

Stigmatisation of gambling and problem gambling in social media. A mixed-methods topic modelling approach for YouTube comments

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I. BACKGROUND AND AIM OF THE STUDY

Background

- Problem gambling is associated with **stigma** (Carroll et al. 2013)
- A consequence of stigma can be **self-stigma** (Carroll et al. 2013)
- Stigma and self-stigma are considered major **barriers to help-seeking and treatment** (Hing et al. 2013)

Aim of the study

- Examining if **stigmatisation of (problem) gambling** is present in social media and how stereotypes are created in the everyday language of users

II. METHODOLOGY

- **Mixed-Methods approach** combining **machine learning** with **qualitative analysis**
- **Data collection** from YouTube
- Selecting the comments (n=11,813) from **two videos** featuring a person who has overcome problem gambling
- **Pre-processing** the data for text analysis
- Creating an extended **stigma dictionary** based on existing research, some additional terms and embeddings from the collected data (Table 1)
- Guided topic modelling with **BERTopic** (Figure 1)
- Validating the results with **qualitative analysis**

III. RESULTS

- BERTopic classifies 850, the qualitative analysis 666 comments as **stigmatisation of (problem) gambling** (Table 2)
- Users use a **variety of negative attributions and prejudices** to describe problem gambling (Figure 2)
- Problem gambling is seen as a **personal fault**, the **result of personal weakness** and **irresponsibility**
- The comments indicate that **many users do not have an understanding** of problem gambling as an addictive disorder
- There is also a small proportion of **supportive comments**

IV. DISCUSSION & CONCLUSION

- **Social media is a promising channel** to analyse the stigmatisation of (problem) gambling and examine **prevailing prejudices**
- Our **novel framework** yields a large number of stigmatisation incidents
- **Education** about how addiction works is necessary to destigmatise (problem) gambling and prevent self-stigma (Cunningham 2005)
- **Reducing stigma and raising awareness** of treatment can help encourage people to seek help (Brown & Russell 2019)

Terms from the literature (n=3)	Additional terms (n=4)	Embeddings (n=9)
foolish, naive, stupid	addiction, addicted, gambling addicted, gambling addict	guilty, guilt, stupid, responsible, responsibility, weak, weakness, criminal, gambling addicts

Table 1. Extended stigma dictionary

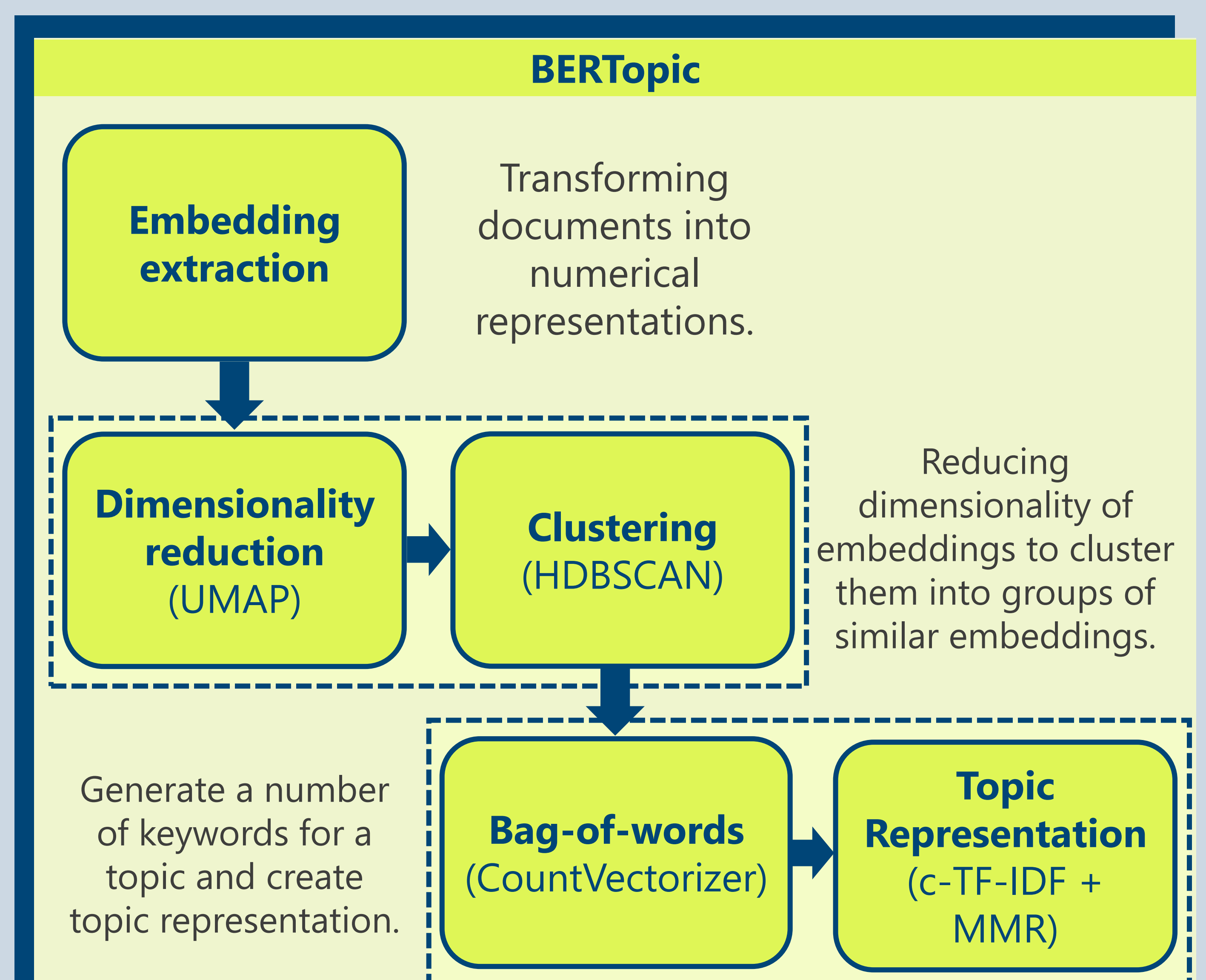


Figure 1. Simplified representation of BERT

	BERT		Qualitative Analysis		Agreement	
	n	%	n	%	Cohen's κ	%
Stigma	850	20	666	16	0.92	78
Support	335	8	168	4	0.98	50

Table 2. Numer of topics classified as stigmatisation, BERT vs. qualitative analysis

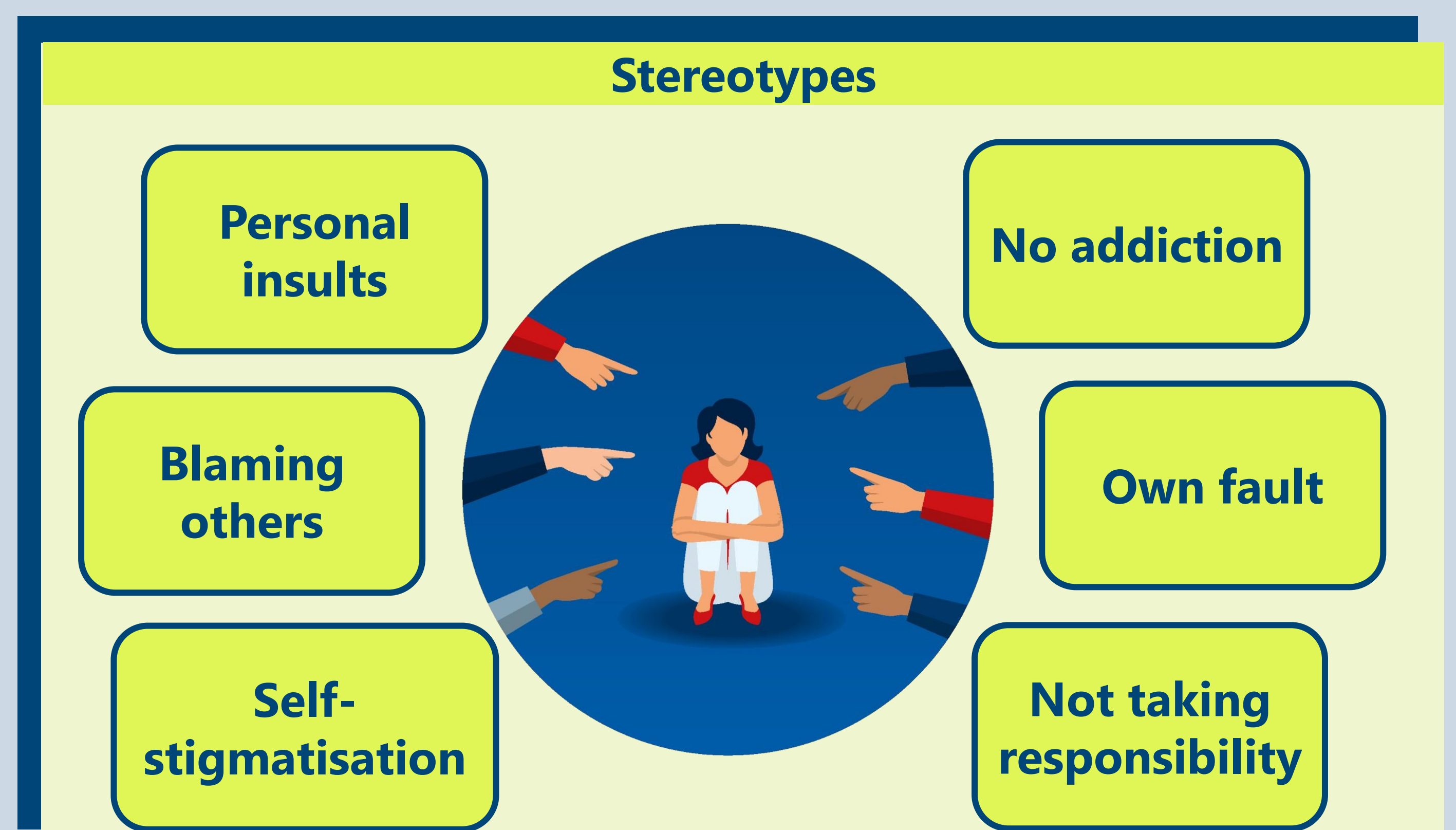


Figure 2. Examples of comments with stigmatising content¹



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¹ Own illustration based on: <https://paritaet-bw.de/leistungen-services/fachinformationen/stigma-kills>