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DO INDONESIAN SPEAKERS FEEL ‘PAIN’? NSM and Corpus-Based Approach to the Cross- Linguistic Concept of ‘Pain’ in Bahasa Indonesia

Abstract This study challenges the global notion of ‘pain’ by exploring the semantic nuances of pain-related concepts in Bahasa Indonesia and comparing them to English. It examines four lexemes: *sakit*, *nyeri*, *pedih*, and *perih* using the Natural Semantic Metalanguage (NSM) and a corpus-based approach. The study proposes alternative definitions to address the circularity and vagueness in the Great Indonesian Dictionary. Analyses reveal distinctions in physical and emotional conceptualizations: physical sensations differ in body locus, intensity, and duration, while emotional pain-like concepts relate to social relationships and vary in triggers, duration, and reactions. This highlights significant cross-linguistic distinctions between Bahasa Indonesia and English in conceptualizing ‘pain’.

Keywords pain; cross-linguistic; Bahasa Indonesia; English; NSM; corpus-based approach

1. Introduction

The perception and expression of pain vary significantly across cultures. Cross-cultural studies reveal that the concept of ‘pain’ is not universal (Goddard & Ye, 2016; Wierzbicka, 2012; 2016). In Bahasa Indonesia, words like *sakit*, *nyeri*, *pedih*, and *perih* convey different aspects of ‘pain’. Although medical literature often uses *nyeri* to mean ‘pain’ based on the International Association for the Study of Pain (IASP) definition, non-medical discourse from the BPPT-PAN English-Indonesian corpus sourced from CQP Web (Hardie, 2012) shows overlap in the usage of *sakit* and *nyeri*.

1. If someone suffers an acute **chest pain** associated with a heart attack, they call the ambulance

Jika seseorang menderita nyeri dada akut yang terkait serangan jantung, segera panggil ambulans.

2. ...play again in Jan. 2007 but continued to feel **pain** in his knee and went under the knife for a...

...untuk bermain lagi pada Januari 2007 tetapi terus merasa sakit pada lututnya dan kembali menjalani pembedahan ...

Both *sakit* and *nyeri* are commonly used to describe pain, but the Great Indonesian Dictionary (KBBI)(Badan Bahasa, n.d.) does not clearly distinguish between the words and other related concepts. The KBBI defines pain-related terms using a traditional *genus + specifica* approach, which often leads to vagueness and circularity. To illustrate, here are the definitions of each lexeme along with their English translations.

sakit a *berasa tidak nyaman di tubuh atau bagian tubuh karena menderita sesuatu (demam, sakit perut, dan sebagainya)*

‘feeling uncomfortable in the body or part of the body due to suffering from something (fever, stomach ache, etc)’

nyeri 1 a *berasa sakit (seperti ditusuk-tusuk jarum atau dijepit pada bagian tubuh); rasa yang menimbulkan penderitaan*

‘feeling painful (like being pricked by a needle or being pinched in a part of the body); feeling that causes suffering’

pedih a *berasa sakit, seperti luka dicuci dengan sublimat*

‘feeling painful as if the wound was washed by sublimate’

perih a *pedih*

‘smart/sting/sore’

The KBBI defines *sakit* with an open-ended and vague description, using terms like *etc.*, that obscures its specific causes. This vagueness extends to using *sakit* as a broad category that fails to clearly distinguish between various pain-related concepts, such as *pedih*, which might not be considered as suffering from something. Additionally, the definitions of pain-related words like *nyeri*, *pedih*, and *perih* are circular and complicated to understand. Users need to comprehend *sakit* to understand these other terms, but since *sakit* itself is vaguely defined and circularly explained through examples like *sakit perut*, it remains unclear and confusing.

To address these definitional challenges, the present study aims to explore the semantic nuances of the four related concepts. Following this, the natural semantic metalanguage (NSM) (Wierzbicka, 2012; Goddard & Wierzbicka, 2014) and corpus-based approach are introduced (Section 2) to deal with definitional challenges. Then, the pain-related concepts are analysed based on physical and emotional sensations along with the proposed explications (Section 3) before presenting the conclusion and further steps from the present study (Section 4).

2. Methods: NSM and Corpus-Based Approach

This study employs the Natural Semantic Metalanguage (NSM) for meaning analysis, a lexical semantics approach initiated by Wierzbicka in 1972. NSM posits that all languages share a core mini-language of lexical and grammatical elements, enabling neutral cross-cultural comparisons (Ye, 2019, p. 133). It uses reductive paraphrase to decompose word meanings into basic elements called semantic primes, with their manifestations in any language termed exponents. This study uses English exponents and their translations in Bahasa Indonesia.

The data for this study are sourced from two accessible Indonesian corpora: IndonesianWAC (Kilgarriff et al., 2010), obtained through Sketch Engine, and LCC Indonesian 2023, made accessible via CQPweb (Hardie, 2012). The profiles of these two corpora are presented in Table 1.

Table 1: Profile of Corpora

	LCC Indonesian 2023	IndonesianWAC
Year	2008--2022	2013
Size	573,557,097-word tokens	100 million words
Texts	mixed texts (mixed genres) collected from the Internet from 2012–2014, web-based news, and Wikipedia	texts collected from the Internet
Access via	https://cqpweb.lancs.ac.uk/lccindonesianv3/	https://app.sketchengine.eu

Analysis on semantic nuances is conducted based on significant collocates determined by high frequency in two corpora. In the Indonesian WAC, collocates are measured using Log Dice and extracted using Word Sketch and Word Sketch Difference, with outcomes depicted in graphs. In the LCC Indonesian 2023, collocates are measured using Dice Coefficient, which combines significance and strength of connection. These collocates, excluding unrelated instances like *rumah sakit* 'hospital', are visualized in graphs using the *ggplot* package in R (R Core Team, 2022).

Additionally, colloquial context analysis is derived from patient-doctor interactions on the Alodokter website (Kementerian Kesehatan Republik Indonesia, n.d.), filtering topics with relevant keywords. This results in 18 topics for analysis. While corpora and Q&A sessions are used to analyse the physical aspect of 'pain', the emotional sphere is examined through concordances and Indonesian song lyrics from the 1990s to 2000s, with 12 lyrics selected based on relevant keywords.

3. Results

This subsequent section presents the results of analysis of the four lexemes. The discussion is divided into physical and emotional aspect of 'pain'-related concepts in Bahasa Indonesia.

3.1 Physical Pain-Related Concepts

To delve into the meaning of the four lexemes, the collocates of the lexemes from the left and right context (presented in Figures 1 to 4) are analysed and their contexts of use are re-examined from their concordances. The result of analysis is discussed based on locus, intensity, and duration of pain.

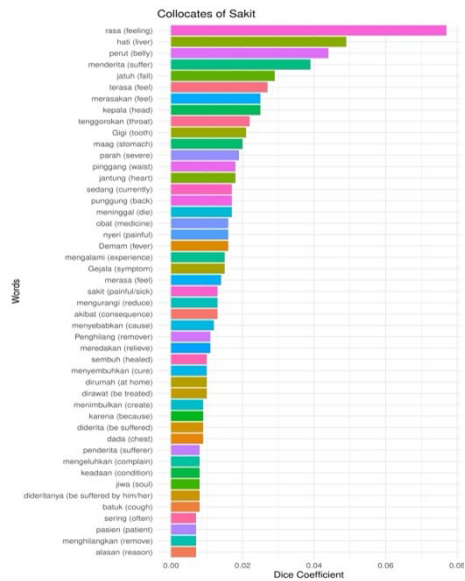


Fig. 1: Collocates of Sakit from LCC Indonesian 2023

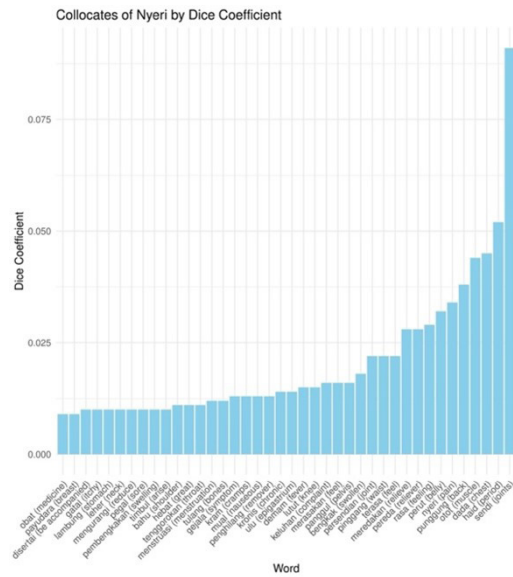


Fig. 2: Collocates of Nyeri from LCC Indonesian 2023

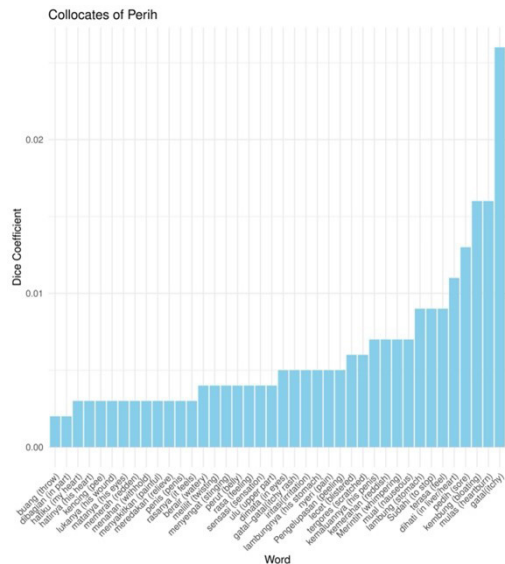


Fig. 3: Collocates of Perih from LCC Indonesian 2023

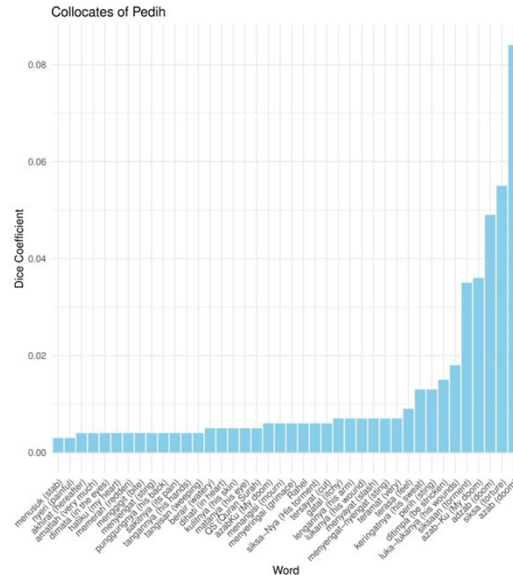


Fig. 4: Collocates of Pedih from LCC Indonesian 2023

In Figures 1 to 4, 40 high frequency collocates of the four lexemes from the left and right contexts are depicted. For example, *sakit* is frequently collocated with *rasa* ‘sensation/feeling’, *jatuh* ‘fall’, and body parts such as *hati* ‘liver’ and *kepala* ‘head’. *Nyeri* co-occurs predominantly with body parts such as *sendi* ‘joint’, *dada* ‘chest’, and *otot* ‘muscles’. *Perih* and *pedih* are collocated with terms such as *gatal* ‘itchy’, *luka* ‘wound’, and *mata* ‘eyes’. Additionally, *azab* ‘doom’ and *siksa* ‘torment’ only co-occur with *pedih* in Islamic texts, which are excluded from the analysis.

When comparing Figure 1 and Figure 2, notable distinctions in terms of locus among the four related concepts emerge from their significant collocates. While *sakit* (Figure 1) frequently co-occurs with *rasa* ‘feeling; sensation’, *menderita* ‘suffer’, *jatuh* ‘fall’, and *terasa* ‘feel’, *nyeri* predominantly pairs with body parts such as *sendi* ‘joints’, *dada* ‘chest’,

and *otot* 'muscles', indicating its localization as best illustrated in (3). In this example, when describing *nyeri*, a specific body locus is necessary. However, when referring to the general sensation of 'pain' felt in the body, the term *sakit* in its derivative form *kesakitan* 'be in pain' is used since there is no similar derivative form for *nyeri* such as *?kenyerian*.

3. ...*demam* kemudian terjadi **nyeri otot** terutama
 ...fever then happen **pain muscle** especially
 di daerah kaki dan ketika dipegang
 in area leg and when be touched
penderita merasa **kesakitan**.
 sufferer feel **be in pain**.
 '...fever, then **muscle pain** occurs, especially in the leg area and when it is held the patient feels **pain**.' (LCC Indonesian 2023)

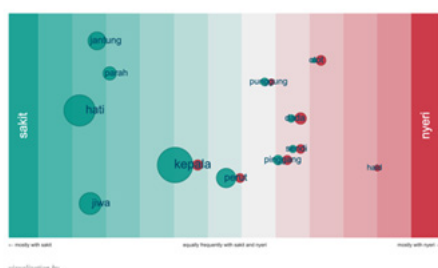


Fig. 5: Comparison of collocates between *sakit* and *nyeri*

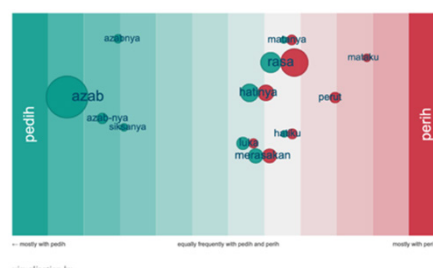


Fig. 6: Comparison of collocates between *pedih* and *perih*

As *nyeri* is typically localized compared to *sakit*, the collocates involving specific body parts in the right context (Figure 2) exhibit the specific locus and the nature of both lexemes. In terms of locus, the figure depicts that *nyeri* is mostly followed by terms like *sendi* 'joints' and *otot* 'muscles' which are less commonly occurred with *sakit* that is frequently followed by *kepala* 'head' and *perut* 'belly' (see Figure 5). The specific locus suggests internal locus in part of body compared to a more general sensation in *sakit* as expressed by patient's explanation quoted from Alodokter (4).

4. *Halo dok, telinga saya bengkak dan bagian dalamnya terasa nyeri. Rasanya mengganggu sekali dok, sekarang rasanya seperti tersumbat. obatnya apa ya dok? rasanya nggak nyaman bgt soalnya. Thanks*

'Hello Doc, my ear is swollen, and it **hurts inside**. It's really annoying, now it feels like it's clogged. What's the cure, Doc? It doesn't feel very comfortable. Thanks.' (Alodokter)

In contrast, *pedih* and *perih* are externally localised depicting by their significant collocates such as *gatal* 'itchy' and *luka* 'wound' (Figures 3 & 4) that represent sensation on skin. While both lexemes share external locus, these two words differ in the context of internal loci, as the collocates *lambung* 'stomach' and *perut* 'belly' only co-occur with *perih* (Figure 6).

5. *Penyakit Maag merupakan penyakit akibat jaringan lunak lambung yang disebabkan adanya luka atau peradangan di lapisan lambung yang menyebabkan mulas atau **perih** di bagian perut akibat produksi asam lambung yang berlebihan.*

‘Ulcer disease is a disease caused by the soft tissue of the stomach which is caused by injury or inflammation in the stomach lining which causes heartburn or **pain** in the stomach due to excessive production of stomach acid.’ (LCC Indonesian 2023)

6. *Ambil busa sabun biarkan menempel pada kulit sambil digosok pelan-pelan maksimal 1 menit, lalu bilas hingga bersih, jika **kulit** terasa **pedih** atau gatal kurangi dosis pemakaian.*

‘Take the soap foam, let it stick to the skin when rubbing it gently for a maximum of 1 minute, then rinse thoroughly, if the **skin** feels **sore** or itchy, reduce the dosage.’ (LCC Indonesian 2023)

As demonstrated in the previous example (6), it is crucial to have prior contact with specific body locations to experience *pedih*. This is in stark contrast to *perih*, which is primarily influenced by the disease and does not necessitate such contact (5).

In terms of intensity and duration, all pain-like sensations indicate unpleasant feelings to some degree, which the individual does not want, except for *pedih* due to its short-term nature (as in 6). When considering intensity, example (8) demonstrates *nyeri* as a physical sensation that the body cannot tolerate, unlike *perih* and *pedih*, therefore requiring *obat pereda nyeri* meaning ‘pain reliever’. Meanwhile, *sakit*, as illustrated in (7), is a severe sensation that wholly affects the individual.

7. *Ia mengambil cuti setelah menderita sakit*
 S/he took leave after suffer **ache**
perut yang berhubungan dengan stres.
 stomach which is related with stress.
 ‘She took a leave after suffering from **stomach ache** that was related to stress’. (IndonesianWAC)

8. *Seseorang yang menderita nyeri sendi akan merasakan peradangan yang sangat hebat serta rasa nyeri yang sangat tajam yang tidak bisa dihindari.*
 ‘Someone who suffers from **joint pain** will feel very intense inflammation and a **very sharp pain** that cannot be avoided.’(LCC Indonesian 2023)

In terms of duration, *sakit* and *perih* take some time to recover due to their whole-body effect and disease-affected factor. On the other hand, *nyeri* is experienced in terms of frequency due to its unavoidable nature, such as *nyeri haid* or menstrual pain (Figure 5). Unlike other pain-like concepts, *pedih* is a short-term experience and is not typically seen as a problem that needs to be solved. This is evident from the less frequently discussed topic with a doctor on the Alodokter website.

The prototypical concepts of the four lexemes are constructed in the following explications with their Indonesian counterparts. The explications present three components as the prototypical scenario of 'pain': "feeling something bad in part of the body (a), thinking that something bad is happening to that part (b), and wanting it not to be like this (d)" (Goddard & Wierzbicka, 2014, p. 132).

<p>[A1] <i>Sakit</i> in <i>Dia sakit perut/kepala/gigi</i> (She/he has stomach/head/tooth-ache)</p> <p>(a) someone feels something bad in his body (b) like someone can feel when it is like this: (c) something bad is happening to a part of this someone's body for some time (d) because of this, this someone feels something bad in his part of body for some time (e) this someone thinks like this: "I don't want to feel something like this, I want to do something because of this I cannot think like this: I can do something with my body"</p>	<p>[A2] <i>Dia sakit perut/kepala/gigi</i></p> <p>(a) seseorang merasakan sesuatu yang buruk di badannya (b) seperti seseorang bisa rasakan waktu seperti ini: (c) sesuatu yang buruk sedang terjadi pada satu bagian dari badan orang ini untuk sementara (d) karena ini, orang ini merasakan sesuatu yang buruk di bagian badannya untuk sementara (e) seseorang ini berpikir seperti ini: "Aku tidak mau merasakan sesuatu seperti ini, aku mau buat sesuatu karena ini Aku tidak bisa berpikir seperti ini: Aku bisa buat sesuatu dengan badanku"</p>
<p>[B1] <i>Nyeri</i> in <i>sendinya terasa nyeri</i> 'his joints feel painful'</p> <p>(a) he feels something very bad in a part of his body (b) like someone can feel when it is like this: (c) something very bad is happening inside one part of this someone's body (d) because of this, this someone's feels something very bad inside the part of his body, not one time (e) this someone thinks like this: 'I know I can't think: I can't feel something like this'</p>	<p>[B2] <i>Nyeri</i> in <i>sendinya terasa nyeri</i></p> <p>(a) dia merasakan sesuatu yang sangat buruk pada salah satu bagian badannya (b) seperti seseorang bisa rasakan waktu seperti ini: (c) sesuatu yang sangat buruk sedang terjadi di dalam salah satu bagian dari badan seseorang ini (d) karena ini, seseorang ini merasakan sesuatu yang sangat buruk di dalam bagian badannya, bukan satu kali (e) seseorang ini berpikir seperti ini: 'Aku tahu aku tidak bisa berpikir: Aku tidak bisa merasakan sesuatu seperti ini'</p>
<p>[C1] <i>Pedih</i> as in <i>matanya terasa pedih</i> 'his eyes felt sore'</p> <p>(a) someone felt something bad in one part of his body [eyes, skin] (b) like someone can feel when it is like this: (c) something touched his part of body (eyes) a short time before (d) because of this, something bad happened in this part of the body (e) at the same time, he felt something bad in his part of the body for a short time</p>	<p>[C2] <i>Pedih</i> as in <i>matanya terasa pedih</i></p> <p>(a) seseorang merasakan sesuatu yang buruk pada satu bagian badannya [mata, kulit] (b) seperti seseorang bisa rasakan waktu seperti ini: (c) sesuatu menyentuh bagian badannya sesaat sebelumnya (d) karena ini, sesuatu yang buruk terjadi pada bagian badannya (e) pada saat yang sama, dia merasakan sesuatu yang buruk pada bagian badannya untuk sesaat</p>
<p>[D1] <i>Perih</i> as in <i>Perutnya (matanya; kulitnya) terasa perih</i> 'Her stomach (eyes; skin) feels sore'</p> <p>(a) she feels something bad in one part of her body [stomach, eyes, skin] (b) like someone can feel when it is like this: (c) this someone feels something bad in one part of her body for some time (d) because something bad has happened to this part of her body (e) when this someone feels something like this, she thinks like this: "I don't want to feel something like this"</p>	<p>[D2] <i>Perih</i> seperti <i>Perutnya (matanya; kulitnya) terasa perih</i></p> <p>(a) Dia merasakan sesuatu yang buruk pada satu bagian badannya [perut, mata, kulit] (b) seperti seseorang bisa rasakan waktu seperti ini: (c) seseorang ini merasakan sesuatu yang buruk pada satu bagian badannya untuk sementara (d) karena sesuatu yang buruk sudah terjadi pada bagian badannya (e) ketika seseorang ini merasakan sesuatu seperti ini, dia berpikir seperti ini: "Aku tidak mau merasakan sesuatu seperti ini"</p>

From the explications, it can be observed that component (e) in *pedih* [C1] does not have the cognitive scenario of ‘wanting not to feel like this.’ This shows that unlike other pain-like concepts, *pedih* is a bodily sensation that the body can tolerate.

As a point of comparison, Wierzbicka’s (2012) proposed explication is presented below.

[E] Semantic explication of **pain** in English (as in ‘She felt **pain**’)

- a) she felt something bad at that time
- b) like someone can feel when it is like this:
- c) something bad is happening in a part of this someone’s body
- d) this someone feels something bad in this part of the body because of this
- e) this someone can’t think like this at this time: “I don’t want this”

(Wierzbicka, 2012, p. 311)

Comparing the English concept of pain with the four related concepts in Bahasa Indonesia reveals three notable distinctions. First, the unitary component differs. Pain in English is unitary (as shown in component (a) in [E]), while in Bahasa Indonesia, the concepts are primarily physical because the emotional sensation takes a different locus *hati* ‘liver’ as the centre of emotion. Second, components (c) in explications [A1] and [D1] and (d) in [B1] and [C1] imply a temporal process, a feature absent in [E]. Lastly, although component (e) in English and Bahasa Indonesia’s explications share the pain as an ‘unwanted sensation’, they are different in terms of the experiencer’s control over the body and unavoidable sensation as presented respectively in components [A1] and [B1].

3.2 Emotional Pain-Related Concepts

Unlike the unitary feeling in English, in Bahasa Indonesia, the emotional sensations take *hati* ‘liver’ as the locus, forming fixed expressions: *sakit hati*, *pedih hati*, and *perih hati*. This is evident from the significant collocates in all pain-like concepts, except for *nyeri*, which is mainly physical.

Due to limited occurrence in corpus data, only collocates of *sakit hati* are presented below.

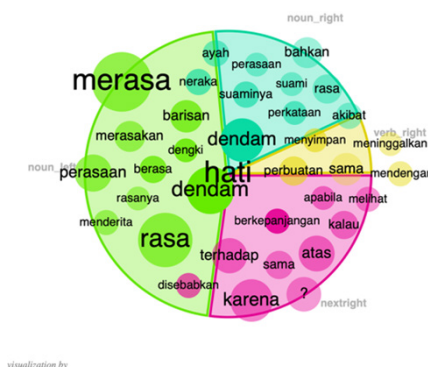


Fig. 7: Collocates of *Sakit Hati* from Indonesian WAC

The following examples illustrate the notable distinctions among the three emotional pain-like concepts in terms of triggers, reactions, and duration.

9. ***Sakit hatiku tiada terobati***
Walau sejuta senyum kau berikan
Demi langit dan bumi aku bersumpah
Dirimu tak mungkin lagi kumaafkan
'My sakit hati is incurable
 Even though you give me a million smiles
 By heaven and earth I swear
 I cannot forgive you'
 (Meggie Z, Sakit Hati)
10. ***Hatinya*** ***pedih*** *tersayat-sayat, tak tahan*
 liver.his painful shredded not stand
menyaksikan *isak* *tangis dan duka-lara istrinya.*
 see sob cry and sorrow wife.his
 'His heart ached and tore apart; he couldn't bear to witness his wife's sob and sorrow.'
 (LCC Indonesian 2023)
11. ***Pedih hati saat kehilangan darah daging sendiri dan benar kata emak, itulah takdir untukku tapi emak hadir memayungiku dan inilah hikmah***
It hurts when I lost my child and it's true what my mother said, that's my fate, but my mother is here to console me and **this is the lesson...**
 (LCC Indonesian 2023)
12. *Begitu berat beban hidupku*
Ku menangis sendiri
Dia yang ku cinta telah pergi
Tuhan ku tak sanggup lagi
Menahan perihnya hati
Mengapa aku begini
 'My life's burden is so heavy
 I cried alone
The one I love is gone
 God, I can't take it anymore
 To Endure (my) heartache
 Why am I like this'
 (Perih, Ariel Noah)

While all emotional pain is triggered by close social relationships such as lovers or spouses, *sakit hati* is mainly caused by shattered expectations that end up with *dendam* 'resentment' (Figure 7 & example 9). Differently, experiencing *pedih hati* and *perih hati* requires the component of loss and being abandoned (10–12). While both emotional sensations share these components, only *pedih hati* includes thinking about something bad that has happened or will happen to someone the experiencer cares for while feeling powerless to do anything about it (10).

When comparing the reactions, it is clear that *sakit hati* prompts a reaction from the experiencer toward others, while in *pedih hati* and *perih hati*, the focus remains in the experiencer’s internal state.

Although the emotional sensations differ in trigger and reaction, they share the component of intensity but are different in duration. Unlike the varying degrees of physical ‘pain,’ all emotional sensations constitute a very distressing state centered in *hati* ‘liver.’ However, they are different in terms of duration. While time may fade away the feeling of loss as the experiencer gains some insight from the sad event (11), resentment remains incurable (9).

All the components of emotional pain-like concepts are deconstructed into the following explications.

<p>[F1] Sakit hati as in <i>seseorang merasa sakit hati</i> ‘someone feels sakit hati’</p> <p>(a) someone feels something very bad for a long time (b) like someone can feel when he thinks about someone else like this: (c) “I know this someone will not do bad things to me This someone did something very bad to me” (d) when someone thinks something like this, he feels something very bad towards someone else (e) because of this, this someone wants to do something very bad towards someone else</p>	<p>[F2] Sakit hati seperti <i>seseorang merasa sakit hati</i></p> <p>(a) seseorang merasakan sesuatu yang sangat buruk untuk waktu yang lama (b) seperti seseorang bisa rasakan waktu dia berpikir tentang seseorang yang lain seperti ini: (c) “Aku tahu seseorang ini tidak akan melakukan hal-hal yang buruk kepadaku Seseorang ini melakukan sesuatu yang sangat buruk kepadaku” (d) waktu seseorang berpikir sesuatu seperti ini, dia merasakan sesuatu yang sangat buruk terhadap seseorang yang lain (e) karena ini, seseorang ini mau melakukan sesuatu yang sangat buruk terhadap seseorang yang lain</p>
<p>[G1] Pedih hati as in <i>Pedih hatinya melihat anaknya terbaring lemah tak berdaya</i> ‘it hurts her heart to see her child lying weak and helpless’</p> <p>(a) she feels something very bad for some time at this time (b) like someone can feel when she thinks about someone else like this: (c) “I feel something very good when I think about this someone, (d) I want this someone to be with me for a long time (e) I want very good things to happen to this someone” (f) At this time she thinks like this: (g) “Now I know something bad has happened to this someone (h) maybe this someone cannot be with me for a long time (i) I don’t want this to happen to this someone (j) I want to do something now, I know I can’t do anything now” (k) because of this, she feels something very bad for some time</p>	<p>[G2] Pedih hati seperti <i>Pedih hatinya melihat anaknya terbaring lemah tak berdaya</i></p> <p>(a) Dia merasakan sesuatu yang sangat buruk untuk sementara pada saat ini (b) seperti seseorang bisa rasakan waktu dia memikirkan seseorang yang lain seperti ini: (c) ‘Aku merasakan sesuatu yang sangat baik waktu aku memikirkan seseorang ini, (d) Aku mau seseorang ini ada denganku untuk waktu yang lama (e) Aku mau hal-hal yang sangat baik terjadi pada seseorang ini” (f) Pada saat ini dia berpikir seperti ini: (g) “Sekarang aku tahu sesuatu yang buruk sudah terjadi pada seseorang ini (h) Mungkin seseorang ini tidak bisa ada denganku untuk waktu yang lama (i) Aku tidak mau ini terjadi pada seseorang ini (j) Aku mau melakukan sesuatu sekarang, aku tahu aku tidak bisa melakukan apa pun sekarang” (k) karena ini, dia merasakan sesuatu yang sangat buruk untuk sementara</p>

<p>[H1] <i>Perih hati</i> as in <i>perih hatinya karena kehilangan istrinya</i> 'his heart aches because he lost his wife'</p> <p>(a) he feels something very bad at this time (b) like someone can feel when he thinks about someone else like this: (c) "I feel something very good when this someone is with me (d) I thought before, this someone could be with me for a long time (e) now, I know, this someone cannot be with me for a long time" (f) because of this, he feels something very bad for some time</p>	<p>[H2] <i>Perih hati</i> as in <i>perih hatinya karena kehilangan istrinya</i></p> <p>(a) dia merasakan sesuatu yang sangat buruk pada waktu ini (b) seperti seseorang bisa rasakan waktu dia berpikir tentang seseorang yang lain seperti ini: (c) "Aku merasakan sesuatu yang sangat baik waktu seseorang ini ada denganku (d) Aku pikir sebelumnya, seseorang ini bisa ada denganku untuk waktu yang lama (e) sekarang, Aku tahu, seseorang ini tidak bisa ada denganku untuk waktu yang lama" (f) karena ini, dia merasakan sesuatu yang sangat buruk untuk sementara</p>
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The explications consist of some components. Component (a) highlights the difference between physical and emotional sensation. The absence of bodily locus in (a) is typical of emotional 'pain'. Component (b) presents the social relationship as a trigger following its prototypical scenario in indented parts of the explications. Components (d), (e), (f), and (k) present the reaction and duration.

4. Conclusion and Further Steps

This paper unpacks the semantics of 'pain'-related concepts in Bahasa Indonesia and compares the concepts with that of 'pain' in English. By using NSM and corpus-based approach, the present study proposes the explications of pain-related concepts in Bahasa Indonesia as alternative definitions to tackle the vagueness and circularity from the existing dictionary definitions. The study also highlights the difference in physical and emotion sensations, discriminating this concept with the unitary concept of pain in English.

The current study, while contributing to cross-linguistic research on the concept of 'pain' and providing potential solutions for creating definitions of culture-specific words, has two limitations. First, the proposed explications may be too complex for laypeople to understand due to their length and formulation. Therefore, if NSM is used to develop dictionary entries, concise formulations should be considered. Second, the results of this study are based on generated data from written text, and thus do not account for individual differences in experiencing and expressing 'pain' in both languages.

Despite the limitations, NSM explication can be applied to the domain of emotion and other related concepts whose meaning cannot be fully expelled using a *genus+specifica* type of definition. Developing dictionary entries of culture-specific words using NSM explication in a more concise formulation may benefit the L2 Indonesian learners in terms of understanding culture through words.

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