A Cognitive-Corpus Linguistic Investigation of Self-Causation During the COVID-19 Pandemic

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1. Introduction

In 2019, the WHO declared that vaccine hesitancy was one of the top threats to global health (Turner, 2021, p. 3569).

Since the beginning of the COVID-19 pandemic, people all over the world have been asked or mandated to get vaccinated, tested, registered, etc. Sometimes, however, people resisted or were hesitant about performing these actions. Some reasons for this vaccine hesitancy are general anti-vaccine beliefs, lack of trust in the vaccine science and drug company data, level of education and income, political affiliation, and social and cultural beliefs (Machingaidze, 2021; Sallam, 2021; Troiano, 2021; Turner, 2021). Eventual vaccine uptake or activation from hesitant individuals may come from 'nudges' from doctors and/or other healthcare providers, families, governments, etc., and may even come from within the person him/herself. The present discussion explores how vaccination, testing, registering, etc. is linguistically expressed when the antagonist (i.e., hesitant 'nudgee') and agonist (i.e., activation 'nudger') are the same Self. Linguistic data related to COVID-19 can be analyzed to gain insight into this question. Specifically, the causative construction get oneself to do something, instantiated in the Coronavirus Corpus (Davies, 2019-), is proposed here to express these hesitancies and eventual activation or uptake of vaccines and/or related actions. In other words, the decision to get vaccinated, tested, or registered (or not) requires mental deliberation (MacDonald, 2015), and activation may require some type of self-coercion. This discussion presents a cognitivecorpus analysis of the English causative-reflexive construction [get + x-self + V] and offers qualification and quantification of these 'Self-causative events' instantiated in the Coronavirus Corpus, such as the example below.

1. For the past four days I have had signs of flu, I got myself tested and it came positive for COVID-19. (Coronavirus Corpus: 20–03-20 IN, ibtimes.co.in)

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Examples such as number one convey self-causative volition by metaphorically construing one part of the self coercing a different part of the self as if a separate entity (Lakoff, 1992). This is coined here as the 'Self-causative event'. When causation and reflexivity integrate into one event, they create a split in identity within the psyche of the person. Adequately describing this phenomenon requires inquiry into the impetus for self-causation, i.e., volitional force. Volition is described here from a psycholinguistic perspective and refers specifically to the force or energy required to coerce an entity into action (Talmy, 2001; Wolff & Song, 2003). Results from corpus data support this analysis. Upon examination of the Self-causative event's postreflexive collocates, specifically the EFFECT slot, the verbs tested, vaccinated, registered, checked, and inoculated are found to occur relatively frequently in the Coronavirus Corpus. Furthermore, contextual evidence supports the notion of physical or psychological tension or conflict between the different parts of the Self, which is proposed to be the catalyst for the [get x-self] Self-causative event (Gilquin, 2007, 2010) and the intention to express 'hesitancy but the ultimate decision to act'. Data from the Coronavirus Corpus are compared to other corpora and found to contain very different event profiles. For example, in the Corpus of Contemporary American English (Davies, 2008), the most frequent EFFECT slot items for [get x-self] are; elected, educated, fired, and organized, whereas in the British National Corpus (BNC XML Edition, 2007), the most frequent EFFECT slot items are; parked, dressed, sorted, elected and organized. Justification for the use of the Self-causative construction in the Coronavirus Corpus is proposed here to be resistance or hesitancy towards the recommended health-related action (Dubé, 2013; Troiano, 2021), although with eventual activation.

2. Vaccine Hesitancy

The decision to get vaccinated or not involves a complex set of variables. According to MacDonald, the term 'vaccine hesitancy',

refers to delay in acceptance or refusal of vaccination despite availability of vaccination services. Vaccine hesitancy is complex and context-specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence (2015, p. 4163).

These '3Cs' of vaccine hesitancy (i.e., complacency, convenience, and confidence) include but are not limited to general anti-vaccine beliefs, lack of trust in the vaccine science and drug

company data, level of education and income, political affiliation, social and cultural beliefs, etc. (Machingaidze, 2021; Sallam, 2021; Troiano, 2021; Turner, 2021). On an individual level, the causes of vaccine hesitancy can be encapsulated by five main categories that are based on the original 3C model. "The 5C model of the drivers of vaccine hesitancy provides five main individual person–level determinants for vaccine hesitancy: confidence, complacency, convenience (or constraints), risk calculation, and collective responsibility" (Machingaidze, 2021, p. 1338). The issue of vaccine hesitancy is complex and a challenge to governments and organizations that create and administer these vaccinations. Due to space considerations, it is beyond the scope of this paper to investigate the issue of vaccine hesitancy in full. Most relevant for the present investigation, however, is the idea that although identified causes for vaccine hesitancy are social, financial, and/or political, the fundamental hesitancy/uptake decision is a very personal, mental-emotional phenomenon. The decision-making process and ultimate choice of action happen within the mind of the individual.

On the other side of the vaccine hesitancy coin, as it were, is vaccine uptake. "Acceptance of vaccination is an outcome behavior resulting from a complex decision-making process that can be potentially influenced by a wide range of factors" (MacDonald, 2015, p. 4162). These factors have been summarized in a model called the '5A taxonomy for vaccine uptake'; access, affordability, awareness, acceptance, and activation. Especially relevant here is 'activation', defined as "the degree to which individuals are nudged toward vaccination uptake" (Betsch, 2018; Turner, 2021, p. 3569). The term 'nudge' implies some sort of pressure, coercion, and/or incentive from the party providing the vaccine (i.e., the 'nudger') to the party hesitant of accepting the vaccine (i.e., the 'nudgee').

Thus, for some individuals, there is hesitancy to get vaccinated, and there is pressure from others toward vaccine uptake or activation. Both sides of these nudging tendencies are complex and involve various attitudes, assumptions, presumptions, and societal situations, but again, the underlying, fundamental decision-making process is psychological; they are constructs of the mind. We *feel* hesitant and we *feel* compelled to act. These mental constructs can be expressed linguistically. The next sections explore the linguistics of how vaccine hesitancy and activation during the COVID-19 pandemic are expressed in English through the use of self-causative events.

3. Definitions, Transitivity, and Reflexivity

Definitions of the verb *get* with reference to causation in two online corpus-based dictionaries are provided below. Both dictionaries have multiple references to causation, persuasion, and force. The common theme among these dictionary senses is 'making someone do something' or 'causing them to be in some situation'. The reflexive construction is mentioned once in the Longman Dictionary Online, boldfaced and italicized in the example of sense 20.

Collins Online Dictionary (Collins Online Dictionary, 2022)

3. VERB: To get someone or something into a particular state or situation means to cause them to be in it.

4. VERB: If you get someone to do something, you cause them to do it by asking, persuading, or telling them to do it.

Longman Dictionary Online (LDOCE, 2014)

18. MAKE SOMEBODY/SOMETHING BECOME SOMETHING [transitive] to make someone or something change to a new feeling, situation, or state

20. MAKE SOMETHING HAPPEN TO SOMEBODY/SOMETHING [transitive] to accidentally make someone or something experience something

You're going to get us all killed! *Mind you don't get yourself burned*.

21. MAKE SOMETHING DO SOMETHING [transitive] to make something do a particular thing22. MAKE SOMEBODY DO SOMETHING [transitive] to persuade or force someone todo something

The Longman Dictionary describes *get* as a transitive verb. Prototypical transitivity "...is defined as a verbal event (i.e., the semantic and pragmatic scenarios that the linguistic forms represent) in which a human entity (an Agent) acts volitionally, exerting physical force on an inanimate definite entity (a Patient) which is directly and completely affected by that event" (Kemmer, 1993: 50). The terms *volitionally* and *force* will be relevant and explained in more detail in section four. For the moment, however, for transitive events, the hearer expects the Patient to be a different person from the Agent who acts intentionally and is responsible for that action; furthermore, the action has noticeable effects in the physical world.

Contrary to this, the use of the reflexive pronoun signals to the hearer that the Agent and Patient are the same entity, in other words, they are co-referent. "The reflexive event... is used to signal that the action of the typically unidirectional (i.e., other-directed) event is directed towards the same originating entity of the action, contrary to expectation. The nonprototypicality and unexpectedness have been described as the motivation for the use of the English reflexive pronoun" (Faltz 1985; Kemmer 1993; König & Siemund 2000; Lange 2007).

In sum, when a construction with the transitive *get* is used, the hearer expects two different actors to be involved in the event; however, when the Agent and Patient are one and the same person, the speaker employs the reflexive construction to avoid confusion. Thus, the 'Self-causative event' is the composite of the transitive *get* (with causative meaning) and the reflexive object pronoun.

3.1. The Divided Self

In cognitive linguistics, the idea that one can refer to the Self as if it were a separate identity has been coined, 'The Divided Self'.

We are often in this situation of having contradictory beliefs, of being unable to decide between alternative plans, and of having conflicting passions. Metaphorically, this is conceptualized as a splitting of the self into, typically, two selves, either of which can be inhabited by the subject... They all share a general metaphorical mapping:

DIFFERENT ASPECTS OF THE SELF ARE DISTINCT OPPOSED SELVES

(Lakoff, 1992:16)

Thus, the ability to have more than one point of view, to almost simultaneously have one emotional reaction or thought and another more logical one, can be construed as two parts of the Self. In English, this can be expressed with metaphors such as *I struggled with myself to make the right choice, I kept telling myself not to overeat, I caught myself reaching for the wine,* etc. Furthermore, for causative events, these two parts of the Self have incongruent desires and one part *forces/ coerces/ convinces/ causes* the other part to act in a certain way. This 'self-causation' occurs and is construed within the 'split' mind of the Actor/Patient conglomeration.

4. Causation and Volition

As discussed in section two, vaccination uptake/activation included a 'nudge' toward action. It is proposed that there are actually two different aspects of this action. The first is the energetic force of causation, the pressure to think or act in some particular manner. The second is volition, the internal impetus toward a certain outcome. Both of these are discussed below in relation to how these phenomena are expressed during the COVID-19 pandemic.

Causative events express actions that include force or persuasion to complete. In examples two through four, the (a) examples are causative events involving two separate entities, the (b) examples construe 'self-causation', i.e., causation that occurs within the same individual, and the (c) examples construe factual statements (i.e., *get* acts as a linking verb) with no causation implied. It is proposed that the Self-causative events in (b) require some type of mental effort in order to resolve internal conflicting thoughts or emotions and that this effort is the reason why volition or force is needed to complete the action.

- 2. (a) I got Jim vaccinated for COVID-19.
 (b) I got myself vaccinated for COVID-19.
 (c) I got vaccinated for COVID-19.
- 3. (a) Joe got Jim registered for a free jab.
 (b) Joe got himself registered for a free jab.
 (c) Joe got registered for a free jab.
- 4. (a) John got Jessica tested for COVID-19.
 (b) John got himself tested for COVID-19.
 (c) John got tested for COVID-19.

Goldberg's well-known "Principle of No Synonymy" states that if two constructions are grammatically distinct, they must also be distinct in meaning (1995). The (a) examples are events where the Patient (i.e, the 'nudgee') *gets vaccinated, registered,* and *tested* and the Agents responsible for initiating these actions, (i.e., the 'nudgers'), are unique individuals. In the (b) examples, the only surface differences between these and the (a) examples are the replacement of distinct object pronouns with reflexive pronouns; they construe reflexive self-causation. They convey the meaning of 'effort' of some mental part of the Patient in order to cause some other mental (and/or physical) part to succumb to the force of that stronger part. In other words, some part of the Patients' psyches knew, for whatever reason, that *getting vaccinated, getting registered,* and *getting tested* was in their best interests but they were wary. However, the ultimate decision and action were directed toward uptake/activation.

Contrastingly, the (c) examples construe that meaning that some event occurred; there is no causation. The situation simply occurred (although causation is possible with the appropriate contextual conditions).

In linguistics, the volitive case refers to the intention of performing some action. In the present discussion, however, the two terms 'intention' and 'volition' are used separately as they occur in psychology and psycholinguistics, where 'intention' is the immediate impulse to act and the mental function that controls or 'maintains' that impulse is termed 'volition'. Furthermore, if an immediate impulse to act, an 'intention', is deemed inappropriate, it can be overridden by volition and the action will not be performed. Perhaps the most well-known description of this within linguistics is Force Dynamics theory (Talmy, 1988). This theory describes how different forces act upon one another and how they are expressed in language. In the present discussion, these force events are described from the vantage of a newer adaptation of Force Dynamics, called Force Theory, proposed by Wolff.

The theory holds that people specify causal relations in terms of configurations of forces that are evaluated with respect to an end-state. An end-state can be conceptualized as a location in a state space that the patient might move towards or reach. The forces may be physical, psychological (e.g., intentions), or social (e.g., peer pressure) (2003:106).

For causative events, the Affector (i.e., Agent or 'nudger') is stronger than the Patient (i.e., 'nudgee') and the Patient is moved toward the goal, called the 'end-state'. "A cause configuration is defined as a configuration in which the patient does not have a tendency for the end state, the affector opposes this tendency, and the result is towards the end state" (ibid:116). Animations of a boat floating on a water current moving toward a clearly marked destination were used in psycholinguistic experiments to describe different kinds of mental forces. For causative events, the Affector's volition (i.e., the maintaining or moderating part of the psyche) is represented by the current moving away from the final destination, the end-state or goal. The subjects of the experiments had to choose what they thought were the most appropriate linguistic items from a set (Wolff and Song, 2003). If volition (i.e., the boat) was strong enough to overcome the opposing intentional force (i.e., the water current), the goal or end-state (i.e., a mountain range, the opposite side of a pool, etc.) would be successfully reached (i.e., causation would be successful). If not, intention (i.e., the water current) would prevail and the Affector (i.e., the boat) would act in a way that takes them away from the goal (i.e., the boat would be swept down the current.) Subjects of these experiments consistently

and accurately chose the specific 'intentions and volitions' of linguistic causation when prompted by the causative circumstances in the animations.

4.1. Summary

To summarize the discussion until this point, Self-causative events are comprised of the integration of transitive *get* constructions followed by reflexive object pronouns. Conceptually, (1) different parts of the Self are construed as different entities (2) 'intention' is situational/emotional, comprising immediate wants and desires, and (3) 'volition' is maintaining and has an objective view of actions. The aim of reaching some conclusion (*vaccination*, *registration*, etc.) is considered the end-state or goal. Some amount of effort is required to resolve the two aspects of the Self due to their lack of congruency with respect to this end-state.

5. Corpus Analysis

From a corpus perspective, Gilquin (2006) looked specifically at the EFFECT slots in causative constructions, in other words, what is being done to the Patient, typically, the post-reflexive verb. Three distinct, statistically significant meaning senses were found for each of the most frequent causative constructions with the verb *get*; the to-infinitive, the past participle, and the present perfect. The sense of difficulty with the past participle and present perfect in the column marked 'Distinctive Meaning' is noteworthy as it lends statistical significance (detailed in that discussion) to the present proposal.

Construction	Distinctive Meaning
[X GET Y V _{to-inf}]	To elicit words or agreement
[X GET Y V _{pp}]	To carry out an action in difficult circumstances or under a tight schedule
[X GET Y V _{prp}]	To set an object in motion, usually with difficulty [also metaphorical]

Table 1. Meanings distinctively associated with periphrastic causative constructions. (Gilquin, 2006:41)

Gilquin's analysis also describes the tension between the 'volitional' and 'intentional' Selves, termed 'Subject' and 'Self', respectfully. "Because the split between Subject and Self necessarily involves some sort of effort, since one part of the mind has to escape the control of the other part and perform acts under its own agency..., the *get* construction is particularly appropriate to describe such a state of affairs" (Gilquin, 2010, p. 86). Gilquin uncovered corpus

evidence for the ubiquity of the *get* causative construction in the CORE corpus as well as in elicitation data (ibid.)

In the present discussion, the Self-causative event was investigated predominantly in the Coronavirus Corpus (Davies, 2019-). The Coronavirus Corpus query for [get] + REFLEXIVE PRONOUN + VERB recovered a frequency ratio of 0.37 per million. The most frequent EFFECT slot verbs for the self-causative event are listed in Table 2. As expected for the type of corpus (i.e., news related to the COVID-19 pandemic), most of the actions performed by the Patient are related to health/illness hesitancy, activation, and prevention; *tested, vaccinated, checked, inoculated, protected, jabbed*, etc. However, some verbs such as *elected, prepared, going*, and *organized* have sense affiliations that are ambiguous as to their specific COVID-19 relations, although the overall article is COVID-19-focused.

<u>Rank</u>	EFFECT (post-reflexive verb)	<u>FREQ (n >10)</u>	<u>Rank</u>	EFFECT (post-reflexive verb)	FREQ (<i>n</i> >10)
1	Tested	1370	9	Prepared	23
2	Vaccinated	1025	10	Screened	15
3	Registered	133	11	Sent	14
4	Checked	91	12	Elected	13
5	Inoculated	74	13	Infected	12
6	Admitted	46	14	Treated	12
7	Protected	37	15	Going	11
8	Jabbed	27	16	Organized	11

Table 2. Coronavirus Corpus: [get] + REFLEXIVE PRONOUN + VERB (Frequency >10)

Figure 1 shows the most frequent full-phrase [get + Refl. Pro. + V] items. Turning attention to the subject and reflexive pronoun complex, the most frequent are third-person (as in reported speech), followed by second-person (as in interviews and conversations), and minimal use of first-person (as in self-reporting), exemplifying the nature of news correspondence.

Figure 1. Coronavirus Corpus: Most frequent items for query: [get] _ppx VERB (query date: 1/15/2022)



Figure 2. NOW Corpus: Most frequent items for query: [get] _ppx VERB (query date: 1/16/2022)



In the News on the Web (NOW) Corpus (Davies, 2019-a), the EFFECT slot verbs for Self-causative events are listed in Figure 2. (See Appendix 1 for a more extensive list.) Because the NOW corpus is updated daily, the five most frequent actions performed by the Patient are also related to health and illness prevention related to the COVID-19 pandemic, which has yet, as of this publication date, to be eliminated as a global threat. Here, again, third-person reflexive pronouns are the most frequent, typical of news correspondence data.

For comparison, the 10 most frequent verbs in the EFFECT slots in the spoken sections of the COCA and BNC corpora were also investigated. These pre-COVID-19

corpora were compiled and completed in 2019 and 1994, respectively. The different EFFECT slot profiles, underlined in Table 3, are revealing in that none are directly related to health/illness.

COCA: SPOK: [get] + REFL + VERB	Per mil	BNC: SPOK: [get] + REFL + VERB	Per mil
GET (VVI) HIMSELF (PPX1 <u>) ELECTED (VVN)</u>	0.03	GET (VVI) YOURSELF (PPX1) PARKED (VVN)	0.03
GET (VV0) YOURSELF (PPX1) EDUCATED (VVN)	0.02	GET (VV0) YOURSELF (PPX1) <u>DRESSED (VVN)</u>	0.02
GET (VVI) HERSELF (PPX1) <u>FIRED (VVD_VVN)</u>	0.02	GET (VVI) MYSELF (PPX1) <u>SORTED (VVD_VVN) (OUT)</u>	0.02
GET (VV0) YOURSELF (PPX1) <u>ORGANIZED (VVN)</u>	0.02	GET (VV0) YOURSELF (PPX1) <u>SORTED (VVN) (OUT)</u>	0.02
GET (VVI) HIMSELF (PPX1) I <u>NDICTED (VVN_VVD_JJ)</u>	0.02	GET (VVI) YOURSELF (PPX1) <u>SORTED (VVN) (OUT)</u>	0.02
GET (VV0) YOURSELF (PPX1) <u>RAPED (VVN)</u>	0.02	GET (VVI) THEMSELVES (PPX2) <u>ELECTED (VVN)</u>	0.02
GET (VVI) HIMSELF (PPX1) <u>REELECTED (VVN)</u>	0.02	GET (VVI) OURSELVES (PPX2) <u>ORGANIZED (VVN_VVD)</u>	0.02
GET (VVI) THEMSELVES (PPX2) <u>ELECTED (VVN)</u>	0.02	GET (VVI) OURSELVES (PPX2) <u>BOGGED (VVN) (DOWN)</u>	0.01
GET (VVI) MYSELF (PPX1) <u>STRAIGHTENED (VVD_VVN) (OUT)</u>	0.02	GET (VVI) YOURSELF (PPX1) <u>SAYING (VVG)</u>	0.01
GET (VVI) HIMSELF (PPX1) TRANSFERRED (VVN)	0.02	GET (VVI) YOURSELF (PPX1) <u>RESCUED (VVN)</u>	0.01

Table 3. COCA and BNC Corpora: the most frequent instances of [[get] + REFL. PRO. + VERB].

(* CLAWS parser codes: VV= Verb, D= past tense, N= past participle, G= present participle, JJ=General Adjective)

In Table 4, the 20 most frequent collocates in the Coronavirus Corpus (4 places to the right of the node) are listed. (See Appendix 2 for a more extensive list.) As expected, collocations dealing with health/illness hesitancy, activation, and prevention are common.

<u>Rank</u>	COLLOCATIONS	FREQ	Percent	<u>Rank</u>	COLLOCATIONS	FREQ	Percent
1	TESTED	1422	0.34	11	PROTECTED	49	0.11
2	VACCINATED	1097	0.57	12	COVID	49	0.01
3	REGISTERED	175	0.21	13	EARLIEST	40	0.23
4	AGAINST	153	0.02	14	SCREENED	34	0.22
5	CHECKED	130	0.71	15	TREATED	33	0.05
6	INOCULATED	99	0.83	16	JABBED	32	2.63
7	ADMITTED	99	0.15	17	ELECTED	32	0.07
8	SOON	67	0.03	18	ORGANISED	29	0.15

9	!	58	0.02	19	INFECTED	29	0.01
10	PREPARED	50	0.05	20	VACCINATION	27	0.01

Table 5. TIME Corpus (1993-2006): ([get] + REFL PRO VERB); collocations (Right + 4)

<u>Rank</u>	COLLOCATIONS	FREQ	Percent	<u>Rank</u>	COLLOCATIONS	FREQ	Percent
1	PRESIDENT	20	0.01	11	ROUTE	2	0.04
2	MAYOR	10	0.08	12	REPRESENTATIVE	2	0.03
3	GOVERNOR	9	0.04	13	PRISON	2	0.02
4	PARLIAMENT	4	0.06	14	INSIDE	2	0.02
5	SENATE	4	0.01	15	CIVIL	2	0.01
6	LIEUTENANT	3	0.08	16	\$1,500.	1	7.14
7	PREMIER	3	0.02	17	NIGHT-LIFE	1	6.67
8	EN	2	0.1	18	\$75-A-WEEK	1	5.88
9	CONNECTICUT	2	0.06	19	SKIVVIES	1	4.35
10	ROW	2	0.05	20	ESTIM	1	4.17

Contrastively, from the TIME Magazine corpus, which contains data from 1923-2006, the 20 most frequent collocations (right +4) are shown in Table 5. The list reveals topics related to politics, location, finance, and society, but none related to health or illness.

Highlighted in boldface in examples five through seven, typical contextual evidence is offered for the perceived effort or difficulty in performing the action of *testing* and *vaccination* on the part of the Patient. Using terms from Force Theory, *getting tested*, *vaccinated*, *etc*. are the perceived end-states or goals to be achieved, highlighted in italics. However, one part of the Self (the nudgee) resists movement toward that end-state, i.e., it does not want to be *tested* or *vaccinated*, while another part (the nudger) tends toward the particular end-state, i.e., it wants to be *tested* and *vaccinated*. This is proposed to be the effort needed to overcome the inconsistency in order to reach the end-state and applies to other Self-causative event EFFECT verbs appearing in the Coronavirus Corpus such as *inoculated*, *checked*, *jabbed*, *treated*, *screened*, etc.

5. For the past four days I have had signs of flu, <u>I got myself tested</u> and it came positive for COVID-19. (Coronavirus Corpus: 20—03-20, IN, ibtimes.co.in)

- 6. Though I am a little scared of needles, <u>but I still got myself vaccinated</u> today. I urge people to please get vaccinated as soon as they can...
 (Coronavirus Corpus: 21-05-29, sports.ndtv.com)
- 7. Another confrontation came on the Centre's order that <u>all patients must get themselves checked</u> at coronavirus-dedicated clinics against Delhi government's strategy of the government teams visiting the covid-19 patients to ascertain whether they need to be sent to centres or home isolation is enough. (Coronavirus Corpus: 20-06-24, IN, kashmirtimes.com)

6. Conclusions & Discussion

A metaphorical 'divided self' is construed to contain discordant parts of the Self. Choosing a certain action in order to reach an end-state or goal requires control (i.e., maintenance) of physical, emotional, and impulse desires (i.e., intentions). This is difficult, takes effort, and is proposed to be the impetus, by activation-hesitant individuals, for the use of the Self-causative event in the COVID-19 and NOW corpora. In other words, for a part of the population affected by COVID-19, some type of self-volition is needed to act in ways ultimately deemed necessary either for the individual and/or the society in which that individual engages. The use of the verb *get* with the reflexive construction allows the speaker to convey the effort or difficulty in making these choices. This is often reported on by media, thus, the frequent use of the third-person subject + reflexive object pronoun complex.

The decision-making process that initiates the divided-self phenomenon is likely related to some level of vaccine (or other) hesitancy. Describing the conflicting internal forces within the psyche during health emergencies such as the COVID-19 pandemic can be insightful and useful for researchers, healthcare workers, NGOs, and governmental bodies interested in guiding (nudging?) public policy and societal action.

There are still avenues of research that would deepen and clarify aspects of the present investigation. One is a more in-depth statistical analysis that would help quantify the levels and significance at which causation or the sense of difficulty in performing an action is present in the data. Another would be the media's effect on health-related decision-making during global health emergencies, i.e., how much does media in general and the type of media, specifically, influence our internal decision-making processes?

A further interesting line of research would be a diachronic investigation of selfcausation during the COVID-19 pandemic compared with past pandemics or other health emergencies. Although the quantity and quality of past linguistic data would be a challenge, investigations could help inform the projection of future health-related trends.

These and similar studies would be invaluable. My most immediate and sincerest hope is, however, that all research on global-scale health emergencies becomes diachronic in nature. May we all be free from suffering.

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Appendix 1

The most frequent (n > 100) items for the search term [[get] _ppx VERB] (i.e., lemmatized *get* followed by any reflexive pronoun followed by any verb) in the News on the Web (NOW) corpus (query date: January 16, 2023).

<u>Rank</u>	[get] ppx V	Freq.
1	GET THEMSELVES TESTED	883
2	GET THEMSELVES VACCINATED	702
3	GET THEMSELVES REGISTERED	678
4	GET YOURSELF TESTED	292
5	GET YOURSELF CHECKED	260
6	GET THEMSELVES CHECKED	243
7	GOT THEMSELVES REGISTERED	178
8	GOT HIMSELF SENT	177
9	GET YOURSELF VACCINATED	153
10	GET HIMSELF GOING	148
11	GOT HIMSELF ADMITTED	146
12	GET HIMSELF ELECTED	141
13	GET MYSELF GOING	122
14	GET YOURSELF GOING	119
15	GETTING HIMSELF SENT	117

1		1
16	GET THEMSELVES ENROLLED	115
17	GOT HIMSELF ELECTED	114
18	GET YOURSELF PREPARED	100
19	GET THEMSELVES PREPARED	86
20	GETTING THEMSELVES VACCINATED	86
21	GET THEMSELVES ELECTED	84
22	GETTING THEMSELVES TESTED	82
23	GET YOURSELF KILLED	81
24	GETTING THEMSELVES REGISTERED	80
25	GET OURSELVES PREPARED	78
26	GET OURSELVES GOING	77
27	GET HIMSELF TESTED	76
28	GOT HIMSELF TESTED	70
29	GET HIMSELF KILLED	65
30	GET HIMSELF ARRESTED	63
31	GET THEMSELVES INOCULATED	62
32	GOT MYSELF TESTED	61
33	GET THEMSELVES GOING	60
34	GET YOURSELF NOTICED	59
35	GET YOURSELF SET	56
36	GET HIMSELF SENT	56
37	GET THEMSELVES TREATED	54
38	GET YOURSELF SORTED	53
39	GET THEMSELVES SORTED	52
40	GET THEMSELVES SCREENED	52
41	GOT THEMSELVES VACCINATED	52
42	GET YOURSELF STARTED	51
43	GET YOURSELF REGISTERED	50
44	GETS HIMSELF BOOKED	47
45	GOT THEMSELVES TESTED	46
46	GOT HIMSELF ARRESTED	44
47	GET HIMSELF PREPARED	43
48	GET HIMSELF FIT	43
49	GET THEMSELVES KILLED	43
50	GET THEMSELVES HEARD	41
51	GET THEMSELVES NOTICED	40
52	GET MYSELF CHECKED	40
53	GET HIMSELF CHECKED	39
54	GET HIMSELF TREATED	39

55	GET THEMSELVES ORGANISED	39
56	GOT HIMSELF GOING	39
57	GET THEMSELVES ACQUAINTED	36
58	GET HIMSELF SORTED	36
59	GET MYSELF PREPARED	36
60	GET HIMSELF FIRED	35
61	GOT THEMSELVES ENROLLED	35
62	GOTTEN THEMSELVES BLOWN	35
63	GET YOURSELF INVOLVED	32
64	GET YOURSELF MOVING	32
65	GET HIMSELF RE-ELECTED	32
66	GET MYSELF TESTED	31
67	GET HIMSELF INVOLVED	30
68	GET THEMSELVES ADMITTED	29
69	GET HIMSELF ADMITTED	29
70	GET YOURSELF MOTIVATED	28
71	GETTING HIMSELF KILLED	28
72	GETTING HIMSELF ELECTED	28
73	GET ITSELF REGISTERED	27
74	GOT HERSELF TESTED	27
75	GET MYSELF SORTED	26
76	GETTING HIMSELF ARRESTED	25
77	GET ITSELF ACCEPTED	25
78	GOT HIMSELF KILLED	25
79	GET HIMSELF REELECTED	24
80	GET THEMSELVES TRAINED	24
81	GOT HERSELF STUCK	24
82	GOT HIMSELF SUSPENDED	24
83	GET YOURSELF ACQUAINTED	23
84	GET THEMSELVES EXAMINED	23
85	GET THEMSELVES PHOTOGRAPHED	23
86	GET MYSELF MOTIVATED	23
87	GET MYSELF FIT	23
88	GOT HERSELF ADMITTED	23
89	GET HERSELF TESTED	21
90	GET HIMSELF PUT	21
91	GET YOURSELF FIRED	21
92	GETTING THEMSELVES CHECKED	20
93	GETS HIMSELF ARRESTED	20

94	GET HIMSELF NOTICED	20
95	GETTING THEMSELVES PREPARED	20
96	GETTING YOURSELF VACCINATED	20
97	GOT HIMSELF FIRED	20
98	GOT HIMSELF RUN	20
99	GET THEMSELVES PROTECTED	19
100	GET OURSELVES VACCINATED	19

Appendix 2

The most frequent items (n > 10) for the search term [[get] _ppx VERB] (i.e., lemmatized *get* followed by any reflexive pronoun followed by any verb) in the Coronavirus Corpus (query date: January 15, 2023).

Rank	[get] _ppx VERB	Frequency
1	GET THEMSELVES TESTED	752
2	GET THEMSELVES VACCINATED	597
3	GET YOURSELF TESTED	186
4	GET YOURSELF VACCINATED	138
5	GET THEMSELVES REGISTERED	116
6	GOT HIMSELF TESTED	90
7	GOT MYSELF TESTED	81
8	GETTING THEMSELVES VACCINATED	74
9	GET THEMSELVES CHECKED	72
10	GETTING THEMSELVES TESTED	72
11	GET THEMSELVES INOCULATED	62
12	GET HIMSELF TESTED	61
13	GOT THEMSELVES TESTED	60
14	GOT THEMSELVES VACCINATED	56
15	GET YOURSELF CHECKED	46
16	GOT HERSELF TESTED	35
17	GET OURSELVES VACCINATED	34
18	GOT HIMSELF ADMITTED	31
19	GET MYSELF TESTED	30
20	GOT HIMSELF VACCINATED	27
21	GET THEMSELVES PROTECTED	24
22	GET HIMSELF VACCINATED	22
23	GET OURSELVES PREPARED	22
24	GOT THEMSELVES REGISTERED	21
25	GETTING YOURSELF VACCINATED	18
26	GET YOURSELF PROTECTED	17
27	GET YOURSELVES VACCINATED	17
28	GET HERSELF TESTED	15
29	GET OURSELVES TESTED	15

30	GET THEMSELVES ADMITTED	15
31	GET THEMSELVES SCREENED	15
32	GET THEMSELVES JABBED	14
33	GOT THEMSELVES JABBED	14
34	GETTING OURSELVES VACCINATED	13
35	GETTING THEMSELVES INOCULATED	13
36	GOT HIMSELF SENT	13
37	GET HIMSELF ELECTED	12
38	GET THEMSELVES INFECTED	12
39	GET URSELF TESTED	12
40	GOT MYSELF VACCINATED	12
41	GET HIMSELF GOING	11
42	GET HERSELF VACCINATED	11
43	GET THEMSELVES TREATED	11
44	GOT THEMSELVES ORGANISED	11
45	GET MYSELF VACCINATED	10
46	GETTING MYSELF TESTED	10