



Addiction-like behaviour

Social media, Gambling

For:
IMC Conferences
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Health warning

- Some understanding of biology, law, politics, regulation, commerce and philosophy is essential.
 - This presentation is HIGHLY selective otherwise we would be here for a week, or more.
- Many reasonable “ah buts” have been addressed.
- All common behaviours are couched in a colourful language of their own e.g.,
 - “a bit on the side”,
 - “victimless crime”,
 - “doom scrolling”,
 - “hooked”

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Structure of presentation

- Basic principles of addiction-like behaviour
- Social Media
- Laws

Further reading

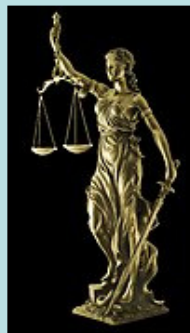
Insurance risk, exclusions, scenarios will have to wait.

Problem gambling follows the same principles.

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Principles Section



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Behavioural addiction?

- Addiction would be a common law injury if it was harmful **and** arose because of an induced loss of function.
- How does a purely behavioral addiction occur?
- The brain:
 - Is adaptive and integrative.
 - Explores and maintains new states via chemical and cognitive **reinforcement**.
 - Can justify choices and intrapersonal and interpersonal conflict.
 - Dopamine is the most famous reinforcement agent
 - Is able to adopt and maintain functional impairment if overwhelmed or 'required' to do so (e.g., PTSD and chronic stress effects).
 - Is self-resolving to the integrative state.

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Injury at common law

In the context of active negligence

- There must be a significant **change** of bodily structure and/or function. We are not statues! Adaptivity is innate.
 - Proof according to the balance of probabilities = a fact.
- The effect of that change is a direct and significant impairment of structure and/or function.
 - Direct means causally proximal (reasoned explanation).
 - Significant means more than *de minimis*.
 - Impairment means it is less than it was.
- The direct effect of the impairment is that the person is significantly worse off.

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Reliable Law?

Significant means: must be or should be taken into account.

- Must be applies to regulation/ compulsion.
- Should be applies to common law such that reason is informed.

Daily variations and changes which are within a peer group norm (width implied) are not facts which need to be explained any further. Specific exceptional cases.

Intermediated impairments are not direct or necessary. They are often constructive. Can be a grey area.

The vicissitudes of life are not facts which need to be explained any further.

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Mental injury vs mental state

Changes in degree of each brain function occur all the time the adaptive integrative nature of the brain usually 'corrects' them.

Mental injury requires significant change which directly results in significant functional impairment and, being worse off. E.g., PTSD.

Mental injury does not include functionally normal experiences such as grief, elation, anxiety, joy, rumination, fatigue, increased vigilance, low mood, poor concentration, constructive compulsion.

Such mental states may be taken into account as *suffering*.

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Reinforcement

- Reinforcement is a natural talent of the brain. It is both cognitive and emotional.
 - It makes good (integrative) choices easier to take, we say they are impulsive, intuitive.
- Noticed as preoccupation, cue sensitivity, confirmation bias, withdrawal evasion.
- It is reversible and is reversed when there is conflict.
 - Conflict is sensed as anxiety, edginess, false justification, pining
 - CBT for SM 'addiction' works at all because reinforcement is functioning well enough to be lead away.

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Reinforcement

- Can be deliberately manipulated and is manipulated by SM platforms, online games, TV series, gambling services, food manufacturers, pornographers, teachers, parents, politicians, marketers, religious, therapists...
- Any scenario where 'pleasure' or desire e.g., sensual, emotional, rational, is a motivating factor.
 - Reinforcement is considered good when it supports an integrative whole. E.g., supports personal agency.
 - Reinforcement is considered bad when it drives towards imbalance.
 - Obsession, mania, substance abuse, Manchester United fans...

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Addiction, dependency and withdrawal

Addiction would be a common law injury if it was harmful **and explained** by induced loss or impairment of function.

- There is no diagnostic threshold which distinguishes between 'often preferred', 'strongly reinforced' and, 'addiction-like'.
- The distinction is made by assessment of the degree of conflict, not impaired brain function. **Maladaptive reinforcement is called addiction.**
- Labelling is motivated by the potential value of a therapeutic, practical or social intervention.

Dependency and **withdrawal** are the result of functional impairment.

- They can be objectively detected injuries.

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Lazy assumption

Dependency and withdrawal are very potent drivers of reinforcement. Hence the understanding of drug addiction.

However, just because there is reinforcement doesn't mean there is any dependency or withdrawal.

The presence of reinforcement does not equate to the presence of dependency and withdrawal.

Both could be present but this would need to be proved, not assumed.

However, the language of substance addiction is thoughtlessly(?) applied to strong reinforcement, giving the cultural impression of equivalence. Teachers? Parents(?)

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Problems

Persistent conflict, especially if coercive, can lead to maladaptive functioning which can be detected as injury.

Chronic intense stress for example leads to reinforcement of depression,

More often it is detected as social and personal problems.

Essentially the conflict correction effect is being bypassed. Manipulative services aim to de-sensitise to conflict.

Does persistent intense conflict prove that the compulsion was irresistible?

No. It proves that it wasn't in fact resisted. Not why.

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Summary so far

- Reinforcement is not an injury.
 - It gives rise to integrativity, personhood and legal agency.
- Reinforcement can be and is manipulated for advantage.
- Reinforcement can de-sensitise the person to conflict.
- Persistent extreme conflict can be injurious.

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Social Media (SM)



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X ploitation or X stream utility?

2-sided coin

Self description	Described as
Democratic/free speech	Cheap/ abuse of trust
New	Ephemeral
Advanced	Technobabble
Progressive	I want what I'm now told to want
Advocacy	Promotes only self-interested views
Choices	How to get more time from you
Trending	Self-referential
Secure	Identity and relationships theft
Encrypted	Encrypted
Features	Timewasting chindogu
Informative	Moral outrage, unreliable
Social	Anti-social
Powerful	Unaccountable
Wealthy	Wealthy

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SM science

- There is no specific definition of SM.
- There is no uniform user experience.
- Content is generated by 3rd parties and by AI.
- There is no test of actual mutuality or the mutuality assumption made by the user.
- Risk factors for reinforcement are fragmentary and unquantifiable.
- Classifications such as social networks, games, information services, shopping, forums... don't work.
- Adaptive AI algorithms are non-analytical.

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SM

- A feature of the attention economy
 - Product, ideology and self-promotion opportunities increase with activity.
- Those digital services that best keep your attention (regardless of factual content) will have an advantage in using and selling “screen time”.
- The addiction-like user actively chooses to use and resists abstinence.
 - Addiction-like behaviour is very much in the interests of the platform providers, so long as the behaviour doesn't impair the user's capacity to fund full participation.

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SM Findings

- There is no objective dependency.
 - With or without the service use, the capacities are the same.
 - Users frequently change service with no loss of capacities.
- There is no objective decremental habituation.
 - The capacity for benefit persists regardless of degree of use.
 - Increased use or complexity of use is not evidence of a loss of capacity for benefit.
- There is no objective oppositional habituation.
 - Users do re-evaluate the benefit and so construct opposition.
- There is no objective withdrawal.
 - Users report being anxious, irritable and restless when use is frustrated. This is a component of reinforcement.

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SM reinforcement potency

Four conventional potency factors

- **Benefit latency**. Pleasure on start up is very variable and rare afterwards but distraction is immediate. Re-use is strongly predicted for those in search of distraction.
 - **Euphoric potency** measures the benefit felt per cost of usage. SM provides mild pleasure but intense distraction at almost no cost. Re-use is strongly predicted for those in search of distraction.
 - **Benefit duration**. Distraction is immediately lost. Re-use is strongly predicted.
 - **Withdrawal intensity** (irritability) is mild and resolves with normal activity.
- Three potency factors for reinforcement are strong.

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SM reinforcement tactics

- Endless usage
- Intermittent variable reward (anticipation hook)
- Ephemeral content (look or miss it)
- Missing content (keep searching to find it)
- Notifications (bugging you)
- Selective content algorithms (not for you, for them.)
- Barriers to exit (
- Emulation endorsement
- Views, downloads, comments, re-posts, 'X is typing'
- Confirmation bias

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Laws and Bills



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Liability

- Unless the service takes responsibility for the person there can be no liability for a freely adopted intangible service.
 - Everything which is core to the service is immune.
 - Reliability, security, accessibility, responsiveness and control
- Defective, non-core aspects, which cause harm, could be described as products.
 - Strict liability for data loss and parental control failure for example.
- There can be no liability for free speech (a public good).
 - Algorithms to enhance the service are immune.

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Is that true?

While intangible services are not products, it seems the EU may have decreed that AI systems are products.

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Regulation

- EU Digital Services Act Regulation (EU)2022/2065
 - Became active on the 17th Feb 2024.
- A level playing field for digital platform business growth.
- Protection from illegal content and fraud.
- Promotion of approved ideology.
- Prohibition of dark patterns.

- Harmful content is not illegal until the EC says it is.

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Young people

- *Whereas (89) very large platforms should also take measures to protect minors from content that may impair their physical, **mental** or moral **development** and provide tools that enable conditional access to such information.*
 - Probably unenforceable.
- Article 34 demands protection from algorithmic systems that have serious negative consequences to mental well-being.
 - Whereas 81 and 83 refer to the risks presented the minors by strong reinforcement.
 - But strong reinforcement is not an injury, conflict may be injurious, but this is not something the SM provider can control.

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Is that right?

Committee on the Internal Market and Consumer Protection

The Committee make strong recommendations that the problems of strong reinforcement itself be tackled and not just the indirect consequences.

The EPRS report

Strong reinforcement is entirely reversible.

12 months of conflict may cause injury.

SM providers know exactly how old, how much active use, spiraling overuse and vulnerability factors such as ADHD, OCD, narcissistic personality, paranoia, loneliness.

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UK

Online Safety Act (OSA)(2023).

The fact or manner of dissemination of any content, harmful by nature or otherwise, is not a matter for risk assessment by the service provider (see section 13(4) and 30(4)).

In direct contradiction:

Section 234 refers to harm done by the manner of dissemination.

There are 66 references to functionality but each of these is concerned solely with the control of illegal content. Harm done by the manner of dissemination refers to this loss of control. It does not refer to strong reinforcement as an injury.

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USA minors

Draft regulations to prevent or mitigate addiction-like behaviours if it becomes clear that harm arises.

So it is the associated behaviour not the addiction that is central the problem. As yet unclear.

Conflict is intermediated by the agent, unless they have no agency.

When does a minor have agency in the eyes of the law?

Only if direct harm is done by the strong reinforcement algorithms need anything be done.

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Section 230

Communications Decency Act of 1996

Northern District of California.

Case No. 4:22-md-03047-YGR

MetaYouTubeTikTokSnapchatInstagram

These are active services, not passive.

Adolescent addiction was described in the claim as an injury.

Dismissal standard of proof = plausible only.

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Section 230

- *No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.*
- *... “[n]o cause of action may be brought and no liability may be imposed under any State or local law that is inconsistent with this section.”*
- Otherwise, the platform user might be ‘entitled to rely’.
 - Negligence by omission/failure to benefit.
- Publishing = any editorial decision or service function.
 - Includes strong reinforcement algorithms.
- Any platform-generated content would be immune under the first amendment. Maybe.

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Intangible service liability

- “... intangible thoughts, ideas, and expressive content are not ‘products’ within the realm of the strict liability doctrine.”
 - Unless you are entitled to rely on them, i.e., the provider takes responsibility for you.
- Any harmful attribute which is not essential to the publishing service could be a product with strict liability.
 - Q. But would any of them directly cause strong reinforcement?
 - Q. Is strong reinforcement an injury or an indirect risk factor?
 - So long as the user has agency, the mechanism of harm is intermediated.
 - Proof of lack of irresistible compulsion would usually be obvious.

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Further reading

- CIMCP concerns.
 - https://www.europarl.europa.eu/doceo/document/IMCO-PR-750069_EN.pdf
- EPRS psychology report.
 - [https://www.europarl.europa.eu/stoa/en/document/EPRS_STU\(2019\)624249](https://www.europarl.europa.eu/stoa/en/document/EPRS_STU(2019)624249)
- EU Digital Services Act Regulation (EU)2022/2065.
 - <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R2065>
- Online Safety Act (OSA)(2023).
 - <https://www.legislation.gov.uk/ukpga/2023/50/enacted>
- Draft US State legislation
 - <https://www.capito.senate.gov/imo/media/doc/05-08-2023%20Kids%20Online%20Safety%20Act.pdf>
- California case
 - <https://ia801603.us.archive.org/7/items/gov.uscourts.cand.401490.702.0.pdf> (archive.org)

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