

UNDERSTANDING THE SCALAR IMPLICATIONS THROUGH APPLICATION OF PRAGMATIC AND SEMANTIC ELEMENTS IN CONVERSATION-STORIES: CASE OF PRIVATE SCHOOL STUDENTS IN HYDERABAD, SINDH

Ali Siddiqui¹

¹PhD Scholar- Institute of English Language and Literature (IELL),
University of Sindh, Jamshoro, Sindh, Pakistan

Email: scorpion_king2893@outlook.com

Orcid Id: 0009-0007-5154-8833

Nadeem Ahmed Solangi²

²Assistant Professor

IELL

University of Sindh

nadeem.solangi@usindh.edu.pk

Ghulam Saqib Buriro³

³Assistant Professor of English, University of Sindh*

Email: gs.buriro@usindh.edu.pk

LinkedIn: linkedin.com/in/ghulam-saqib-buriro-50346934

Abstract

This study investigates the intricate interplay involving pragmatic along with semantics elements in understanding scalar implicatures. Participants' assessments and suggestions during crucial trials exhibit complicated understanding influenced by its semantic significance and functional fit. Heterogeneous evaluations in crucial trials reveal instances in which logically correct arguments are found to be practically erroneous, indicating potential inconsistencies. Participants emphasised the significance of meeting both semantic correctness and situational criteria while making language modifications. The findings improve our knowledge of scalar-implicatures through emphasising the importance for pragmatic elements alongside semantic features.

Keywords: Language alteration, scalar implicatures, semantics and pragmatic components

1. INTRODUCTION

1.1. Scalar-Implicatures: their significance and function

According to Grice (1975) and Horn (1972), Scalar implicatures (SIs) are an interesting occurrence within languages that result of the interaction of pragmatics with semantics. Imagine saying, "A number of our attendees departed early." According to Horn and Ward (2006), the phrase "at the very least a single guest departed early" implies that not each of the guests departed soon.

Scalar implication refers to inferring extra significance instead of simply encoding it. Language includes gradable adjective ("a tall structure" suggests never the most towering), comparing sentences ("He is smarter than Me" means no infinite much), and quantifies ("The majority individuals enjoy pie" indicates no everybody). The comprehension for SIs requires a complicated

interaction of elements. According to Fox (2007), the existence of a scalar word at some particular location on the scale (e.g., "high" on the measurement scale) indicates the possibility of a particular implicature approaching its more powerful point in the continuum (e.g., definitely not highest). The cooperative theory (Grice, 1975) encourages speakers to be informed and audiences to understand the speaker's objective. If "A few departed soon" delivers identical knowledge as "Everyone departed soon," it violates the principle of number, implying that the literal interpretation implies a thing greater. Furthermore, setting is critical in SI understanding. Take the phrase "Almost everybody completed their race," which is used following a long marathon filled with weary participants. The phrase "nearly everybody completed" emphasises the race's difficulties. Levinson (2000) found that contextual factors such as common understanding and presenter purpose might impact the power and relevancy of an implicit message. This research may be materialized in diverse intercultural settings (Gopang et al., 2015).

1.2.Scalar Implications: The study of semantics vs Practical communication

Linguists have long debated whether SIs are based on semantics or pragmatic communication principles. Supporters for semantics location for SIs believe that implicature is inherent in the connotation of scalar words. According to Horn (1972), gradable qualifiers such as "tall" contain integrated scales (e.g., short, intermediate, high) with an implied connection between weak more powerful levels. The phrase "a few guests left early" implies "not every guest departed soon," that establishes an implicature. According to Grice's (1975) "Cooperative Principle," presenters want to be instructive, while audiences search the presenter's objective. This principle emphasises the amount and relevancy. If "A handful guests departed soon" supplied identical knowledge as "Everyone departed soon," the weaker sentence could break the amount principle. According to Horn and Ward (2008), implicature is used to settle dispute and maximise the informational value of a speech. This viewpoint emphasises the evolving aspect of SI comprehension, where situation and presenter purpose affect deduced meaning. Recognising the limits of each side, others argue for a hybrid strategy. Although scalar concepts generate semantic implications links, pragmatics plays a vital role in defining the appropriateness and degree of implied meaning. For example, repeating "The majority of people completed their race" following a gruelling marathon may imply that "most individuals completed," highlighting the impact of situation on semantic meaning (Levinson, 2000).

According to the theory of Relevance (Sperber & Wilson, 1986), audiences seek knowledge and mutually benefit of meaning, leading to the formation of SIs. Noveck and Sperber (2007) stated that Corpus analytics as well as psycholinguistic tests are shedding light on how SI process and understanding vary among dialects and settings.

1.3.RESEARCH GOALS

Items that follow are the primary objectives of the current study:

1. Exploring further entailment connections:

Horn's (1972) idea of scalar dimensions and entailment relationships (such as "tall" implies not absolute tallest) serves as a basis, but further study is needed to understand how they work. What impact do multiple scales' the density and precision have on SI effectiveness and comprehension? Are implicatures triggered by lexical objects other than gradable modifiers, and how do they do so?

2. Above Maxims of Gricean:

Grice's (1975) "Cooperative Principles as well as The maxims" serves as an asset for describing specific SIs, but might not provide a complete foundation. How can practical factors like as relevancy (Sperber & Wilson, 1986), and politeness (Leech, 2007), as well as presenter purpose (Clark, 1996) communicate with meaning to influence SI interpreting? Analysing how those concepts collaborate and battle can provide an increased awareness of pragmatic impacts.

3. Contextual Fluid Environment

Context elements like as information shared, circumstance in society, and conversations experience significantly influence SI understanding. Study helps in understanding whether cultural variations, latent presumptions, as well as non-linguistic signals (e.g. tone of voice, posture) affect the perceived force and significance of implications might shed light on the changing characteristics of SI process.

4. Personal variations and Brain Process:

Not everyone who listens perceives SIs the same way. What do specific variations in cognitive ability, processes, as well as cultural context affect SI understanding? Psycholinguistic approaches along with corpus research can reveal differences regarding cognitive factors underlying SI comprehension.

5. The interaction of numerous SIs:

Sentences frequently have several SI prompts. Degen & Tanenhaus (2015) explore whether these interactions might enhance, diminish, or eliminate implicatures.

6. SIs extend above specific statements:

SIs might endure and impact later statements. What do effects that carry over occur, and the way do audiences combine existing knowledge with freshly acquired knowledge? Examining this feature reveals the constantly shifting character of SI perception in linked conversation.

7. Conceptual consequences and establishment of models:

Work on SIs is important in enhancing conceptual frameworks as well as generating novel language evaluating models. What can studies in the interaction of semantics and pragmatic features enrich and confront current ideas of implicature creation as well as interpretation? Do these developments increase the preciseness and extensibility present linguistic comprehension models?

8. Applications beyond the laboratory:

What may influence SI research on the teaching and learning of language? Can these results help enhance the layout of language processing methods including conversation participants?

1.4.RESEARCH QUESTIONS

RQ.1.What influence do pragmatic as well as semantic components have on interpreting scalar implicatures in the present inquiry setting?

RQ.2.How can participants' judgements as well as comments regarding the puppet's statements during warming up along with crucial trials reflect the influence of pragmatism and semantics aspects upon scalar implicatures?

RQ.3.In critical trials, do participants' differing judgements regarding the puppet's assertions indicate discrepancies in their knowledge about scalar implicatures?

RQ.4.What patterns or trends emerge from the answers provided on language shifts over scalar implicatures? What lessons these suggestions provide to enhance both the practical and the semantic comprehension of scalar implicatures?

2. REVIEW OF LITERATURE

2.1. Conceptual background: Scalar Levels & Their Characteristics

SIs relies on an interesting language issue:

Scalar levels. Horn's (1972) hypothesised that prior frameworks serve as the foundation for comprehending and developing the nuanced extra connotations conveyed through SI. Understanding the features of these scales is vital for balancing pragmatics and semantics during SI understanding.

Every scalar level is defined with an intrinsic sequence:

Take the commonly used heat scale: frigid barely warm, warm, and blazing. This sequence defines levels of severity or power inside a domain, enabling terms like "warm" to refer to something other than the hotter. According to Chierchia (2017), SIs rely on their intrinsic regularity to establish entailment links.

Saturation as well as Granularity:

None of the levels are produced equally. Temperature has thick levels with several intermediary locations. Some factors, such as length (big vs. little), are less common. The density of the material affects the level of accuracy that the implicatures are formed. A dense object scaling enable finer-grained conclusions, such as "hot" meaning beyond not the warmest nevertheless not very hot.

The endpoints & inclusiveness:

Scales may have specified ends (such as death vs. living) and be flexible (for instance, high vs. low). It impacts the perception of implicatures formed by words at both ends. According to Degen and Tanenhaus (2015), on an intimate scale, saying "He is departed" implies more than just being unwell, yet on a wider scale, the phrase may be ambiguous.

Similarity and the subscales:

Some measures regularly quantify the exact same quality, such as loudness. Some measures are diverse, with similar but separate aspects (e.g., pricing may include sub-scales indicating feasibility and financial worth). Difficulty can impact how implicatures become activated and understood at various scales.

Cultural as well as linguistic variations:

Scalar levels can vary significantly among cultures and tongues. In different cultures, what is regarded as "tall" may differ from what is termed "normal". Such variances underscore the importance of common understandings and societal factors in affecting the understanding of SIs dependent on scale characteristics.

2.2. USING MAXIMS ALONG WITH THE PRINCIPLES OF COOPERATION TO EXPLAIN SIS:

The study employs Grice's maxims for discourse implicature to analyse unwanted assumptions. They might be viewed as following in terms of the Related phrase generation task:

Quality:

In qualitative terms, this remark must correctly reflect what is meant by reference. If "A few guests departed soon" meant "All of them departed soon," it would contradict the principle, implying that an inferior sentence implies anything greater in terms of veracity. The above is likewise consistent to the SI understanding.

Quantity:

When referring to something, an expression should just include enough information to help the listener recognise it. Consider: "A few guests departed soon." While technically accurate, it implies that some guests departed early, sticking with the number maxim in order to avoid excess.

Relevancy:

According to Dale and Reiter (1995), features which fail to distinguish the suggested signifier from the differentiation list ought to be avoided due to their lack of discerning ability. For example, "The majority of individuals completed their race, yet it was hard" may be interpreted as "Almost every person completed," emphasising an unforeseen accomplishment.

2.3.RELEVANCE THEORY AS WELL AS COOPERATIVE ENHANCEMENT

Verbal communication requires a language system which correlates sound with implications, as well as the capacity to derive pragmatic inferences based on situation (Akram & Oteir, 2025; Li & Akram, 2023, 2024; Ramzan et al., 2025, 2023). It was proposed that if a speaker creates a word or phrase, it is clear to both the listener and the communicator that they have a specific instructional intent (Ahmad et al., 2022; Amjad et al., 2021). This approach builds on Paul Gryce's (1975) view on the tacit component of interpersonal communication (Sperber & Wilson, 1986). A fresh input can affect a context in three ways:

- (i) Developing new assumptions based on contextual implications that may be inferred based on the context and fresh information, yet not independently.
- (ii) Reinforcing prior hypotheses.
- (iii) The discrepancy as well as elimination of underlying assumptions. According to Romero and Soria (2010), input becomes more meaningful to an individual when it has greater mental effects and requires fewer efforts to receive (each one other considerations being equal).

2.4.SEMANTICS VARIABLES

Semantic lexicography as well as scalar entailment connections

Within the intricate interaction of elements determining scalar implications (SIs), dictionary semantics along with scalar entailment connections form the critical semantic basis.

2.4.1. Semantic Lexicography

2.4.1.1.Semantics (Terminology):

Gradable adjective

According to Horn (1972) and Saeed (2013), Gradable adjective are the foundation of SIs, with meaning inherent that may be sorted on a ranking system (such as small < smaller < smallest). The semantic qualities of terms of adjectives, such as densities, precision, and terminals, affect the type and potency of implied meanings.

Scalar (Adverbs)

SIs can be triggered by modifiers such as "very" or slightly that increase or decrease the intensity of an adjective (Levinson, 2000). Considering the semantic significance of this adverb is essential for deciphering their implicatures.

A negation & Scalarity

Negation and scalarity intersect in different manners. According to Chierchia (2013), the phrase "not big" is not always synonymous with "small," rather can have varying meanings based on scale as well as situation.

2.4.1.2. Relationships Of Scalar To Entailment Entailment

Scalar adjectives communicate with one another via entailment relationships. For instance, "tall" means "no short." These associations serve as the very first logical triggering to SI production.

Strength of entailment

The amount of force of the entailment connection changes with magnitude. Granular scaling with multiple degrees provide poorer inferences ("hot" implies "not frigid," yet not definitely "barely warm"). Limited levels have greater implications (for example, "deceased" strongly implies "not living"). Degen and Tanenhaus (2015) stated that this variance affects how people view the power and accuracy of implications.

The setting and Deviations

Degen and Tanenhaus (2015) stated that Entailment relationships cannot be permanent. Situational as well as pragmatic circumstances can impact how implicatures are interpreted, overriding literal entailments. For example, understanding the individual's viewpoint about height may reduce the distinction between "short" and "not tall".

2.4.2. Grammatical Variables That Influence Si Production (Modes, Negation, And Quantifiers)

2.4.2.1. Modals

Powerful and ineffective modals

Modals such as "must" and "have to" express great need, resulting in lesser SIs. For example, "He must be extremely tall" implies "not somewhat tall," yet not definitely "extremely tall." Stronger implicatures can be implied by weak modals, such as ought to or "could" (Fox, 2007). For example, "He ought to feel happy" may imply "not gloomy".

Epistemological vs deontological modalities

Epistemological modals including may or "can" communicate levels of chance, possibly activating SIs along a continuum of probability (such as "He may be arriving shortly" might also mean "probably not too soon"). Deontic modals including "should" or "must" indicate duty or authorization, impacting SIs connected to desired states. For example, "You should consume additional greens" may imply "not sufficient greens" (Chierchia, 2013).

2.4.2.2. Negative

Scalar (variety)

Degen (2015) stated that Scalar negative combines to scalar adjective in intricate manners. The phrase "He isn't high" might suggest more than just "tiny," based on the setting and size. Granular scales allow to obtain more subtle readings, such as "no hot" implying "lukewarm" or "chilly". Bare scales frequently have greater implicatures, such as "not living" implying "deceased".

Negation involving intensifiers

Negation with enhancers such "never even" or "hardly" can enhance SIs. For instance, "He barely ate nothing" may imply "not much," but rather "absolutely nothing whatsoever." Knowing the conceptual significance of such formulations is critical for evaluating the implications (Levinson, 2000).

2.4.2.3. The Quantifiers

Universal vs existential quantifiers

The universal quantifiers, such as "everyone" or "each," have a tendency to reduce SIs owing their powerful entailments. In this case, the phrase "All guests departed soon" implies "never everybody departed soon," yet fails to indicate the number of visitors that departed. Existential quantifiers, which including "a certain amount" or "a handful" enable greater implicatures by allowing for more degrees. According to Horn and Ward (2006), the phrase "a few guests departed soon" implies that not every one of guests departed soon, or merely a few did.

Comparable Quantifiers

Scales are inherent in comparative terms such as "more" as well as "less," which makes them ideal for using SI. For instance, "The woman worked more hours than He" implies "John worked a bit less than woman did," with other implications based on magnitude and situation (Clark 1996).

2.4.3. Morphological And Structural Complexity Affects Si Perception

SIs are not just limited to scalar adjective as well as syntax, but also involve vocabulary and syntactic ambiguities. Ambiguities in SI interpretations can provide new levels of meaning along with complexity.

2.4.3.1. Verbal Ambiguity

Homophones

Homophones, or words having the same sound but distinct implications, such as "the bear" (animal/carry), can make it difficult to comprehend SIs that may pertain to both senses. The phrase "The bear is big" implies "not tiny," although its true meaning of "bringing anything huge" also applies, necessitating additional background for clarification.

Polysemy

Terms with many connected implications, such as "light" (illumination/weight), might cause difficulty in SI understanding based on what was intended. For example, the phrase "The one provided lights to the circumstance" might mean both "no blackness" and "never heavy stress," rendering SI understanding contingent on situation (Levinson, 2000).

Symbolism and A figurative Communication

Metaphorical usage of scalar descriptive words might result in non-literal SI. The phrase "Her eyeballs were flame" implies "not a solid ice yet its symbolic significance establishes an entirely novel level of strength independent to degree (Clark, 1996).

2.4.3.2. Syntax Ambiguity

Extent ambiguity

Horn and Ward (2006) stated that phrases with uncertain syntax might result in many SI meanings (Ramzan et al., 2020, 2021). For instance, "He failed to consume every bit of cake" may imply "he consumed part" (emphasis on negative) or "she kept a portion wasted" (concentrating on quantifier). Recognising the envisioned scope is vital for addressing SI.

Elliptical Structures

Incomplete statements or phrases may leave implicit factors that affect SI interpretation. According to Chierchia (2017), the phrase "better late than than never" implies "it's nice you've arrived, even if it is delayed." The missing presupposition adds towards the SI.

2.5. PRAGMATIC PLAY ASPECTS

2.5.1. Situational relevancy and usefulness choices

Although semantics serves as a basis to SIs, practical issues influence their understanding and use in everyday interactions. Situational relevancy and usefulness choices influence way audiences interpret scalar statements.

2.5.1.1.Spatial Relevance

Mutual comprehension and presumptions

The speaker's and listener's shared knowledge influences the contextual relevance of information. Levinson (2000) suggests that the phrase "the majority of individuals completed their race" may imply "not every person completed" in general, yet "everybody except John completed" when referring to other people's involvement.

Concentration and significance

Clark (1996) explained Contextual considerations can alter SI perception. The phrase "He is the tallest kid throughout class" implies "never short," however depending on the setting (such as volleyball trials), the meaning may shift into "very tall".

Social situation and politeness

Speakers may opt to deliver knowledge directly or indirectly depending on the social context as well as the degree of politeness. In more formal situations, using "I dissent" rather than "I cannot fully agree" might be more courteous (Leech, 2014).

2.5.1.2.Relevance Preferences

Least Effort Rule

The Least Effort Rule states that audience members and speakers choose effective interaction to communicate the intended meaning. SIs provide additional details with no overloading the audience member (Grice, 1975).

Maximal quantity

Horn and Ward (2006) stated that the Gricean concept implies that communicators must not say excessively or inadequately. SIs aims to express meanings and implications concisely, minimising duplication and maximising usefulness.

Bilateral enhancement and intellectual outcomes

Relevance Hypothesis (Sperber & Wilson, 1986) promotes reciprocal benefit in interaction. SIs enhance mutual comprehension by updating the recipient's mental representation and reducing superfluous explanation.

2.5.2. Respondent intent and audience assumptions

SI perception relies heavily on the interaction involving presenter purpose and audience inferences, in addition to environmental circumstances. Comprehending how presenters express what they want to say via implicatures as well as how audiences form conclusions based on the spoken word and environment is key for understanding this intriguing linguistic phenomena.

2.5.2.1.Speaker's Motive

Indirect and implied meaning

Speakers frequently use symbolic language (SIs) to express messages rather than making plain assertions. This may be done for courtesy, to prevent presumption, or to convey a more complex and provocative meaning (Leech, 2014). For instance, "It is not all that awful" might imply "it's really great" if the person saying it want to express support with no exaggerating their individual pleasure.

2.5.2.2.Listener Predictions

Philosophy of Cognition and Shared Ground

To draw conclusions from SIs, as stated by Sperber and Wilson, (1986) that the audience member must understand the presenter's objective and common expertise. Understanding the author's character, interaction, and prior experiences might assist listeners grasp the true significance and power of this implicature.

Process of labour and mental effectiveness

Audiences prefer simple explanations that fit with their current mental picture. SIs with minimum implicit ability has a greater chance to be adopted compared with proposals that demand difficult thinking or challenge established beliefs (Grice, 1975).

2.5.3. Societal understanding and cooperation

2.5.3.1.Ethnic Threads and Standards

Social expectations and preconceived notions

Scalar words are related with certain expectations in different roles in society. The physician's statement, "He is hardly experiencing any pain," may be interpreted as "he is experiencing substantial pain" because of their professional obligation to minimise subjective statements (Leech, 2014).

Traditions of culture and standardization

Traditions and customs shape way scalar concepts appear in certain settings. Levison (2000) suggests that in courteous societies, indirect comments (such as "It was not awful" indicating "it is nice") might be more frequent to explicit ones.

2.5.3.2.Collective Member and The group in question Communication

Jargon as well as specialised terminologies

Organisations with common competence or goals may produce specialised terminology with distinct scalar values. According to Horn and Ward (2006), "interesting" may mean "ground-breaking" in classroom settings and "fairly enjoyable" in daily talk.

Dynamics of groups and socioeconomic relationships

Power relations among groups of people can impact way SIs are understood. Someone below responding "No, I fully object" to a higher may indicate severe dissent owing to peer pressure to prevent conflict (Leech, 2014).

2.5.3.3.Relevancy & Reciprocal Benefit In Similar Settings

Shared information minimizes the execution of work

Sperber and Wilson (1986) stated that common ground reduces the requirement of sophisticated conclusions from SIs. Audiences with shared prior knowledge can easily perceive problematic implicatures, leading to more efficient and clear dialogue.

Improving implicatures as well as social bonds

Sharing social information can enhance the implications of scalar concepts. Social interaction is also important according to (Akram & Abdelrady, 2023, 2025; Akram & Li, 2024; Ma et al., 2024; Ramzan & Khan, 2024). In tightly connected neighbourhoods, saying "We are ever available for one another" may indicate unshakable solidarity based on deep social links and dependence on one another (Wedgwood, 2007).

2.5.4. The Significance Of Courtesy And Inadvertent

Scalar implications (SIs) sometimes require a delicate balance between politeness and indirection. Using indirect remarks allows communicators to negotiate social circumstances with sensitivity and care for the the hearer's sentiments while delivering the intended point via implied meanings.

2.5.4.1.Sustaining Societal Cohesion and Eliminating the Face Threat

Gricean Maxim for The quality

Speakers follow the idea of honesty, although occasionally they take it precisely. SIs allow for indirect communication of potentially negative signals (e.g. critiques, dissent) without immediately affecting the recipient's self-worth or social position (Grice, 1975). For instance, "That was not the greatest presentation I've witnessed" implies dissatisfaction without directly expressing disapproval.

Societal Proximity and Powerful Dynamics

The amount of politeness varies as the social gap among the individual speaking and audience. A less senior colleague's phrase "I may possess an alternative viewpoint" to his or her superior conveys a more subtle dissent than a direct "I dissent" (Levison, 2000).

2.5.4.2.Strengthening Expression and Tactical Unpredictability

Humour and ironic via implicature infringement

Speakers can use scalar expectancies for funny effect. Sarcastically expressing "It is precisely what I expected" implies the reverse, utilising the SI to generate humorous ironic to the the audience cost (Clark, 1996).

2.5.4.3.Problems and Possible Inconsistencies

Understanding implicatures accurately takes effort needed

To accurately interpret SIs, listeners must make inferences above what is actually meant, which can lead to misconceptions without context or common knowledge.

Indirectness may result in ambiguity or manipulations

Excessive dependence on SIs can lead to ambiguous communication, impeding clarity and perhaps permitting manipulative approaches to hide the intended message.

3. METHODOLOGY

3.1.Participants

The study included sixteen-year-old Sindhi and Urdu-speaking matric standard students. The participants were students of County Cambridge Girls School located the city of Hyderabad, Sindh, Pakistan.

3.2.Tools

The researcher developed a collection of 10 brief narratives that may be executed with toys as well as accessories. In each scenario, characters must choose between two possibilities based on number or degree, such as the quantity of nourishment devoured by animals. Furthermore, seven important assertions using Scalar words (e.g., "certain, all") were true but not pragmatically appropriate. To prevent individuals from answering at random from among the researcher created five empty phrases, two true and three false. We designed two warm-up tales, one apparent and one false, to help participants understand the task and prevent unproductive performance. Accessories and miniatures were acquired to enhance the storytelling experience. The scholar used a computerised camera to capture the tales, each lasting around 20 minutes. The projector was used to display to everyone the video recordings of stories, which had been uploaded to a computer.

3.3.Procedure to Collect Data

The study endeavour involved five 10th-grade pupils recruited through school ads. Participants in the investigation provided consent with knowledge after the researcher described the goal of the study and ensured their anonymity. Participants were given a brief the Pre-Test Survey to obtain personal information and ensure they were unfamiliar with the study's stories. To minimise disruptions, the investigation was conducted in a quiet environment. There had a projection and a computer prepared to display stimuli of vision. To prepare responders for the task, the researcher presented two warming up trail stories. Each of the 10 exploratory stories was narrated by a puppet that was then concluded with an evaluation utilising scalar language. Judges were tasked with determining the accuracy of the puppets portrayal. To prevent random responses, five blank phrases were introduced among each experiment session. Throughout the Post-Test Survey, respondents were prompted to rate the puppet's words as being appropriate or not. Students received incentives for actively participating in the research. Finally, an investigation of responses from respondents assessed pragmatic and semantics aspects of interpreting SIs.

4. FINDINGS

TABLE 1: Trials for Warm-UP Exercise			
S.NO	Participants	Stories for Warm-UP Exercise	
		Garden Flower (True)	Michael Jackson (Moon Walker) (False)
1	One	A	n/a
2	Two	A	n/a
3	Three	A	n/a
4	Four	A	n/a
5	Five	A	n/a

A is for Acceptable-Appropriate and N/A not Applicable

TABLE 2: Statements (Fillers)			
Participants	Filler (Name)	Fill Type	Fill Type
One	Umbrella for Rainbow	T	
Two	Field of Sunflower	T	
Three	Penguins	T	
Four	Trees-Talking		F
Five	Giraffes		F

5. ANALYSIS OF FINDINGS

Respondents successfully rated the suitability of sentences during warm-up tests, indicating their grasp of the task. The responses show varying views and appraisals regarding puppet's statements during important trials.

In "STORY OF BEARS," P1 and P3 suggested that the sentence was appropriate, but P2 as well as P5 demonstrated otherwise. P4 suggested an alteration.

About "THE JOURNEY OF SEA," P3 along with P5 offered changes to the puppet's justification, while P1 and P2 agreed and acceptable. P4 stated that it wasn't.

In "BUILDING OF BLOCKS," nobody agreed that the declaration was suitable, although P1, P4, along with P5 stated that it was not, while P2 and P3 proposed a revision.

P4 along with P5 suggested changing the sentence "A SLICE OF PIZZA PARTY," but P1, P2, and P3 agreed that the original was appropriate.

Nobody commented on the inappropriate statement from the narrative "VEGGIE YARD." P1, P2, P3, and P4 supported the original statement, while P5 requested a revision.

The study found that responders handled important trials differently. Some of the participants frequently judged items as correct, whereas others expressed scepticism or proposed revisions. Respondents highlighted a potential pragmatic inconsistency, since theoretically true claims may be perceived as pragmatically erroneous based on the context.

6. DISCUSSION

Research Question 1:

Respondent responses indicate that pragmatism and semantics in variables significantly influence their views of SIs in this study. Participants' interpretations of puppet statements differed, indicating that pragmatic suitability had a substantial role. The study found that pragmatic aspects play a significant role in interpreting scalar implicatures, since semantically valid claims were often deemed inadequate.

Research Question 2:

Assessments and suggestions from warming up and essential trials show a complicated relationship among pragmatism and elements of meaning in understanding scalar implicatures. Participants consistently reached appropriate judgements regarding warming up declarations, but their responses to important trials varied. Participants' judgements were heavily influenced by pragmatic considerations, such as setting fit, as seen by various evaluations and suggested revisions. Scalar implicatures vary not just by semantic content but also by their practical appropriateness in specific contexts.

Research Question 3:

Participants' differing ratings associated with puppet's statements in key trials indicate pragmatic differences in their understanding of scalar implications. The study found that a few participants considered specific claims to be pragmatically incorrect, notwithstanding their intellectual validity. Participants prioritised contextual fit above rigorous logical dependability, as seen by the gap in results. Results indicate that interpreting scalar implicatures pragmatically is a greater challenge.

Research Question 4:

Participants' suggestions for language enhancements or changes to the puppet's statements reflect frequent patterns and themes in their understanding of scalar implicatures. Participants aimed to connect a puppet's speech with pragmatic issues, resulting in proposed alterations which are simultaneously spatially as well as semantically appropriate. The frequent themes in these suggestions may indicate areas where responders want explanation or agreement with situational assumptions. These proposals enhance the way language is used to transmit scalar implicatures, increasing both pragmatic as well as semantic elements of the understanding process.

7. FUTURE INSIGHTS

The suggested adjustments and found heterogeneity in responder views open up new study options. Future research might examine the underlying factors that lead to pragmatist discrepancies in scalar implicatures to gain a better understanding on the link among pragmatics and semantics. Showkat and Parveen (2017) stated that the participants' demographics, including age along with linguistic origin, can enhance our knowledge of how pragmatic awareness varies between individuals. In-depth interviews aim to gain a comprehensive understanding regarding the interviewee's opinion on the subject at hand. Hertzog (2008) suggested that to utilize reliability ranges to estimate the number of samples based on expected or desired values.

8. CONCLUSION

Papafragou and Musolino (2003) stated that the Verbal communication involves more than simply encoding and decoding, as inference is a crucial aspect. The commonly established norms in language along with philosophy cannot be definite in the setting of SI, such as "a few Fs be G indicating yet not every Fs were G." According to Katsos (2017), all the deductive interpretation on the results as well as the application of the recommendations are relevant regarding the semantics/pragmatics difference. Participants consistently emphasised the importance of pragmatic and a semantic accuracy while making linguistic modifications. The study discovered which scalar implicatures can lead to practical contradictions, making logically precise claims potentially erroneous. This study advances our knowledge of language understanding by focusing on the interplay of pragmatic along with semantic factors in SI understanding. It provides valuable insights to apply to subsequent language pragmatics study.

REFERENCES

- Ahmad, N., Akram, H., & Ranra, B. (2022). In quest of Language and National Identity: A Case of Urdu language in Pakistan. *International Journal of Business and Management Sciences*, 3(2), 48-66.
- Akram, H., & Abdelrady, A. H. (2023). Application of ClassPoint tool in reducing EFL learners' test anxiety: an empirical evidence from Saudi Arabia. *Journal of Computers in Education*, 1-19.
- Akram, H., & Abdelrady, A. H. (2025). Examining the role of ClassPoint tool in shaping EFL students' perceived E-learning experiences: A social cognitive theory perspective. *Acta Psychologica*, 254, 104775.

- Akram, H., & Li, S. (2024). Understanding the Role of Teacher-Student Relationships in Students' Online learning Engagement: Mediating Role of Academic Motivation. *Perceptual and Motor Skills*, 00315125241248709.
- Akram, H., & Oteir, I. N. (2025). A longitudinal analysis of physical exercise in shaping language learners' emotional well-being: a comparative analysis between L1 and L2 students. *BMC psychology*, 13(1), 1-10.
- Amjad, M., Hussain, R., & Akram, H. (2021). Structural and functional taxonomies of lexical bundles: an overview. *Harf-o-Sukhan*, 5(4), 358-367.
- Chierchia, G. (2017). Scalar implicatures and their interface with grammar. *Annual Review of Linguistics*, 3(1), 245-264.
- Clark, H. H. (1996). *Using language*. Cambridge University Press.
- Dale, R., & Reiter, E. (1995). Computational interpretations of the Gricean maxims in the generation of referring expressions. *Cognitive science*, 19(2), 233-263.
- Degen, J. (2015). Investigating the distribution of some (but not all) implicatures using corpora and web-based methods. *Semantics and Pragmatics*, 8(11), 1-55. <http://semprag.org/article/view/3022>
- Degen, J., & Tanenhaus, M. K. (2015). Processing scalar implicature: A constraint-based approach. *Cognitive Science*, 39(4), 667-710. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/cogs.12171>
- Fox, D. (2007). Free choice and the theory of scalar implicatures. In *Presupposition and implicature in compositional semantics* (pp. 71-120). Palgrave Macmillan UK.
- Gopang, I. B., Bughio, F. A., & Umrani, T. (2015). Foreign language anxiety and intercultural communication sensitivity. *ELF Annual Research Journal*, 17, 93-106.
- Grice, H. P. (1975). Logic and conversation. In *Speech acts*. Brill.
- Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in nursing & health*, 31(2), 180-191. <https://onlinelibrary.wiley.com/doi/abs/10.1002/nur.20247>
- Horn, L. R. (1972). *On the semantic properties of logical operators in English*. University of California, Los Angeles.
- Horn, L. R., & Ward, G. (2006). *A handbook of pragmatics*. Blackwell Publishing. <http://www.uop.edu.pk/ocontents/Lecture%204%20indepth%20interview.pdf> <https://www.sciencedirect.com/science/article/pii/S0010027702001798>
- Katsos, N. (2008). The semantics/pragmatics interface from an experimental perspective: the case of scalar implicature. *Synthese*, 165(3), 385-401. <https://link.springer.com/article/10.1007/s11229-007-9187-4>
- Leech, G. N. (2014). *The pragmatics of politeness*. Oxford University Press.
- Levinson, S. C. (2000). *Presumptive meanings: The theory of generalized conversational implicature*. MIT Press.
- Li, S., & Akram, H. (2023). Do emotional regulation behaviors matter in EFL teachers' professional development?: A process model approach. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, (9), 273-291.
- Li, S., & Akram, H. (2024). Navigating Pronoun-Antecedent Challenges: A Study of ESL Academic Writing Errors. *SAGE Open*, 14(4), 21582440241296607.

- Ma, D., Akram, H., & Chen, I. H. (2024). Artificial Intelligence in Higher Education: A Cross-Cultural Examination of Students' Behavioral Intentions and Attitudes. *The International Review of Research in Open and Distributed Learning*, 25(3), 134-157.
- Noveck, I., & Sperber, D. (2007). The why and how of experimental pragmatics: *The case of 'scalar inferences'*. In N. Burton-Roberts (ed.), *Advances in Pragmatics*. Palgrave.
- Papafragou, A., & Musolino, J. (2003). Scalar implicatures: experiments at the semantics–pragmatics interface. *Cognition*, 86(3), 253-282.
- Ramzan, M., & Khan, M. A. (2024). Analyzing pragmatic hedges from politeness principles perspectives in the prologue of the holy woman and epilogue of unmarried. *Journal of Applied Linguistics and Tesol (JALt)*, 7(4), 1170-1184.
- Ramzan, M., Akram, H., & kynat Javaid, Z. (2025). Challenges and Psychological Influences in Teaching English as a Medium of Instruction in Pakistani Institutions. *Social Science Review Archives*, 3(1), 370-379.
- Ramzan, M., Awan, H. J., Ramzan, M., & Maharvi, H. (2020). Comparative Pragmatic Study of Print media discourse in Baluchistan newspapers headlines. *Al-Burz*, 12(1), 30-44.
- Ramzan, M., Azmat, Z., Khan, M. A., & un Nisa, Z. (2023, June). Subject-Verb Agreement Errors in ESL Students' Academic Writing: A Surface Taxonomy Approach. In *Linguistic Forum- A Journal of Linguistics*, 5(2), 16-21.
- Ramzan, M., Khan, M. A., & Sarwar, M. (2023). Style Shift: A Comparative Cultural Analysis of Pride and Prejudice and Unmarried. *University of Chitral Journal of Linguistics and Literature*, 7(2), 22-29.
- Ramzan, M., Qureshi, A. W., Samad, A., & Sultan, N. (2021). Politics as Rhetoric: A Discourse Analysis of Selected Pakistani Politicians' Press Statements. *Humanities and Social Sciences Review*, 9(3).
- Romero, E., & Soria, B. (2010). Introduction: Explicit communication and relevance theory pragmatics. In *Explicit communication: Robyn Carston's pragmatics* (pp. 1-24). Palgrave Macmillan UK.
- Saeed, J. I. (2013). *Semantics*. Wiley-Blackwell.
- Showkat, N., & Parveen, H. (2017). In-depth interview. *Quadrant-I* (e-text), 1-9.
- Sperber, D., & Wilson, D. (1986). *Relevance: Communication and cognition*. Harvard University Press.
- Wedgwood, D. (2007). Shared assumptions: Semantic minimalism and Relevance Theory. *Journal of Linguistics*, 43(3), 647-681.
- Wepik. (2023). Adventure of sea. <https://wepik.com/ai#rs=menu>
- Wepik. (2023). Garden flower . <https://wepik.com/ai#rs=menu>
- Wepik. (2023). The Moon walkers. <https://wepik.com/ai#rs=menu>
- Wepik. (2023). The story of bears. <https://wepik.com/ai#rs=menu>