



**“The Problem or the Solution?”
The First Illusion of Stress and Tobacco Use**

**Ryan Coffman, MPH, CHES, CTTS-M, FS (Retired)
Tobacco Policy and Control Program Manager
Philadelphia Department of Public Health**



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SURGEON GENERAL WARNING:

This discussion may be hazardous to your perceptions

**Yes. I think so?
I'm not sure..maybe?**

What is one of the biggest trigger and causes of relapse for tobacco use?

Despite this, tobacco users often voice hesitation and uncertainty

Where did this widespread belief come from and what can we do?





Stress in America 2022

Concerned for the future, beset by inflation

More than a quarter of U.S. adults say they're so stressed they can't function

Stress

Concerns high around civil liberties, inflation, violence, with nearly half of adults saying they don't feel protected by U.S. laws

WASHINGTON — Americans are struggling with multiple external stressors that are out of their personal control, with 27% reporting that most days they are so stressed they cannot function, according to a [poll conducted for the American Psychological Association](#).

“

f

—

A majority of adults cited inflation (83%), violence and crime (75%), the current political climate (66%), and the racial climate (62%) as significant sources of stress.

Stress effects on the body

Stress affects all systems of the body including the musculoskeletal, respiratory, cardiovascular, endocrine, gastrointestinal, nervous, and reproductive systems.

Last updated: March 8, 2023 Date created: November 1, 2018 1 min read

Stress



Join us in Washington, D.C. for
CE WORKSHOPS
APA 2023

Tobacco Prevalence and Stress Levels

Cigarette smoking remains high among certain groups



Men



Adults 25-64 years old



Lower education



Below poverty level



Midwest and South



Uninsured or Medicaid



Disabled



Serious psychological distress



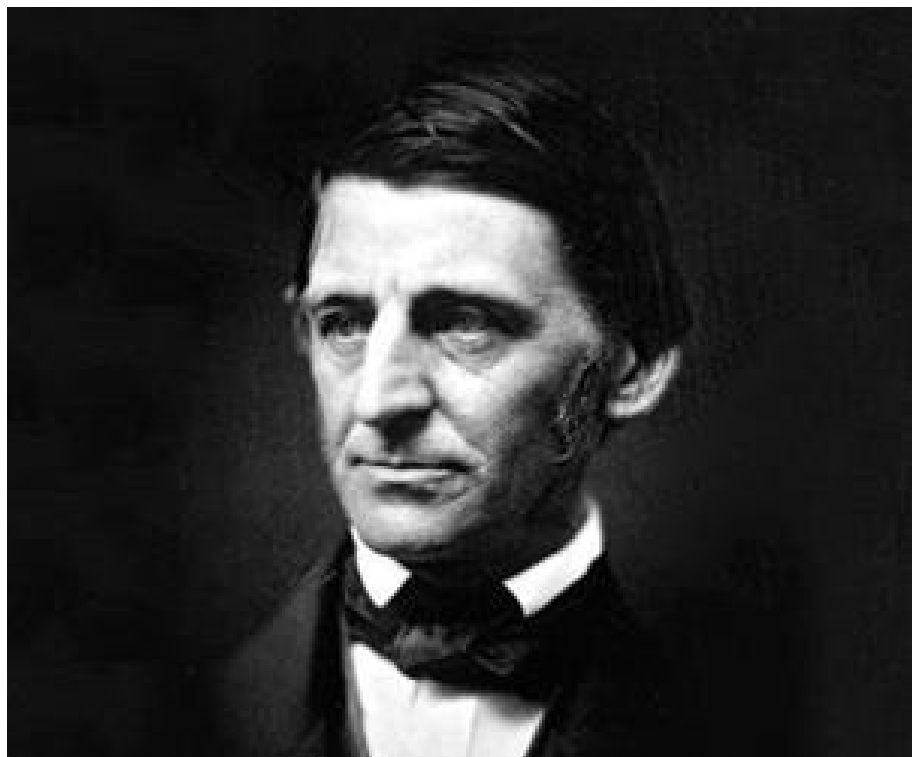
American Indians, Alaska Natives and Multiracial



Lesbians, gays, and bisexuals

For discussion

- Comprehend the urgency to clarify the actual relationship between stress and tobacco use
- Examine the independent, peer-reviewed literature on the impact of tobacco use on stress
- Discern the role of the Tobacco Industry and their allies in perpetuating unfounded beliefs about stress and tobacco use
- Consider different framing when discussing stress and tobacco use in tobacco treatment and culture change efforts



“The believing we do something, when we do nothing is the first illusion of tobacco.”

Ralph Waldo Emerson

1803-1882

A look at the literature

- Perceived stress associated with greater odds of smoking ([Gallo et al., 2014](#); [Webb & Carey, 2008](#))
- Stress is often cited as the primary reason for smoking ([Fidler and West, 2009](#); [Shiffman, 1993](#))
- Higher and consistent stress levels associated with relapse ([Cohen, 1990](#), [Slopen et al., 2013](#))
- The stress levels of adult smokers are slightly **higher** than those of nonsmokers (Parrot, Murphy, 2012)
- Adolescent smokers report **increasing** levels of stress as they develop regular patterns of smoking, (A. Parrot, 1999)



Gender Differences In Tobacco Use

- Women who smoke daily tend to do so in response to non-nicotine stimuli (such as cue exposure, **stress reduction**, or weight control)
- Men are more likely to smoke to maintain nicotine levels
(Perkins, 2001, [Shiffman & Paton, 1999](#), [Allen et al., 2014](#))

Vaping worsens mental health

- > 90% of those who quit said they felt less stressed, anxious, or depressed
- > 47% of respondents who quit vaping reported that when they quit vaping they felt more in control
- > 78% of respondents who reported ever vaping but had not quit said they would feel better about themselves if they quit vaping



These beliefs can cause harm and maintain cultures of tobacco use

- Meta-analysis of 38 studies 16,369 mental health professionals
- Most common beliefs/attitudes:
 - 51% believe people with mental illness don't want to quit
 - 45% had permissive attitudes toward smoking
 - 42% perceived barriers to treating smoking
 - 41% had negative attitudes toward quitting smoking
 - **38% think quitting smoking is too stressful for these patients**

[\(Sheals et al, 2016\)](#)

And yet... recent data from PA STFRI

- Statewide survey of individuals receiving treatment
 - Diagnosis
 - Levels of care
 - Age
 - Geographic region

17. Which option best reflects your level of agreement to the following statement: Learning tobacco-free coping skills is helpful to mental health or substance use recovery.

Value	Percent	Responses
Strongly agree	30.9%	232
Agree	43.2%	324
Not sure	17.3%	130
Disagree	5.9%	44
Strongly disagree	1.7%	13
Prefer not to answer	0.9%	7

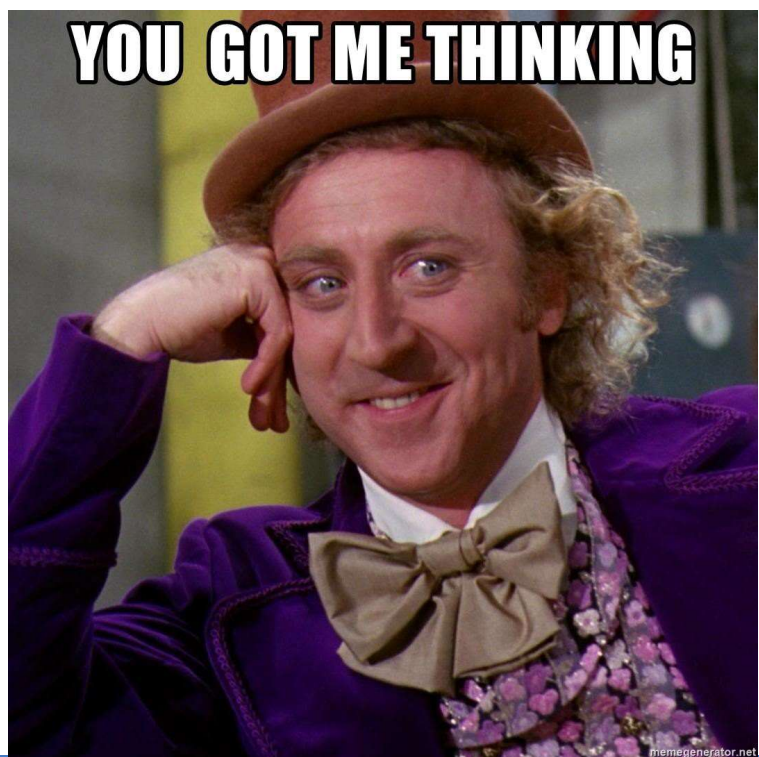
Totals: 750

And yet...

- Meta-analysis found quitting smoking is associated with long term **reductions in depression, anxiety, and stress and improved positive mood** states and quality of life, including among those with poor mental health ([Taylor et al., 2014](#))

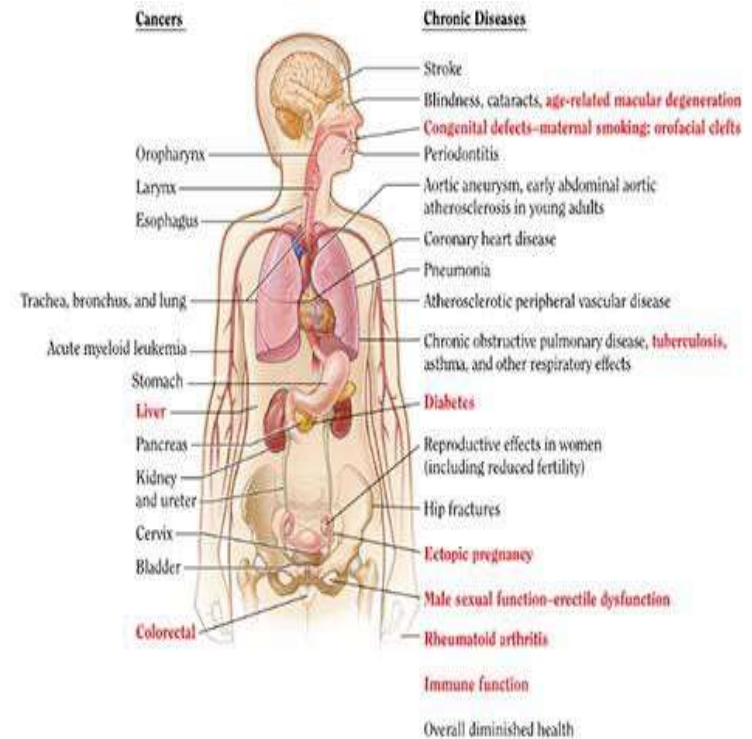


So, what is happening here?



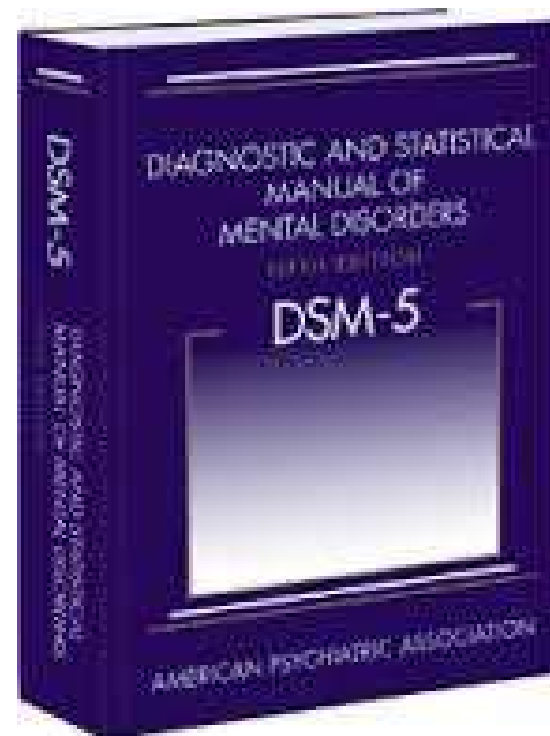
Head to Toe, Inside and Out

- Tobacco use causes the following immediate negative reactions:
- Increase in blood pressure
- Increased in heart rate
- Tensed muscles
- Constricted blood vessels
- Decrease in oxygen available to the brain and body to facilitate healthy coping skills



Tobacco Withdrawal

- Tobacco Withdrawal (4 or more)
- **Depressed mood**
- **Insomnia**
- **Irritability, frustration or anger**
- **Anxiety**
- **Difficulty concentrating**
- **Restlessness**
- **Increased appetite or weight gain**



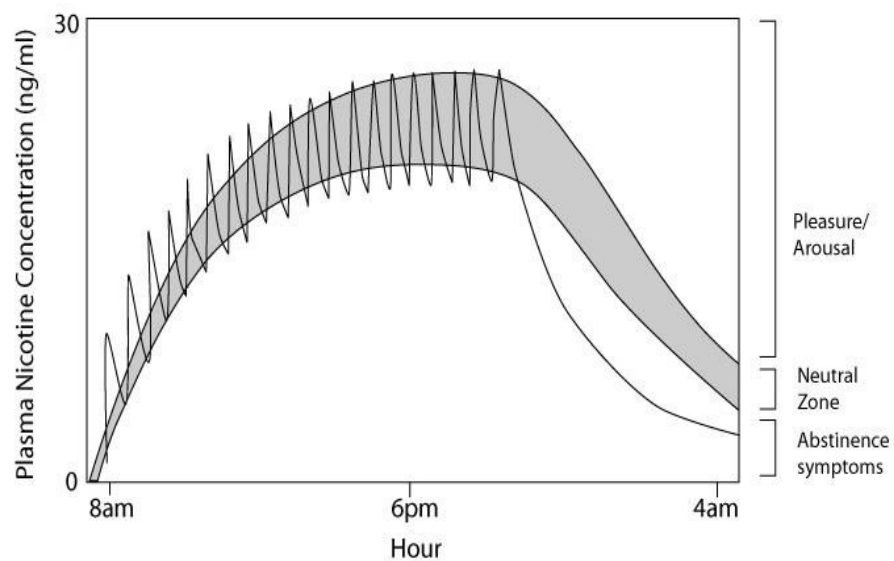
It all comes down to tobacco withdrawal

- Tobacco users can confuse the temporary removal of tobacco withdrawal symptoms with the feeling of stress relief
- Tobacco use increases stress levels due to the constant [need to use tobacco to avoid tobacco withdrawal. \(Cohen and Lichtenstein, 1990; Parrott, 1999\)](#)

It all comes down to tobacco withdrawal

- Smoking reduces the withdrawal symptoms, but doesn't manage the stressor that made us feel that way
- Daily mood patterns in smokers find **normal** moods during smoking, and **worsening** moods between cigarettes. (A. Parrot, 1999)

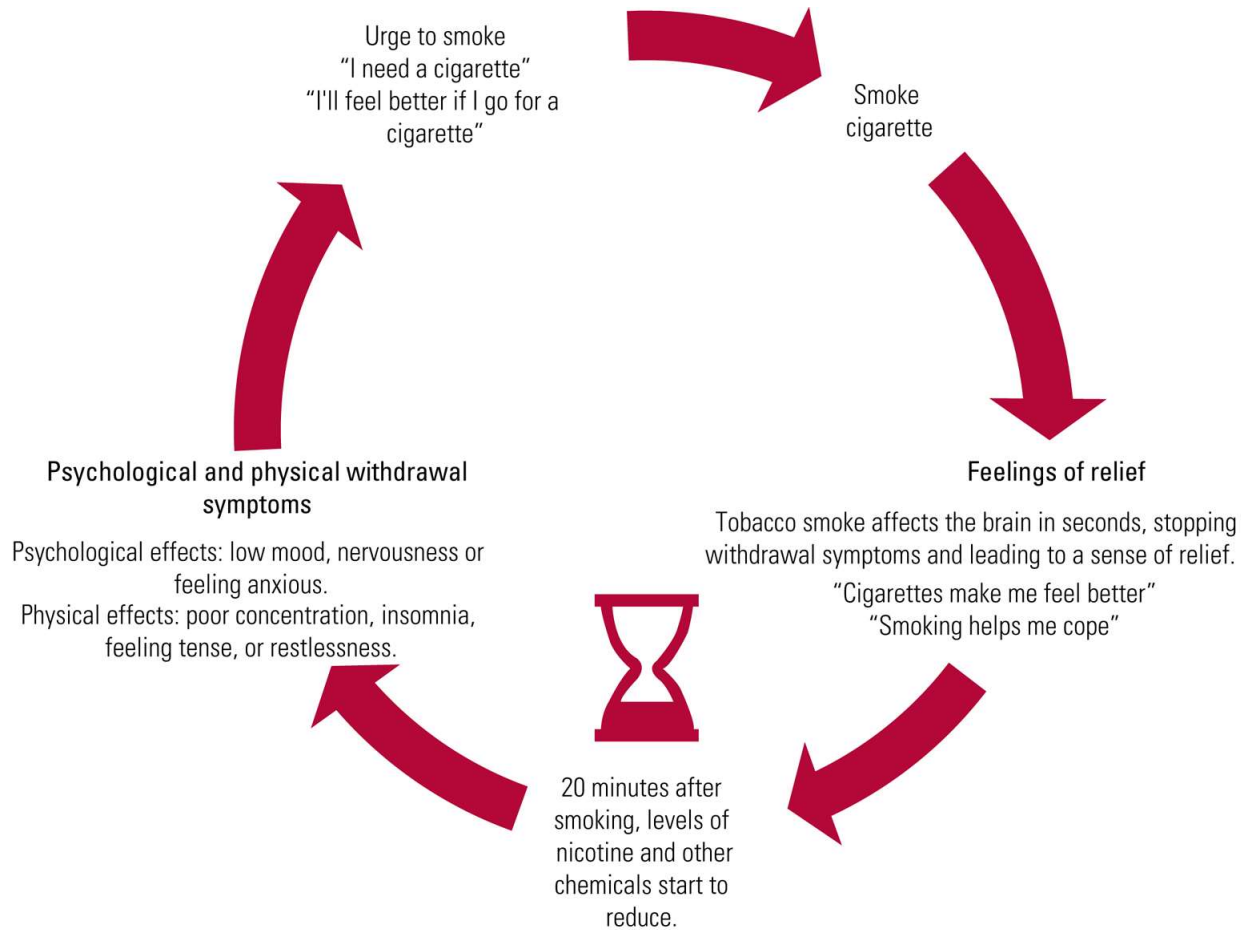
The Myth of Sisyphus Effect



- Reprinted with permission. Benowitz. (1992). *Med Clin N Am* 2:415-437.



Decades of Deception



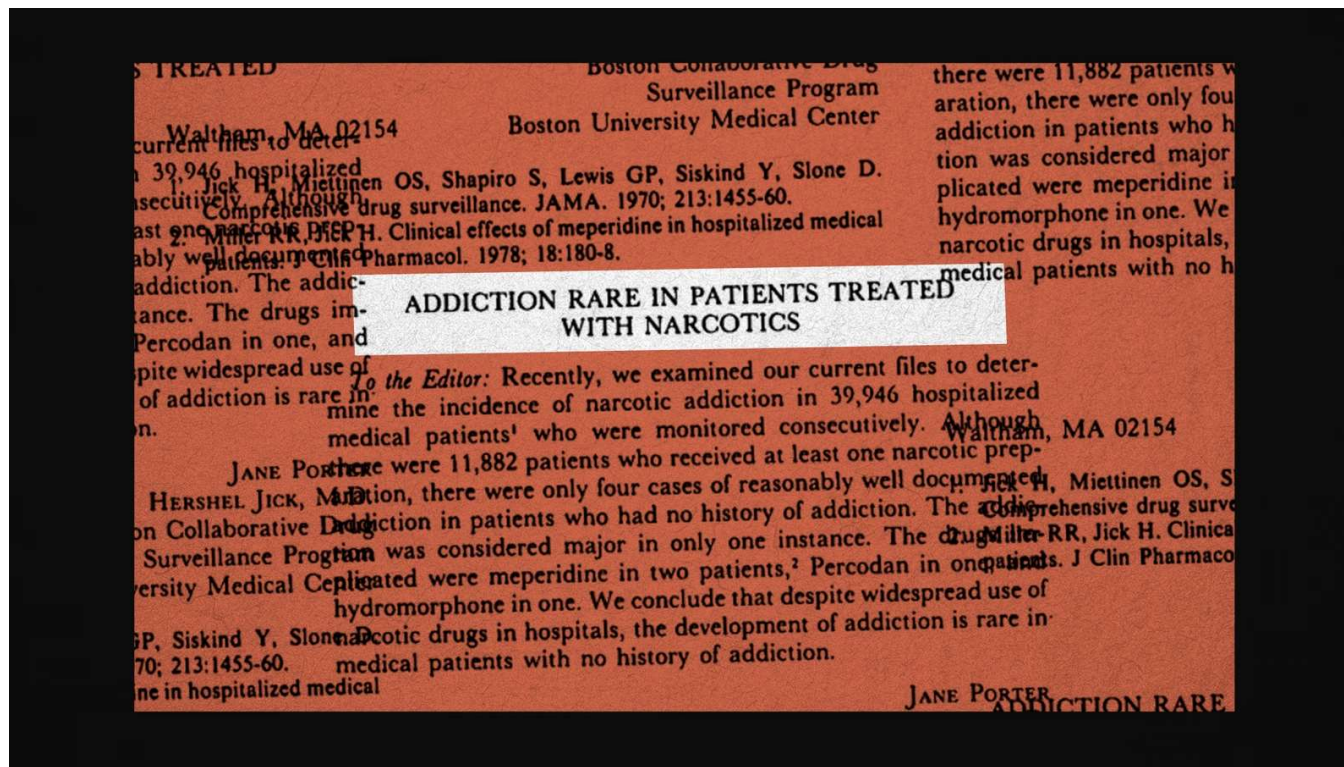
QUESTION:

**SO WHERE DID THESE
WIDESPREAD BELIEFS
COME FROM?**

The Tobacco Industry. Surprised?

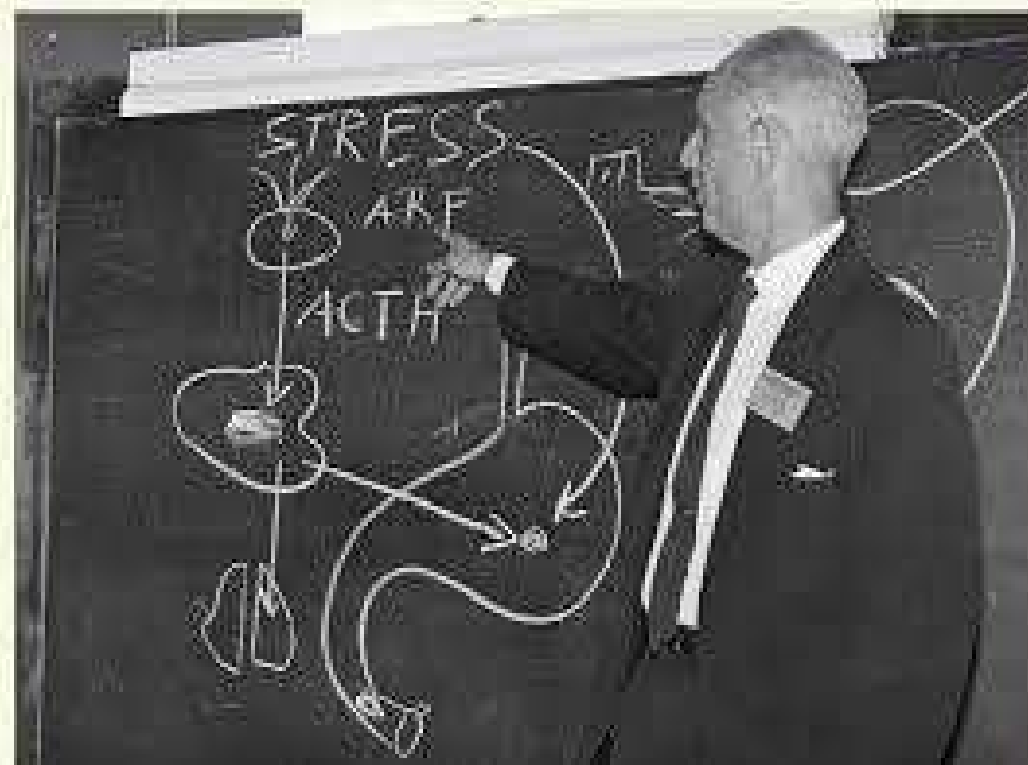


On par with misleading statements about opioids...



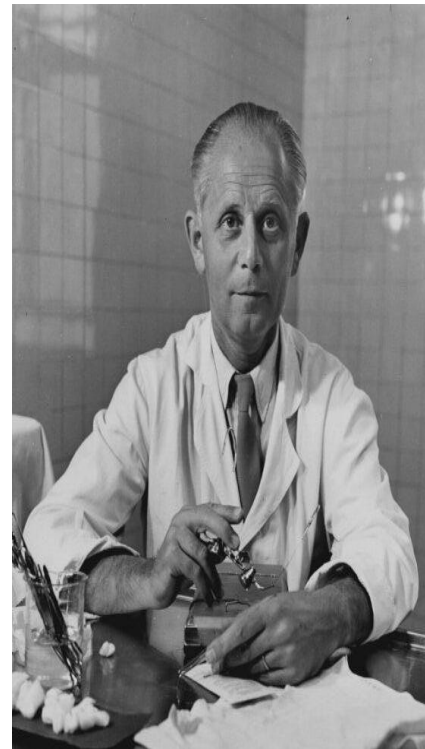
Hans Selye (1907-1982)

- Extremely influential and well-published researcher on stress
- Internal tobacco industry documents, we found that Selye received extensive tobacco industry funding
- Publicly, Selye never declared his consultancy work for the tobacco industry.



An Extensive and Concealed History

- Selye's research on stress and health was used in litigation to defend the industry's interests and argue against a causal role for smoking and disease
- The anti-racketeering between the Department of Justice and the Tobacco Industry that began in 1999 revealed the Industry's influence on stress research



HANS SELYE

"Stress like relativity is a scientific concept, which has suffered from the mixed blessing of being too well known and too little understood" 1980

The Tobacco Industry and the "Father of Stress"

During the conference, Dr. Selye proposed a five-step project for advancing the concept that stress is related to disease, that "deviation" of stress is necessary, and that cigarette smoking is an acceptable deviation.

In the first place, he said that the tobacco industry should change its manner of defense. The industry should not quibble with the meaning of the association between smoking and disease. Instead, he said, the industry should introduce a new, affirmative method of defense, which should emphasize the value of

1005083899

Source: <https://www.industrydocuments.ucsf.edu/docs/tsny0101>

- 2 -

smoking as a "prophylactic and curative" measure.

Promoting Tobacco Use as "Self-Medication"

YB

Re: Research Proposal for July/83 - June/84
"Tobacco Smoking As a Coping Mechanism in
Psychiatric Patients: Psychological, Behavioral
and Physiological Investigations"
Phase I

These 3 studies, plus the remaining 3 planned for next year promise to bear fruitful findings. It is particularly interesting that the psychiatrists, who are medical professionals, are very aware of the role of tobacco use in patients and are very interested in these studies. If tobacco can be shown to be an efficient form of "self-medication" for these patients then this would be significant bonus for the tobacco industry.

RJR- MACDONALD INC. Research and Development/
255 North 5th Street, Philadelphia, PA 19106

Dr. Knott has been sponsored by CTMC for some years. Up to last year his own salary was paid by us - so he was totally dependent on CTMC funding. He became, however, a permanent member of the Royal Ottawa Hospital in 1984, and since then we only support the cost of his assistants.

The latest request is addressing the problems that restriction on smoking in the workplace or elsewhere may have on inducing stress on the smoker. Once again he seems to be looking at this from our point of view.

In their own words

- “Moreover, nicotine is addictive. We are, then, in the business of selling nicotine, an **addictive drug effective in the release of stress mechanisms.**”
- July 17, 1963 report by then Brown & Williamson general counsel/vice president Addison Yeaman, Bates No. 1802.05

YOU WANT STEADY NERVES *to hit the silk in a paratroop attack*



"JUMP" is the command that sends you on this thrilling and perilous plunge through space. But the real order of the hour is steady nerves! For down below of the sky lies every one of us! So take a tip from the men in the front lines. They favor Camels—the slow-burning mild cigarette. Make Camels your cigarette, too—starting now!



YOU GET 10 SMOKE CAMELS. THEY'RE EXTRA MILD AND THEY ALWAYS TASTE GREAT!

Stick close in this drive, the Navy, the Marine Corps, and the Coast Guard, the favorite cigarette is Camels. Offered in several selections in Post Cigarettes, Life Cigarettes, Ship's Service Store, Ship's Store, and Company!



Important to Steady Smokers:
The smoke of slow-burning
CAMELS
contains
LESS NICOTINE



than that of 4 other popular-selling brands tested—less than any of them—according to independent scientific tests of the smoke itself!

"I'D RATHER HAVE THESE PARACROPS," says Johnnie W. Lynch, Postmaster, Parkersburg, West Virginia. "I've smoked Camels for years, and I know they're the best. They're mild, they're smooth, they're just what I need. I'm a steady smoker. I'm a steady smoker. I'm a steady smoker. They have the address that comes and Camels don't have none. You'll get all the information from them, and when you see your pack this is a 'test of nerves.' How important that test, now, in your choice of cigarette, Uncle Camels."

DO YOU SMOKE AWAY ANXIETY?



• • • THEN YOU'LL APPRECIATE SPUD'S GREATER COOLNESS!

Do you await an important event, an important decision, lighting one cigarette from another? Then smoke Spud. Even after hours of waiting and smoking, a Spud's tongue and throat are still moist and cool...tobacco enjoyment still keen, not killed...no "smoked-out" let-down to mar the good

SMOKE 10% COOLER BY TEST

news. Spud's smoke is scientifically proved 16% cooler. This refreshing coolness heightens your enjoyment of Spud's full tobacco flavor. That's why Spud is the new freedom in old-fashioned tobacco enjoyment. At better stands, 20 for 20c. The Ashton-Fisher Tobacco Co., Inc., Louisville, Ky.

JUDGE SPUD... Now by first puff...but by first puff. Surprises of first puff soon forgotten...continued coolness heightens enjoyment of the full tobacco flavor.

Here the coolness of Spud smoke was proved scientifically, and what "Smoke 10% Cooler by Test" means to you, are told in this little book, sent gladly on request.

MENTHOL-COOLED **SPUD** CIGARETTES

To anxiety... I bring relief
I'm your best friend
I am your Lucky Strike

Try me I'll never let you down

I am made only of the choice center leaves. The top leaves are lower, bitter. The bottom leaves are gray, rough and unsuitable. My fragrant, exquisite center leaves—so medium and rich—give you the mildest, best-tasting smoke. I do not irritate your throat. To anxiety I bring relief. I'm your best friend.

IT'S A PSYCHOLOGICAL FACT: PLEASURE HELPS YOUR DISPOSITION

Have your disposition today?

For more pure pleasure... have a Camel

"I've tried 'em all! But it's Camels for me!"
Rock Hudson

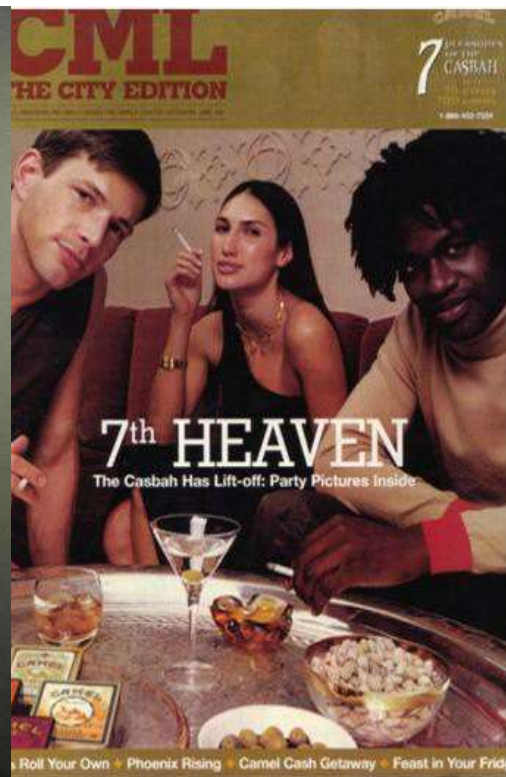
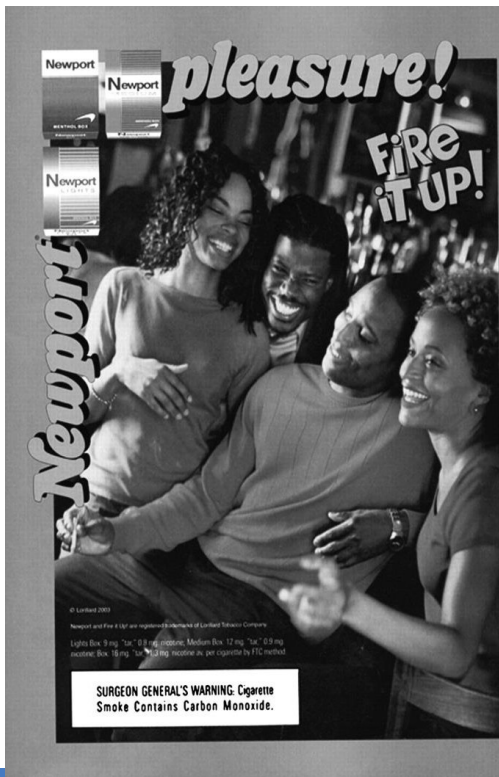
No other cigarette is so rich-lasting yet so mild!

YOU CAN SEE ROCK HUDSON STARING IN "I'VE NEVER SAY GOODBYE"


ROCK HUDSON AGREES with Camel smokers everywhere: there is more pure pleasure in Camels! More flavor, more enjoyment! Good enough for Rock Hudson, it's good enough for you. Remember that pleasure helps your disposition. And for more pure pleasure... have a Camel!

Reinforced and amplified by ~ \$1 million/hour marketing apparatus

Always this...



Never this.



The true face of smoking is disease, death and horror - not the glamour and sophistication the pushers in the tobacco industry try to portray.

(David Byrne)

izquotes.com



Newport pleasure!

© Lorillard 2010

CIGARETTES

These cigarettes do not present a reduced risk of harm compared to other cigarettes.

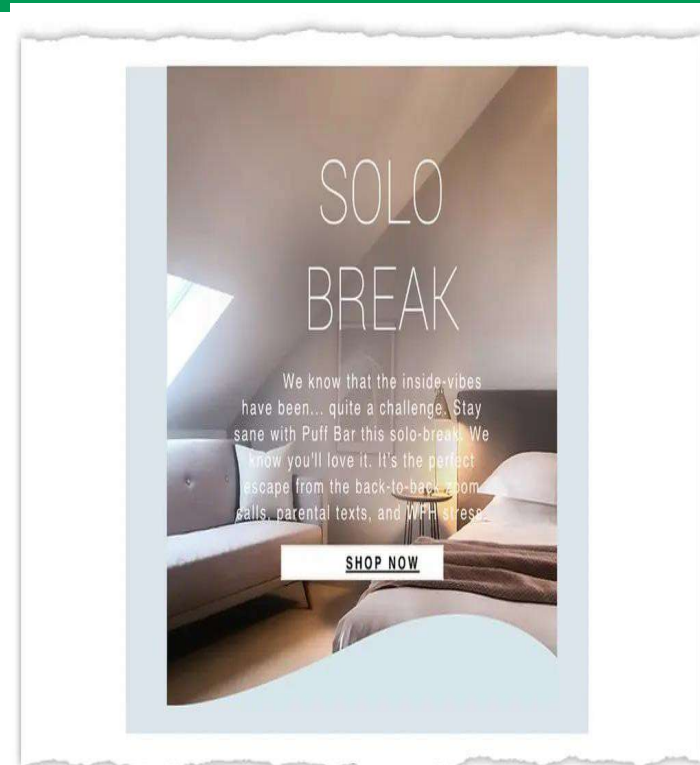
Visit us at Newport-pleasure.com
Restricted to Adult Smokers 21 or Older.

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

Newport, Pleasure, Newport Pleasure, Menthol Gold, Menthol Blue, spinnaker design, package design and other trade dress elements TM Lorillard Licensing Company LLC Reg. U.S. Pat. & Tm. Off.

Once again, the Vaping Industry follows suit

“We know that the inside vibes have been...quite a challenge. Stay sane with Puff Bar this solo break. We know you’ll love it. It’s the perfect escape from the back-to-back zoom calls, parental texts and WFH stress.”



**Every film is the result
of the society that
produced it...”**

Jean Luc Godard



Selling the Myth Through Silver Screen....



“The Surgeon General’s Report concluded that *exposure to onscreen smoking in movies causes young people to start smoking*”

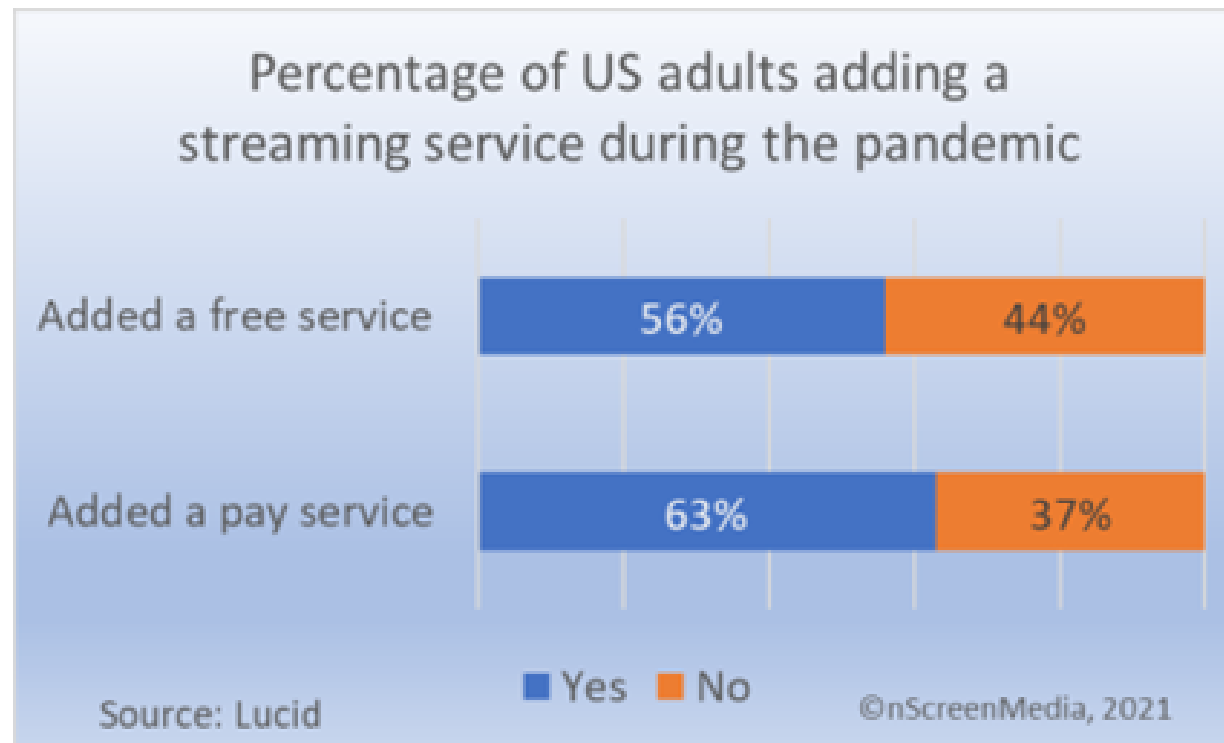
• CDC

...And stream



STREAMING RATES Increased during the pandemic

- According to new data from research technology firm [Lucid](#), almost two-thirds of U.S. adults said they added a pay streaming service during



QUESTION:

**WHAT CAN WE DO TO
CLARIFY THIS
RELATIONSHIP?**

Having the Discussion

- Does smoking relieve stress?
- How/tell me more about that?



Having the Discussion

- Can I share something with you that may provide some more information about this relationship and could advance our work together?
 - 11.5% of US adults smoke cigarettes (CDC, 2021)
 - 100% of US adults experience some type of stress (financial, familial, relationship, etc.)
 - Tobacco users often have higher levels of stress
 - When you recover from tobacco use, stress levels often improve
- What do you think this means for your recovery from tobacco use?
- Can we talk about healthy and productive coping skills for your tobacco use triggers?

Other ways to Take 5 and Stay Alive

- ***Individuals***
- Incorporating stress management into the development of healthy and productive coping skills and relapse prevention during behavioral treatment
- Acknowledge that stress will happen, whether we use tobacco or not
- What stress can be removed from our lives?
- Manage stress directly through escape, distraction, delay
- Define the true relationship between stress and tobacco use
- Utilize FDA approved pharmacotherapy and behavioral treatment

Other ways to Take 5 and Stay Alive

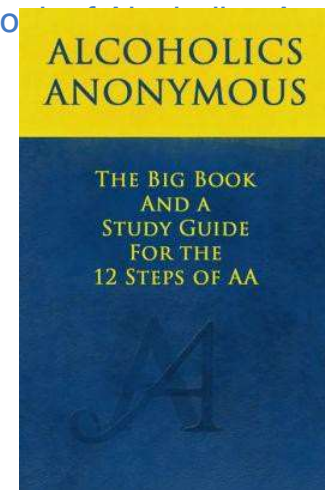
- ***Organizations***
- Challenge the assertion that treating tobacco use disorder and creating tobacco and vape-free therapeutic environments are too “stressful”
- Familiarize yourself with the independent, peer-reviewed literature
- Identify other activities and programming that manage stress in a healthy and productive way
- Highlight the role of the Tobacco Industry in promoting tobacco use as “self-medication”
- Ensure that all individuals are offered FDA approved pharmacotherapy and behavioral treatment as part of care, services and treatment

Take Home Points

- When we use tobacco or vape to relieve stress, we are momentarily removing tobacco withdrawal symptoms which is often confused with stress relief
- Tobacco and vaping product use increases stress in tobacco users
- Tobacco users must keep using tobacco to avoid tobacco withdrawal which maintains their addiction

“When I stopped living in the problem and began living in the answer, the problem went away.”

-Big Book of Alcoholics Anonymous



Take home points

- Tobacco and vaping use is a harmful and unproductive coping strategy for stress. It does not address the underlying stressors in one's life, and worsens stress
- Tobacco and vaping use is the problem, not the solution, for stress
- We all must all strive to realize:
 - Tobacco and vape-free care settings
 - Incorporate healthy and productive stress management strategies into tobacco treatment services and other programming



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**RYAN COFFMAN,
MPH, CHES, CTTS-
M**

Tobacco Policy and Control
Program Manager

ryan.coffman @phila.gov

