

**LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE**

**Department of Psychological and Behavioural Science**

**COURSEWORK SUBMISSION FORM AND  
PLAGIARISM/ACADEMIC HONESTY DECLARATION**

**Instructions for completion:**

Please ensure that a completed copy of this form is uploaded as part of your coursework submission.

**Candidate Number:** 35280

**MSc Programme:** Psychology of Economic Life

**Course for which work submitted:** PB417; Consumer Psychology

**Word-count:** Case: 499; Memorandum: 997; Theoretical Underpinnings: 1990

**Date:** 5/5/20

The Department wishes to draw your attention to the School Calendar Regulations on Assessment Offences and Plagiarism:

<http://www.lse.ac.uk/resources/calendar/academicRegulations/RegulationsOnAssessmentOffences-Plagiarism.htm>,

All work submitted as part of the requirements for any assessment of the School (e.g., examinations, essays, dissertations, and any other work, including computer programs), whether submitted for formative or summative assessment, must be expressed in your own words and incorporate your own ideas and judgments. Plagiarism must be avoided in all such work. Plagiarism can involve the presentation of another person's thoughts or words as if they were your own. However, please note that plagiarism also includes self-plagiarism, which is where you as the author re-use your own previously submitted work or data in a "new" written piece of work without letting the reader know that this material has appeared elsewhere. The definition of "your own work" also includes work produced by collaboration or group-work expressly permitted by the Department.

Please also note that plagiarism as defined by the School above, need not be deliberate or intentional for it to constitute an assessment offence.

---

**Declaration (without signature, to preserve anonymity): Having read and understood LSE's guidelines on plagiarism/academic honesty, I hereby confirm by completing and attaching this form that the work submitted is my own. By submitting this form I hereby confirm I understand the Department's policy on formative and summative assessment, and that I have read the relevant parts of the MSc programme handbook.**

## JUUL VS. CAMPAIGN FOR TOBACCO FREE KIDS: THE CASE

The Juul is a highly addictive e-cigarette released by Pax Labs in 2015. Juul's popularity quickly soared because they are slick, concealable, and look like USB flash-drives. This cleverly and powerfully marketed product caused an epidemic amongst youths, having caused lung-diseases that have killed over 60 youths (Hammond, 2020). From 2017 to 2019, in the USA, e-cigarette use more than doubled amongst high school students (from 11.7% to 27.5%) and tripled amongst middle school students (from 3.3% to 10.5%), according to the 2019 National Youth Tobacco Survey (Cullen et al., 2019). More than 5.3 million kids now use e-cigarettes – an increase of over 3 million in just two years (CTFK, 2020). Juul shut down their social media advertising in 2018, but that didn't stop advertising from proliferating on personal social media accounts (Ducharme, 2019).

Juul advertised with top-models and has “over 15,000 funky flavours from mint and menthol to gummy bear and cotton candy” (CTFK, 2020). 97% of current youth e-cigarette users smoke flavoured products (Cullen et al., 2019). As a cigarette alternative which only has nicotine and no tobacco, it is highly successful with adults trying to quit smoking, but unfortunately it gained popularity with youths as well, who can easily purchase the products online. Juul currently has a very strong, tight-knit brand community amongst a “vape culture” (Presson, 2020). Juul parties and events only strengthen this community. Juul cleverly conceals the fact that they utilize toxic chemicals such as benzoic acid and glycerine to create a big smoke cloud, not even mentioning the amount of nicotine in each pod.

The narrative around smoking is changing. This is especially relevant given the current COVID-19 situation where smoking makes you naturally more susceptible to the virus through hand-to-mouth transmission (WHO, 2020) and “is associated with increased development of acute respiratory distress syndrome (ARDS)” (Glantz, 2020). Smoking traditional cigarettes has reached the “lowest levels ever recorded among U.S. adults, but the market for e-cigarettes is just getting fired up” (Sharma, 2020). It hasn't been legal to smoke in public places for many years (Menzies et al., 2006). Something has to change around Juul's narrative, which is currently making smoking accessible, incognito and desirable - to end the addiction forming habit in its entirety.

Although the US government has started to ban flavoured e-cigarettes, this has only come to fruition in four states in the US, where “Campaign for Tobacco-Free Kids” (CTFK) (<https://www.tobaccofreekids.org/>) is based. Anti-smoking advertisements aren’t showing much success as “the market demand for cigarettes has small advertising elasticity” (Hamilton, 1970, pg. 401). There has been an improvement in toxin content from normal cigarettes to tobacco-free e-cigarettes, with the NHS claiming that vaping is 95% less harmful, however, the problems that come with e-cigarettes now prevail (NHS, 2019). Therefore, writing to CTFK’s president Matthew Myers, this project will use behavioural economics insights and consumer psychology theories to help them improve their campaigning tactics, to end the youth e-cigarette, Juul epidemic.

## MEMORANDUM

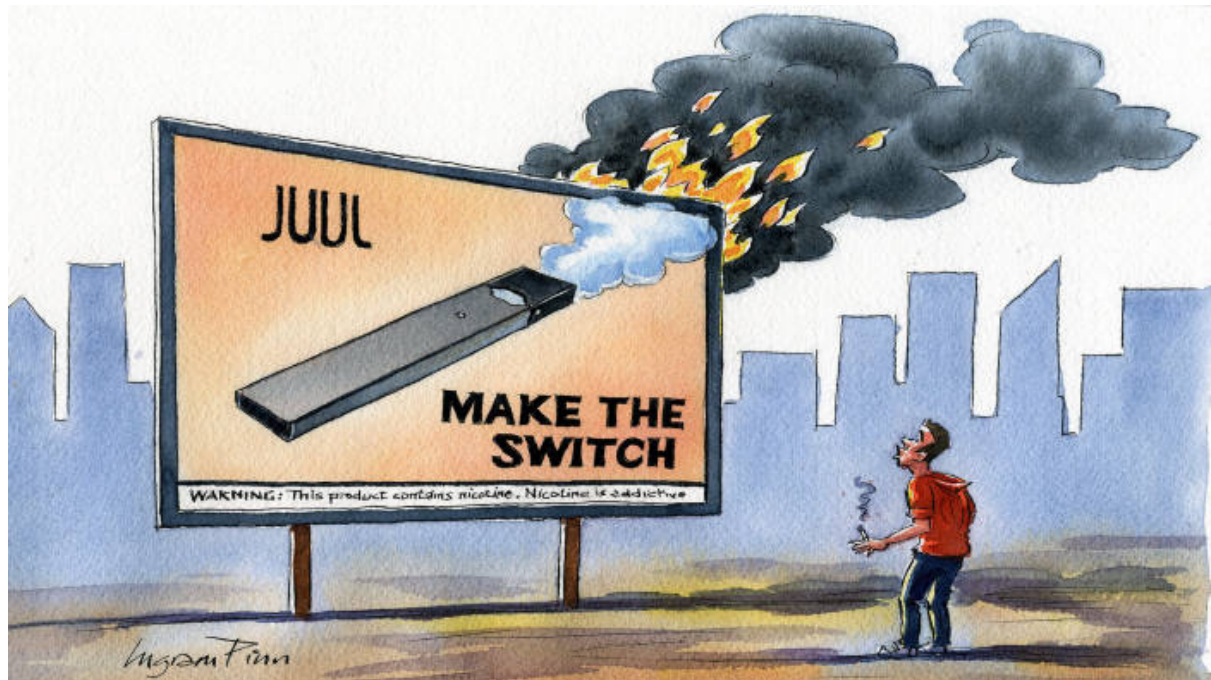
Dear Mr. Matthew Myers,

I would like to begin by commending you for co-founding the 'Campaign for Tobacco Free Kids' (CTFK) back in 1996 and for your fantastic initiatives since then, as this is an incredibly important cause. I agree that pushing for change in smoking habits worldwide can start by targeting the youth and preventing habit formation when they're the most susceptible to peer pressure and external influences. According to the FDA, "nearly 90 percent [of adults] started smoking before the age of 18" (Gottlieb, 2018). As you mentioned in your court hearing against *Big Tobacco* in the 2006 racketeering case, when judgement found them guilty of marketing to children: "Juul has a different tool than old cigarette companies had, and that is social media" (Myers, 2006). Having grown up amongst smokers and being the only non-smoker in my family, I always question how to stop such an addictive habit.

I can't lie, as a non-smoker, I've often eyed the Juul and savoured the smell of the vape clouds as 'Juulers' walked by. Even as someone completely uninterested in smoking, I'm interested in how the Juul flavours taste. Adolescents attach to trends, so it's hard to blame them for being interested in the Juul, especially if their friends are all smoking in the classroom and public places; they're a cool, slick vape pen that can easily be hidden in a pencil case. So, this memorandum targets the Juul directly, which, as you know, is the posterchild of e-cigarettes with the most impact and sales amongst teens. We can agree that the marketing of the Juul is highly effective, enticing and clever. However, "the number of people with a severe lung illness linked to vaping has reached over 2,600 cases" with many deaths (Presson, 2020). The majority of these deaths are adolescents, as outlined on the CTFK website. This must come to an end.

Your campaign and previous initiatives have been effective, especially seeing as you have peer-to-peer influences, protests and some success in appeasing the law in four states. However, "with 5 million teens caught in this trap" it seems unlikely that "a ban on e-cigarette flavours will stop resourceful young people" (Presson, 2020) – once the habit is formed, they will find a way, especially since e-cigarettes can be bought on the internet. So, I would like to propose some recommendations using behavioural insights and consumer psychology to

further enhance your campaign and bring more success in stopping the habit from forming at such young age, to end smoking overall.



(Juul Cartoon)

Please see my recommendations below:

	<b>Problem Area</b>	<b>Recommendation</b>
Social Media	Inadequate CTFK presence on online platforms	Targeting the youth by: <ul style="list-style-type: none"> <li>- Using TikTok’s influencers to persuade</li> </ul>
Branding/ Marketing	Juul’s strong brand community	Counteracting Juul’s advertising and disrupting the brand community by: <ul style="list-style-type: none"> <li>- Shocking advertisements directly mimicking Juul’s</li> <li>- Telling horror-stories</li> </ul>
Alternatives	Promoting existing alternatives	Encouraging alternatives with: <ul style="list-style-type: none"> <li>- Nudging towards using nicotine-free pods</li> </ul>

## USING TIKTOK'S INFLUENCERS TO TARGET THE YOUTH

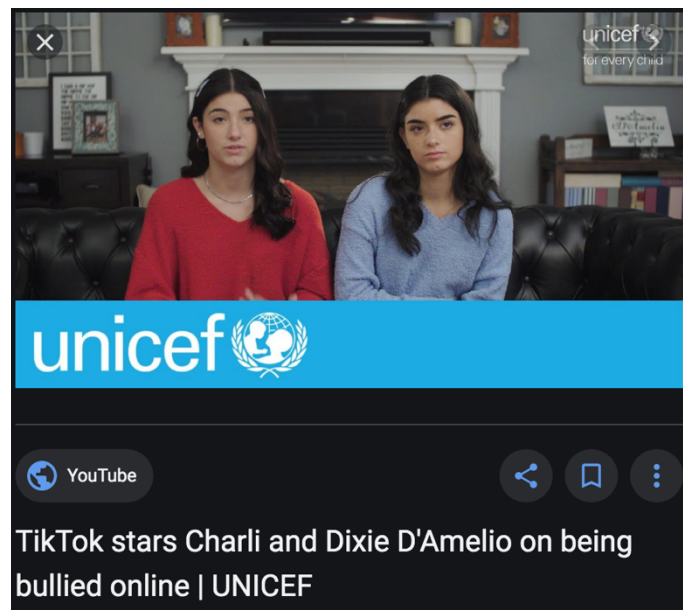
As you mentioned in your speech, modern-day cigarette companies thrive as a result of social media. This first recommendation uses the power of social media to influence the youths to stop smoking, using TikTok. TikTok is a video sharing social-networking service that is available in 40 languages and is particularly appealing to the teenage demographic (Stokel-Walker, 2020). Out of 500 active monthly users, “41 percent are between 16 and 24 years-old” (99Firms, 2020). The most famous TikTok influencers are all under the age of 20 and live in a Los Angeles mansion/incubator called “The Hype House” (Groskopf, 2020), as seen below, it is evidently a well-financed application. 15-year-old Charli D’Amelio, the most famous ‘TikToker’, now has 53 million followers (Leskin, 2020). She now endorses UNICEF’s anti-online-bullying campaign, seen below. Evidently, “TikTok has become an integral part of Gen Z culture” (Leskin, 2020), so CTFK would benefit from an endorsement from influencers such as Charli, as this would reach the target audience.



(TikTok Logo)



(The Hype House)



(UNICEF Video)



## COUNTERACTING JUUL'S ADVERTISING: DISRUPTING THE BRAND COMMUNITY

Using the powerful social media platforms such as TikTok, we can counteract Juul's advertising to disrupt the brand community. Juul's powerful marketing showcased attractive young adults with flamboyant colours, seen by "vaporized". The FDA challenged Juul and subsequently these advertisements were banned and Juul pledged to stop using models on social media. However, as you appropriately told *Business Insider*: "you can't put the genie back in the bottle" (Brodwin, 2018). The youth are advertising the Juul on their own platforms (Instagram, TikTok, Twitter), very visibly showing Juuls in photos and videos. Therefore, using shocking, opposing images of these advertisements, we can powerfully influence the youth to stop smoking.



(Vaporized)



(Teen Vaping)

As seen here by "Teen Vaping" (Senne, 2018) - using an average, pimply-skinned teenager or, more shockingly, a teenager hooked to a ventilator, can disrupt the tight-knit brand community. This is done by infiltrating advertising by promoting images that don't support the sexiness the brand formerly promoted.

## PROMOTING ALTERNATIVES

The last recommendation includes promoting alternative brands and nudging the adolescents to use nicotine-free pods, seen with "MyBlu", as an example. This is a matter of disrupting the product that associates with the Juul name, a postmodern way of disrupting the brand community closely associated with Juul – changing these alternatives from 'not a Juul', to 'another cool vape pen'.



(MyBlu)

Harnessing the influential capabilities of social media platforms such as TikTok is the perfect way to catch the attention of the youths. The disrupted brand-community, shocking advertisements and the alternatives can be promoted towards the target audience. It may be difficult to stop the youth from vaping, but it *is* possible to get them to stop inhaling nicotine and seeing the product in a different light. These messages can be put-forward by their most adored influencers.

With these proposed changes, CTFK could significantly reduce e-cigarette use especially amongst the youth: a stride towards the fight against the nicotine-fuelled epidemic. Please see the theoretical underpinnings attached.

Yours faithfully,

XXX



## THEORETICAL UNDERPINNINGS

### USING TIKTOK'S INFLUENCERS TO TARGET THE YOUTH

Juul's potential pervasive use of TikTok influencers to target the youth is rooted in theories of persuasion, influence and the vulnerable consumer. More specifically, this discusses Elmore's "super-peer theory" (2017), materialism (Chaplin & Connell, 2015) and heuristics (Gigerenzer, 2011).

CTFK needs the proper social media platform to effectively spread their campaign. On average, adolescents spend 7 hours on social media daily (Fobian, 2016). Elmore's "super-peer theory" (2017) posits that media-interpretation by adolescents can influence their perception of norms around nicotine/alcohol use. The use of nicotine is influenced by the amount they see onscreen (Chaplin & Connell, 2015). Although this can provide information about safety and can promote social-connectedness, recent evidence raises fears about media's effects on aggression, sexual behaviour, substance use and more (Strasburger et al., 2010). In order for the youth to listen, the information has to come from the most influential source: social-media and their peers. Drawing a comparison between the media and viewing influencers as powerful "best-friends", research shows that social media "exerts excessive pressure on children and teens to engage in risky behaviour by depicting these behaviours as normative" (Chaplin & Connell, 2015, p. 189). The youth are highly impressionable.

The Youth Materialism Scale (Goldberg et al., 2003) and Chaplin's (2009) study on materialism by age-group shows that eighth graders (age 13-14) reported material things, people and pets make them happiest (Chaplin, 2009). This materialistic age-group needs to be directly targeted. Followed up by Chaplin & Connell's (2015) study, it is less clear when and how children's desire for material goods can turn from being healthy, to being potentially harmful. In order to combat this prioritisation of material goods such as the Juul in children at this age, Chaplin and Connell claim that children and adolescents need to: (1) become media-literate consumers, (2) understand the difference between advertising and entertainment and (3) learn how different types of advertising in different formats manipulate them (2015). This is where TikTok can help. The message should be very clear, with an influencer like Charli D'Amelio, who's endorsed by CTFK, saying: 'this is harmful, it isn't cool, and you'll end up

feeling sick and addicted'. Celebrities such as Jennifer Anniston have endorsed successful anti-smoking campaigns (Brichard, 2019), however with a product like Juul, peer-to-peer endorsements from young influencers could be the most effective.

For adolescents, social relationships with peers often come above relationships with family, Chaplin and John explain that peers can help to foster healthy self-esteem and reduce the need to "compensate through material goods" (2010). Supportive relationships can positively influence adolescents to be less materialistic and care less about their image, especially as a 'Juuler'.

Psychological theories of persuasion and influence are also relevant in understanding why using influencers on social media will be effective. Persuasion is a heuristic and influence in psychology is deeply rooted in persuasion, with studies such as the infamous Milgram (1963) obedience to authority study and Asch's influence by the majority (1951). Specifically, Friedman & Friedman (1979) discuss how celebrity endorsements can increase believability of messages, the evaluation of product, advertising and the intention to purchase the product. This heuristic only works because endorsements increase the perceived credibility, thereby making the product more attractive to the consumer (Petty, 2002). Charli D'Amelio is a healthy, 15-year-old dancer who could say smoking the Juul is bad. The underlying message is staying healthy and being cool, simultaneously.

However, being aware of persuasion can lead to backfires such as the inoculation theory (McGuire, 1964). Using a medical analogy, we see anti-smoking persuasion targeted at the youth. Using reverse psychology, and often a weak persuasion attempt can actually inoculate youths from further influences such as alcohol consumption. To avoid this, narrative transportations can have a big impact. Telling someone's story is an effective way of persuading against a product. Dual system/process models (Kahneman, 2011; Evans, 2009) evaluate the nature of the product and the context and situation, CTFK would need to adapt communication messages to the duality of mind of consumers & complexity of persuasion mechanisms. This includes system-1 (fast route: shortcuts), system-2 (slow route: quality of arguments) and thinking about different cultures (thinking styles, self-construal) (Samson & Voyer, 2012). An all-encompassing approach does not work for persuasion, so a very specific

type - using stories and influencers - is the effective way of reaching the target audience of adolescents in the US.

### **COUNTERACTING JUUL'S ADVERTISING: DISRUPTING THE BRAND COMMUNITY**

Juul's tight-knit brand community centres around the phrase "Juuling" (Presson, 2020), which is what proliferates its success. Juuling has an image of a "teenager who rips a Juul that's hidden in the sleeve of their hoodie, holding in the hit so as not to get caught vaping in math class" (Presson, 2020).

A "brand community" refers to "a specialised, non-geographically bound community based on structures set of social relationships among admirers of a brand" (Muniz & O'Guinn, 2001, p. 412). Disrupting the brand community through narratives and shocking advertisements shared on TikTok could be a very successful tactic for CTFK to deploy. Juul's brand, having been previously advertised by supermodels and exclusive events made the trend and the admiration for the product grow. Brands can serve as a sign of quality and even as a simple way of "signalling" wealth and one's membership to this brand community. This echoes the theory of the extended self which is about the meaning that consumers attach to possessions (Belk, 1988). As a process, the individual opens themselves up to all types of social influence – in turn, they mark themselves through consumption and objects. As consumption of the Juul is a type of identity expression for adolescents, or "non-verbal signs of self" (Belk, 1988), we see that "relationships with objects are never two-way (person-thing), but always three-way (person-thing-person)" (Belk, 1988, p. 147).

In this case, it is signalling a teenager keeping up with trends, which needs to change. The way that the Juul looks, with only a small engraved 'JUUL' at the bottom of the vape-pen, this can be attributed to "inconspicuous consumption (...) the use of subtle signals that are only observable to people with the requisite knowledge to decode their meaning" (Berger & Ward, 2010, p. 556). Bourdieu (1984) says consumption becomes a source of distinction between what we do and do not want to consume. In economic life, our (group) identity is (non-verbally) expressed through our consumption.

Therefore, using shocking advertisements (Dahl et al., 2003), narratives (Shaffer & Focella, 2018) and incongruous metaphors (Basso & Oullier, 2011) can disrupt the brand community. To dissociate the Juul product with the trendy image, implementing shocking advertisements that “deliberately, rather than inadvertently, startles and offends its audience” (Dahl et al., 268) could be effective. Dahl et al.’s study showed that “shocking content in an advertisement significantly increases attention, benefits memory, and positively influences behaviour” (Dahl et al., 2003, p. 268). If the shocking advertisements were to show a pimply teenager in a hospital-bed with a ventilator, or an incongruous metaphor such as “smokers are suckers” (Basso & Oullier, 2011, p. 203), followed by a narration of their story, this could change the imagined image of Juul in adolescents’ heads. Incongruous metaphors such as “smokers are suckers” which is linked to performing sexual acts on adults is shocking. Holding a captivating story alongside the disrupting images are effective due to the nature of stories. Stories communicate information and shape behaviour because (1) they’re more engaging, (2) they facilitate recall and (3) they lead to fewer counterarguments (Shaffer & Focella, 2018). There is “power of stories over statistics” (Newman, 2003, p. 1424). These ideas disrupt Juul’s image. As Myers said, “you can’t put the genie back in the bottle” (Brodwin, 2018) when referring to Juul’s effective advertising although banned by the FDA, but you can change the appearance of the genie.

## **NUDGING TOWARDS NICOTINE-FREE ALTERNATIVES**

Nudging refers to “liberty-preserving approaches that steer people in particular directions, but that also allow them to go their own way” (Sunstein, 2014, p. 583). With a difficult habit-forming substance such as nicotine, nudging must present itself in deeper ways than just government bans and taxes to allow a smooth transition to nicotine-free pods.

The first nudging tactic is changing social norms, which are “attributes of groups that generate expectations for the behaviour of group members” (Prentice, 2007, p. 629). Following trends is what adolescents find cool, a form of “social proofing” where others’ behaviours are sometimes used as a guideline, especially in unfamiliar contexts (Goldstein & Cialdini, 2009). Relevant for confused, pubescent, hormonal teens. For now, smoking and being involved in risky behaviour could have been the trend, but reversing that can be the way forward. Social

norms, presented by Miller & Prentice (2016), show injunctive and descriptive norms that could help teenagers with the transition. Descriptive norms describe the perception of what is happening, while injunctive norms explain what *should* happen (Goldstein & Cialdini, 2009). For example, descriptive norm: 'teenagers are smoking the nicotine-heavy Juul pods', could be replaced with injunctive norm 'teenagers can still vape, but they *should* use MyBlu nicotine-free pods'. If clearly presented on TikTok, this could instil changes.

Secondly, there needs to be a deeper behavioural change, which includes changing installations and using postmodern consumption theory. Postmodern consumption refers to when "the image does not only represent the product, but the product represents the image" (Van Raaij, 1993, p. 555). In this case, the product is still a vape-pen, but there must be some sort of innovation to break the installation of smoking *specifically Juul* pods. In the re-enchantment of utility in modern economic life, there is a movement to an experiential perspective on consumption, and less association with the brand itself. CTFK should take advantage of this when encouraging a change to nicotine-free pods. Additionally, installation theory's "embodied competencies" are relevant here (Lahlou, 2017, p. 10). When smoking was banned in public buildings, a new type of installation had to be implemented in airports: smokers' lounges/glass-boxes, to appease their addiction without leaving the building (Lahlou, 2017). The installation theory can be used to navigate teenagers towards smoking nicotine-free MyBlu pods. Innovation is needed here, "an installation specifically designed to perform a new function" (Lahlou, 2017, p. 276). Allowing adolescents to still vape, but in a safer, nicotine-free manner.

Nudging to change an addiction-forming habit is difficult to do, but once the specific Juul pen is not associated with the trendy brand, it can achieve a deeper change to either nicotine-free pods, or to adolescents refusing to begin smoking overall.

## **Conclusion and Limitations**

These recommendations hold several limitations. First, addiction is a medical condition that requires direct medical attention, thus, this project has given guidelines for how to stop the addiction happening in the first place. Secondly, celebrity endorsements may be costly for CTFK, although they would be beneficial for adolescents who refuse to listen to family and only to 'super-peers', therefore it is worth the cost. Thirdly, the recommendation using incongruous metaphors may be far-stretched, as sexual predators exist in some households, or teens may not be aware of abuse and/or not understand why this metaphor is being used, or not care for it. Lastly, this project is largely USA-centric as CTFK is USA-based, whereas the Juul epidemic is global. This project would benefit from cross-cultural analysis.

Teenage-hood is a confusing time with heightened emotions and hormones. The Juul has presented very strong marketing tactics with funky-flavours and supermodels to, albeit unintentionally, lure the youth into a substance-addiction forming habits. The product's design itself is slick and concealable, so of course the vulnerable youth will latch on. With these recommendations - pertaining to changing behaviour rather than fighting the addiction – there can be small changes pushed forward on the beloved TikTok online-platform. Disrupting the brand community, nudging towards changes in product with a similar style but different substance can help CTFK achieve their desired change, and put the genie back in the bottle.



## Bibliography

- 99Firms. (2020). 30 TikTok Statistics 5 FAQs to Be Aware of in 2020. Retrieved from <https://99firms.com/blog/tiktok-statistics/#gref>
- Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men; research in human relations* (p. 177–190). Carnegie Press.
- Basso, F., & Oullier, O. (2011). Smokers are suckers: should incongruous metaphors be used in public health prevention? *American journal of public health*, 101(2), 203–204.  
<https://doi.org/10.2105/AJPH.2010.197996>
- Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15(2), 139–168.
- Berger, J., & Ward, M. (2010). Subtle signals of inconspicuous consumption. *Journal of Consumer Research*, 37(4), 555-569.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard university press.
- Brichard, S. (2018, August 7). Six celebrities who might just persuade you to quit smoking. Retrieved from <https://www.quitgenius.com/resources/six-celebrities-who-might-just-persuade-you-to-quit-smoking>
- Brodwin, E. (2018, July 25). The head of a top anti-tobacco group says an e-cig that's gone viral among teens is 'the genie you can't put back in the bottle'. Retrieved from <https://www.businessinsider.com/juul-popularity-with-young-people-like-genie-2018-7?r=US&IR=T>
- Campaign for Tobacco Free Kids (2020). (2020, April 18). What We Do. Retrieved from <https://www.tobaccofreekids.org/>
- Centre for Disease Control and Prevention (CDC). (2018, November 8). Cigarette Smoking Among U.S. Adults Lowest Ever Recorded: 14% in 2017. Retrieved from <https://www.cdc.gov/media/releases/2018/p1108-cigarette-smoking-adults.html>
- Chaplin, L. N. (2009). Please may I have a bike? Better yet, may I have a hug? An examination of children's and adolescents' happiness. *Journal of Happiness studies*, 10(5), 541- 562.
- Chaplin, L. N., & Connell, P. M. (2015). Developmental Consumer Psychology. *The Cambridge Handbook of Consumer Psychology*. In M. I. Norton, D. D. Rucker, & C. Lamberton (Eds.). *The Cambridge Handbook of consumer psychology* (pp. 180-208). Cambridge University Press.
- Chaplin, L. N., & John, D. R. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20(2), 176-184.
- Cialdini, R. B., & Goldstein, N. (2009). Normative influences on consumption and conservation behaviors. *Frontiers of Social Psychology*, 273
- Dahl, D. W., Frankenberger, K. D., & Manchandra, R. V. (2003). Does It Pay to shock?. *Journal of advertising research*, 43(3), 268-280.

Ducharme, J., & Li, A. (2019, September 19). How Juul Hooked Teens on Vaping and Ignited a Health Crisis. Time. Retrieved from <https://time.com/5680988/juul-vaping-health-crisis/>

Elmore, K. C., Scull, T. M., & Kupersmidt, J. B. (2017). Media as a “super peer”: how adolescents interpret media messages predicts their perception of alcohol and tobacco use norms. *Journal of youth and adolescence*, 46(2), 376-387

Evans, J. S. B. (2009). How many dual-process theories do we need? One, two, or many?

Fobian, A. D., Avis, K., & Schwebel, D. C. (2016). The Impact of media use on adolescent sleep efficiency. *Journal of developmental and behavioral pediatrics: JDBP*, 37(1), 9

Friedman, H. H., & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of advertising research*

Gapper, J. (2019, October 2). [JUUL Cartoon]. Financial Times.

<https://www.ft.com/content/2cd5bab2-e452-11e9-b112-9624ec9edc59>

Gigerenzer, G. E., Hertwig, R. E., & Pachur, T. E. (2011). *Heuristics: The foundations of adaptive behavior*. Oxford University Press

Glantz, S. A. (2020, April 20). Reduce your risk of serious lung disease caused by corona virus by quitting smoking and vaping. Retrieved from <https://tobacco.ucsf.edu/reduce-your-risk-serious-lung-disease-caused-corona-virus-quitting-smoking-and-vaping>

Goldberg, M. E., Gorn, G. J., Peracchio, L. A., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of consumer psychology*, 13(3), 278-288.

Gottlieb, S. (2018, November 15). Statement from FDA Commissioner Scott Gottlieb, M.D., on proposed new steps to protect youth by preventing access to flavored tobacco products and banning menthol in cigarettes. Retrieved from <https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-proposed-new-steps-protect-youth-preventing-access>

Groskopf, M. (2020, January 3). Hype house. [Photograph]. The New York

Times. <https://www.nytimes.com/2020/01/03/style/hype-house-los-angeles-tik-tok.html>

Hamilton, J. (1972). The Demand for Cigarettes: Advertising, the Health Scare, and the Cigarette Advertising Ban. *The Review of Economics and Statistics*, 54(4), 401-411. doi:10.2307/1924567

Hammond, D., Wackowski, O. A., Reid, J. L., & O'Connor, R. J. (2020). Use of JUUL e-cigarettes among youth in the United States. *Nicotine and Tobacco Research*, 22(5), 827-832

Herrman, J. (2019, March 10). Tiktok logo. [Advertising Image]. The New York Times.

<https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>

JUUL. (2015). Vaporized [Advertising Image]. Juul Launch Campaign.

<https://www.nj.com/news/2019/08/im-so-hooked-on-vaping-i-sleep-with-my-juul-addicted-teen-says-in-lawsuit.html>

Kahneman, D. (2011). *Thinking, fast and slow*. Macmillan.

- Kahneman, D., & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological review*, 93(2), 136
- Lahlou, S. (2017). *Installation theory: the societal construction and regulation of behaviour*. Cambridge University Press.
- Leskin, P. (2020, March 25). Charli D'Amelio has officially become the most followed creator on TikTok. Retrieved from <https://www.businessinsider.com/tiktok-charli-damelio-most-popular-creator-loren-gray-2020-3?r=US&IR=T>
- Cullen KA, Gentzke AS, Sawdey MD, et al. (2019). e-Cigarette Use Among Youth in the United States. *JAMA*. 2019;322(21):2095–2103. doi:10.1001/jama.2019.18387
- McGuire, W. J. (1964). Inducing resistance to persuasion. Some contemporary approaches
- Menzies, D., Nair, A., Williamson, P. A., Schembri, S., Al-Khairalla, M. Z., Barnes, M., ... & Lipworth, B. J. (2006). Respiratory symptoms, pulmonary function, and markers of inflammation among bar workers before and after a legislative ban on smoking in public places. *Jama*, 296(14), 1742-1748
- Milgram, S. (1963). Behavioral study of obedience. *The Journal of abnormal and social psychology*, 67(4), 371
- Miller, D. T., & Prentice, D. A. (2016). Changing norms to change behavior. *Annual review of psychology*, 67, 339-361.
- Muniz, A. M., & O'Guinn, T. C. (2001). Brand community. *Journal of consumer research*, 27(4), 412-432
- MyBlu. (2020). Nicotine free. [Advertising Image]. <https://www.amazon.co.uk/myblu-Liquidpod-Flavour-Nicotine-Liquid/dp/B07N57WMQG>
- Myers, M. (2006). *U.S. Racketeering Verdict: Big Tobacco Guilty as Charged*. [Speech]. Tobacco-Free-Kids Action Fund vs. Philip Morris USA Inc. Retrieved from <https://www.tobaccofreekids.org/what-we-do/industry-watch/doj>
- Newman, T. B. (2003). The power of stories over statistics. *Bmj*, 327(7429), 1424-1427
- NHS. (2019). Using E-Cigarettes / Vapes to Quit Smoking. Retrieved from <https://www.nhs.uk/oneyou/for-your-body/quit-smoking/using-e-cigarettes-vapes-to-quit-smoking/>
- Petty, R. E., Priester, J. R., & Brinol, P. (2002). Mass media attitude change: Implications of the elaboration likelihood model of persuasion
- Presson, L. (2020, February 21). I'm into health food and hot yoga. I'm also addicted to vaping | Liz Presson. Retrieved from <https://www.theguardian.com/commentisfree/2020/feb/21/vaping-juul-addiction-quitting#img-2>
- Prentice, D. A. (2007). "Prescriptive vs. descriptive norms." Entries in R. Baumeister & K. Vohs (Eds.), *Encyclopedia of Social Psychology*. Sage Publications.

Samson, A., & Voyer, B. G. (2012). Two minds, three ways: dual system and dual process models in consumer psychology. *AMS review*, 2(2-4), 48-71.

Senne, S. (2018). Teen vaping [Photograph]. AP Images.  
<http://www.apimages.com/metadata/Index/Teen-Vaping/7b9b2bc456e249539f6f642705e5520c/5/0>

Sharma, R. (2020, January 30). Which Company Is Behind Popular E-Cigarette, JUUL? Retrieved from <https://www.investopedia.com/news/which-company-behind-popular-ecigarette-juul/>

Shaffer, V. A., Focella, E. S., Hathaway, A., Scherer, L. D., & Zikmund-Fisher, B. J. (2018). On the usefulness of narratives: an interdisciplinary review and theoretical model. *Annals of Behavioral Medicine*, 52(5), 429-442.

Stokel-Walker, C. (2020). TikTok's global surge. *New Scientist*, 245(3273), 31.

Strasburger, V. C., Jordan, A. B., & Donnerstein, E. (2010). Health effects of media on children and adolescents. *Pediatrics*, 125(4), 756-767

Sunstein, C. R. (2014). Nudging: a very short guide. *Journal of Consumer Policy*, 37(4), 583-588

UNICEF. (2020, February 10). TikTok Stars Charli and Dixie D'Amelio on being bullied online. [Youtube Video].

Van Raaij, W. F. (1993). Postmodern consumption. *Journal of economic psychology*, 14(3), 541-563

WHO. (2020, March 24). Q&A on smoking and COVID-19. Retrieved from <https://www.who.int/news-room/q-a-detail/q-a-on-smoking-and-covid-19>