

# A Computational Analysis of Doomerism

# Motivation for Project

- Youth Emotional Loneliness
  - Multiple surveys and government statistics
    - youth aged 15-24 are the loneliest demographic<sup>1, 2, 3</sup>
  - Loneliness ministers in the UK and Japan

[1] Statistics Canada. Canadian Social Survey: Loneliness in Canada. Survey. 2021.

[2] Christina R. Victor and Keming Yang. "The prevalence of loneliness among adults: A case study of the united kingdom". In: The Journal of Psychology 146.1-2 (2012), pp. 85–104.

[3] The Anatomy of Loneliness - Who feels lonely? the results of the world's largest loneliness Study. 2018.

# Cultural Icon Becoming Viral

- Virality of a new doomer icon is culturally significant.
- Young people are identifying with this archetype.
- Dark, nihilistic, doomed existence, collapse, powerless<sup>1</sup>



[1] Karel Němeček. "Internet memes as reservoirs of meaning: Interpreting the Doomer". Bachelor's Thesis. Masaryk University, 2020.

# Significance

- You have the loneliest youth demographic.
- They are identifying with a very dark icon.
- This icon is becoming very popular in internet culture.
- Interventions are tackling the problems of the youth focus on loneliness and are **potentially** overlooking other problems.
  - Consulted with an expert in psychology to validate significance of research

# Research Question

- **Where does the doomer fit in with loneliness and depression, or is it completely a new phenomenon?**

# Methodology

- Scrape posts from 4 Subreddits
- Analyse the text-based posts using layered approach
  - Manual Inspection
  - Frequency Analysis
  - Classification of Individual Posts

# The Data

Subreddit	Number of Posts $\geq$ 500 words	Average Post Length	Earliest Post	Oldest Post	Number of Users
/r/Doomer	2921	1275.15	2019-04-22	2022-11-15	1764
/r/lonely	4860	1228.02	2022-09-13	2022-11-17	3759
/r/loneliness	2754	1489.41	2011-11-09	2022-11-15	2252
/r/depression	8811	1336.82	2022-02-28	2022-11-15	8168

Table 1: Metadata

# The Users

- Young overall age
- Mostly male, but there are females as well
- Typical of the Internet, Reddit, and especially these Subreddits
- Very inaccurate
  - Most users don't volunteer their gender online
- Threat to validity
- Unique users between Subreddits

Subreddit	Number of Posts with Ages	Average Age Found
/r/doomer	253	21.26
/r/lonely	787	23.09
/r/loneliness	456	23.55
/r/depression	1368	22.47

Table 2: Ages of Users

Subreddit	Number of Posts with Genders	Males	Females
/r/doomer	7	5	2
/r/lonely	12	10	2
/r/loneliness	7	5	2
/r/depression	18	14	4

Table 3: Genders Found



# Manual Inspection<sup>1</sup>

- Read a number of posts from each category.
- Identified some themes and keywords that would be relevant to analyse.

themes	keywords
nihilism	nihil, dark, hopeless, meaning, nothing, empty, death, life, nonsense, bleak, reason, pessimis, worth
doom	doom, collapse, brutal, survive, consciousness, conscience, extinction, clown, climate, ecology, destitute
suicide	suicid, kill, kms, hang
alone	lone, friend, isolated, island, people, presence, nobody, social, bore, boring
medical	medical, mental, health, issue, diagnos, medication, pills, anxiety, psychologist, help, therap, disorder, episode, gender, dysphoria, surgery, mg, lexapro, doctor, neurology
relationship	gf, bf, sex, coom, wank, porn, girl, boy, slut, hore, kiss, edging, virgin, love, masturbat, simp, woman, women, relationship, hug, dating, date, intimacy, girlfriend, boyfriend, fiancé, husband, wife, breakup, marriage, divorce, understanding, parent, cheated
childhood	child, abuse, neglect, mom, parents, dad, mother, father, mum, school, course, college, university, grade, teacher, professor, youth, young, recess, class
job	job, work, occupation, career
mental health	mental, depress, diagnos, anxiety, anxious, harm, smile, happy, happi, toxic, emotion, energy, sad, pain, ache, happy, happiness, motivat, unlove, uncared
drugs	drug cig, drunk, drink, smoke, weed, alcohol, booze, crack, coke, cocaine, hemp, marijuana, cannabis, intox
social issues	social, shy, timid, talk, support, insecure, rejection, awkward, fit, society, conversation, abandon, extroverted, introverted, unattractive, ugly
responsibilities	responsibl, death, family, pass, job, miscarriage, victim

Table 8: Table of the Keywords that identify a given theme

[1] H  l  ne Joffe Sam Fardghassemi. “The causes of loneliness: The perspective of young adults in London’s most deprived areas”. In: PLOS ONE 17.4 (2022).

# Frequency Analysis

themes	/r/Doomer	/r/lonely	/r/loneliness	/r/depression
nihilism	18.09	9.53	9.23	12.48
doom	2.61	0.21	0.13	0.28
suicide	3.87	2.02	2.08	3.98
alone	16.73	29.96	32.34	14.35
medical	5.71	5.71	5.52	11.83
relationship	12.78	15.51	14.24	10.70
childhood	10.29	8.57	9.05	11.58
job	5.43	4.26	4.10	6.25
mental health	10.76	8.59	8.36	16.11
drugs	2.15	0.73	0.78	1.21
social issues	6.81	10.75	9.95	5.94
responsibilities	4.77	3.34	3.32	5.29

Table 4: Composition of Themes by Percentage

# Results of Frequency Analysis

- Doomer
  - Much more nihilistic
  - Obsessed with *doom*, the brief collapse of the world
    - But not as much as anticipated
  - Slightly more mentions of drugs comparing with the other categories
- Depression
  - Medical
- These results are similar to the themes identified by the manual inspection

# Classification of Individual Posts

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# Classification of Individual Posts

*The prophetic vision of the holy executioner finally begins to take shape and unfold*

*Nothing remains to view the final breaths of a dying star many eons after all signs of*

*life ceased their existence on the surface of our beautiful planet leaving behind a still*

*silhouette of memory of a once magnificently brilliant world  
The prophetic vision of the*

*holy executioner finally begins to take shape and unfold where the monochrome deafening*

*silence echoes throughout the remnants of what was our beautiful world.*

- Turned that into a vector
- Classification: find its most similar vector

# Classification of Individual Posts

	/r/Doomer	/r/lonely	/r/loneliness	/r/depression	no match found
/r/Doomer	1213	291	466	1031	15
/r/lonely	712	860	2330	1076	11
/r/loneliness	236	533	1496	427	3
/r/depression	2230	867	1059	4834	13

- Doomer is really similar to depression
  - Depression is not as closely related to doomerism
- Individual posts can have a varying composition of themes

# Discussion

- We sought to determine where doomerism fits with loneliness and depression.
- It's not a new phenomenon.
- It is closely related to the other two, except that it is high in nihilism and the obsession with collapse.

# Threats to Validity

- Used only Reddit and these four Subreddits
  - Relevant to the cultural icon and demographic
  - The particular focus on Reddit makes sense to the problem scope
- Female users are very small **at most** ~5%.
  - There is no clear way to identify them, so as to give them more weight
- The themes identified are too crude
  - Bias & assumptions about each category
  - Attempt to ground themes in a manual inspection of the posts