

SEMANTICS ANALYSIS OF SENTIMENT POLARITY IN HEALTH NEWS HEADLINES: A STUDY OF THE JAKARTA POST

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Abstract

This study explores the use of semantics in analyzing sentiment polarity in a health news headline published by The Jakarta Post, entitled “Four Reasons to Try to Get a Better Night’s Sleep.” Health news can influence readers’ understanding and behavior, making it important to examine how meaning is conveyed. The purpose of this study is to identify the sentiment polarity expressed in the headline and to explain how lexical and contextual elements shape this meaning. A qualitative descriptive method is applied, focusing on semantics as the main analytical approach. The data consist of one selected headline, supported by relevant expressions from the article to strengthen interpretation. The analysis includes identifying key words, interpreting their meanings, examining context, and determining sentiment polarity based on semantic reasoning. The findings show that the headline mostly conveys positive polarity, highlighted by words such as “better,” “try,” and “reasons,” which express improvement, encouragement, and logical persuasion. Negative expressions in the article, such as “risk” and “mental health issues,” are used as contrasts to highlight the benefits of enough sleep rather than create a negative tone. This study shows that sentiment polarity in health news headlines depends not only on explicit positive or negative words but also on how meaning is built through context and evaluative language, helping readers understand the message more clearly.

Keywords: Semantics, Sentiment Polarity, Health News, Headline Analysis, The Jakarta Post

INTRODUCTION

Language conveys meaning not only through individual words but also through how words interact in context. In semantics, researchers study how lexical items and their combinations communicate meaning, including attitudes, evaluations, and sentiments. Sentiment polarity is a key concept in this area, referring to the tendency of expressions to convey positive, negative, or neutral orientations. While previous research on sentiment

polarity has often emphasized automated classification or word-level analysis, these approaches may overlook how meaning is constructed through semantics, particularly in specialized domains such as health news. Contextual interpretation is critical; for instance, the word “positive” may carry favorable meaning in everyday language but may indicate a medical concern in health reporting, demonstrating that polarity depends on semantic context rather than on individual words alone. (Villanueva-Miranda et al., 2025)

Headlines serve as the first point of contact between readers and news content, influencing perception, engagement, and understanding. The sentiment expressed in a headline can shape readers’ expectations and affect how they interpret the following article. Studies on sentiment polarity in news headlines show that tone influences readership and engagement, yet much of this research relies on lexical or automated sentiment classification without addressing the semantic processes that underpin polarity construction. (Diaz, 2021)

Health news is particularly important because it communicates information that can influence readers’ well-being and decision-making. Headlines in this genre often combine informative and persuasive elements, using lexical and contextual cues to convey sentiment. Understanding how semantic meaning shapes sentiment polarity in health news headlines can provide insights into how readers perceive and interpret health-related messages. The headline selected for this study, “Four Reasons to Try to Get a Better Night’s Sleep”, was chosen because it exemplifies a typical health news headline that conveys information while encouraging readers to take action, allowing analysis of how meaning and sentiment interact.

Based on this context, the research questions guiding this study are:

- 1) What types of sentiment polarity are expressed in the selected health news headline?
- 2) How do lexical choices and contextual usage contribute to the construction of sentiment polarity?
- 3) How does semantics analysis help explain readers’ interpretation of sentiment in health news headlines?

The aim of this study is to conduct a detailed semantics analysis of sentiment polarity in the selected headline, examining how lexical items and contextual factors work together to shape overall sentiment. This approach provides a deeper understanding of how meaning is constructed and communicated in health news, moving beyond simple word-level or automated sentiment classification.

RESEARCH METHODS

Research Design

This study employs a qualitative descriptive research design, focusing on the semantics analysis of sentiment polarity in a health news headline. A qualitative approach is chosen because the study aims to explore how meaning is constructed in language, rather than measuring numerical frequency or applying automated sentiment classification. By examining the lexical choices and contextual usage in the selected headline, this study provides an in-depth understanding of how sentiment polarity is expressed through semantics.

Participants and Data Source

The primary data for this study consist of one health news headline from The Jakarta Post, titled “Four Reasons to Try to Get a Better Night’s Sleep” (March 14, 2020). The headline was selected because it represents a typical health news headline that combines informative and persuasive language, allowing for analysis of both lexical meaning and contextual influence on sentiment. Supporting textual elements from the article are also included to provide context and strengthen interpretation of semantic meaning.

No human participants were involved in data collection, as the focus of this research is textual analysis.

Data Analysis

Data analysis is conducted through a semantics-based approach in several steps:

1. Lexical identification: Key words and phrases in the headline are identified for their potential contribution to meaning and sentiment.
2. Semantic interpretation: Each lexical item is analyzed in terms of its lexical meaning, connotations, and evaluative function.
3. Contextual analysis: The context of the headline and supporting article content is examined to understand how meaning is shaped by surrounding text.
4. Polarity determination: Based on the semantic and contextual analysis, sentiment polarity is classified as positive, negative, or neutral.
5. Synthesis: Overall sentiment polarity is interpreted by considering both lexical choices and contextual factors, highlighting how semantics contributes to the readers’ perception.

This method ensures that sentiment polarity is not determined solely by isolated words, but by how meaning is constructed in context, providing a nuanced and reliable interpretation.

Ethical Consideration

Although this study involves textual data only, the research maintains academic integrity by properly citing sources, ensuring that all references are accurately reported and verifiable.

FINDING AND DISCUSSIONS

1. Lexical Analysis of the Headline

The headline analyzed in this study is:

“Four Reasons to Try to Get a Better Night’s Sleep”

Following the analytical procedures outlined in the Methods, key lexical items were identified and examined in terms of their semantic meaning and contribution to sentiment polarity.

Table 1. Lexical Analysis of the Headline

Word/Phrase	Lexical Meaning	Semantic Function	Polarity
Four	Numerical value	Organizes information	Neutral
Reasons	Justification	Rational persuasion	Positive
Try	Attempt	Encouragement	Positive
Better	Comparative improvement	Positive evaluation	Positive
Night’s Sleep	Rest activity	Health-related state	Positive

The word “four” functions as a numerical marker that organizes the structure of the headline. Semantically, it does not encode evaluative meaning, as it neither expresses positive nor negative judgment. Therefore, it is classified as neutral. However, its presence contributes to clarity and readability, which indirectly supports the persuasive structure of the headline.

The noun “reasons” encodes justification and logical explanation. It suggests that the recommendation presented is supported by evidence, which increases the credibility of the message. This creates a persuasive effect that aligns with positive polarity, as it encourages readers to view the information as reasonable and beneficial.

The verb “try” functions as a form of soft encouragement. Rather than imposing obligation, it invites the reader to consider taking action. This interpersonal meaning reduces resistance and creates a supportive tone, which contributes to positive sentiment.

The adjective “better” plays a central role in constructing sentiment polarity. As a comparative form, it implies a transition from a less desirable condition to a more desirable one. In the context of health discourse, this lexical choice encodes a positive evaluation, suggesting improvement in physical and mental well-being.

The phrase “night’s sleep” refers to a state of rest associated with health and recovery. While it may appear neutral in isolation, in this context it carries positive connotations, as the article emphasizes sleep as an essential part of good health. Its combination with “better” strengthens the overall positive meaning.

The lexical pattern shows that the headline is dominated by positive evaluative meaning, with only one neutral element. This indicates that the headline is intentionally constructed to promote a positive health message through its lexical choices.

2. Contextual and Semantic Interpretation

To provide a deeper understanding, the headline is analyzed in relation to the content of the article. This step follows the contextual analysis described in the Methods, where meaning is interpreted through interaction between lexical items and surrounding text.

One important sentence in the article states:

“Sleep is now known to be an essential part of good health.”

The phrase “essential part” encodes necessity rather than optionality. The adjective essential indicates that sleep is fundamentally required for maintaining health. This strengthens the meaning of “better night’s sleep” in the headline, suggesting not only improvement but also the fulfillment of a necessary condition. As a result, the polarity remains positive.

Another sentence highlights negative consequences:

“A bad night’s sleep has a negative effect on gut health.”

The phrase “negative effect” encodes an unfavorable outcome, indicating harm to the body. However, this negative expression does not change the overall polarity of the headline. Instead, it functions as a contrastive element, emphasizing the importance of achieving better sleep. The negative meaning supports the positive message by showing what happens in the absence of improvement.

A similar pattern can be observed in the sentence:

“Those who got the least sleep had the greatest risk of developing mental health issues.”

The phrase “greatest risk” encodes a high probability of undesirable outcomes. The noun risk introduces a negative evaluation, while mental health issues further reinforces this meaning. Semantically, this creates a strong negative representation of insufficient sleep. However, within the broader context, this negativity strengthens the argument of the headline by motivating readers to avoid such risks.

In contrast, the article also presents explicitly positive expressions, such as:

“It could improve your gut health.”

The verb “improve” encodes a process of positive change, indicating movement toward a better state. This meaning directly aligns with the word “better” in the headline, reinforcing its evaluative function and strengthening the positive polarity.

Another supporting sentence states:

“Getting enough shut-eye could have a positive effect on our mental health.”

The phrase “positive effect” explicitly encodes beneficial outcomes. This reinforces the overall semantic pattern in which sufficient sleep is associated with positive consequences.

From a semantic perspective, the article constructs meaning through a contrastive structure:

- Negative expressions (risk, negative effect, lack of sleep) highlight potential harm
- Positive expressions (better, improve, positive effect) emphasize benefits

Despite the presence of negative expressions, the dominant interpretation remains positive because the text consistently directs attention toward improvement and desirable outcomes.

3. Semantic Patterns and Polarity Construction

Beyond individual lexical items and contextual interpretation, the article also demonstrates consistent semantic patterns that contribute to the construction of sentiment polarity. These patterns reveal how meaning is systematically organized to support the positive message of the headline.

One dominant pattern is the use of contrastive meaning, where negative expressions are used to highlight the benefits of positive conditions. For example, expressions such as “negative effect,” “greatest risk,” and “lack of sleep” present undesirable outcomes associated

with insufficient sleep. Semantically, these expressions encode negative evaluation by emphasizing harm, danger, or loss. However, rather than shifting the overall sentiment to negative, they function to strengthen the positive message by creating a clear contrast between harmful and beneficial conditions.

Another pattern is the use of causal and resultative expressions, such as “improve,” “positive effect,” and “more likely to.” These expressions indicate a cause-and-effect relationship between sufficient sleep and positive outcomes. The verb “improve” encodes a process of positive change, while “positive effect” explicitly signals beneficial results. Similarly, “more likely to” suggests increased probability of desirable behaviors, such as curiosity and engagement. These semantic constructions reinforce the idea that better sleep leads to positive consequences.

In addition, the article employs evaluative language to guide readers’ interpretation. Words such as “essential,” “better,” and “sufficient” encode judgments about what is desirable or necessary. The adjective “essential” indicates necessity, while “better” suggests improvement, and “sufficient” implies adequacy. Together, these lexical choices construct a clear evaluative framework that positions good sleep as a positive and necessary condition.

These patterns demonstrate that sentiment polarity is not constructed randomly, but through systematic semantic strategies. The interaction between contrast, causality, and evaluation creates a coherent message that consistently promotes positive health behavior.

4. Overall Polarity and Semantic Implications

By synthesizing the lexical and contextual analyses, it can be concluded that the headline expresses a dominant positive sentiment polarity. This conclusion is supported by several findings.

First, the lexical analysis shows that most key words carry positive evaluative meaning, particularly “better,” “try,” and “reasons.” Second, the contextual analysis demonstrates that positive meanings are consistently reinforced throughout the article, especially through expressions such as “improve” and “positive effect.” Third, negative expressions function as contrastive elements, emphasizing the importance of positive outcomes rather than defining the overall sentiment.

These findings indicate that sentiment polarity is not determined solely by individual words, but by semantic relationships and contextual interpretation. This supports the idea that meaning is constructed through interaction between lexical choices and discourse context.

In addition, the analysis shows that health news headlines are strategically constructed to influence readers' perception. By combining positive evaluative language with contrastive negative information, the headline encourages readers to adopt healthier behavior. This demonstrates that sentiment polarity is closely related to communicative purpose, not only linguistic form.

Overall, this study highlights the importance of using a semantics-based approach in sentiment analysis, as it provides a deeper understanding of how meaning and polarity are constructed in real texts.

CONCLUSION

This study set out to analyze the sentiment polarity of a health news headline by focusing on its semantic features. Based on the analysis, it can be concluded that the headline "Four Reasons to Try to Get a Better Night's Sleep" expresses a dominant positive polarity. This is mainly shown through the use of evaluative lexical items such as "better," "try," and "reasons," which encourage readers and present the message in a persuasive and supportive way.

The findings also show that meaning is not constructed only at the word level. Through contextual analysis, it becomes clear that the article reinforces the positive polarity by presenting both positive and negative expressions. Positive expressions, such as "improve" and "positive effect," highlight the benefits of good sleep, while negative expressions, such as "risk" and "negative effect," are used to show the consequences of poor sleep. These negative expressions do not change the overall polarity but instead function as contrastive elements that strengthen the positive message.

The study finds that the construction of sentiment polarity is supported by consistent semantic patterns, including contrast, causality, and evaluation. These patterns help organize the message in a way that guides readers toward a positive interpretation. This shows that sentiment polarity is closely related to how meaning is structured in context, not just to individual words.

This study highlights the importance of using a semantics-based approach in analyzing sentiment polarity, especially in health news texts. By examining how meaning is constructed through lexical choices and context, the analysis provides a deeper understanding of how headlines can influence readers' perceptions.

For future research, it is suggested that similar studies analyze a larger number of headlines or compare different types of news texts to provide broader insights into how sentiment polarity is constructed in media discourse.

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