigated the negative implicit attitude of smoking toward smokers. It

showed that scores on an attitude Implicit Association Test (IAT) discriminate between smokers and nonsmokers to the same extent as scores on an IAT designed to measure associations between smoking and approach or avoidance. They also found positive implicit attitudes toward smoking in smokers when they used a personalized version of the IAT designed to be less susceptible to the effects of societal views. The results indicate that implicit attitudes should not be dismissed as a causal factor in the maintenance of smoking behavior.

Smokers' Physical and Behavioral Manifestation

Smoking is addictive, which means that once a person has smoked consistently for a while, his or her body will need more smoking, especially when the body's nicotine level begins to decline due to nicotine evaporating and no replacement dose has been ingested. Smoking is affected by depriving oneself of primary needs like home (Patterson et al., 2019). This is also affected by the external orientation of thinking that leads to emotional separation (Davydov et al., 2013). Classical psychotherapy treatments frequently attempt to identify the internal reasons for a problem. 70% of contemporary smokers desire to quit, but only about 2% or 3% succeed each year permanently. The data suggest that smokers retain free will because they exercise voluntary control over their behavior, including autonomy and responsibility.

While there is much study on why people quit smoking in developed countries, there is not much from lower-middle-income countries (LMICs) like Pakistan. According to the Global Burden of Disease (2019), 10% of fatalities in Pakistan each year are related to smoking, and roughly 19.1% of Pakistan's adult population uses tobacco, the majority of whom smoke. The success rates of quit attempts are also lower for smokers in Pakistan (2.6%) than those reported by international literature (Shaheen et al., 2018). World Health Organization, Global Adult Tobacco Survey Pakistan Data (2014) supported that they were less likely to be successful, with only 9.1% making use of pharmacotherapy and 14.7% of counseling; thus, this is one of the factors that affect smokers to continue smoking. Such limited social resources with minimal financial provision led to low motivation when smokers started to quit (Hiscock, 2012).

Additionally, depression has been linked to difficulty in smoking cessation, particularly when co-occurring with nicotine addiction. In a follow-up study conducted by Ranjit A. et al. (2020), a higher level of



depressive symptoms indicated a reduced likelihood of quitting, resulting in an addiction that influences chain smoking. According to Chun et al. (2022), the frequency of visits to the smoking cessation clinic, the degree of nicotine dependency, and cardiovascular illness, especially hypertension, all impacted smokers' success in quitting. Smoking cessation strategies may be improved and personalized for individuals using these factors.

The study found that smoking cessation was associated with age, region, perception of health status, and nicotine dependence, like in previous studies (Holm et al., 2017). Older smokers are more likely to give up smoking because they have more significant health concerns (Feng et al., 2011) and the inverse U-shaped relationship of nicotine dependence with age (Lee et al., 2012). Song et al. (2018) also noted that older persons, smokers with less severe tobacco dependency, and smokers who assessed their health as being poorer had reduced smoking relapse rates.

Methodology

This study utilized a qualitative case study design to explore the experiences of chain smokers who successfully succeeded in smoking cessation, specifically their significant experiences, encountered challenges, strategies, and coping mechanisms to the challenges faced. This method provides tools for researchers to study complex phenomena within their contexts. When the approach is applied correctly, it becomes a valuable method for health science research to develop theory, evaluate programs, and develop interventions (Baxter & Jack, 2008). Thus, a real-time phenomenon is explored within its naturally occurring context, considering that context will create a difference (Kaarbo & Beasley, 1999).

A purposive sampling technique was used to recruit the six participants who achieved the inclusion criteria in the barangays of Mandaue City, Philippines. The basis of the selection connects with the study's rationale and significance to ensure that the prospective data collected is relevant and beneficial to the research study. This sampling technique selects a sample by taking a subject that is not based on the level or area but based on the specific purpose (Arikunto, 2013). The selection criteria were as follows (a) chain smokers or ex-chain smokers (b) undergoing smoking cessation or successfully undergone smoking cessation and (c) willingness to participate in the study.

The researchers followed the steps in qualitative data collection. A certificate to conduct the study from the school principal was secured. Upon approval, an invitation and consent form were sent to the participants to ask permission to conduct the study before the interview, properly indicating voluntary participation in the study and understanding all the rights of refusal and withdrawal. Strict confidentiality was assured, which was specified in the informed consent form. Adhering to the ethical principles during the entire study was also observed. Personal information like names, contact numbers, addresses, or direct identity that could identify the participants was kept strictly confidential.

Data were obtained through semi-structured face-to-face interviews while maintaining the general safety and protocols. A panel of experts validated the guide questions. Then, it was carefully reviewed and revised to confirm their suitability and the study results. The participants were asked in their local dialect (*Cebuano*) to be comfortable and be free to express their thoughts towards the questions during the interview process. During the interview, audio tapes were used for recording purposes that lasted from 10 to 20 minutes, but everything was kept confidential and assured them anonymity of their identities.

After conducting the interview, the researcher transcribed voice recordings to improve the data's credibility. The researchers used content analysis and analytic induction as primary analysis methods (Fowler, 2013). The researchers identified joint statements from the narrations of the research participants. When the researchers found expressions confusing or could not understand, participants were called and requested to confirm what they wanted to express. Then, the data were coded, and themes were drafted. The researcher explored the subthemes and their relationships with the data many times. Finally, the sub-themes were combined to form themes. Regarding data conformability, the emerging trends were submitted to the participants, who were to provide input about what they said during the interviews to accurately recount their experiences.

Results and Discussion

The descriptive analysis of the significant statement extracted from the transcripts of six participants revealed five (5) major themes: (1) relevance of quitting smoking; (2) risks of smoking; (3) roadblocks from the goal; (4) rewards from quitting smoking; and (5) intrinsic and extrinsic motivations towards



smoking cessation. These themes were labeled using direct quotations from the participants; this was done to express the original idea conveyed by the participants. Responses were translated into English.

Theme 1 Relevance of Quitting Smoking

Extensive research on the health repercussions of smoking cessation has now accumulated. With few exceptions, illness risks decrease following smoking cessation and continue to drop while abstinence is maintained (Samet & Barrington-Trimis, 2021). The relevance of quitting smoking has a significant impact on chain smokers. It reduces risks for the family and the environment and health concerns. Hence, the relevance of quitting smoking comprises two subthemes: positive changes in the life of ex-smoker and realizations about smoking.

Positive Changes in the Life of an Ex-Smoker. The dangers of smoking and the health benefits of smoking cessation are well known. Quitting smoking provides both immediate and long-term health advantages, as well as an improved general quality of life. Furthermore, participants express worries about the impacts of quitting smoking, including weight gain, impaired capacity to cope with stresses and harmful effects, social isolation, loss of pleasure, and extreme cravings. Participants expressed that,

"My physique before was not as it is now. I used to be skinny and had dry skin, but now my body is in good condition, and I don't have any problem breathing." (P2)

"My feelings are light, and it pleased me." (P5)

Former smokers have reported that their bodies have benefited from quitting smoking. Furthermore, retroactive statistics show that ex-smokers are happier after stopping than when smoking. These findings suggest that stopping smoking may increase mood and life satisfaction.

Realizations Pertaining to Smoking. Opinions on whether addicts lose the ability to regulate their actions and exercise free will vary considerably (Baumeister, 2017). Cigarette smoking is now well acknowledged to be addicting. A significant point of contention is whether regular smoking causes a change in the individual that motivates him or her to continue smoking, thereby robbing the person of voluntary control over their conduct. According to the World Health Organization 2020, realizing how difficult breathing may be with lung inflammation, we

recognize that healthy lungs are essential for us to return to everyday living. The participants noted,

"...There are no more cigarettes, I will stop forever."
(P1)

"I'm okay, I'm happy now...I will never smoke again." (P3)

"...but for now, I don't have any plans about going to smoke again." (P4)

The participants claimed that they had no intention of smoking cigarettes again. The World Health Organization (2020) states that the willingness to stop is the first step toward effective quitting. More effort is needed to enhance knowledge of tobacco harm and adopt additional tobacco control measures for a supportive atmosphere to create willingness. As a result, it's helpful to understand the most common rationalizations and what scenarios may activate them to keep smoke-free.

Quitting smoking has several health advantages that often improve the longer a smoker adheres to cessation goals. Quitting smoking lowers the risk of various adverse health consequences, including poor reproductive health outcomes, cardiovascular illness, chronic obstructive pulmonary disease (COPD), and cancer. According to the American Cancer Society 2018, quitting tobacco helps reduce tobacco's impact on a smoker's look, which can include gum disease, tooth decay, and skin wrinkles. A participant explicitly affirms this,

Cigarette smoking continues to be a global public health concern, resulting in numerous fatalities and health inequities. Since smoking is one of the primary causes of death, smoking cessation is a primary factor in slowing down the continuation of the increasing global mortality rate. Smoking is responsible for approximately 7 million deaths per year. However, smoking cessation may sound easy as it seems. Smokers claim that trying to quit smoking is a tough challenge to overcome. Despite the struggle in successfully quitting, several people have overcome the challenges and are now living a smoke-free life.

Theme 2 Risks of Smoking

Smoking poses a potentially harmful consequence to smokers. It can affect the health of smokers and those around them. Such risks of smoking comprise two subthemes: health risks and environmental risks.



Health Risks. Our health is in peril when we smoke. Acetone, tar, nicotine, and carbon monoxide are a few dangerous ingredients in tobacco products. The things you breathe in affect more than just your lungs. They can affect your entire body. Smoking can have several long-term health issues and consequences on your bodily systems. While smoking can increase your risk of various issues over several years, specific physical impacts can be seen immediately. Participants expressed that they experienced some health issues while they smoked. To support this, the participant commented.

"I experienced shortness of breath and bad breath due to smoking. I sometimes experienced chest pain." (P3)

In addition, the participants were aware of the health risks of smoking. Participants shared that,

"I know that smoking can cause cancer and other diseases. That is why I quit smoking for myself and my family." (P5)

One billion people will die from tobacco-related diseases in the 21st century if immediate measures are not taken to reduce the burden of tobacco use, a risk factor for four central non-communicable diseases and a substantial cause of unnecessary mortality (World Health Organization, 2011). Additionally, non-smokers exposed to passive smoking (secondhand smoke) develop illnesses, suffer disabilities, and perish away (U.S. Department of Health and Human Services, 2006). In terms of public health, smoking and passive smoking are global problems.

Environmental Risks. The environmental risk of smoking is an additional danger, and it includes an increased risk of lung cancer and heart disease in partners, higher smoking rates in children of smokers, and an increased risk of low birth weight, SIDS, asthma, middle ear disease, and respiratory infections in smokers' offspring. Participants had limited knowledge about the environmental risks of smoking. Participants commented that,

"I am not aware of the possible risks of smoking to my family. I thought it can only affect me." (P2)

The statement of the participant is supported by the study by Dawood (2016). He found that smokers' knowledge and perception regarding smoking health effects were low, especially regarding secondhand smokers. Many efforts are needed from health policymakers and health care professionals to disseminate information about the risks of smoking

and the health benefits of giving up smoking.

Theme 3 Roadblocks from the Goal

Smokers face a lot of struggles before and during their smoking cessation journey. Smoking has numerous negative physiological, social, and psychological impacts that can severely impair a person's life. Feelings might trigger a desire to smoke. When people are stressed or depressed, or even when they are pleased or relaxed, they may experience impulses, prompting smokers to pick up a cigarette again (CDCP, 2022). Such concern on the roadblocks from the goal comprises three sub-themes: smoking cessation relapse, peer influence, and cigarette as a fictitious companion.

Smoking cessation relapse. Quitting smoking can be one of life's most difficult challenges for chain smokers. Many people decide to smoke again after they stop smoking. An individual may have gone a few months without smoking and feel good about it. Then they ask a friend to smoke for no apparent reason, and before they know it, they're smoking. Unexpected smoking desires can be risky and lead to relapse. Smoking relapse can be caused by a combination of triggers, events, or conditions. Key participants narrated,

"I stopped for two years. Someone is passing by; I'm sitting, and they smoke cigarettes. When I went to work, someone was using tobacco, and I smoked again. I was still able to come back before my lungs were damaged." (P1)

"Every time I am pregnant, I would stop smoking. After that, I would smoke again if I got a lot of things in mind or many problems in mind." (P4)

Different factors and circumstances can trigger a desire to smoke again. A few reasons why people decide to smoke again are either peers or stress. According to Talukder et a. (2017), stress is one of the most potent smoking triggers, which may be considerably minimized. Relieving stress can help you quit smoking before and during a difficult and stressful event. Furthermore, it is beneficial to surround yourself with a good network of supporters when dealing with smoking relapse.

Peer influence. Almost everyone who smokes did so when they were young, and research shows that peer pressure is a crucial factor in determining whether someone chooses to smoke or not. Cigarette use among adolescents is more common among their



peers. It's the outcome of socialization and friend selection. Adolescents pick up smoking habits from the peers with whom they spend time. When people start smoking, they are motivated by the need to fit in and build a social identity (Culpepper,2018). Tobacco use is also reduced among adolescents who believe their peers disapprove of their smoking habits. The company of other smokers often reinforces smoking among teenagers. A participant says that,

"I have no vices, nothing at all, no tobacco. Now, at work, we have a friend that says, "Have a cigarette." A little taste of cigarettes, I became addicted. I have a friend, if I do not accept the cigarette, they will say, "he doesn't smoke." That is why I smoke." (P1)

Once introduced, individuals continue for the sake of continuation and are unaware when it becomes an addiction. Smoking is one of the behaviors that help people feel like they belong to the group. The desire to be accepted and identify with the group is also present. Participants said,

"I just joined my friends to fit in" (P3)

"I started smoking because of my peers and friends" (P5)

By claiming that smoking is a pleasurable experience, a teenager's peers encourage him or her to start smoking. When a teen refuses to smoke because of family values or parental regulations and limits, the peer group begins to mock him by suggesting that he is a weak person who lacks the confidence to try out a manly thing merely because he isn't yet mature enough. Because of his desire to prove his worth, the teenager eagerly accepts the challenge. Adolescence is when the adolescent begins to discover the world and wants to assert his or her individuality.

Cigarette as a fictitious companion. When other people were smoking, cigarettes were viewed as more enjoyable. If this is the case, it may be because the implied companionship makes smoking more rewarding or because both the subject and other smokers are responding to something that makes smoking more rewarding, resulting in several persons smoking in such "rewarding" settings. Some people view smoking as a source of pleasure, a stress reliever, and a companion. A participant shared,

"Smoking became my hobby and kind of stress reliever whenever I had a problem when I was a teenager."
(P2)

"I continued smoking because, as what I've said earlier, I made it(cigarette) as my stress reliever... whenever I am alone, it acts as my companion, and it doesn't make me feel lonely." (P4)

People who smoke in real-world circumstances report feeling satisfied after puffing through several cigarettes. Cigarettes were found to be either somewhat or highly enjoyable by most people. Tobacco users differed in how satisfying they found smoking on average; those who found it most satisfying were more likely to smoke. For some people, it serves as their imaginary friend.

"Smoking was fun because it gave me pleasure. Smoking makes me happy and gives me joy" (P2)

"Even though I can't tell my problems to anyone, not even to my partner, the cigarette is there to make me calm and be my companion." (P4)

"I don't have anything to do, other than smoking. It's my happiness like that, and it's also my habit already."
(P5)

Nicotine wields a significant amount of influence over people who are addicted to smoking. You can begin to understand how any relationship with nicotine is poisonous, not just due to the numerous health dangers associated with smoking but also to the trick's nicotine performs on those who use it. These health hazards and risks associated with smoking are not the only ones. In addition to the physical dependence on nicotine, many people find that smoking becomes a source of comfort for them during times of stress. Because of this emotional attachment, giving up smoking may be considerably more challenging.

Relapse is a normal part of the process of quitting smoking because it is not a one-time event. Recurrence of the disease emphasizes the need for long-term treatment rather than merely short-term assistance. There are currently a variety of therapy alternatives available to help smokers who have tried and failed to quit multiple times reduce the frequency of relapses. However, many people relapse while on their smoking journey, it is essential to be aware of the possibilities.

Theme 4 Rewards from Quitting Smoking Over Time

The potential health advantages of quitting smoking are significant. Quitting smoking increases life



expectancy by an average of ten years, lowers the likelihood of developing tobacco-related illnesses in the future, and slows the advancement of those illnesses that are already present (Young et al., 2010). Thus, smoking not only reduces oxygen flow to the heart. It also harms the artery lining. When the individual stops smoking, the body will begin to naturally repair and restore the vigor of a nonsmoker over time. The rewards from quitting smoking over time comprise two sub-themes: physical and mental health benefits.

Physical Health Benefits. Smoking is a bad habit that can cause serious health issues and even death. The body will gradually begin to mend when someone stops smoking and restore the vigor of a nonsmoker. Some benefits, including reduced blood pressure, are seen right away. Other effects, like the likelihood of contracting heart disease, lung disease, or cancer, take years to subside to levels comparable to nonsmokers. However, every year of cessation reduces risks and enhances general health, making giving up smoking a wise decision for anybody who developed the habit. A participant commented that,

"When I quit smoking improved my health and reduced the risks to my health and my family." (P3)

According to the World Health Organization (2014), quitting smoking can improve health; food will taste better; improve the sense of smell; save money, feel better about oneself, have healthier babies and children; feel better physically; and perform better in physical activities. — improved appearance. Many smokers experience that after quitting smoking, they experienced increase in appetite and weight gain (West, 2017; West & Shiffman, 2016).

Mental Health Benefits. Quitting smoking improves physical health. However, it is also proven to boost mental health and well-being: it can improve mood and help relieve stress, anxiety, and depression. A participant shared that,

"Once I started quitting smoking, it cleared my mind, and I can sleep easily. I do not have to worry about the health diseases related to smoking." (P5)

Social and environmental reinforcement can both assist and hinder efforts to stop smoking. Smoke-free environments influence decisions to quit smoking if favorable social comparisons with nonsmokers occur. Peer modeling and interpersonal connections with nonsmokers can offer links to forming supportive nonsmoking relationships (Snyder, 2008).

Theme 5 Intrinsic and Extrinsic Motivations Towards Smoking Cessation

The journey toward smoking cessation takes several attempts before one can reaches the goal. Smoking cessation interventions prioritize improving patients' sense of self-efficacy and adaptive coping skills in the face of persistent cravings to light up. Post-treatment smoking impulses were significantly reduced compared to baseline, and self-efficacy and adaptive coping were significantly higher (Blevins et al., 2016). The smoker's sense of self-efficacy contributes to effective quitting. Various smoking cessation treatment programs have been developed to explicitly strengthen certain cognitive and behavioral skills to promote smoking cessation, such as smoking cessation self-efficacy and coping skills, particularly in the context of intense smoking impulses or cravings. Such response during smoking cessation comprises two themes: family influence on smoker's lifestyle and positive mindset towards smoking cessation.

Family Influence on Smoker's Lifestyle. The first subtheme expressed the central function of family influence on chain smokers in the family. Members of a smoker's family play an important role in supporting the cessation process by providing tangible resources, informational support, and emotional support for quitting smoking (Westmaas et al., 2010). Participants said their families were why they never smoked again and later successfully quit smoking. A participant shared that,

"My family, particularly my wife, who dislikes the effect of smoking on the odor of my breath as well as the effect of smoking on the color of my lips, which were before extremely dark, helps me to continue not smoking." (P2)

In addition, participants said that their family had become their inspiration in the smoking cessation journey.

"My smoking cessation journey is made possible because my child is my inspiration. My wife and my mother will get mad at me as well if I do not quit smoking." (P3)

"My family is my inspiration in quitting smoking so that I will not get sick and not be a burden to them."
(P5)

As stated in the preceding statements from the participants, it has been highlighted that the smoker's



family members' dislike of cigarettes drives them to continue quitting. In a recent study of lifestyle behaviors, smokers who had recently been encouraged to quit by family or friends were more likely to report that they had tried to quit than those who had not received such support (Sharma & Szatkowski, 2014). Thus, understanding preferences for cessation support is the first step in creating treatments to enhance social support for stopping smoking from family and friends in daily living environments where the temptation to smoke abounds.

Smoker's Mindset Towards Smoking. A person with a fixed mindset about an attribute such as intelligence or addiction considers it a permanent entity firmly entrenched in an individual's personality that is virtually unchangeable. According to psychology research, one's thinking regarding a human quality, whether the attribute is fixed or adjustable, can influence the success of the behavioral change. Mindset has also been associated with different expectations about whether the effort will lead to successful behavior change (Burnette et al., 2012). People with a growth mindset tend to believe that putting in the effort will lead to success (positive effort expectations), which translates to greater success (Burnette et al., 2012). Participants highlighted,

"I weigh the financial consequences if I continue to smoke." (P2)

"It is not a struggle to stop because it is in your mindset." (P4)

The participants believe quitting smoking is not difficult if it is imprinted in one's mind. The participants' beliefs function similarly to knowledge structures or mental models since they frequently draw from one of these views while analyzing their behavior and environment. Smokers with a growth mindset may be more willing to persist in smoking cessation because of the belief that exerting effort can change an addiction. In this way, the mindset has a powerful impact on a person's persistence when facing difficulties. Indeed, it bolsters psychological resilience in stressful situations (Burnette et al., 2012; Schroder et al., 2017).

Conclusion

Based on the findings of this study, it can be concluded that various factors led the participants to start smoking cessation. Most participants quit smoking owing to various health issues caused by

cigarette smoking, such as difficulty breathing, heart failure, and different other adverse physical effects on their bodies. The participants encountered physical and mental challenges at the start of their smoking cessation journey. Every time they witness someone smoking, the participants sense a bodily yearning for cigarettes, an oral longing, and a want for anything in their mouth. In the early stages of smoking cessation, participants miss the sensation of smoking a cigarette. Family influence on a smoker's lifestyle, smokers' mindset towards smoking, and dual product use are the adaptive mechanisms of the participants to continue smoking cessation without smoking again. Selfefficacy combined with family support greatly helps smokers manage relapses and encourages them to quit smoking, as well as the dual usage of the product since it catches the smoker's attention to avoid desiring cigarettes. These adaptive mechanisms could be suggested to strengthen and improve smoking cessation.

The researchers recommend that the government health center expand and make people more aware of the programs to help smokers successfully quit smoking. Families, relatives, and chain smokers must always be mindful of the effects of smoking on their health. The government health center should create a program that will provide a health systems approach that focuses on promoting and integrating clinical best practices, which help tobacco-dependent consumers increase their chance of quitting successfully. The clinicians should direct tobacco patients to other cessation interventions with proven effectiveness and established safety. For future researchers, we suggest expanding the scope of the respondents, particularly in the place and the number of participants involved in the study.

References

American Cancer Society (2018). *The tobacco atlas: Philippines*. Retrieved from: https://tobaccoatlas.org/country/philippines/.

Arikunto, S. (2013). Prosedur penelitian suatu pendekatan praktik.

Aung, M. N., Yuasa, M., Moolphate, S., Lorga, T., Yokokawa, H., Fukuda, H., ... & Marui, E. (2019). Effectiveness of a new multicomponent smoking cessation service package for patients with hypertension and diabetes in northern Thailand: a randomized controlled trial (ESCAPE study). Substance Abuse Treatment, Prevention, and Policy, 14(1), 1-10.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, *13*(4), 544-559.

Baumeister, R. F. (2017). Addiction, cigarette smoking, and voluntary control of action: Do cigarette smokers lose their free



will?. Addictive behaviors reports, 5, 67-84.

Blevins, C. E., Farris, S. G., Brown, R. A., Strong, D. R., & Abrantes, A. M. (2016). The role of self-efficacy, adaptive coping, and smoking urges in long-term cessation outcomes. *Addictive disorders & their treatment*, 15(4), 183.

Burnette, J. L., McCullough, M. E., Van Tongeren, D. R., & Davis, D. E. (2012). Forgiveness results from integrating information about relationship value and exploitation risk. *Personality and Social Psychology Bulletin*, *38*(3), 345-356.

Centers for Disease Control and Prevention (2020). Current Cigarette Smoking Among Adults in the United States. Retrieved from:

 $cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm$

Chun, H. R., Cheon, E., & Hwang, J. E. (2022). Systematic review of changed smoking behaviour, smoking cessation and psychological states of smokers according to cigarette type during the COVID-19 pandemic. *BMJ open*, *12*(6), e055179.

Culpepper, M. K. (2018). "Yeah, That's What I Am Now": Affordances, Action, and Creative Identity. In *The Palgrave Handbook of Creativity at Work* (pp. 107-124). Palgrave Macmillan, Cham.

Dawood, O. T., Rashan, M. A. A., Hassali, M. A., & Saleem, F. (2016). Knowledge and perception about health risks of cigarette smoking among Iraqi smokers. *Journal of pharmacy & bioallied sciences*, 8(2), 146.

De Houwer, J., Custers, R., & De Clercq, A. (2006). Do smokers have a negative implicit attitude toward smoking?. *Cognition and Emotion*, 20(8), 1274-1284.

Ellis, L. C., Berg-Nielsen, T. S., Lydersen, S., & Wichstrøm, L. (2012). Smoking during pregnancy and psychiatric disorders in preschoolers. *European child & adolescent psychiatry*, 21(11), 635-644

Feng, Y., Kong, Y., Barnes, P. F., Huang, F. F., Klucar, P., Wang, X., ... & Shams, H. (2011). Exposure to cigarette smoke inhibits the pulmonary T-cell response to influenza virus and Mycobacterium tuberculosis. *Infection and immunity*, 79(1), 229-237.

Fowler Jr, F. J. (2013). Survey research methods. Sage publications.

Global Burden of Disease (GBD). Global Burden of Disease Study 2019 (GBD 2019) Smoking Tobacco Use Prevalence 1990-2019.

Retrieved from: https://ghdx.healthdata.org/record/ihme-data/gbd-2019-smoking-tobacco-use-prevalence-1990-2019

Gregor, K., & Borrelli, B. (2012). Barriers to quitting smoking among medically ill smokers. *Journal of behavioral medicine*, *35*(5), 484-491.

Hiscock, R., Bauld, L., Amos, A., Fidler, J. A., & Munafò, M. (2012). Socioeconomic status and smoking: a review. *Annals of the New York Academy of Sciences*, 1248(1), 107-123.

Holm, M., Schiöler, L., Andersson, E., Forsberg, B., Gislason, T., Janson, C., ... & Torén, K. (2017). Predictors of smoking cessation: A longitudinal study in a large cohort of smokers. *Respiratory medicine*, 132, 164-169.

Jones, M., Lewis, S., Parrott, S., Wormall, S., & Coleman, T. (2016). Re-starting smoking in the postpartum period after receiving a smoking cessation intervention: a systematic review. *Addiction*, 111(6), 981-990.

Kaarbo, J., & Beasley, R. K. (1999). A practical guide to the comparative case study method in political psychology. *Political psychology*, 20(2), 369-391.

Lee, J., Taneja, V., & Vassallo, R. (2012). Cigarette smoking and inflammation: cellular and molecular mechanisms. *Journal of dental research*, *91*(2), 142-149.

Leshargie, C. T., Alebel, A., Kibret, G. D., Birhanu, M. Y., Mulugeta, H., Malloy, P., ... & Arora, A. (2019). The impact of peer pressure on cigarette smoking among high school and university students in Ethiopia: A systemic review and meta-analysis. *PLoS One*, *14*(10), e0222572.

Martin, R. A., Cassidy, R. N., Murphy, C. M., & Rohsenow, D. J. (2016). Barriers to quitting smoking among substance dependent patients predict smoking cessation treatment outcome. *Journal of substance abuse treatment*, 64, 7-12.

McRobbie, H., Bullen, C., Glover, M., Whittaker, R., Wallace-Bell, M., & Fraser, T. (2008). New Zealand smoking cessation guidelines. *The New Zealand Medical Journal (Online)*, *121*(1276).

National Institute on Drug Abuse (2022). *Tobacco, Nicotine, and E-Cigarettes Research Report. Is Nicotine Addictive?* Retrieved from: https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/nicotine-addictive

Patterson, F., Grandner, M. A., Malone, S. K., Rizzo, A., Davey, A., & Edwards, D. G. (2019). Sleep as a target for optimized response to smoking cessation treatment. *Nicotine and Tobacco Research*, *21*(2), 139-148.

Ranjit, A., Latvala, A., Kinnunen, T. H., Kaprio, J., & Korhonen, T. (2020). Depressive symptoms predict smoking cessation in a 20-year longitudinal study of adult twins. *Addictive behaviors*, 108, 106427.

Samet, J. M., & Barrington-Trimis, J. (2021). E-cigarettes and harm reduction: An artificial controversy instead of evidence and a well-framed decision context. *American Journal of Public Health*, 111(9), 1572-1574.

Schroder, H. S., Yalch, M. M., Dawood, S., Callahan, C. P., Donnellan, M. B., & Moser, J. S. (2017). Growth mindset of anxiety buffers the link between stressful life events and psychological distress and coping strategies. *Personality and individual differences*, 110, 23-26.

Shaheen, K., Oyebode, O., & Masud, H. (2018). Experiences of young smokers in quitting smoking in twin cities of Pakistan: a phenomenological study. *BMC public health*, *18*(1), 1-12.

Sharma, A., & Szatkowski, L. (2014). Characteristics of smokers who have never tried to quit: evidence from the British Opinions and Lifestyle Survey. *BMC Public Health*, 14(1), 1-7.

Shepherd, J. (2012). Free will and consciousness: Experimental studies. *Consciousness and cognition*, 21(2), 915-927.

Snyder, M., McDevitt, J., & Painter, S. (2008). Smoking cessation and serious mental illness. *Archives of psychiatric nursing*, 22(5), 297-304.



Song, F., Bachmann, M. O., Aveyard, P., Barton, G. R., Brown, T. J., Maskrey, V., ... & Brandon, T. H. (2018). Relapse to smoking and health-related quality of life: Secondary analysis of data from a study of smoking relapse prevention. *PloS one*, *13*(11), e0205992.

Stubbs, B., Veronese, N., Vancampfort, D., Prina, A. M., Lin, P. Y., Tseng, P. T., ... & Koyanagi, A. (2017). Perceived stress and smoking across 41 countries: a global perspective across Europe, Africa, Asia and the Americas. *Scientific reports*, 7(1), 1-8.

Talukder, M. H., Johnson, W. M., Varadharaj, S., Lian, J., Kearns, P. N., El-Mahdy, M. A., ... & Zweier, J. L. (2011). Chronic cigarette smoking causes hypertension, increased oxidative stress, impaired NO bioavailability, endothelial dysfunction, and cardiac remodeling in mice. *American Journal of Physiology-Heart and Circulatory Physiology*, 300(1), H388-H396.

Tomar, S. L., Alpert, H. R., & Connolly, G. N. (2010). Patterns of dual use of cigarettes and smokeless tobacco among US males: findings from national surveys. *Tobacco Control*, *19*(2), 104-109.

Tombor, I., Shahab, L., Brown, J., & West, R. (2013). Positive smoker identity as a barrier to quitting smoking: Findings from a national survey of smokers in England. *Drug and Alcohol Dependence*, 133(2), 740-745.

Twyman, L., Bonevski, B., Paul, C., & Bryant, J. (2014). Perceived barriers to smoking cessation in selected vulnerable groups: a systematic review of the qualitative and quantitative literature. *BMJ open*, *4*(12), e006414.

Vangeli, E., Stapleton, J., Smit, E. S., Borland, R., & West, R. (2011). Predictors of attempts to stop smoking and their success in adult general population samples: a systematic review. *Addiction*, 106(12), 2110-2121.

Volkow, N. D., & Morales, M. (2015). The brain on drugs: from reward to addiction. *Cell*, 162(4), 712-725.

West, R. (2017). Tobacco smoking: Health impact, prevalence, correlates and interventions. *Psychology & health*, 32(8), 1018-1036.

West, R., & Shiffman, S. (2016). Smoking cessation (3rd ed.). Abingdon: Health Press.

Westmaas, J. L., Bontemps-Jones, J., & Bauer, J. E. (2010). Social support in smoking cessation: reconciling theory and evidence. *Nicotine & Tobacco Research*, 12(7), 695-707.

World Health Organization (2022). *Tobacco*. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/tobacco

World Health Organization (2011). WHO report on the global tobacco epidemic, 2011: warning about the dangers of tobacco.

Geneva: WHO; 2011.

U.S. Department of Health and Human Services (2006). *The health consequences of involuntary exposure to tobacco smoke: a report of the surgeon general*. Atlanta (GA): Centers for Disease Control and Prevention

Young, R. P., Hopkins, R. J., Smith, M., & Hogarth, D. K. (2010). Smoking cessation: the potential role of risk assessment tools as motivational triggers. *Postgraduate medical journal*, 86(1011), 26-33

Affiliations and Corresponding Information

Rachel Kate Limalima

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Glyza Kadusale

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Mikaela Gepiga

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Blaise Mariel Colimbo

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

John Clyde Alquiza

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Jhayzee Mae Marco

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Mary Fair Ruval Estrera

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Roberto Samson

Mandaue City Comprehensive National High School Department of Education - Cebu, Philippines

Romel Mutya

Mambaling National High School Department of Education - Cebu, Philippines