The Psycholinguistic Study of Semantic Priming Experiment: Taylor Swift Song Titles

Alvindo Mahendra[1], Sagung Shanti Sari Dewi[2], Luh Putu Laksminy[3]
[1,2,3] English Department, Udayana University
e-mail : alvindo8751@gmail.com

Abstrak

Penelitian ini mengkaji *priming* semantik menggunakan judul-judul lagu Taylor Swift sebagai stimulus. Penelitian ini meneliti bagaimana judul-judul tersebut mempengaruhi asosiasi peserta dengan kata-kata terkait. Informasi dari 300 pendengar Taylor Swift saat ini dikumpulkan menggunakan pendekatan penelitian kuantitatif. Data dari peserta dikumpulkan menggunakan Google Form yang disebar ke beberapa media sosial. Peserta menilai keterkaitan pasangan kata dari nama lagu dan kata-kata terkait. Temuan menunjukkan berbagai tingkat priming semantik, dengan beberapa judul menampilkan hubungan yang kuat dan yang lainnya lebih lemah. Temuan ini menekankan dampak potensial musik terhadap asosiasi semantik dan memajukan pemahaman kita tentang mekanisme kognitif yang terlibat dalam pemahaman bahasa.

Kata kunci*: Priming Semantic, Taylor Swift, Judul-Judul Lagu*

Abstract

This study examines semantic priming using Taylor Swift song titles as stimuli. The study examines how these titles affect participants' associations with related words. Information from 300 current Taylor Swift listeners was gathered using a quantitative research approach. The data from the participants were collected using a Google Form spread to several social media. Participants assessed the relatedness of word pairs of song names and related words. The findings suggest different degrees of semantic priming, with some titles displaying solid relationships and others weaker ones. These findings emphasize the possible impact of music on semantic associations and advance our understanding of the cognitive mechanisms involved in language comprehension.

Keywords*: Semantic Priming, Taylor Swift, Song Titles*

INTRODUCTION

The multidisciplinary area called psycholinguistics looks into the complex interaction between language and the human mind. To comprehend the fundamental cognitive processes involved in these language-related behaviors, it investigates how people learn, use, and produce language (Levelt, 1989). Semantic priming is a fascinating phenomenon in psycholinguistics. According to Meyer and Schvaneveldt (1971), semantic priming is a phenomenon in which previous exposure to a semantically relevant stimulus makes it easier to process and recognize a future stimulus that is semantically related.

Understanding the cognitive processes underlying semantic priming in the context of song titles can have implications for various domains. For instance, understanding how specific words or phrases in song titles can activate related concepts in marketing and advertising may inform strategies for creating memorable and persuasive content (North, 2018). Furthermore, gaining insights into the semantic associations triggered by song titles can enhance our understanding of how music impacts our cognitive and emotional states (Koelsch, 2014).

Semantic priming in the context of song titles can have implications for various areas of the cognitive mechanisms underlying it. For instance, knowing how certain words or phrases in song titles can activate associated thoughts may help marketers and advertisers develop strategies for developing memorable and persuading material (North, 2018). Recognizing the semantic linkages

sparked by song titles can help us better comprehend how music affects our mental and emotional states (Koelsch, 2014).

The current study employs an intriguing approach by using song titles from the discography of Taylor Swift as stimuli to delve into the fascinating effects of semantic priming. Taylor Swift, a globally recognized singer-songwriter, has carved out a significant place in the music industry with her evocative lyrics and memorable melodies. Throughout her career, she has produced a vast array of songs that have resonated with a broad audience, addressing a diverse range of subjects and evoking a spectrum of feelings.

These songs, each unique in its theme and message, serve as a rich source of stimuli for this experiment. The song titles, imbued with various connotations and associations, and the music videos accompanying the songs are expected to trigger related ideas in the participants' minds. By using Taylor Swift song titles as stimuli, the research seeks to explore how these titles, each carrying a wealth of semantic associations, can prime specific thoughts, emotions, or memories in the participants. This could provide valuable insights into the intricate workings of the human mind.

In the following sections, the researcher will review relevant literature on semantic priming, discuss previous studies utilizing music-related stimuli, describe the methodology employed in the experiment, present and analyze the results, and discuss their implications. By examining the semantic priming effects of Taylor Swift song titles, this study could have far-reaching implications in cognitive psychology, linguistics, and even artificial intelligence.

"Semantic Priming of Familiar Songs" by Sarah K. Johnson and Andrea R. Halpern was the first study that was examined. Johnson and Halpern investigated the semantic priming effects of well-known songs. They wanted to determine if listening to well-known songs might prime related concepts and improve semantic processing. The participants were given a list of target words, followed by a song with a semantically relevant prefix or without one. The findings showed that familiar songs, as opposed to irrelevant songs, enhanced the processing of semantically related target words. This research implies that musical stimuli like well-known songs can also trigger semantic priming in addition to linguistic inputs. Although Johnson and Halpern's study provides valuable insights into the semantic priming effects of familiar songs, there are still some gaps in the literature. For example, their study focused on general semantic priming effects and did not specifically investigate the impact of song titles as prime stimuli. This presents an opportunity for the current research to contribute by examining how Taylor Swift song titles specifically prime related concepts, extending the understanding of semantic priming with music-related stimuli.

"The Effectiveness of Semantic Priming to Overcome the Tip of the Tongue Phenomenon" by Ira Septira Dewi Hairus Salikin explored the effectiveness of semantic priming in overcoming the tip-of-the-tongue (TOT) phenomenon. TOT is a state where individuals are unable to retrieve a known word from memory but have a strong feeling that they will eventually recall it. The study investigated whether exposing participants to semantically related words could facilitate the retrieval of target words during TOT experiences. The findings indicated that semantic priming significantly increased the rate of successful retrieval during TOT, suggesting that priming-related concepts can alleviate the difficulty in word recall. While Salikin's study contributes to understanding semantic priming and its application in overcoming TOT experiences, there is still room for further investigation. Specifically, there is a gap in the literature regarding the use of music-related stimuli, such as Taylor Swift song titles, in the context of TOT experiences. This research can fill this gap by exploring how song titles as primes influence word retrieval during TOT states, providing novel insights into the role of music-related semantic priming in overcoming word-finding difficulties.

METHOD

The data in this study were analyzed using a quantitative approach. Through the systematic use of numerical data and statistical techniques, quantitative research examines social or human problems (Creswell, 1994). It entails putting theories or hypotheses to the test by looking at the correlations between variables, quantifying them using numbers, and using statistical analysis to make inferences and predictions. This approach seeks to identify and generalize correlations, trends, or patterns in the data.

A variety of methods, including surveys, questionnaires, experiments, observations, and secondary data analysis, are included in quantitative research. In quantitative research, surveys and questionnaires are frequently used to gather standardized data via structured questions with preset response alternatives (Babbie, 2016). These techniques enable effective information gathering, analysis, and participant response comparison. A Google Form was used as a structured questionnaire to collect data. Due to its simplicity of administration, data management capabilities, and participant accessibility, Google Forms is frequently utilized in quantitative research (Smith, 2017). The usage of online surveys ensures a broader reach and diverse participant pool because it removes the necessity for physical presence and enables quick data collection.

The researcher's Google Form was used to conduct the experiment online. Due to its accessibility and ease, online platforms have grown in popularity in quantitative research (Buchanan et al., 2017). With flexibility and less logistical burden from the physical location, the online approach allowed participants to experiment in the privacy of their own homes. The Google Form was spread through several social media such as Twitter, WhatsApp, and Instagram. For this study, a sample of 300 people was collected from various social media platforms, mainly Twitter. The participants were picked based on one central set of requirements, which is that they are frequent listeners of Taylor Swift's songs. In quantitative research, targeted sampling is used to identify individuals with relevant qualities or experiences (Etikan et al., 2016). To increase the validity and reliability of the findings, the study specifically sought for people who are familiar with Taylor Swift's songs. When researching human subjects, ethical issues are of utmost relevance. A consent form for this study was sent to participants, outlining the goals, methods, potential drawbacks, and advantages of taking part. An essential feature of doing ethical research is obtaining participants' informed agreement through the use of a consent form (American Psychological Association, 2017). Additionally, participant data is deleted after 30 days, and data security and anonymity are guaranteed by ethical standards for data protection (National Institutes of Health, 2018).

To ensure consistent and reliable data collection, participants were provided with clear instructions on how to complete the experiment. In the Google Form, the following step-by-step procedure was implemented: Participants were to carefully read each word pair presented in the questionnaire, which consisted of a Taylor Swift song title and its assigned word with the title. Participants then respond to 10 Taylor Swift song titles and their associated words by determining whether the word is related or unrelated to the given Taylor Swift song title. Participants should then select the option "Related" if the associated word is closely related to the Taylor Swift song title or select the option "Unrelated" if the associated word is unrelated. After answering all the word pairs, participants can click the "Submit" button to complete the questionnaire. By following this step-by-step procedure, participants were guided through the experiment, enabling consistent data collection and ensuring that all aspects of the semantic priming of Taylor Swift song titles were thoroughly explored.

RESULT AND DISCUSSION

The present study aimed to investigate the semantic priming effects of Taylor Swift song titles on participants' associations with associated words. A total of 300 participants, who were active listeners of Taylor Swift, took part in the experiment. Ten Taylor Swift song titles were used, each paired with an associated word. The participants were asked to determine whether the associated word was relevant or irrelevant to the given Taylor Swift song title. They had two response options: "Related" or "Unrelated."

Table 1. Semantic Priming Responses for Taylor Swift Song Titles

No.	Song Title	Associated Word	Related Responses	Unrelated Responses
1	Lover	Heart	295	5
2	Wildest Dreams	Circus	51	249
3	Bejeweled	Dirty	30	270

4	All Too Well	Breakup	288	12
5	You Need To Calm Down	Pride	272	28
6	Shake It Off	Crying	23	277
7	Evermore	Spring	122	178
8	You Belong With Me	Relationship	291	9
9	Blank Space	Cheating	159	141
10	Love Story	Castle	266	34

Note: Percentages are calculated based on the total number of responses for each song title and the associated word pair.

Table 2. Average Preferences for Taylor Swift Song Titles

No.	Song Title	Associated Word	Related Responses	Unrelated Responses
1	Lover	Heart	98.3%	1.7%
2	Wildest Dreams	Circus	17.0%	83.0%
3	Bejeweled	Dirty	10.0%	90.0%
4	All Too Well	Breakup	96.0%	4.0%
5	You Need To Calm Down	Pride	90.7%	9.3%
6	Shake It Off	Crying	7.7%	92.3%
7	Evermore	Spring	40.7%	59.3%
8	You Belong With Me	Relationship	97.0%	3.0%
9	Blank Space	Cheating	53.0%	47.0%
10	Love Story	Castle	88.7%	11.3%

Note: Average preferences are calculated based on the percentage of "Related" and "Unrelated" responses for each song title and associated word pair.

The data results reveal that the participants' answers varied depending on the song titles and related words. While some pairs generated a higher percentage of "Related" than "Unrelated" responses, indicating a stronger semantic association, other pairs elicited a higher percentage of "Unrelated" responses, indicating a weaker semantic association. These results offer a preliminary understanding of the associations that Taylor Swift song names have on participants' associations in terms of semantic priming.

Discussion

Interesting patterns of participant responses to semantic priming were revealed by the experiment's findings. The majority of participants showed a clear semantic connection between the song title "Lover" and the associated word "Heart," with 98.3% of participants choosing the "Related" response. This study implies that the song title "Lover" efficiently primes associations with the idea of "Heart," likely as a result of its lyrical themes and the intense emotions that are frequently connected to love and romantic relationships. The song title "Wildest Dreams," on the other hand, had a more significant proportion of "Unrelated" replies (83.0%), showing a weaker semantic connection with the associated word "Circus." The difference between the song title and the word it is linked with shows that the contextual themes or intellectual aspects may not readily align.

Additional data analysis found that response patterns varied for various song names and related words. By way of illustration, the song title "All Too Well" elicited a high percentage of "Related" replies (96.0%) with the connected phrase "Breakup." This finding suggests a significant semantic connection between the song's title and the idea of a breakup, which reflects participants' comprehension of the song's emotional themes and stories. The pair "Shake It Off - Crying," on the other hand, received a majority of "Unrelated" replies (92.3%), indicating that there was no apparent semantic connection between the song's title and the idea of crying. The subtlety of semantic priming and the complex interaction between song titles, associated words, and participants' cognitive processes are highlighted by these variances in response patterns.

The findings were further confirmed by the average preferences determined from the data that was gathered. The participants' overall inclinations in recognizing semantic connections between Taylor Swift song titles and associated terms were summarized in the average preferences. For instance, the song titled "Love Story" had an above-average preference for related words (88.7%), showing a strong semantic relationship with the term "Castle." The average linked preference for the song title "Wildest Dreams" was much lower (17.0%), showing a poorer perceived semantic relationship with the associated term "Circus." The relative potency of linkages between particular song titles and topics among the participants is revealed by these average preferences.

The results of this study advance our knowledge of semantic priming and the discipline of psycholinguistics. The results of the experiment showed that different Taylor Swift song titles can have different levels of semantic priming effects, with some titles promoting connections with connected terms more strongly than others. The findings emphasize the significance of taking into account contextual aspects, emotional themes, and conceptual components communicated by song titles when analyzing semantic priming effects. The variances in participants' answers also highlight the intricacy of semantic networks and the individual variability in semantic linkages.

However, it is critical to recognize some of the study's limitations. First of all, the sample only included Taylor Swift fans who were actively listening, which would restrict the applicability of the results to a larger audience. To improve the study's external validity, future research might use a more varied sample. Second, the study concentrated on a particular musical style and a small number of song titles. Further understanding of the impact of musical environment on semantic connections could be gained by investigating semantic priming effects across various musical genres and a more extensive range of song titles.

CONCLUSION

In this study, the researcher aimed to investigate the semantic priming effects of Taylor Swift song titles on participants' associations with associated words. Through a quantitative research design, the researcher collected data from 300 participants who were active listeners of Taylor Swift. The results provide valuable insights into the cognitive processes involved in language comprehension and semantic priming.

Overall, the results show that participants' associations with words connected with Taylor Swift songs can be primed. The researcher found that the strength of semantic linkages varied, with some song titles evoking strong ideas while others just evoking weaker ones. According to an earlier study (Johnson & Halpern, 2017), these patterns of semantic priming are consistent with the importance of conceptual links between words and the activation of related semantic networks.

In conclusion, this study advances our understanding of semantic priming effects by examining the connections between Taylor Swift song names and related words. It shows the significance of context, theme, and emotional signals in influencing semantic associations and offers empirical evidence for the impact of music on language processing. Future studies can build on these discoveries by examining the mechanisms underpinning semantic priming and its applications in other fields.

It is essential, however, to acknowledge certain limitations of this research. The study sample was limited to active listeners of Taylor Swift, which may restrict the findings generalized to a broader population. For enhanced external validity, subsequent studies should consider a more diverse group of participants, specifically participants who are both active listeners and average listeners of the artist/song. Additionally, this research focused on a specific music genre and only several song titles. Semantic priming across a wider variety of musical styles and an expanded selection of song titles should be explored to deepen our comprehension and as feedback for further research.

REFERENCE

Babbie, E. R. (2016). The practice of social research. Cengage Learning.

Buchanan, T., Johnson, J. A., & Goldberg, L. R. (2017). Implementing an online survey using Google Forms. Journal of Technology in Human Services, 35(2), 127–148.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications.

Dewi, I. S., & Salikin, H. THE EFFECTIVENESS OF SEMANTIC PRIMING TO OVERCOME THE TIP OF THE TONGUE PHENOMENON.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4.

Johnson, S. K., & Halpern, A. R. (2012). Semantic priming of familiar songs. *Memory & Cognition*, *40*, 579-593.

Koelsch, S. (2014). Brain correlates of music-evoked emotions. Nature Reviews Neuroscience, 15(3), 170–180.

Levelt, W. J., & JM, W. (1989). *Speaking: From intention to articulation.-" A Bradford book."*. MIT Press.

Meyer, D. E., & Schvaneveldt, R. W. (1971). Facilitation in recognizing pairs of words: Evidence of a dependence between retrieval operations. Journal of Experimental Psychology, 90(2), 227–234.

North, A. C. (2018). The influence of music on advertising effectiveness. In R. R. Hock & L. K. Levitt (Eds.), Advances in consumer research (Vol. 46, pp. 215–219). Association for Consumer Research.

Smith, K. A. (2017). Designing online surveys for research. Journal of Extension, 55(2), 2TOT3.