Unmasking Deception: An Exploratory Study of Viewers' Attitudes Towards Romantic Betrayal

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Abstract

Although romantic deception is prevalent in many societies, it may not be readily acceptable to publicly acknowledge approval of acts associated with such deception. This article explores the publicly acknowledged sentiments of viewers of two YouTube channels aimed at the exposure of romantic deceit through two shows for facilitating a "couple switching phones" game. Specifically, we analyse videos where all participants are caught engaging in extra-relationship affairs. Our study reveals a prevailing trend of neutral comments from viewers, indicating a reluctance to openly acknowledge approval or disapproval of the depicted acts. Interestingly, the discussions primarily revolve around tribal issues [specially focused on the Xhosa tribe] rather than focusing on the subject of romantic deception itself.

Keywords: Sentiment Analysis, Romantic Betrayal, YouTube, Corpora, Couples switching phones

1 Introduction

As communities evolve and undergo transformations, perceptions of actions that are considered acceptable also shift and some actions lose their status of acceptability. Similarly, behaviours that are looked down upon can experience shifts in public opinion. In this way, the composition of a community is a fundamental factor in shaping societal expectations and norms (House 2018).

Regrettably, issues of deception and betrayal are not exempt from this longstanding tradition. Throughout history, lies and deception have pervaded our daily lives, constituting an integral part of the human experience (Ein-Dor et al. 2017).

The effectiveness of deception hinges on the ability of the deceiver to go undetected by their intended victim (Boon & McLeod 2001, p. 464). In other words, a skilled liar succeeds in their deception only if the target remains oblivious to the falsehood. Consequently, an extensive literature has been dedicated to studying the detection of deception in various contexts, including self-deception (Smith et al. 2017), extramural activities (Ein-Dor et al. 2017), counselling (Blanchard & Farber 2016), academics (Estep & Olson 2011, Griffin et al. 2015, Jensen et al. 2002, Wowra 2007), and romantic relationships (Boon & McLeod 2001, Reinhardt & Reinhard 2023).

1.1 Relationship Dishonesty

In their study on academic dishonesty and cheating, Jensen et al. (2002) raise several crucial questions that have relevance beyond academia and can be extended to the realm of romantic relationships. One fundamental question is whether there are specific circumstances or conditions in which cheating is deemed acceptable or unacceptable within these relationships. In the end, exploring the existence of varying degrees of acceptability is essential, as certain forms of cheating may be perceived as less severe and, consequently, easier to accept (Dufwenberg & Dufwenberg 2018). For example, in the study conducted by Chappell (2017), it was found that girls held the sentiment that boys are inherently prone to cheating. However, despite expressing dissatisfaction with this behaviour, girls still willingly engaged in romantic relationships with boys, albeit with a general lack of trust. According to Jensen et al. (2002), addressing these inquiries allows for a comprehensive understanding of the intricate nature of cheating behaviour within the context of romantic relationships.

Nevertheless, individuals differ in their acceptance

of cheating (Dunbar et al. 2016, p. 130). While it is commonly acknowledged that different motives for cheating can be ranked differently (Jensen et al. 2002, p. 212), people's acceptance or rejection of cheating is influenced by various factors, including personal values, societal norms, and expectations (Dunbar et al. 2016). This divergence in attitudes towards cheating within romantic relationships may be attributed to the recognition that such relationships do not exist in isolation (Brummett & Steuber 2015, p. 22). Ultimately, the acceptability of cheating may be influenced by the frequency of exposure to or engagement in such behaviour (Jensen et al. 2002, p. 211). It is worth noting that although sexual transgressions may be the deciding factor in overlooking romantic betrayal, such deceptions represent only a fraction of the broader spectrum of deception within romantic relationships (Reinhardt & Reinhard 2023, p. 3).

1.2 Cellphone privacy

In contemporary times, interpersonal communication heavily relies on personal devices like cellphones (Maxwell & Miller 2020). To this end, some people are addicted to and dependent on cellphones (Kruger & Djerf 2017). In fact, a participant in Chappell (2017, p. 594) indicated that a romantic partner may be left because *"he"* does not own a cellphone.

The prevalence of personal devices has made it increasingly convenient to conceal deception within interpersonal relationships, thanks to the implementation of effective security measures such as passwords, fingerprints, and security patterns. Unfortunately, while legal authorities typically require a search warrant to access a suspect's cellphone, regardless of legal considerations (Gershowitz 2016), romantic partners may assert a sense of entitlement to access each other's cellphones, disregarding concerns regarding privacy. Such a sense of entitlement can give rise to challenges associated with *"intimate threats,"* a term coined by Levy & Schneier (2020) to describe instances where one partner in an intimate relationship violates the privacy of the

other's cellphone. Unfortunately, it may be more typical than not that there are indeed secrets hidden in the cellphone. When such privacy is bridged, romantic relationships may suffer the consequences (Scheeren et al. 2018, Warach & Josephs 2021, Whisman 2016).

1.3 Article Aims

This study explores romantic betrayal and examines how it is received within online platforms, specifically YouTube. We aim to analyse the sentiments expressed in the comments section of select YouTube videos to gain insight into how viewers perceive and respond to the portrayal of romantic dishonesty and betrayal.

The subsequent sections of this paper are organised as follows: Section 1.4, we outline the concept of sentiment analysis. Section 2 outlines the methodology employed and describes the materials utilised in our investigation. Our findings are presented in Section 3, followed by a comprehensive discussion of the results and our concluding remarks in Section 4.

1.4 Sentiment Analysis

Sentiment analysis, particularly automated approaches (Khoo & Johnkhan 2018), has garnered significant attention in NLP research (Zhang et al. 2018), and its importance spans various application domains (Dang et al. 2020). By assessing attitudes and capturing a wide array of emotions, sentiment analysis serves as a means to convey sentiments within languages (Mohammad 2017, Qazi et al. 2016). Additionally, its potential for application in areas like image processing and data aggregation further showcases its breadth and impact (Hardeniya & Borikar 2016).

1.4.1 Sentiment Analysis approaches

There are multiple ways of analysing sentiment. Of note are machine learning (ML) approaches encompassing both supervised and unsupervised learning methods, and lexicon-based approaches (Khoo &

Johnkhan 2018, Poria et al. 2016). ML approaches typically adopt a "bag-of-words" strategy (Khoo & Johnkhan 2018). Common machine learning algorithms used for sentiment analysis include Naïve Bayes, Support Vector Machines (SVM), and Random Forests (Jeong & Choi 2022, Wang & Manning 2012). Second, lexicon-based approaches involve utilising a pre-existing lexicon that contains words or multiword terms classified as positive, negative, or neutral, often with sentiment strength or intensity values attached (Almas & Ahmad 2007, Khoo & Johnkhan 2018). By employing lexicon-based approaches and analysing individual opinions categorised as positive, neutral, or negative sentiment, conclusions can be drawn to enhance a particular subject or gain insights into the majority opinion on the matter.

1.4.2 Sentiment Categorisation

Sentiment categorisation is founded upon a positive-negative continuum (Khoo & Johnkhan 2018). The objective of this categorisation is to understand how a specific topic elicits personal emotions and feelings. Therefore, more positive sentiments are defined by expressions indicating favourable opinions or attitudes towards a particular subject (Pang & Lee 2008). Such sentiments manifest in diverse forms of communication (Chen et al. 2018, Kim & Hovy 2004). Conversely, negative sentiments are distinguished by expressions signifying an unfavourable opinion or attributes associated with a particular subject (Liu & Zhang 2012). Note that when expressed appropriately, negative sentiment serves a beneficial purpose as it can stimulate significant discussions and debates. In this way, the ability to express negative emotional states plays a pivotal role in fostering communities, especially in online spaces (Babić et al. 2021). Finally, within the sentiment spectrum, lies neutral sentiments that do not convey a strong positive or negative emotional opinion (Cambria et al. 2013). These sentiments are commonly associated with the provision of objective information, without expressing personal involvement or interest. In

neutral expressions, individuals do not take sides and may not have opinions on the matter at hand.

1.5 Our Hypothesis

This article proposes the hypothesis that there is a greater prevalence of positive sentiments towards the behaviour of women who engage in cheating compared to the more negative sentiments associated with men who cheat.

This hypothesis is derived from contemporary trends, including hashtag movements that portray men in an unfavourable light, such as: #menaretrash, #menaredogs, and similar hashtag trends. From this perspective, boys are "just bad news" (Chappell 2017), and cheat just because they are sex-focused cheaters (Knox et al. 2008), and have no vision beyond their penises (Freydberg 1987, p. 7), and simply just men (Walker 2022).

2 Methodology

This section aims to provide a contextualisation of the content discussed in this article. Initially, a description of the channel is presented, followed by a summary of the video. It is important to note that while YouTube prohibits unauthorised reproduction of its content, the comments section is comprised of user-generated content and is not subject to copyright laws.

2.1 Video 1

2.1.1 Backgound on channel

We specifically targeted the @CMTVSA channel[1]. This channel has garnered over 270,000 subscribers and consistently uploads at least one video daily since the year 2021. The channel focuses on romantic relationships and uncovering deception within them. By providing an extensive variety of shows, the channel aims to address numerous relationship-related issues. For example, it covers topics like (i) finding a partner through "*Ngiyakufuna*" (I want you), (ii) exploring the dynamics of polygamous relationships in "*Isthembu*" (polygamy), (iii) testing

loyalty in their "*Niyathembana na*?" (Do you trust each other?), (iv) navigating breakups when necessary in "*Angisakufuni*" (I do not want you anymore), where relationships are ended for reasons other than infidelity, (v) openly pursuing someone else's partner if deemed appropriate in "*Stena*" (partner poaching), (vi) seeking the return of lost love in "Love back", and (vii) finding closure when reconciliation is not possible in "Closure".

2.1.2 The Video

We pay special attention to the couples switching phones playlist. The videos featured on this playlist challenge the contention by Ein-Dor et al. (2017) that "it takes an insecure liar to catch a liar." Instead, these videos demonstrate that the intervention of a third party, the show, is necessary to expose hidden deception through facilitating intimate threats. Interestingly, when one partner feels suspicious due to their partner's use of their cellphone in their presence (Roberts & David 2016, p. 134), they are more inclined to readily agree to participate in the loyalty test.

In the specific video under examination[2], the couple has been together for four months. While the lady is excited at the opportunity to go through each others' phones, the gentleman is hesitant. The gentleman begins by searching the female partner's phone with the search term and finds a heart sent to another male, indicating potential romantic dishonesty. When the roles are reversed and the lady searches the male partner's phone, she uncovers the names of multiple females under the search term "It was nice seeing you." Initially, the gentleman denies any romantic dishonesty, but eventually, it becomes evident that both parties have been unfaithful. Consequently, the lady responds with anger and violence.

The video is 22 minutes and 30 seconds long. It was shot in daylight in the streets of Johannesburg. To date, it has been viewed 205 000 times. It contains a total of 920 comments with 3900 likes and zero dislikes.

2.2 Video 2

2.2.1 Background on channel

The second channel we examined is @JosephDary[3] which has over 220,000 subscribers. The channel maintains a weekly upload schedule, releasing new videos every Friday. The channel also centres around the theme of romantic relationships and investigates deception within them. The channel features a series of videos where the presenter approaches couples they encounter on the street and proposes a challenge in which the couple would exchange their phones for a brief duration of 60 seconds.

2.2.2 The video

The second video was recorded during a 32-minute nighttime[4]). Initially, the presenter attempts to create a comfortable atmosphere by making jokes, but the man appears disinterested and requests the presenter to be more direct. Subsequently, the presenter proposes the switching phones challenge to the couple. The couple searches for specific terms on each other's phones, such as "Morning After Pill," "Sexy," and "I miss you" on WhatsApp. First, the gentleman discovers that the lady exchanges sexy pictures with a male acquaintance whom she claims is her best friend, and they occasionally refer to each other as "baby". This revelation agitates the gentleman, and he doubts the lady's explanation. The presenter then requests the gentleman to hand over his phone for his turn. The lady searches for the same terms and uncovers that her boyfriend has impregnated a woman. One twist in this channel is that the presenter offers to kiss the ladies in order to make their boyfriends jealous. The female agrees to kiss the presenter.

2.3 Data Collection and Analysis

To extract YouTube comments, we employed *Python* (version 3.1.1) and utilised the *Google Cloud YouTube API* Version 3. Our script retrieved all the comments and stored them in a spreadsheet for further analysis. The comments were organised in sep-

arate lines, with each new comment and response appearing on a new line. We also collected emoji data. Note that our focus was solely on the comments themselves, as such, we did not gather any information regarding the commentators.

Video 1: The text was pre-processed manually to correct issues such as changing (') to the apostrophe ('). A total of 174 counts were identified. We also changed (") to (") and ("), a total of 130 such errors were identified and fixed. **Video 2**: Similar to Video 1, the comments mined from the second video also contained non-textual noise in place of expected punctuation. To this end, a total of 260 replacements were made for (') to the apostrophe ('). Furthermore, a total of 237 changes were effected for (") to (") and ("). No Further cleaning was necessary.

3 Findings

3.1 Frequently used words

The frequently used words in the comments are presented in Figure 1 for Video 1 and Figure 2 for Video 2. The frequencies of these words indicate that the comments of Video 1 are focused on the tribe of amaXhosa as opposed to the issue of romantic deception. There is also a focus on the presenter instead of the participants. The reasons for the shifted focus from the topic of deception to the issue of tribalism and the focus on the presenter are currently unknown.

Given the periodical kiss that the male presenter in Video 2 gives to selected female victims of romantic deceit, the comments of the second video are skewed towards the act of kissing. In this way, the act of kissing is seemingly regarded as an act of deserved revenge and not cheating. Note that more research is needed to ascertain this observation. Nonetheless, similar to Video 1, the comments also tend to focus a lot on the presenter. Furthermore, there are also a number of comments that are focused on the tribe of amaXhosa in this video.

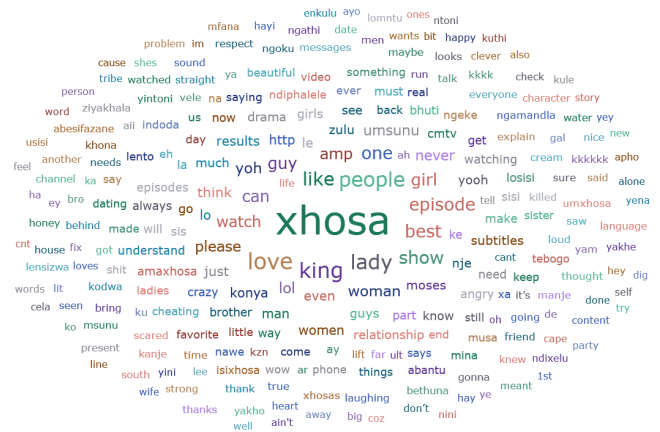It is interesting to note that for both wordclouds, there is no prevalence of cheating and cheating-

Figure 1: A word cloud for concepts frequently used in the comments of video 1.

related vocabulary.

3.2 Sentiments

We utilised Python 3's *vaderSentiment* package to analyse sentiment intensity, which provides four sentiment types: negative, neutral, positive, and compound sentiments. Our analysis excludes sentiments towards the presenters of the show, focusing solely on the sentiments expressed towards the male and female interviewees in each episode. To identify sentiments towards each participant, we aggregated synonyms for male and female references and employed group names for analysis purposes. Ad-
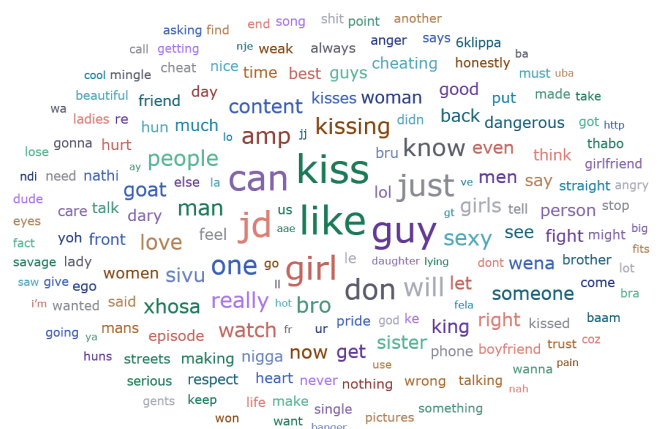

Figure 2: A word cloud for concepts frequently used in the comments of video 2.

	Negative		Neutral		Positive		Compond	
	V1	V2	V1	V2	V1	V2	V1	V2
Male	.10	.15	.67	.68	.23	.18	.41	.18
Female	.10	.11	.67	.65	.23	.24	.41	.37
Xhosa	.09	.12	.67	.67	.24	.21	.49	.32
Mean	.09	.12	.67	.67	.24	.21	.44	.32

Table 1: Sentiment analyses for Video 1 and Video 2

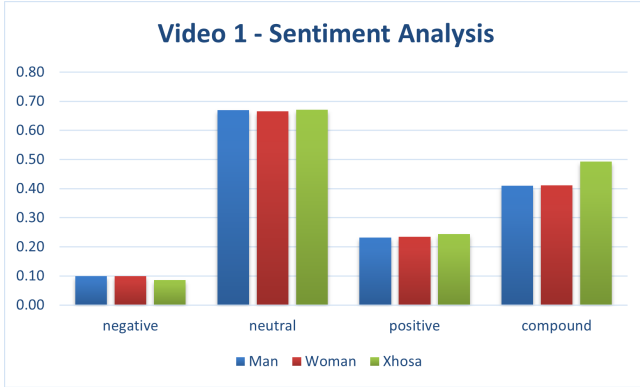*Figure 4: A comparison of sentiments for Video 2.*

Figure 3: A comparison of sentiments for Video 1.

ditionally, we observed a significant occurrence of tribe-based comments, prompting us to investigate the impact of 'tribe' on sentiments regarding the act of cheating.

In Video 1, the majority of the comments are in vernacular, whereas in Video 2, the majority of the comments are in English. As expected, English sentiments tend to be more precise and decisive compared to the vernacular ones. For instance, when analyzing statements like "Xhosa women are the best [heart emoji]," the sentiment analyser indicates a strong positive sentiment (neutral = 0.35, positive = 0.65) without any hint of negativity.

In addition to English sentiments, the model correctly identified non-English sentiments, such as the Zulu statement: *"Come Ginger. Wahle wabamba u cherry kanje. Uqale nini ukuba ngubody guard. Sengiyabona I type yakho Ginger"* (which roughly translates to "Come on Ginger. So you had to hold a lady like that. Since when are you a bodyguard? I now see your type, Ginger.") The model correctly classified this statement as neutral, as there are no explicit sentiments of disdain or approval expressed in the
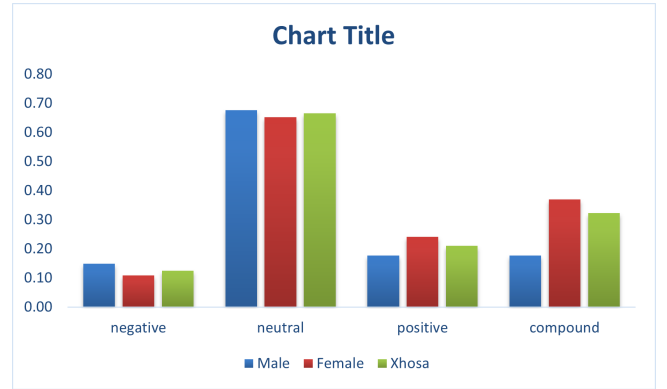
text. However, employing a critical discourse analysis approach would reveal an underlying sarcasm in the reference to King Ginger being a bodyguard merely to have an excuse for inappropriate physical contact with the lady.

We acknowledge the limitations of using automatic sentiment detection since not all identified sentiments are precise. For instance, some sentiments, like the statement *"But Xhosa woman ayi ngiyababonga"* (translating to "But Xhosa women, I thank them"), are identified as neutral by the model. It may appear to suggest expressing gratitude for something. However, a human annotator would have performed context-based semantic analysis to determine the true sentiment of the comment.

We conducted a comparison of the sentiments expressed in the video 1 comments towards three categories: "woman," "man," and "isiXhosa." The sentiment identifier identified a total of 235 statements with sentiments towards "woman," 464 statements with sentiments towards "man," and 182 statements with sentiments towards "isiXhosa." The graphical representation of this sentiment comparison is depicted in Figure 3.

We conducted a similar comparison of the sentiments expressed in the video 2 comments towards three categories: "woman," "man," and "isiXhosa." The sentiment identifier identified a total of 84 statements with sentiments towards "woman," 205 statements with sentiments towards "man," and
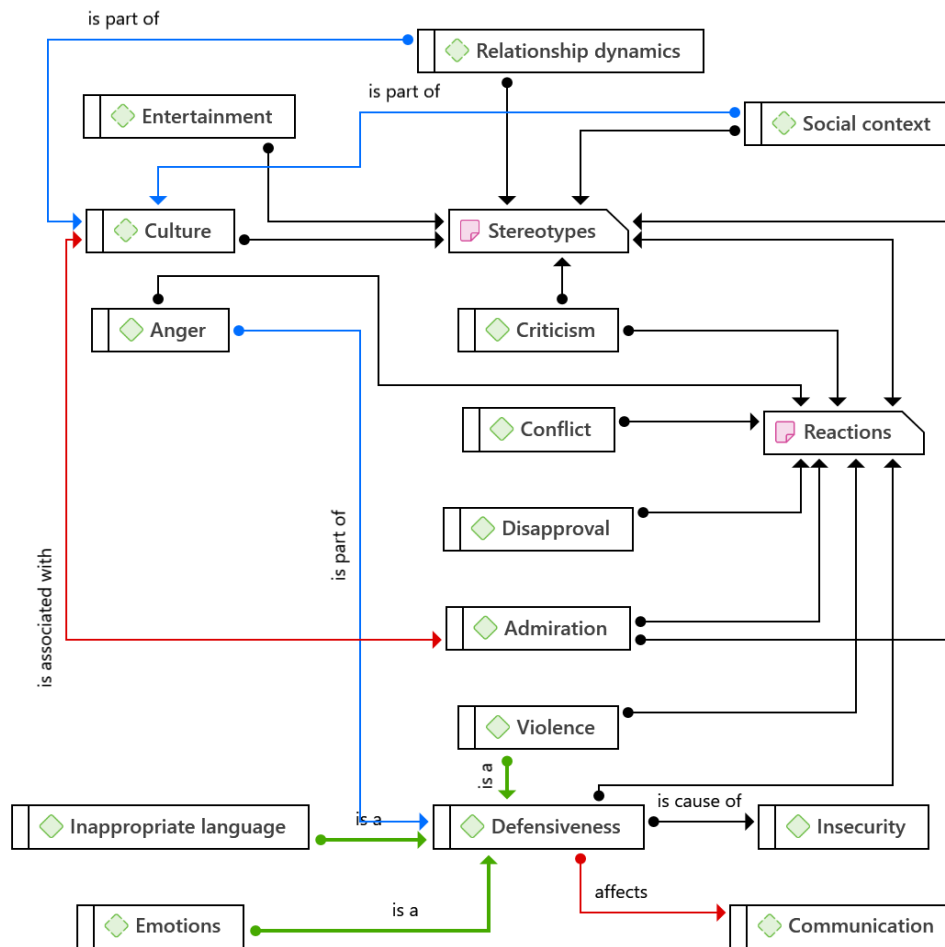
Figure 5: A network analysis of themes

39 statements with sentiments towards "isiXhosa." The graphical representation of this sentiment comparison is depicted in Figure 4.

3.3 Thematic analysis

We employed the Artificial Intelligence code generation functionality of *Atlas.ti* (version 23.1.2) to generate thematic codes from the audience comments for both sources. The codes were then verified through manual verification of the coded comments. A network of the codes is presented in Figure 5.

We group the codes under two main themes. First, we considered reactions to the act of cheating. Criticism, conflict, disapproval, admiration, violence and defensiveness are typical reactions to cheating.

The defensive reactions cause conflict, and negative emotions, and lead to the use of inappropriate language. Communication is also affected whereby conflict resolutions become unattainable. Cheating, as observed in the videos, involves dishonesty and deception, leading to communication breakdown. Interestingly, some comments are more inclined to the admiration of either the beauty or the reaction of the lady although both participants commit infidelity. In this way, the comments choose sides.

The stereotypes group of codes includes social contexts which are driven by culture and affect expected relationship dynamics. The Xhosa tribe is stereotyped as being very loud, disrespectful, and stubborn. Seemingly, the reactions of the Xhosa females are not taken as unusual given their tribal stereo-

types. With such an interplay between culture and curiosity regarding amaXhosa, the comments tend to respond with positive feedback and excitement while ignoring that both ladies have cheated. It is not clear whether their being Xhosa is more important than their infidelity.

Nonetheless, some comments are more geared towards the defence of the gentlemen. For instance, one comment states: "Men have pride and ego. Doing something like that could hurt that man's pride and ego making him feel vulnerable, weak, and disrespected". This is a stereotypical reaction to instances where a male is a victim of cheating. Such comments also ignore the fact that the males cheated.

4 Conclusions

This article discussed the sentiments of YouTube comments towards the discovery of the act of romantic dishonesty in random relationships. We utilised two sets of data from two video sources that create similar content where relationships are tested for dishonesty.

We initially hypothesised that we would observe more positive sentiments towards the cheating female as opposed to the cheating male given the recent trends against male behaviour, particularly, the #hashtag movement. Our findings refute this hypothesis in that there are minor differences in the positivity and negativity of comments towards cheaters of both sexes. Interestingly, most comments indicate a neutral stance.

Such findings open avenues for future research. For example, future research could ascertain the causes of neutral stances towards the discovery of cheating. An illustrative case could be the use of videos where only one gender cheats. In this article, we acknowledge that the choice of videos where both partners cheat may have had an influence on neutral sentiments.

Since the comments are neutral, we consider the possibility that the comments may be influenced by the tribal background of the females since many comments present positive stereotypes about Xhosa people. Such positivity towards the Xhosa tribe may have been influenced by the audience's perceptions and heightened focus on these stereotypes rather than the females' actions.

Future studies could explore how sentiments would differ if the cheating women are from tribes other than amaXhosa. Furthermore, it could be interesting to investigate the tribal influence on the comments by analysing comments from videos where both partners are from the same tribe. Such inquiries could unveil the impact of tribes and associated stereotypes on the sentiments. In this way, conducting a comparison study between different tribes could provide valuable insights into how cheating is perceived, and what sentiments are given based on the tribal affiliation of the individuals involved.

We acknowledge the limitations imposed by our disregard for commenter identities. Perhaps future studies that employ YouTube videos for sentiment analyses could benefit from an exploration of commenters' identities to determine whether tribal affiliation has an impact on the sentiments observed from the comments.

More importantly, we recognise the limitations of our sentiment analyses due to the inability to analyse contextual sarcastic comments. If such analyses were to be considered, it is possible that our results could differ somewhat.

Moreover, it is important to note that apart from the presenter's actions and skills, various factors may contribute to eliciting reactions from the audience. These factors include the sexuality of the participants, particularly concealed sexual preferences such as closeted bisexuality or veiled homo- or heterosexuality.

Furthermore, participant reactions, such as displays of emotion like crying, also impact the sentiments. Furthermore, plot twists introduced towards the end of the video are among the elements that influence viewers' reactions. However, none of these factors were considered in this exploratory study.

Notes

[1] The @cmtvsa channel can be accessed at `https://www.youtube.com/@cmtvsa`

[2] The first video can be accessed at `https://www.youtube.com/watch?v=4c2MrWBOl7A`

[3] The @JosephDary channel can be accessed at `https://www.youtube.com/channel/UC_3ivEGgUtBGnzlzdVVf2nQ`

[4] The second video can be accessed at `https://www.youtube.com/watch?v=NqkZg5_gCuU`

Acknowledgements

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