An Online Academic Journal of Interdisciplinary & transcultural topics in Humanities & social sciences

TJHSS

BUC Press House

BUC

Volume 6 Issue (2)

January 2025

Transcultural Journal for Humanities and Social Sciences (TJHSS) is a journal committed to disseminate a new range of interdisciplinary and transcultural topics in Humanities and social sciences. It is an open access, peer reviewed and refereed journal, published by Badr University in Cairo, BUC, to provide original and updated knowledge platform of international scholars interested in multi-inter disciplinary researches in all languages and from the widest range of world cultures. It's an online academic journal that offers print on demand services.

TJHSS Aims and Objectives:
To promote interdisciplinary studies in the fields of Languages, Humanities and Social Sciences and provide a reliable academically trusted and approved venue of publishing Language and culture research.

Transcultural Journal for Humanities & Social Sciences (TJHSS) Editorial Board

EDITORIAL BOARD

Professor of Chinese Linguistics Faculty of Alsun, Ain Shams University, Egypt	
Prof. Rasha Kamal Professor of Chinese Language Vice- Dean of the School of Linguistics & Translation Badr University in Cairo & Faculty of Alsun, Ain Shams University, Egypt	Email: rasha.kamal@buc.edu.eg
Prof. Sun Yixue President of The International School of Tongji University	Email: 98078@tongji.edu.cn
Prof. Wang Genming President of the Institute of Arab Studies Xi'an International Studies University	Email: genmingwang@xisu.cn
Prof. Zhang hua Dean of post graduate institute Beijing language university	Email: zhanghua@bluc.edu.cn
Prof. Belal Abdelhadi Expert of Arabic Chinese studies Lebanon university	Email: Babulhadi59@yahoo.fr
GERMAN LANGUAGE & LITERATURE	
Prof. Baher El Gohary Professor of German Language and Literature Ain Shams University, Cairo, Egypt	Email: baher.elgohary@yahoo.com
Prof. El Sayed Madbouly Professor of German Language and Literature Badr University in Cairo & Ain Shams University, Cairo, Egypt	Email: elsayed.madbouly@buc.ed u.eg
Prof. George Guntermann Professor of German Language and Literature Universität Trier, Germany	Email: GuntermannBonn@t-online.de
Prof. Herbert Zeman Professor of German Language and Literature Neuere deutsche Literatur Institut für Germanistik Universitätsring 1 1010 Wien	Email: herbert.zeman@univie.ac.at
Prof. Lamyaa Ziko Professor of German Language and Literature Badr University in Cairo & Menoufia University, Egypt	Email: lamiaa.abdelmohsen@buc. edu.eg
Prof. p`hil. Elke Montanari Professor of German Language and Literature University of Hildesheim, Germany	Email: montanar@unihildesheim.de, elke.montanari@unihildesheim.de
Prof. Renate Freudenberg-Findeisen Professor of German Language and Literature Universität Trier, Germany	Email: freufin@uni-trier.de
ITALIAN LANGUAGE & LITERATURE	
Prof. Giuseppe Cecere	Email: giuseppe.cecere3@unibo.it

Professore associato di Lingua e letteratura araba Università di Bologna Alma Mater Studiorum, Italy	
Prof. Lamiaa El Sherif Professor of Italian Language & Literature BUC, Cairo, Egypt	Email: lamia.elsherif@buc.edu.eg
Prof. Shereef Aboulmakarem Professor of Italian Language & Literature Minia University, Egypt	Email: sherif_makarem@y ahoo.com
SPANISH LANGUAGE & LITERATURE	
Prof. Carmen Cazorla Professor of Spanish Language & Literature Universidad Complutense de Madrid, Spain	Email: mccazorl@filol.ucm.es
Prof. Elena Gómez Professor of Spanish Language & Literature Universidad Europea de Madrid, Spain	Email :elena.gomez@universidadeuropea.es Universidad de Alicante, Spain spc@ua.es
Prof. Isabel Hernández Professor of Spanish Language & Literature Universidad Complutense de Madrid, Spain	Email: isabelhg@ucm.es
Prof. Manar Abd El Moez Professor of Spanish Language & Literature Dean of the Faculty of Alsun, Fayoum University, Egypt	Email: manar.moez@buc.edu.eg
Prof. Mohamed El-Madkouri Maataoui Professor of Spanish Language & Literature Universidad Autónoma de Madrid, Spain	Email: elmadkouri@uam.es
Prof. Salwa Mahmoud Ahmed Professor of Spanish Language & Literature Department of Spanish Language and Literature Faculty of Arts Helwan University Cairo, Egypt	Email: Serket@yahoo.com
HUMANITIES AND SOCIAL SCIENCES	
Prof. Ahmad Zayed Professor of Sociology Faculty of Arts, Cairo University, Egypt Ex-Dean of the School of Humanities & Social Sciences Badr University in Cairo	Email: ahmedabdallah@buc.edu.eg
Prof. Amina Mohamed Baiomy Professor of Sociology Faculty of Arts Fayoum University, Egypt	Email: ama24@fayoum.edu.eg
Prof. Galal Abou Zeid Professor of Arabic Literature Faculty of Alsun, Ain Shams University	Email: gaalswn@gmail.com
Prof. M. **Safeieddeen Kharbosh** Professor of Political Science Dean of the School of Political Science and International Relations	Email: muhammad.safeieddeen@ buc.edu.eg

| Badr University in Cairo, Egypt | |
| **Prof. Sami Mohamed Nassar** Professor of Pedagogy Dean of the School of Humanities & Social Sciences Badr University in Cairo Faculty of Graduate Studies for Education, Cairo University | Email: sami.nassar@buc.edu.eg |

خطاب رئيس مجلس الأمناء

أ. د. حسين محمود حسين حمودة

رئيس تحرير

(TJHSS) Transcultural Journal of Humanities & Social Sciences

تحية طيبة وبعد ،،،

تتقدم إليكم جامعة بدر بالقاهرة بالشكر على ما تبذلونه من جهد مادي ومعنوي لإصدار المجلة،

فتميزكم المشهود خير قدوة، ممتنين لعملكم الدؤوب وتفوقكم الباهر، ونتمنى لكم المزيد من

النجاحات المستقبلية.

تحريرًا في يوم الأربعاء الموافق 2024/08/07.

رئيس مجلس الأمناء

د/ حسن القلا

Editorial:

Embracing Diversity and Inclusion in the Age of Digital Humanity

The Third International Conference hosted by the School of Linguistics and Translation at Badr University in Cairo, titled "Diversity and Inclusion in the Age of Digital Humanity", marked a significant milestone in the ongoing dialogue about the intersection of technology, language, and humanistic values. Held on October 26–27, 2024, the conference brought together scholars, researchers, and activists from around the world to explore how digital advancements can foster inclusivity while addressing the challenges posed by rapid technological evolution.

The Digital Transformation of Humanities

One of the central themes of the conference was the imperative for digital transformation in humanities disciplines. Keynote speaker Professor Ruslan Mitkov's presentation, "Language and Translation Technologies in the Artificial Intelligence Era", underscored the transformative potential of Natural Language Processing (NLP) and AI in translation and linguistics. Mitkov highlighted the evolution from rule-based systems to generative AI, emphasizing both the capabilities and limitations of Large Language Models (LLMs). His insights reinforced the idea that while AI can enhance efficiency, human expertise remains indispensable in navigating linguistic nuances, ambiguity, and cultural context.

The conference also addressed the need for integrating computational linguistics into academic curricula. Recommendations included developing undergraduate and postgraduate programs in digital humanities, equipping students with skills for emerging roles like AI translators and prompt engineers, and promoting bias-free AI technologies. These measures are critical to preparing future generations for a labor market increasingly shaped by AI.

Diversity and Inclusion in Digital Spaces

Another focal point was the role of digital platforms in promoting diversity and inclusion. Discussions highlighted the importance of creating safe digital environments for marginalized groups and minorities, as well as the ethical responsibilities of AI developers to mitigate biases in data and algorithms. Professor Sameh El Ansary's presentation on corpus-based language teaching exemplified how empirical approaches, such as using real-life language data, can bridge gaps in traditional pedagogy and foster more inclusive learning experiences.

The participation of researchers from diverse linguistic and cultural backgrounds—with 57 papers presented in multiple languages, most of them published in this issue—further demonstrated the conference's commitment to inclusivity. The inclusion of voices like Italian poet Domenico Pisana (we publish in this issue his valuable lecture), and scholars specializing in underrepresented languages underscored the value of cultural and linguistic diversity in academic discourse.

Charting a Path Forward:

The conference concluded with a call for continuous monitoring of AI developments, ethical AI practices, and interdisciplinary collaboration to ensure technology's role as a tool for empowerment. Professor Zain A. Hady's article, "The Internet from the Age of Innocence to the Age of Decadence: A Study in the Digital Postcolonialism," furthered the discussion on the societal impacts of digital evolution. The imperative to safeguard humanistic values while embracing AI's potential was underscored.

The insights from this conference serve as a crucial reminder that the digital age must be guided by principles of diversity, inclusion, and human oversight. By aligning technological advancements with equity, we can build a future that authentically reflects the richness of our global community. The success of this conference reaffirms academia's vital role in shaping inclusive digital landscapes, urging us to carry forward its lessons and ensure technological progress aligns with understanding, respect, and inclusion.

The Editorial Board

Pragmatic Language Impairment in Autism: Application on the Character of Nadim in the Arabic Series *Hala Khasa* (*Special Case*)

Iman Mahfuz

Arab Academy for Science, Technology and Maritime Transport (AASTMT)

imahfouz@aast.edu

Abstract

Pragmatic Language Impairment (PLI) is considered one of the core symptoms of individuals with Autism Spectrum Disorder (ASD). The present study attempts to analyze PLI as displayed by the main character in *Hala Khasa* (*Special Case*) Egyptian series. The series was released in 2024 and tells the story of Nadim who is a young autistic lawyer. The research seeks to examine the pragmatic deficits displayed by Nadim on both the receptive and expressive language levels. Drawing upon Vicker (2009) and Vicente et al. (2024), the study proposes a compiled list for PLI features in ASD by merging similar categories under more general ones in order to avoid duplication and yield a more comprehensive model. A mixed approach is adopted in order to qualitatively account for the different deficits and calculate their frequencies. The results reveal that most of the pragmatic deficits displayed by the main character pertain to the expressive rather than the receptive language level, particularly in relation to dialogic rather than monologic discourse. This was primarily manifested in deficits in conversation skills and politeness. On the receptive level, on the other hand, most of the difficulties involved inability to interpret non-literal meaning, especially in the case of idioms and indirect speech acts. Since drama series are widely watched by people of different ages and from various backgrounds, the series may serve to raise awareness among Arab-speaking audience to ASD and the involved pragmatic language deficits which may eventually contribute to promoting inclusion in Egyptian and Arab society.

Keywords: Autism Spectrum Disorder (ASD), *Hala Khasa* Series, Pragmatic Language Impairment (PLI), Savant Syndrome

1. Introduction

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental disorder characterized by deficits in social communication, restricted interests and repetitive behaviors (American Psychiatric Association, 2022). It has become one of the fastest growing disabilities with an estimated prevalence of around 1.5% (Diamond et al., 2022). It is distinguished by "a chronic impairment in social relations" (Baron-Cohen, 1988, p. 379).

Maintaining successful social relations through efficient communication often requires going beyond literal meaning and drawing upon knowledge and experience to interpret the meaning of utterances. Pragmatic communication ability involves language use in context which transcends word meanings (semantics) and sentence structure (syntax) (Turkstra et al., 2016). It is an important aspect of communication by which a person modifies their speech according to a number of factors including culture, background, location and shared experience (Dolata et al., 2022).

Indeed, Cummings (2014) argues that pragmatics is the point of intersection between language and cognition. While some scholars restrict its scope to purely linguistic context, others adopt a more cognitive and cultural perspective that also encompasses non-linguistic factors such as gestures, gaze and posture. Malkin (2020) argues that this loose definition often hinders effective assessment of pragmatic language disorders. According to Reboul et al. (2012), autism is considered a "natural testing ground for pragmatic hypothesis" (p. 317).

Studying deficits in pragmatic competence falls within the scope of clinical linguistics, which applies linguistic theories and concepts to the study of language disorders (Perkins, 2010). Clinical pragmatic studies thus attempt to tackle pragmatic deficits among children and adults (Cummings, 2007). One of these main deficits is pragmatic language impairment (PLI), which describes a type of Specific Language Impairment (SLI) in which individuals struggle not with language structure but with its use. Also known as Social (Pragmatic) Communication Disorder (SPCD), its main symptoms include inability to adapt interactions to context or listener, follow rules of conversation and storytelling, and understand implicit language (American Psychiatric Association, 2022). However, its exact prevalence cannot be accurately determined due to its overlap with several other neurodevelopmental disorders and learning disabilities (Alduais et al., 2023; Ketelaars & Embrechts, 2017).

PLI is considered one of the core symptoms of individuals with ASD (Baron-Cohen, 1988; de Marchena, 2013; Diamond et al., 2022; Dolata et al., 2022). In fact, ASD itself is often discovered in children due to the recognition of unusual or delayed speech (Tager-Flusberg et al., 2005). According to Tager-Flusberg (1981), phonological and syntactic development in autistic children often occurs at a normal rate, whereas semantic and pragmatic development displays remarkable deficits. Indeed, 90% of parents of autistic children have reported that their children displayed some degree of PLI (Malkin, 2020).

Even individuals with ASD who are fluent and high-functioning often display inappropriate language use which results in difficulty in social communication. This is probably caused by "maladaptive choices of speech due to abnormal patterns of brain functioning" (Diamond et al., 2022, p.2). Pragmatic impairment in people with ASD becomes more pronounced in adults since they are normally expected to have attained normal progress in other language aspects such as syntax and semantics (Baltaxe, 1977).

High Functioning Autism (HFA) is a condition that refers to individuals who had displayed classic autism symptoms in early childhood but developed in a way superior to usual autistic children in relation to intellectual, social and communicative skills (DeMyer et al., 1981). A special type of ASD is the savant syndrome which is a condition in which someone with an intellectual impairment such as autism displays an exceptional ability or talent inconsistent with their overall level of functioning (Park, 2023). This may include mathematical calculations, artistic skills, musical abilities, or extraordinary memory.

Autism only started gaining interest in Egypt in the 1990s and there is still a significant lack of publication in this field (Mustafa, 2021). According to Meguid (2015), "developing countries are facing an alarming gap between innovations in childhood learning and developmental disabilities (LDD) research and their delivery to communities" (p.1) since the "level of knowledge and awareness about autism spectrum disorder is low among the general population and health care workers in Egypt" (p.4).

The present study attempts to analyze PLI features as displayed by the main character in *Hala Khasa* (*Special Case*) Egyptian series. The series was released in 2024 and tells the story of Nadim who is a young autistic savant lawyer. The research seeks to identify the features of PLI displayed by the character in order to examine the pragmatic deficits displayed by Nadim on both the receptive and expressive language levels. It also investigates to what extent the proposed feature list can aid in analyzing PLI in ASD adult individuals. Since drama series are widely watched by people of different ages and from various backgrounds, the series in general and the main character in particular may serve to raise awareness among the Egyptian and Arabic-speaking audience about ASD and the involved pragmatic language deficits.

2. Review of the Literature

There is a large body of literature on PLI for which several terms have evolved over the years including social pragmatic communication disorder and semantic pragmatic disorder among others.

2.1 Studies of PLI

Baltaxe (1977) conducted a pioneering study on pragmatic deficits related to autism. By comparing autistic adolescents' discourse to that of typically developing (TD) children, she found that the former failed to observe politeness since they lack understanding of the social rules that determine what is acceptable in conversations. She also reported that autistic children displayed problems with turn-taking as they frequently interrupt in conversations.

Prutting and Kirchner (1987) devised a pragmatic protocol consisting of thirty parameters organized for clinical use. These comprised verbal, nonverbal and paralinguistic aspects. Baron-Cohen (1988), on the other hand, discussed two different psychological theories for ASD-related pragmatic deficit: the Affective Theory and the Cognitive Theory and proposed integrating them for better comprehension of this phenomenon. He explained these deficits in terms of the theory of mind (ToM), which is the ability to understand other people's mental states, desires, intentions, etc.

Rapin (1996) listed a number of features that characterize the pragmatic deficit disorder. These include verbosity, comprehension and word finding deficits, inadequate conversational skills, and poor maintenance of topic. However, the phonological and syntactic skills are usually unimpaired.

Field (2003) distinguished two main types of language disorders: expressive and productive; the former affecting language production while the latter affecting language comprehension. Perkins (2010), on the other hand, listed four types of deficits that contribute to PLI: neurological, cognitive, linguistic and sensorimotor.

Reboul et al. (2012) maintain that ASD entails difficulties in utterance interpretation as well as discourse management which are clearer in natural conversations than experiments. This includes difficulties interpreting non-literal communication (humor, irony, implicatures, figurative language, indirect speech acts, etc.), politeness, turn-taking, persistence on boring or unsuitable topics in conversation.

Malkin (2020) investigated pragmatic language ability in autism with particular focus on verbal reference. She concluded that autistic individuals may not display impairment equally in all pragmatic abilities.

Despite the sophisticated theoretical frameworks employed by the above studies, they have often focused on certain specific aspects of PLI rather than attempting to provide a more comprehensive framework for various features. They also mostly involved English-speaking individuals with very little attention devoted to ASD individuals who are native speakers of other under-researched languages in this respect.

2.2 PLI in the Language of Film and TV Characters

Several studies have attempted to analyze the language of autistic characters in movies and series.

 A number of studies have tackled the language used by the main character of *Rain Main*, the 1988 famous American movie starred by Dustin Hoffman who portrayed an autistic savant. Ikalyuk and Kuzmyn (2015) for instance compared the speech of the fictional character with the real one as shown in a documentary using psycholinguistic text analysis and pointed out significant differences. Levia et al. (2019), on the other hand, found that the most dominant type of disorder displayed by the character in the movie was expressive language disorder as opposed to receptive language disorder indicating a difficulty in self-expression. Aisyah et al. (2022) also examined the same character with specific focus on phonological aspects and found that it displayed four main disorders, namely articulation disorder, phonological disorder, voice disorder and repetition.

Several studies have also examined the language of the main character in *The Good Doctor* American medical drama series (2013). Studies attempted to identify the types of autistic responses displayed by the main character Shaun Murphy who is an autistic savant. For instance, Larasati (2019) classified the pragmatic impairments displayed by the character into verbal and nonverbal. She found that the most frequent among the former were maxim violations, whereas the most frequent among the latter were peculiar or stiff gaze. Dwiyanti (2022), on the other hand, used a psycholinguistic approach to examine Murphy's character. Using a descriptive qualitative method, Rokhim and Indah (2022) also examined Murphy's language and identified four out of six types of language disorders in his utterances, namely stuttering, phonological disorder, difficulty in understanding concepts, and difficulty in following directions.

It thus becomes obvious that studies of PLI in fictional characters have so far mostly focused on American movies and series and were more concerned with nonverbal and phonological features rather than delving deep into purely linguistic and pragmatic aspects of communication.

2.3 PLI Studies in the Arab World

In the Arab World, studies tackling ASD have mostly focused on children. A case in point is Aldofairy (2006) who conducted a field study to measure linguistic communication among a group of autistic children at a Kuwaiti special-need school. The study revealed various levels of abilities, as well as various types of deficits in communication.

Almehmadi et al. (2020) examined the pragmatic skills in the language of Arabic-speaking adolescents with ASD by comparing them with TD ones in Saudi Arabia in order to identify the differences with respect to four main aspects: discourse management, communicative function, conversational repair and presupposition abilities. The study used both direct (participants' performances) and indirect (caregivers' perceptions) measures. They found that ASD adolescents were likely to use a more formal style in conversation which hinders their ability to make friendships and engage in social activities. Diamond et al. (2022) also reported that young Arabic-speaking children diagnosed with ASD tend to use classical Arabic out of context while speaking in colloquial Arabic.

From the above discussion, it becomes clear that studies tackling PLI in Arab-speaking autistic individuals, let alone adults are very scarce (Almehmadi et al., 2020). Since the bulk of research on ASD has focused on English-speaking individuals, it would be interesting to explore this phenomenon in the Arab-speaking world. To the researcher's current knowledge, no research has been conducted on characters in Arab movies and series in this respect. One of the most effective ways of raising awareness about this important disorder in the Arab world is drama which is widely watched by people from different age groups and backgrounds. This may, therefore, assist in spreading awareness about ASD and difficulties related to it among the public.

The present study thus seeks to examine the character of Nadim as represented in the Egyptian series *Hala Khasa (Special Case)* with the aim of answering the following main research questions:

1. What are the most frequent pragmatic deficits displayed by Nadim on both the receptive and expressive language levels?

2. To what extent can the proposed feature list aid in analyzing PLI in ASD adult individuals?

3. Data and Methodology

This section provides information about the data of the study, the theoretical framework as well as the research design and procedure.

3.1 The Data

Hala Khasa (Special Case) is an Egyptian comedy drama series that premiered on *Watch It* platform on January 3rd, 2024. The series consists of ten episodes whose duration is around forty minutes each. Two episodes were streamed every Wednesday for a period of five weeks. The series blends humor with drama and attempts to convey a powerful message about the challenges faced by individuals with autism in our society. Real autistic individuals were utilized as references for accurate representations in an attempt to break the taboos surrounding special-need characters and promote inclusion in society.

Hala Khasa tells the story of a young autistic lawyer who has special abilities, Nadim, portrayed by young Egyptian actor *Taha Desouky*. The narrative explores Nadim's journey as he strives to prove his capabilities in a society that often misunderstands those considered "special." The series ranked as number one on *Watch It* platform until mid-February 2024 and has a 7.4 rating on the International Movie Database (IMDB) (2024). Rafik (2024) describes the series as "a groundbreaking exploration of the human experience. It is a must-watch because, besides the

compelling cast and storyline, this show is bridging gaps and correcting misunderstandings when it comes to autism" (In my opinion section, para. 3).

Desouky's portrayal of Nadim's character was praised by several critics. Nazir (2024) argued that the actor "brought incredible depth and authenticity to the character, capturing the nuances of Nadim's personality and the unique challenges he faces with grace and sensitivity" (Nadim's autism section, para. 2). "Taha you not only increased awareness beyond belief, you created compassion, acceptance and inspiration", wrote Dahlia Soliman, Founder and Head of the Egyptian Autistic Society on Facebook about the main actor (Egyptian Autistic Society, 2024).

The present study attempts to examine the PLI features displayed by the main character of the Egyptian series *Hala Khasa (Special Case)* in order to find out the most frequent pragmatic deficits involved on both the receptive and expressive language levels. It also seeks to explore how far the proposed model can assist in analyzing PLI in ASD adult individuals. This series was selected since it is ground-breaking in addressing the issue of ASD in Arabic-speaking adults. It was also very popular and widely watched which may help spread awareness about autism in Egypt and the entire Arab world.

The data collection is non-participatory since it is performed by gathering primary data from the episodes. The researcher watched the episodes several times in order to exhaustively identify instances of PLI and classify them under the suggested categories. Only utterances by the main character are considered for analysis, though the context of the interaction is sometimes considered relevant to the discussion. Moreover, only verbal features are tackled rather than paralinguistic ones such as gaze, gestures or intonation.

3.2 Theoretical Framework

Malkin (2020) acknowledges the difficulty of creating a coherent and comprehensive model for analyzing PLI in ASD due to the multiple skills involved and the lack of uniformity. Despite the wide literature on PLI, Cummings (2014) has also reported a lack of theoretical models in clinical pragmatic research. Ketelaars and Embrechts (2017) thus suggest that there is a need for more valid and reliable instruments to assess pragmatic functioning for individuals with PLI. Perhaps the lack of consensus on assessment criteria for this purpose owes to the fact that the pragmatic aspect is the most difficult language ability to measure or quantify (Norbury, 2014), especially that it is socially contextualized and requires naturally occurring conversational interactions (Simmons et al., 2014).

Several instruments have been devised to assess pragmatic skills among ASD populations including both direct measures of actual participants' behaviour and indirect measures collected from parents, teachers and caregivers. Most of these instruments were devised for children, primarily the Children's Communication Checklist (CCC) (Bishop, 1998) which is widely used to assess pragmatic impairment in autistic children. The assessment of adults, on the other hand, is less common. It makes use of formal assessment of an individual's speech, language and cognitive skills, together with observations of their language use in different situations, which is often supplemented by questionnaires. The most widely used instruments include the Functional Assessment of Communication Skills for Adults (ASHA FACS), the Communicative Effectiveness Index (CETI) (Turkstra et al., 2016), and the Yale in Vivo Pragmatic Protocol (Simmons, 2014).

Since most of the above methods are participatory, requiring participation either from the individuals themselves or one of the caregivers, none of them would be applicable for the purpose

of the present study. The present study thus seeks to devise a checklist of PLI in ASD adults that can be used by an observer. In order to make a more comprehensive checklist, the study employs an eclectic approach drawing upon Vicente et al. (2024) and Vicker (2009).

Vicente et al. (2024) discussed different aspects of pragmatic abilities in ASD. They distinguished two main categories of abilities: those related to the comprehension of non-literal language and those related to discourse both monologic and dialogic. The former pertains to the receptive language ability whereas the latter pertains to the expressive language ability.

First, ASD individuals typically tend to interpret non-literal language literally primarily due to their inability to attribute mental states to others. This category includes figurative language, implicatures, indirect speech acts, humor, irony and idioms.

As for the second category which involves discourse structure, autistic individuals often have difficulties in constructing narratives (monologic discourse) and engaging in conversations (dialogic discourse) (Vicente et al., 2024). On the narrative level, on the other hand, ASD individuals are often unable to construct a coherent narrative using appropriate connectives. Moreover, they may fail to use effective referencing that can be easily identified by the listener since they lack recognition of the listeners' background knowledge (new vs. shared). Regarding conversation skills, autistic individuals cannot often sustain a normal back and forth conversation. They typically display deficits in turn-taking, as well as topic preservation and shift and are often unable to extend a topic previously opened (Vicente et al., 2024).

Vicker (2009) on the other hand listed a number of linguistic and social communication characteristics associated with high-functioning adults with ASD. She suggested that the presence and severity of these characteristics varies by age and by individual. The speech of autistic individuals often displays sophisticated language skills and excellent vocabulary. However, they suffer several pragmatic difficulties of which the following will be adopted for the present study. First, autistic individuals often repeat bits of dialogue heard on television or in the conversation of others, known as *echolalia*. Second, they tend to make (impolite) statements that are factually true but socially inappropriate because of lack of awareness of their impact on others (Vicker, 2009).

According to Diamond et al. (2022), models of ASD language disorders such as Vicker (2009) may not be applicable to other languages including Arabic and therefore require modification. Moreover, pragmatic choices and social interactions are closely linked to context and influenced by culture (Ketelaars & Embrechts, 2017; Turkstra et al., 2016).

The present study thus proposes a compiled set of features adapted from both Vicker (2009) and Vicente et al. (2024) which eliminates duplication by grouping related items under the same category and expanding them in order to obtain a more comprehensive model (Figure 1).

Figure 1

Proposed Checklist for PLI Features in Adults with ASD
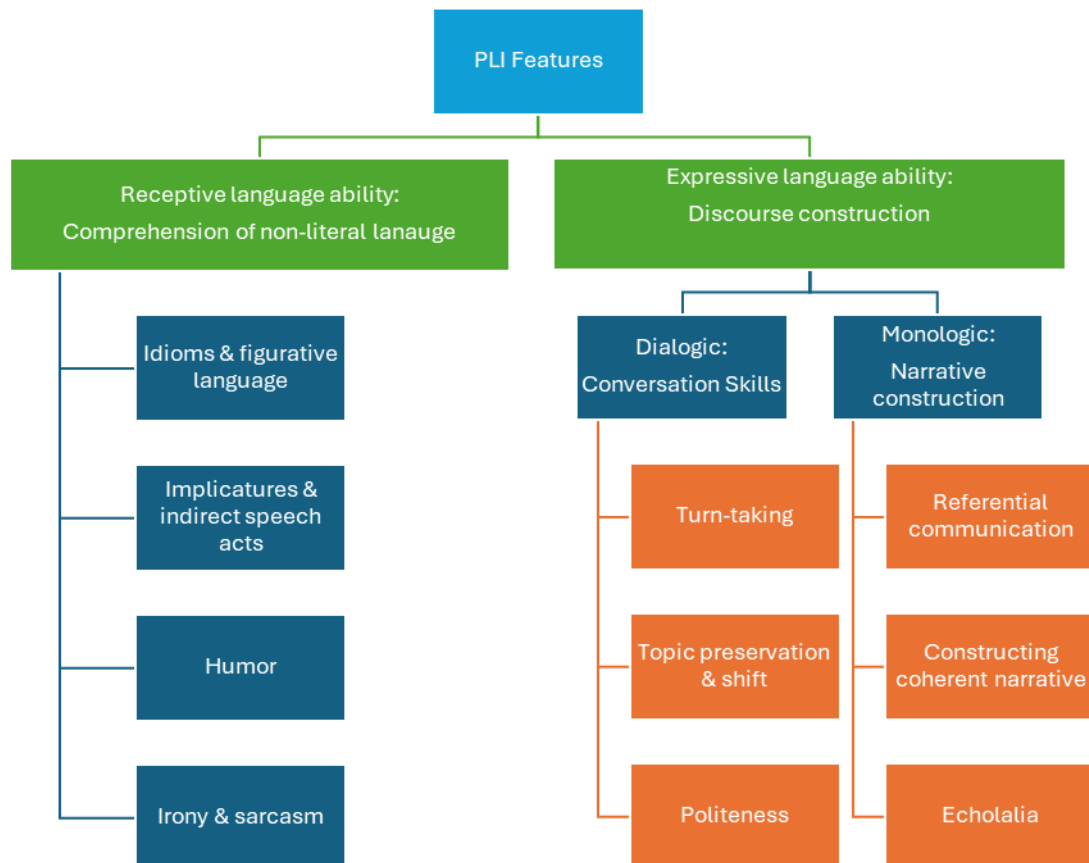
This framework is proposed for the present study since it lends itself to the selected data and may also be beneficial to future studies. Although the scope of PLI may encompass nonverbal or paralinguistic elements such as gestures, eye gaze, volume and intonation, as discussed by Vicente et al. (2024), this is beyond the scope of the present study since it only focuses on verbal features.

3.3 Research Design and Methodology

In an attempt to propose a comprehensive list of features for analyzing PLI in ASD adults the study adopts an eclectic approach. The theoretical framework was therefore adopted from Vicker (2009) and Vicente et al. (2024) since it lends itself to the data under study. By merging similar categories under more general ones and eliminating duplication, the proposed model may assist in identifying and categorizing the pragmatic deficits displayed by the main character in the series.

The study adopts a mixed approach in order to provide a more thorough analysis. The data is examined qualitatively in order to account for each pragmatic deficit and explain it within the context of the interaction. Similar categories are then grouped together according to the selected model and frequencies calculated quantitatively in order to determine the most frequent PLI features encountered. Frequencies are calculated overall for general categories (e.g., receptive vs.

expressive abilities), as well as for each sub-category separately in both cases as percentages of the total number of deficits. The following categories are used:

1. **Receptive language ability (Comprehension of non-literal language)**

   a. **Idioms and figurative language**

   b. **Implicatures and indirect speech acts**

   c. **Humor**

   d. **Irony and sarcasm**

2. **Expressive language ability (Discourse construction)**

   a. **Dialogic discourse (Conversation skills)**

i. Turn-taking

ii. Topic preservation and shift

iii. Politeness

   b. **Monologic discourse (Narrative construction)**

i. Referential communication

ii. Constructing coherent narratives

iii. Echolalia

3.4 Research Procedures

The research procedures started by watching the episodes of the series several times to identify utterances by the main character displaying instances of pragmatic deficits. The option of Arabic subtitles was used on Watch It platform to help transcribe the utterances. The episode number and minute in which the utterance occurred were recorded. The data was then tabulated with utterances classified into categories according to the type of impairment they illustrate. A translation was provided by the researcher accompanied by an explanation of both literal and intended meaning where needed. Necessary context was also provided from the conversation whenever relevant, together with any background information required for the interpretation of the utterance. A full analysis of this data is provided in the next section.

4. Data Analysis

This section is devoted to the analysis of the selected data. The tables used in the analysis display utterances by the main character revealing pragmatic deficits in chronological order in the series. The analysis is divided into sections based on the categories of features introduced in Figure 1. It is worth mentioning that the dialect used in the data is colloquial Egyptian Arabic.

4.1 Receptive language ability: Comprehension of non-literal Language

Comprehension of non-literal meaning has been the focus of linguistic research on autism for decades. The reason is often thought to be that understanding non-literal meaning requires awareness of other speakers' intentions and behaviours (Vicente et al., 2024).

Nadim displays difficulty in interpreting non-literal language in several instances, particularly in the case of metaphors and idioms. Instead of grasping the indirect meaning intended by the speaker, he responds to the literal meaning of the utterance resulting in miscommunication or pragmatic failure. Table 1 lists different examples of this failure to comprehend the non-literal meaning of utterances in conversations between Nadim and other characters in the series. The discrepancy between the literal and intended meaning of the utterances is meant to trigger the humor in these scenes.

Table 1

Comprehending Non-literal Meaning

No.	Utterance	Episode	Min.	Literal Translation	Intended Meaning
1.	قولتله فين الصاروخ ده طلع بيتكلم على رام الله أنا مش عارف هو ليه سماها صاروخ	5	09.05	I asked him where this rocket was. It turned out he was talking about Ramallah. I don't know why he called her a rocket.	صاروخ= hot female
2.	-أنا بكح تراب -عندك حساسية يعني	5	23.13	-I'm coughing dust. -Are you allergic?	بكح تراب= I'm broke.
3.	أنا جوزي ما بيعرفش	2	09.0	My husband doesn't know.	ما بيعرفش= sexually impotent.
4.	ولما سألته إنت برج إيه قالي أنا برج من دماغي حيطير بس أنا ما فهمتش	5	07.46	When I asked him what his sign was, he said a tower is flying off my head, but I didn't understand.	برج: zodiac sign / tower برج من دماغي حيطير: I'm going nuts.
5.	-المكتب من غيرك مضلم كحل -وانتو بتشتغلوا فالضلمة إزاي	9	19.42	-The office is so dark without you. - And how do you work in the dark?	The office is very dull without you.

In example (1) the Arabic slang word صاروخwhose literal meaning is 'rocket' or 'missile' is used to describe a hot female or a pretty lady. Likewise, the expression بكح ترابin example (2) is a colloquial Egyptian Arabic idiom meaning that someone is 'broke', although it literally translates as 'coughing dust'. In both cases, Nadim is not aware of the idiomatic meaning and interprets the words literally. The other interlocutors involved in the conversation had to elaborate with an alternative explanation to clarify the intended meaning in both situations.

A similar situation occurs when a lady describes her husband as sexually impotent using the idiom ما بيعرفشin example (3), which literally translates as 'doesn't know'. As a result, Nadim keeps inquiring about the meaning of this expression asking, 'what does her husband not know?' triggering an embarrassing yet funny situation. In example (4), the word برجhappens to be polysemous since it could mean either 'zodiac sign' or 'tower'. Nadim does not comprehend the play on words resulting from this polysemy. Nadim's confusion is compounded by the idiom أنا برج من دماغي حيطيرwhich contains the same lexical item to mean that someone is losing their mind. Apparently, Nadim is not familiar with the idiom and ends up missing the whole message.

In example (5), Nadim's colleague uses the idiom المكتب من غيرك مضلم كحلwhich literally means 'the office is dark without you', a common complement used in colloquial Egyptian Arabic. This implies that he used to brighten up the place which has become dull and gloomy after he left. However, Nadim only grasps the literal meaning and starts wondering how his colleagues can actually work 'in the dark'.

In example (6) in Table 2, failure to recognize the intended meaning leads to a very awkward scene. Nadim's girlfriend advises him to give his sneaky colleague a hard time because he stole credit for his work. She uses the expression وأديله بالجزمة على دماغه which literally means 'hit him with a shoe on his head', suggesting that Nadim should be tough with him. In the next scene, however, Nadim is actually shown at this colleague's doorstep holding his shoe in his hand and ready to hit the astonished man on his head. Taking his friend's piece of advice literally has in this case resulted not in a humorous conversation but in a visually humorous scene.

Table 2

Carrying out Advice Literally

No.	Utterance	Episode	Min.	Literal Translation	Intended Meaning
6.	أنا لو مكانك أروحله لحد البيت وأديله بالجزمة على دماغه	2	31.37 35.04	If I were you, I would go to his place and hit him with a shoe on his head.	I would quarrel with him.

Rhetorical questions, though syntactically interrogative in form, are not pragmatically intended to elicit an answer from the listener. They are therefore usually considered indirect speech acts since their form does not match their function (Ioussef et al., 2021). Table 3 shows instances where Nadim responds to rhetorical questions in a literal manner. For example, in (7) when his colleague asks what is wrong with everyone which literally translates as 'what happened to the world', he sounds confused and just repeats the question. Similarly, in examples (8) and (9) in Table 3, when people make compliments to him starting with 'did you know that', he replies 'no, I don't' instead of acknowledging the compliment or showing appreciation.

Table 3

Responding to Rhetorical Questions

No.	Utterance	Episode	Min.	Literal Translation	Intended Meaning
7.	‎-هو إيه اللي حصل فالدنيا؟‏ ‎- ايه اللي حصل فالدنيا‏	3	03.11	-What has happened to the world? -What happened to the world?	What's wrong with everyone.
8.	‎-إنت عارف إن إنت أكترواحد بحبه وبعزه فالمكتب ده كله؟‏ ‎-لأ مش عارف‏	3	10.55	-Do you know that you are the one I like most in this office? -No, I don't.	
9.	‎-إنت عارف إن أنا بنبسط أوي لما أشوفك بتضحك؟‏ ‎-لأ مش عارف‏	6	19.35	-Do you know that I feel very happy whenever I see you smile? -No, I don't.	

The examples in Table 4 underline the difficulty faced by Nadim in understanding certain expressions in normal everyday conversations. In the three examples, Nadim explicitly asks the other speaker for clarification since he does not understand the meaning of the utterances at first. In these cases, there is no difference between the literal and intended meaning as such, but even with everyday expressions that may seem straightforward, Nadim still finds it sometimes difficult to grasp other speakers' intentions. Surprisingly, these expressions may be as simple as عندي فكرة or 'I have an idea' in example 12.

Table 4

Asking for Clarification

No.	Utterance	Episode	Min.	Translation
10.	‎-عاوزين نعمل حلقة حلوة‏ ‎-أنا مش عارف يعني إيه نعمل حلقة حلوة‏	1	31.04	-We want to make a good episode. -I don't know what it means to make a good episode.
11.	‎-يعني إيه يكرشك؟‏ ‎-يعني يطردك يا نديم‏	5	23.21	-What do you mean he will kick you out? -It means he will dismiss me, Nadim.

| 12. | ـأنا عندي فكرة | 7 | 06.54 | -I have an idea. |
| | ـعندك فكرة دي يعني زي عندك خطة؟ | | | -You have an idea means like you have a plan? |

The last example (13) in Table 5 is not a conversation per se, but it shows that Nadim's colleagues at school used to bully him, but he still did not even notice. Again, this reflects the difficulty he faces in interpreting speakers' intentions especially when it comes to non-literal language including irony and sarcasm.

Table 5

Utterance Showing Not Noticing Bullying

No.	Utterance	Episode	Min.	Translation
13.	لما كانوا بيتريأوا عليا فالأول مكنتش بفهم ان هم بيتريأو	8	15.08	When they used to make fun of me at the beginning, I didn't understand they were doing so.

In this section examples were given to show difficulties faced by Nadim on the receptive language level. Nadim's failure in different situations to interpret the intended meaning of non-literal utterances including idioms, rhetorical questions, and sarcasm was used to derive humor in these situations. No instances, however, were found in which Nadim was unable to recognize humor in an utterance.

4.2 Expressive Language Ability

This section discusses the deficits displayed by Nadim on the expressive language level, including dialogic and monologic discourse construction.

4.2.1 Dialogic Discourse: Conversation Skills

Nadim's conversational skills are characterized by remarkable deficits in terms of turn-taking, topic preservation and shift as well as politeness. First, when he is hosted by a TV game show, he keeps interrupting the presenter. Cases in point are the examples in Table 6 where he repeatedly intervenes by cutting the presenters' sentences short before he finishes them. As a result, the presenter starts getting annoyed and impatiently interrupts Nadim in his turn demanding him to respect the rules of the show and give him a chance to say the options before he answers.

Table 6

Interruptions

No.	Utterance	Episode	Minute	Translation
14.	ـمعانا النهارده نديم ...	1	08.58	-Today we have Nadim …
	ـنديم أحمد أبو سريع			-Nadim Ahmed Abu Serie'

No.	Utterance	Episode	Minute	Translation
15.	ـما الدولة التي عاصمتها فريتاون؟ هل هي... ـسيراليون	1	21.53	-What is the country whose capital is Freetown? Is it … -Sierra Leone
16.	ـأول فيلم مثله عمر الشريف هل هو... ـصراع في الـ...	1	22.37	-The first movie starred by Omar ElSherif is it … -Struggle in the …

The examples in Table (7) underscore the difficulty faced by Nadim in engaging in a proper back-and-forth conversation. When the other interlocuter gives him the floor he seems confused and often has nothing to say to sustain the conversation. He fails to elaborate resulting in the conversation cut short. No instances, however, were found in relation to topic shifts.

Table 7

Topic Preservation

No.	Utterance	Episode	Minute	Translation
17.	ـأنا مش عارف أقول إيه ـأنا كمان مش عارف أقول إيه	8	02.46	-I don't know what to say. -I don't know what to say either.
18.	ـولا إيه يا نديم؟ ـإيه	9	28.25	-What do you think, Nadim? -What...
19.	ـشوف إنت القمر بيفكرك بإيه ـمش بيفكرني بحاجة	9	32.48	-What does the moon remind you of? -It reminds me of nothing.

Example (20) in Table 8 correlates with a typical ASD feature in conversations, namely monologue. Nadim talks to his colleagues over dinner non-stop about his favorite band, *ElMasreyeen* for almost two minutes. He does not bother to know whether they are interested in listening or not, especially that his monologue is full of very specific details about the band's history, songs, singers, etc.

Table 8

Monologue

No.	Utterance	Episode	Minute	Translation

20.	(فرقة المصريين) Monologue for 1 minute and 50 seconds	3	27.20-29.11	(Talking about ElMasryeen Band for almost two minutes non-stop).

Another noticeable feature in Nadim's conversations is his inability to observe politeness in his responses. He makes statements that may be factually true but offensive to others, which is a typical feature of ASD individuals. He does not recognize the negative impact of his utterances on interlocutors' face needs, thus resulting in several face threatening acts (FTAs) for both positive and negative face.

Table 9 shows utterances by which Nadim clearly poses positive FTAs to the listener. In example (21) he calls his boss, who is supposed to be a superior, 'disrespectful' for being late. Similarly, he describes his best friend's voice as 'terrible' (example 25) not bothering if he would feel offended.

Even when Nadim is on air TV in the game show, he is not aware what is acceptable to say and what is not. In example (22), he bluntly accuses the presenter of the show of lying on air. The presenter is embarrassed as a result and claims that he was just kidding in an attempt to save his face. A few minutes later, when the presenter asks him what he thinks of his tie, he says 'it looks bad' when they are still on air (example 23). Apparently, Nadim insists on expressing his opinion in an extremely honest manner without bothering to make any social compliments or sugarcoating.

Table 9

Positive FTAs

No.	Utterance	Episode	Minute	Translation
21.	(تأخير) أكتر من نص ساعة اسمه عدم احترام	5	15.06	(Being late for) more than half an hour is considered disrespectful.
22.	سيراليون انت كدبت	1	22.15	It's Sierra Lione. You lied.
23.	-إيه رأيك فالكرافتة دي؟ -مش حلوة	1	31.12	-What do you think of this tie? -It's bad.
24.	-بس هو بيحبني -مش بيحبك أنا سمعته	8	23.00	-But he loves me. -He doesn't love you. I heard him.
25.	صوتك وحش أوي يا جميل	9	42.17	You have a terrible voice, Gamil.

In addition to the above threats to interlocuters' positive face, Nadim also demonstrates negative face threats in two situations. In responding to offers and suggestions, Nadim is very blunt and does not exert an effort to produce a polite refusal or add prefaces to mitigate negative face threats as shown in Table 10.

Table 10

Negative FTAs

No.	Utterance	Episode	Minute	Translation
26.	‑ما تيجي نروح (السيرك). ‑لأ	4	11.45	-Let's go (to the circus). -No.
27.	‑اطلع نشرب قهوة طيب ‑مش بشرب قهوة	8	12.30	-Why don't you come upstairs and have a cup of coffee? -I don't drink coffee.

4.2.2 Monologic Discourse: Narrative Construction

This section tackles the deficits displayed by Nadim in narrative construction in terms of referential communication, coherence and echolalia.

4.2.2.1 Referential Communication

Autistic individuals often find difficulty in denoting an entity in a way clear enough to be correctly identified by the listener. In turn, they also have a similar difficulty in interpreting referring expressions themselves. In Table 11, Nadim refers to his best friend *Gamil* without any explanation or introduction although the listeners do not know him. He does not tailor his discourse to the listeners' needs, and he probably wrongly assumes the other interlocutors share this knowledge. This results in failure to identify the person referred to in the conversation.

Table 11

Constructing Effective Reference

No.	Utterance	Episode	Minute	Translation
28.	بس ممكن نسأل الأسئلة أسرع شوية عشان مأتاخرش على جميل؟	1	33.26	**But can we ask the questions a little bit faster so that I'm not late for Gamil?**

No.	Utterance	Episode	Minute	Translation
29.	‑أنا ما بقولش حاجة لحد غير لجميل ‑جميل مين؟	5	22.45	-I don't tell anyone anything except for Gamil. -Gamil who?

In example (30) in Table 12, on the other hand, Nadim fails to interpret the referential expression الست which is traditionally used in colloquial Egyptian Arabic to refer to the famous singer *Om Kolthoum*, thinking that 'the lady' literally means his friend's 'old lady' or mom. In this case, however, failure in referential communication occurs on the receptive rather than the expressive level.

Table 12

Interpreting Referential Expressions

No.	Utterance	Episode	Minute	Translation
30.	‑على رأي الست ‑مامتك اللي قالتلك كده؟	4	13.16	-As the lady says. -Did your mom tell you so?

However, it is worth mentioning that no instances were encountered in the episodes in relation to Nadim's ability to construct coherent narratives. He does not seem to face any difficulty in using connectives or producing coherent discourse even when he gives rather lengthy monologues.

4.2.2.2 Echolalia

Nadim often repeats set phrases that were previously said to him by people he trusts, especially his mother and his best friend (see Table 13). These are either pieces of advice such as his mother's dream for him to become a successful lawyer (example 35) or his best friend's usual saying that 'only important people arrive late' which he repeats whenever anyone is late. Some of these phrases are repeated within the same scene or speech event such as example (34) whereas others are repeated throughout the episodes in similar situations that trigger the same saying such as examples (31) and (35).

Nadim also copies a couple of lines (example 32) his best friend teaches him to flirt with his girlfriend or compliment females which he repeated four times throughout the episodes. Example (34), on the other hand, is a phrase his girlfriend used to reassure him when they went together to the circus, and he was scared of the clown. He repeated the phrase three times in order to reassure himself right before entering the circus tent.

Table 13

Echolalia

No.	Utterance	Episode	Minute	Translation

|				
31.	الناس المهمة بس هي اللي بتتأخر (X3)	2 3 4	04.31 31.40 30.15	**Only important people arrive late.**
32.	شكلك حلو أوي النهارده شعرك حلو أوي النهارده (X4)	4 4 5 9	30.31 32.23 15.57 32.52	**You look so pretty today.** **Your hair looks so good today.**
33.	إنت قولت الكلام ده يا أستاذ نديم أكتر من 20 مرة	4	02.16	**You have already repeated this over 20 times, Mr. Nadim.**
34.	البلياتشو طيب (X3)	5	02.53 02.57 04.55	**The clown is kind.**
35.	محتاج اتعلم أبقى محامي شاطر لازم تبقى محامي ناجح إن أنا أبقى محامي ناجح أوري عمي إني محامي ناجح (X5)	1 9	14.20 4.02 4.16 04.20 04.05	**I need to learn how to become a clever lawyer.** **I/You have to become a successful lawyer.** **To become a successful lawyer** **To show my uncle that I'm a successful lawyer**

5. Findings and Discussion

The previous section attempted to investigate PLI as displayed by Nadim, the main character in *Hala Khasa* series according to the proposed framework. The analysis has revealed that Nadim demonstrates a number of pragmatic deficits on both the receptive and expressive language levels. The total number of such instances encountered in the data amounts to 35, with the majority pertaining to the expressive ability (63%) rather than the receptive (37%), with the former comprising both conversation skills (40%) and narrative construction (23%). This correlates with the results reported by Levia et al. (2019) about the protagonist of the *Rain Man* movie, suggesting that the character has difficulty in self-expression.

The occurrence of the three main categories of PLI features in the suggested model (see Figure 1), namely interpretation of non-literal language, conversation skills and narrative construction, can be represented as shown in Figure 2.

Figure 2

Distribution of Main Categories of PLI Features in the Data
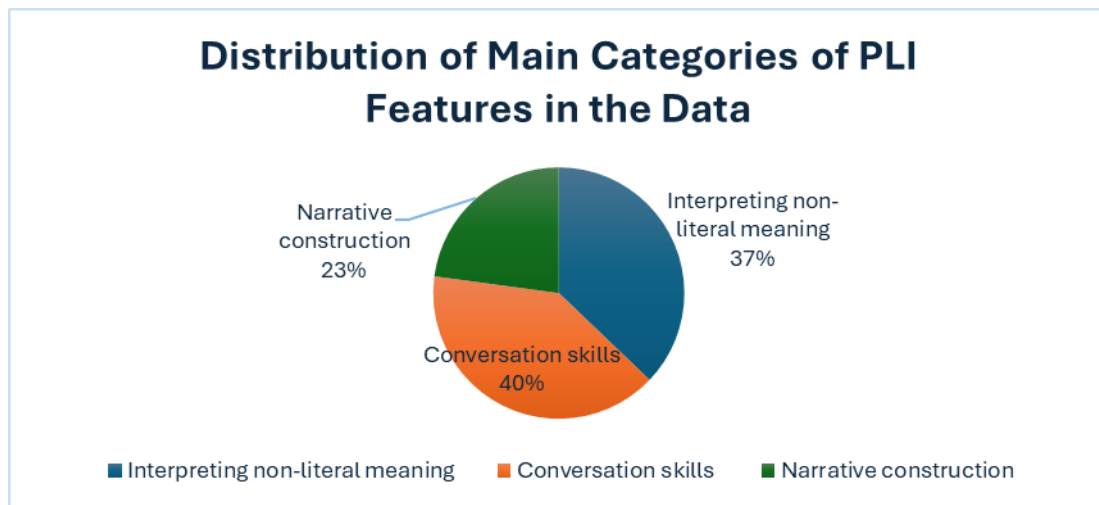
To provide a more detailed account of the PLI features encountered in the data, Figure 3 displays frequencies of occurrence for the specific categories in the adopted model. Overall, the most frequently occurring PLI feature in the data was difficulty in interpreting idiomatic language and everyday expressions (26%). This was followed by inability to produce polite responses (20%) and echolalia (14%). No instances were found of difficulty in understanding humor as well as failure to create coherent discourse.

Figure 3

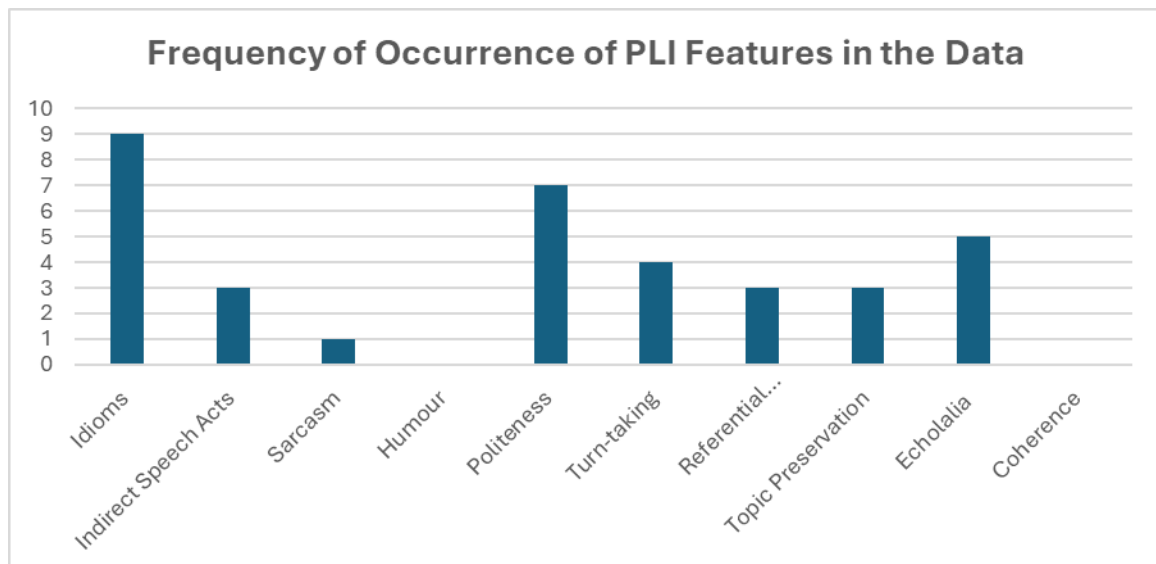*Frequency of Occurrence of PLI Features in the Data*

Figure 4 provides a more detailed breakdown of PLI features on the receptive language level. In terms of receptive language ability, the most frequently occurring pragmatic deficit in the data was Nadim's inability to interpret nonliteral meaning, particularly idioms and expressions (26%). This was further underlined by his inquiries about the meaning of relatively straightforward expressions in some situations. This was followed by indirect speech acts in the form of rhetorical questions which accounted for 8.5% of utterances reflecting PLI. On one occasion, Nadim also reported being unable to grasp sarcastic language when his colleagues made fun of him (3%), which shows that he has been suffering from this problem since his childhood. These misunderstandings result in humor in the series, which becomes visual when he carries out advice literally. No instances were encountered in the data, however, that indicate Nadim's inability to understand humor in conversations.

Figure 4

Distribution of PLI Features for Receptive Language Ability
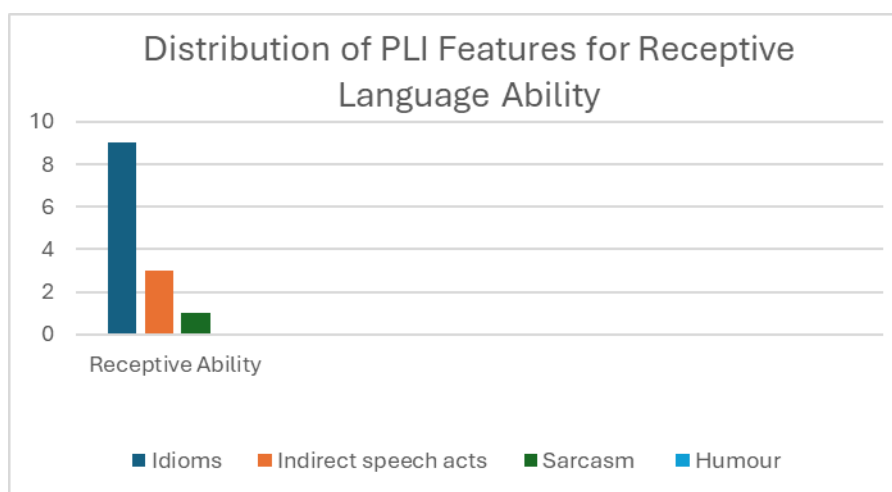
On the expressive level, on the other hand, more difficulties were encountered in dialogic (40%) than monologic discourse (23%) as shown in Figure 5. Nadim's conversation skills leave a lot to be desired (20%). This primarily included turn-taking and topic preservation. Nadim often interrupts interlocuters which can sometimes be irritating to them. He also lacks the ability to sustain or develop a conversation for socializing; he is unable to extend a topic previously opened. Furthermore, he tends to produce rather long monologues about his favorite topics that may be uninteresting to listeners. All these features hinder Nadim from engaging in a normal back-and-forth conversation and limit his ability to socialize with his peers without feeling awkward or being criticized.

Figure 5

Distribution of PLI Features for Expressive Language Ability

Distribution of PLI Features for Expressive Language Ability
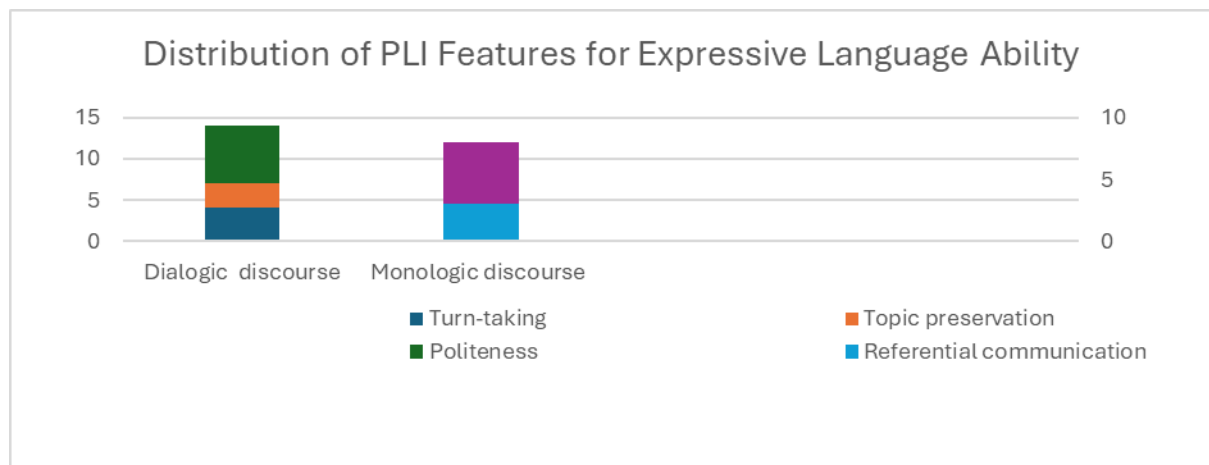
Another serious deficit that negatively affects Nadim's social skills is his inability to observe politeness in interactions (20%). He often poses threats to interlocuters' face, both positive and negative either by bluntly refusing invitations or by making offending remarks. He makes statements that may be factually true but offending since he is not aware of their impact on listeners. Apparently, he lacks awareness of the social norms that determine what is acceptable in conversations and what is not.

On the monologic level of discourse, on the other hand, Nadim faces problems with narrative construction. Although he often manages to construct coherent narratives (0%), he encounters difficulties related to referential communication both on the expressive and receptive level (9%). Not only is he sometimes unable to provide the listener with relevant cues to identify the entities referred to in the discourse, but he also fails to recognize some common referring expressions. This underlines his inability to adapt interactions to context or listener, particularly distinguishing between new as opposed to shared knowledge.

Finally, as a typical ASD feature, echolalia was encountered in several instances in Nadim's discourse (14%). He often echoes phrases said by his favorite people in different situations and sometimes uses this for self-reassurance. However, it is worth mentioning that each of the repeated utterances was calculated as only one instance even though it was repeated several times either in a single scene or throughout the episodes in similar situations.

Therefore, in answer to the first research question for the present study, the most frequently occurring pragmatic deficits displayed in the data belonged to the expressive rather than the receptive language level, particularly involving conversation skills and politeness. This was followed by echolalia and the use of referential communication. On the receptive level, on the

other hand, the most frequent deficits occurred in interpreting non-literal meaning especially idioms and indirect speech acts in the form of rhetorical questions.

These findings correlate with Baltaxe (1977), who reported failure to observe politeness and conversational norms such as turn-taking among ASD adolescents, suggesting that these skills may not improve in time in the case of ASD adults. Furthermore, the fact that Nadim's phonological and syntactic skills were unimpaired, unlike his poor conversation skills is consistent with Rapin (1996) and Reboul et al. (2012). The results thus underscore the importance of the theory of mind discussed by Baron-Cohen (1988) since pragmatic competence largely relies on understanding other interlocuters' thoughts and intentions.

 However, no similarity was found with Almehmadi et al. (2020) and Diamond et al. (2022) since Nadim did not resort to classical or formal Arabic in his conversations. Moreover, the findings are not in line with Rokhim and Indah (2022) since most of the features they listed were not encountered in the data including stuttering, phonological disorders and difficulty in following directions. This may further underline Malkin's (2020) argument that PLI involves significant individual differences since various pragmatic abilities may not be equally impaired.

As regards the second research question, the proposed model has proved helpful to a large extent in analyzing and categorizing PLI features in the selected data. The main advantage of the proposed feature list is that it lends itself to non-participatory studies conducted in a non-clinical setting. Hence, it does not require feedback from the individuals themselves or their caregivers, which would not have been suitable for the purpose of the present study. The model may thus serve to provide a quite comprehensive analysis and classification of PLI features especially in ASD adults rather than children and adolescents on which most PLI research has so far focused. Although originally adapted from two different feature sets primarily targeting English-speaking individuals, the devised model has also proved useful when applied to Arabic data, specifically colloquial Egyptian Arabic.

All the features in the list were present in the data, except for failure to recognize humor as well as inability to construct coherent narratives. Perhaps a possible reason why Nadim was generally able to achieve coherence in his discourse is that he is a high-functioning ASD individual, unlike typical ones who may fail to do this. It should, however, be noted that the model only covers verbal features of communication since nonverbal ones such as body language and voice were beyond the scope of the present study.

6. Conclusion

The present study has attempted to examine pragmatic language deficits displayed by Nadim, the main character in the Egyptian Arabic series '*Hala Khasa*' or *Special Case*. A set of PLI features was devised based on Vicker (2009) and Vicente et al. (2024) in order to examine the different pragmatic deficits on both the receptive and expressive language levels. The feature set proved useful in describing the difficulties faced by the high-functioning ASD character: First on the receptive level particularly in comprehending non-literal language, and second, on the expressive level in constructing both dialogic and monologic discourse. Overall, it was found that Nadim suffered more difficulties in self-expression than in comprehension. The most frequently encountered deficits in dialogic discourse primarily involved conversation skills and politeness, whereas in monologic discourse deficits mainly pertained to referential communication and echolalia. The interpretation of the non-literal meaning of idioms and expressions, however,

accounted for the largest number of utterances involving PLI when considering the detailed features.

Although PLI also involves deficits related to the paralinguistic level in terms of eye contact, gaze, gestures and voice which may have also been displayed by the character under study, the present research only tackled verbal features. Moreover, it is to be noted that the character is after all fictional and the conversations examined in the episodes are based on written script rather than naturally occurring conversations. Furthermore, PLI may involve significant individual differences; impairment may not be uniform in all areas of pragmatic language abilities (Malkin, 2020). However, the findings together with the proposed set of features may serve to highlight the most significant PLI features related to adult ASD individuals and constitute a possible springboard for future studies.

Prospective applications may also include AI (Artificial Intelligence) particularly for the automatic identification and prediction of these features using neural models. Establishing a clearly defined and comprehensive set of PLI features may serve as input for AI algorithms that can be used to detect pragmatic deficits in speech and language patterns both in therapeutic contexts and everyday interactions. With the help of annotated datasets, AI models can learn from examples that illustrate various aspects of PLI, especially that pragmatic aspects are more subtle than syntactic, semantic and phonetic aspects which are more clear-cut and computable. A robust framework of PLI features may especially help to enhance the work of AI systems in understanding and addressing language impairments.

Since drama series are widely watched by of different ages and from various backgrounds, the series in general and the main character in particular may serve to raise awareness among Arab-speaking audience to ASD and the involved pragmatic language deficits. This may aid in promoting correct practices to ASD and in turn contribute to fostering empathy and reducing stigma within the community.

Identifying PLI deficits in ASD individuals may serve to provide strategies for more effective communication with autistic individuals, both in media portrayals and in real life. Understanding how these pragmatic deficits affect character may shed light on the importance of realistic portrayals in storytelling and media industry in general. Therefore, the study may contribute to the understanding of autism and its media representation, which may in turn give way to more nuanced portrayals that reflect the complexities of this condition.

On another note, the PLI feature set proposed by the present study can be further tested, developed and possibly amended by future studies. Further research may focus on different samples either from drama or real-life data and may also target the nonverbal level not covered by the present study, including features such as gestures, gaze and voice.

References

Aisyah, S. Dwiastuty, N. & Rosyada, A. (2022). Language disorder analysis of an autistic savant in the *Rain Man* movie. *Journal of English Education*. 2(1). 47-54. https://doi.org/10.30998/jedu.v2i1.6305

Aldofairy, A. (2006). الاتصال اللغوي لدى اطفال التوحد: دراسة ميدانية لقياس مستوى الاتصال اللغوي لعينة من اطفال التوحد في الكويت[Language communication for autistic children: A field study measuring autistic children's linguistic communication in Kuwait]. *Yarmouk Journal for Human and Social Sciences*, 22(2), 527-548, https://search.mandumah.com/Record/242974

Alduais, A., Alfadda, H., Allegretta, S., Trivkovic, T. (2023). Pragmatic language impairment: A scientometric review. *Applied Science*. 13(9308). https://doi.org/10.3390/ app13169308

Almehmadi, W., Tenbrink, T., & Sanoudaki, E. (2020). Pragmatic and conversational features of Arabic-speaking adolescents with autism spectrum disorder (ASD): Examining performance and caregivers' perceptions. *Journal of Speech, Language and Hearing Research*, 63(7), 2308- 2321. https://doi.org/10.1044/2020_JSLHR-19-00265

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* **(5th ed., text rev.).** https://doi.org/10.1176/appi.books.9780890425787

Baltaxe, C. A. (1977). Pragmatic deficits in the language of autistic adolescents. *Journal of Pediatric Psychology, 2*(4), 176–180. https://doi.org/10.1093/jpepsy/2.4.176

Baron-Cohen, S. (1988). Social and pragmatic deficits in autism: Cognitive or affective? *Journal of Autism and Developmental Disorders, 18*(3), 379–402. https://doi.org/10.1007/BF02212194

Bishop, D. V. M. (1998). Development of the Children's Communication Checklist (CCC): A method for assessing qualitative aspects of communicative impairment in children. *Journal of Child Psychology and Psychiatry, 39*(6), 879–891. https://doi.org/10.1017/S0021963098002832

Cummings, L. (2007). Clinical pragmatics: A field in search of phenomena?, *Language and Communication*, 27(4), 396-432, https://doi.org/10.1016/j.langcom.2007.06.001.

Cummings, L. (2014). Theoretical models and pragmatic disorders. In: *Pragmatic disorders. Perspectives in pragmatics, philosophy and psychology*, vol 3. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-7954-9_4

de Marchena, A. B. (2013). *Executive and nonverbal contributions to pragmatic language in autism spectrum disorder*. **[Doctoral Dissertations, University of Connecticut Graduate School].** https://opencommons.uconn.edu/dissertations/205

DeMyer, M. K., Hingtgen, J. N., & Jackson, R. K. (1981). Infantile autism reviewed: A decade of research. *Schizophrenia Bulletin, 7*(3), 388–451. https://doi.org/10.1093/schbul/7.3.388

Diamond, G., Badir, E., Almog, S., Badir, G., Jaoussy, L., Akawi, A., & Jaber, L. (2022). Characteristic neuro-linguistic styles in young Arabic speaking children diagnosed with ASD. *Child Neurology Open*, 9(March 2022), https://doi.org/10.1177/2329048X221080271

Dolata, J. K., Suarez, S., Calamé, B. & Fombonne, E. (2022). Pragmatic language markers of autism diagnosis and severity, *Research in Autism Spectrum Disorders*, 94(June 2002), https://doi.org/10.1016/j.rasd.2022.101970.

Dwiyanti, C. N. (2022). Language disorder by the main character in the *Good Doctor* **series: Psycholinguistics approach. [Dissertation, University of Putera Batam].** http://repository.upbatam.ac.id/1575/1/cover.pdf

Egyptian Autistic Society (2024, Jan. 31). *Even though I consulted on this series* **[Image attached].** **Facebook. https://www.facebook.com/autismeg/**

Field, J. (2003). *Psycholinguistics: A resource book for students***, Routledge.**

Ikalyuk, L. & Kuzmyn, O. (2015). Psycholinguistic characteristics of autists and their prototypes in American cinema discourse (Based on the films *Rain Man* **and** *The Real Rain Man***).** *Journal of Vasyl Stefanyk Precarpathian National University***. 2(2-3), 87-93. https://doi.org/10.15330/jpnu.2.2-3.87-93.**

Special Case (2024). International Movie Database (IMDb) https://www.imdb.com/title/tt30808759/

Ioussef, D., Breitholtz, E. & Howes, C. (2021). Don't you think that a rhetorical question can convey an argument? *Proceedings of the 25th Workshop on the Semantics and Pragmatics of Dialogue***, Potsdam. (2021) 70-78 https://www.semdial.org/anthology/Z21-Ioussef_semdial_0010.pdf**

Ketelaars, M.P., Embrechts, M.T.J.A. (2017). Pragmatic language impairment. In: Cummings, L. (eds) *Research in clinical pragmatics. Perspectives in pragmatics, philosophy & psychology***, vol 11. Springer, Cham. https://doi.org/10.1007/978-3-319-47489-2_2**

Larasati, A. (2019). *Pragmatic language impairment in autistic savant portrayed in the Good Doctor film***. [Dissertation, University of Muhammadiyah Sumatera, Utara]. http://repository.umsu.ac.id/handle/123456789/3173**

Levia, R., Jufrizal, J., Marlina, L. (2019). The study of language disorder of an autistic savant portrayed in Levinson's Rain Main film (1988). *E-Journal of English Language and Literature***, 8(1). 120-128. http://ejournal.unp.ac.id/index.php/jel**

Malkin, L. (2020). *Pragmatic language ability in autism.* **[Doctoral Dissertation, University of Kent]. doi:10.22024/UniKent/01.02.85751**

Meguid, N.A. (2015). Egypt and Autism. In: F. Volkmar (Ed) *Encyclopedia of Autism Spectrum Disorders***. Springer. https://doi.org/10.1007/978-1-4614-6435-8_102026-2**

Mustafa, O. (2021, May 11). '*With Awareness Comes Acceptance': Shifting Perceptions of Autism in Egypt.* **Egyptian Streets. https://egyptianstreets.com/2021/05/11/with-awareness-comes-acceptance-shifting-perceptions-of-autism-in-egypt/**

Nazir, M. (2024, Jan. 13). *'Hala Khasa' Stirs Up Mixed Reactions***. Lovin Cairo. https://lovin.co/cairo/en/latest/hala-khasa-stirs-up-mixed-reactions/**

Norbury, C. F. (2014). Practitioner review: Social (pragmatic) communication disorder conceptualization, evidence and clinical implications*. Journal of Child Psychology and Psychiatry***. 55(3), 204–216. doi:10.1111/jcpp.12154.**

Park, H. O. (2023). Autism spectrum disorder and savant syndrome: A systematic literature review. *Soa Chongsonyon Chongsin Uihak***. 34(2):76-92. doi: 10.5765/jkacap.230003. PMID: 37035789**

Perkins, M. R. (2010). Pragmatic impairment. In J. S. Damico, N. Müller, & M. J. Ball (Eds.) *The Handbook of Language and Speech Disorders*. (pp. 227-246), Wiley-Blackwell. https://doi.org/10.1002/9781444318975.ch10

Prutting, C. A. & Kirchner, D. M. (1987). A clinical appraisal of the pragmatic aspects of language. *Journal of Speech and Hearing Disorders*, 52(2), 105-119, https://www.lamar.edu/fine-arts-communication/_files/documents/speech-hearing/prutting_checklist_article.pdf

Rafik, F. (2024, Feb. 6). *Hala Khasa' series shines light on autism: Review*. Egyptian Streets. https://egyptianstreets.com/2024/02/06/hala-khasa-series-shines-light-on-autism-review/

Rapin, I. (1996). Practitioner review: Developmental language disorders: A clinical update. *Journal of Child Psychology and Psychiatry, 37*(6), 643–655. https://doi.org/10.1111/j.1469-7610.1996.tb01456.x

Reboul, A., Manificat, S. & Foudon, N. (2012). Autism from a cognitive-pragmatic perspective. 17. In D. Geeraerts & H. J. Schmid, *Handbook of Cognitive Pragmatics*, , (pp.317-344). De Gruyter Mouton. https://doi.org/10.1515/9783110214215.317.

Rokhim, F. & Indah, R. N. (2022). Expressive and receptive language disorder of Shaun Murphy in The Good Doctor series. *Pioneer: Journal of Language and Literature*. 14(2), 554 – 570. https://doi.org/10.36841/pioneer.v14i2.1797

Simmons, E. S., Paul, R. & Volkmar, F. (2014). Assessing pragmatic language in autism spectrum disorder: The Yale in vivo Pragmatic Protocol. *Journal of Speech, Language & Hearing Research.* 57(6), 2162-2173. https://doi.org/10.1044/2014_JSLHR-L-14-0040

Tager-Flusberg, H. (1981). On the nature of linguistic functioning in early infantile autism. *Journal of Autism and Developmental Disorders*, 11(1), 45-56. https://doi.org/10.1007/BF01531340

Tager-Flusberg, H., Paul, R., & Lord, C. (2005). Language and communication in autism. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders: Diagnosis, development, neurobiology, and behavior.* (pp. 335–364). John Wiley & Sons, Inc. https://doi.org/10.17759/autdd.2015130203

Turkstra, L. S., Clark, A., Burgess, S., Hengst, J. A., Wertheimer, J. C. & Paul, D. (2016). Pragmatic communication abilities in children and adults: Implications for rehabilitation professionals, *Disability and Rehabilitation*, 39(18),1872-1885. https://doi.org/10.1080/09638288.2016.1212113

Vicente, A., Ábalos, Z., Martín-González, I. & Ramos Cabo, S. & Castroviejo, E. (2024). Autism (Pragmatics). Handbook of Pragmatics. John Benjamins. https://doi.org/10.1075/hop.27.aut4

Vicker, B. (2009). Social communication and language characteristics associated with high functioning, verbal children and adults with autism spectrum disorder. Indiana University, Indiana Institute on Disability and Community: Bloomington. http://www.bbbautism.com/pdf/article_43_social_communication_HFA.pdf