

### **3. Research Methodology**

#### **3.1 Research design**

The study employed a qualitative research design because this study aimed to provide a descriptive overview of specific things. Particularly, it attempted to examine the rhetorical patterns and metadiscourse strategies used in abstract writing. This was in accordance with what Lambert and Lambert (2013) stated that most qualitative descriptive studies are based on naturalistic inquiry, aiming to study things as closely as possible to how they occur in the real world. This method enabled the identification and comparison of rhetorical patterns and metadiscourse strategies employed in abstract writing. Additionally, a simple quantification was employed to count the appearance of metadiscourse in both circles' abstracts.

#### **3.2 Data source and data collection procedures**

The main data source for this study was the abstracts, which were taken from a science education journal published by a reputable science institution under the Ministry of Education, Culture, Research, and Technology of Indonesia. The journal contained 30 abstracts contributed by writers, especially in Asian countries, from the Outer and Expanding Circles, which were categorized based on Kachru's (1985) theory of English circles. To be exact, the data was the rhetorical pattern and metadiscourse markers found in the abstracts of two English Circles. However, the data were limited to 30 abstracts due to the availability and accessibility of the abstracts from the published journal. For this study, all 30 abstracts were collected and segregated into their respective circles, ensuring an equal representation of 15 abstracts from each circle. This approach ensured a comprehensive analysis of the abstracts, reflecting contributions from diverse linguistic and cultural backgrounds.

#### **3.3 Data analysis**

The data analysis steps align closely with the research questions. First, the abstracts' rhetorical patterns were analyzed using Hyland's (2000) theory of the Five Move Model. This step was essential for recognizing the cultural nuances in how writers from both circles organize their ideas. Subsequently, Hyland's (2005) theory of metadiscourse was employed to analyze the markers used by the writers from each circle. The major categories, functions, and examples are presented in Table 1 below. Second, each metadiscourse marker was quantified manually to identify the frequencies. Finally, the results of rhetorical patterns and metadiscourse usage were examined and compared by Hall's (1976, 2000) descriptive theory of high-context and low-context culture. This analysis highlights cultural factors that

influence the use of metadiscourse or vice versa, providing insights into the characteristic writing styles of each English circle.

**Table 1**

*Categories, Function, and Examples of Metadiscourse Taxonomy (Hyland, 2005)*

<b>Category</b>	<b>Function</b>	<b>Examples</b>
<b>Textual/Interactive</b>		
Logical connectives	Express semantic relation between main clauses/stages	In addition, however, but, etc.
Frame markers	Refer to discourse acts, sequences, or text stages	First, second, finally, etc.
Endophoric markers	Refer to information in other parts of the text	Noted above, in section X, etc.
Evidentials	Refer to source of information from other texts	According to X, etc.
Code glosses	Help readers grasp functions of ideational material	Such as, namely, for example, etc.
<b>Interpersonal/Interactional</b>		
Hedges	Withhold writer's full commitment to proposition	Might, perhaps, possible, etc.
Boosters	Emphasize force or writer's certainty in proposition	In fact, definitely, it is clear that, etc.
Attitude markers	Express writers' attitude to proposition	I agree, surprisingly, unfortunately, etc.
Engagement markers	Explicitly refer to or build relationship with reader	Frankly, note that, you can see that, etc.
Self-mentions	Explicit reference to writer(s)	I, we, our, etc.