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Native and Non-native English-speaking Doctoral Students' Strategies to Understand Idiomatics in Comics and Comic Strips

by

Luz-Aydé Himelhoch

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Technology in Education and Second Language Acquisition
Department of Teaching and Learning
College of Education
University of South Florida

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Keywords: idiomatic and figurative language, idiomatic competence, cultural competence, second language acquisition

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DEDICATION

To my husband, Scott, my children Lexi, Cristina, and William, and my mother, for their unwavering love and support. Thanks for being my biggest cheerleaders!

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TABLE OF CONTENTS

LIST OF TABLES	iv
LIST OF FIGURES	v
ABSTRACT	vi
CHAPTER ONE: INTRODUCTION	1
Background	
Significance of Study	
Research Questions	
Definition of Terms	
Defining Idiomatics	
What are VP Idioms?	
Comics vs. Comic Strips: What is the Difference?	
Theoretical Considerations	
L1 Idiom Processing	
L2 Idiom Processing	
Sociocultural Theory	
Language as a Central Tool in Mental Development	
Language as a Social Process	
Applying Vygotsky's (1978) Sociocultural Theory to Comics and Comic Strips	
Comics and Comic Strips as Language	
Comics and Comic Strips as Cultural Artifacts	
Comics and Comic Strips as Storytelling	
Organization of Study	
CHAPTER TWO: LITERATURE REVIEW	40
Introduction	
Research on Comics and Comic Strips to Promote Cultural and Communicative	
Competence	41
Research on Comics and Comic Strips to Support Reading and Writing Skills	
Research on Comics and Comic Strips to Enhance Motivation, Satisfaction, and	
Reduce Anxiety	55
Summary and Discussion	
Research Findings	
Participant Age/Grade Level	
Geographical Location	
Research Approaches	
Comics Language Features	
Online Comics Creation Tools	

CHAPTER THREE: METHODOLOGY	67
Introduction	67
Study Design	67
Paradigmatic Views	68
Reflexivity	71
Descriptive and Exploratory Research in Second Language Acquisition	75
Study Site and Participants	75
Study Site	75
Participants	76
Selection of Materials	77
Pre-Study Questionnaire	78
Comic Idiomatics Task	78
Post-Study Questionnaire	83
Post-Study Semi-Structured Interview	84
Pilot Testing of Instruments	86
Data Collection	87
Study Procedure	87
Data Analysis	88
Summary	89
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION	0.1
Introduction	
Analysis of Pre-Study Questionnaire	
Analysis of Comic Idiomatics Task	
Perceived vs. Actual Participant Performance	
Thematic Analysis	
Doctoral Non-native English-speaking Students	
Doctoral Native English-speaking Students	
Scaffolding	
Doctoral Non-native English-speaking Students	
Doctoral Native English-speaking Students	
Participant Body Language	
Analysis of Post-Study Questionnaire	
Idiomatics Identification	
Comics With Images and no Text	
Comics With Images and Minimal Text	
Comic Strips With Both Images and Text	
Idiomatics Meaning	
Comics With Images and no Text	
Comics With Images and Minimal Text	
Comic Strips With Both Images and Text	
Study Impressions	
Analysis of Post-Study Semi-Structured Interviews	
Discussion of Findings	
In Support of Vygotsky's (1978) Sociocultural Theory	
Other Theoretical Considerations	

Summary	155
CHAPTER FIVE: CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS	158
Introduction	158
Summary of Results	
Pedagogical Implications	
Discoveries	
Future Recommendations	
Final Thoughts	
REFERENCES	173
APPENDICES	194
Appendix A: Pre-Study Questionnaire	
Appendix B: Post-Study Questionnaire	
Appendix C: Post-Study Semi-Structured Interview Script	
Appendix D: Online Instruments	
Appendix E: IRB Forms	
Appendix F: Recruitment Email	
Appendix G: Comics Licensing	

LIST OF TABLES

Table 1. Idiomatics Terms	8
Table 2. Comics vs. Comic Strips	11
Table 3. Gal'perin's Levels of Abstractions	23
Table 4. Characteristics of Verbal Language vs. Visual Language	28
Table 5. Research Findings on Comics and Comic Strips in SLA	62
Table 6. Mean Values for Idiomatics Identification	123
Table 7. Idiomatics Identification: Metacognitive Comments	128
Table 8. Mean Values for Idiomatics Meaning	131
Table 9. Idiomatics Meaning: Metacognitive Comments	137

LIST OF FIGURES

Figure 1. Idiomatics	2
Figure 2. Calvin and Hobbes Comic Strip	36
Figure 3. Participant Age/Grade Level	63
Figure 4. Geographical Location	64
Figure 5. Research Approaches	65
Figure 6. Languages Represented by Non-native English-speaking Participants	93
Figure 7. Sample Comic/Comic Strip	101
Figure 8. Participant Identification and Meaning Strategies (Doctoral Non-native English-speaking Students)	101
Figure 9. Participant Identification and Meaning Strategies (Doctoral Native English-speaking Students)	108
Figure 10. Scaffolding for Doctoral Non-native English-speaking Students	111
Figure 11. Scaffolding for Doctoral Native English-speaking Students	119
Figure 12. Participant Responses to Comics With Images no Text	124
Figure 13. Participant Responses to Comics With Images and Minimal Text	126
Figure 14. Participant Responses to Comic Strips	127
Figure 15. Participant Responses to Comics With Images and no Text	133
Figure 16. Participant Responses to Comics With Images and Minimal Text	134
Figure 17. Participant Responses to Comic Strips	136
Figure 18. Jump Start Comic Strip	163

ABSTRACT

Everyday language consists of many idiomatic and figurative expressions. For non-native English speakers to achieve native fluency, control of idiomatics—native speech that includes the use of both idiomatic and figurative language—is paramount. In this study, I aimed to explore the use of comics and comic strips in the learning and comprehension of L2 (second language) idiomatics. Seldom has the topic of comics and comic strips been addressed as it applies to idiomatics learning in second language acquisition (SLA). I employed a descriptive and exploratory approach in this study to address this gap in SLA pedagogy. A total of 21 doctoral non-native English-speaking students and doctoral native English-speaking students studying SLA at a major university in the Southeastern region of the United States volunteered for this study. I collected data integrating four participant tasks: the Pre-Study Questionnaire, the Comic Idiomatics Task, the Post-Study Questionnaire, and the Post-Study Semi-Structured Interview. The results provided evidence that there is a clear need for the teaching of L2 idiomatics. More precisely, this study revealed that (1) the doctoral native English-speaking students performed differently than the doctoral non-native English-speaking students when asked to identify and deduce the meaning of idiomatic and/or figurative expressions embedded in comics and comic strips and (2) the doctoral native English-speaking students and the doctoral non-native English-speaking students used similar strategies/techniques in that the native speakers used context clues, recollection, and guessing, whereas the non-native speakers used context clues, recollection, guessing, and referring to their native language. Second and foreign language teachers in the field of SLA can incorporate the strategies/techniques gleaned from this

study in the design and development of a curriculum that addresses the needs and challenges of second language learners.

CHAPTER ONE

INTRODUCTION

Background

For native speakers, the elements of idiomatics—the study of native speech that includes the use of figurative language and idiomatic language such as collocations, metaphors, metonymies, proverbs, and similes (Liontas, 2021)—are acquired naturally throughout the course of their lives. For example, the idioms *let the cat out of the bag* (to mistakenly reveal a secret) or *looking for a needle in a haystack* (looking for something that is difficult to find), are very common American idioms. Native speakers inherently know the meanings of these idioms—words that say one thing, but mean something completely different—and need no assistance in deciphering meaning; it is automatic. Cieślicka (2015) makes a distinction between native and non-native speakers' use of figurative language when she states, "While the former uses figurative language effortlessly and mostly unconsciously, for non-native speakers, idioms often constitute a major stumbling block on their way toward achieving a full mastery in the foreign language or second language (L2)" (p. 208). They are *part and parcel* of everyday vernacular.

Idiomatics is symbiotic. This relationship is graphically represented in Figure 1.

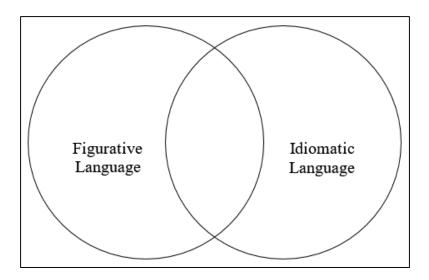


Figure 1. Idiomatics

As shown in Figure 1, both figurative and idiomatic language comprise idiomatics. As defined by Liontas (2018a),

figurative language is laconic language that must be 'figured out' precisely because the words or expressions employed, in the way and manner in which they are being employed, do not mean what they literally state. As a result, the intended meaning the speaker or writer is pursuing must be figured out and interpreted anew within the context in which these words (or expressions) were used creatively for maximum rhetorical or communicative effect. (pp. 3020-3021)

Hence, figurative language is language that goes beyond the literal, oftentimes requiring the ability to make inferences in order to deduce its meaning. Figurative language can be divided into schemes and tropes. Schemes are used to alter the structure and word arrangement of sentences, while tropes are used to add visual effect. Take for instance the anastrophe (changing the word order of a sentence for added effect), "The greatest teacher, failure is," spoken by Yoda in *Star Wars: The Last Jedi* (Kennedy, Bergman, & Johnson, 2017). Figurative language is

creative language. It is the language of poets and writers. For example, William Shakespeare's *Romeo and Juliet* (Shakespeare, 1992) is laden with figurative language such as the metaphor (comparison of two unlike things) "It is the East and Juliet is the sun" (p. 69), personification (giving animals or objects human qualities) "...the envious Moon, Who is already sick and pale with grief" (p. 69), and simile (use of *like* or *as* to compare two things) "Like a poor prisoner in his twisted gyves" (p. 83). Shakespeare's use of figurative language is unique to his writing.

Conversely, idiomatic language is not created; it is everyday language that has been adopted by the majority of speakers due to its ubiquity. Idiomatic language is language used by native speakers that may include idiomatic expressions, idioms, clichés or other parts of speech that are commonly used in everyday speech and are not comprehensible by defining its parts. In other words, idiomatic language is difficult to deconstruct or break into parts in order to grasp its meaning. Consider the following sentence: After being all the rage for so many years, now skinny jeans are on the way out. The meanings of *all the rage* (the latest fashion) and *on the way out* (going out of fashion) cannot be deduced merely by defining each of the words. As Liontas (2019) states when referring to idiomatic language, "In all these lexicalized units, the sum of the usual individual meanings of their (apparent) constituents violates common compositional rules and does not mean what the bilexemic or polylexemic word group mean independently in common use" (p. 58).

Significance of Study

From personal experience, most native speakers have a difficult time explaining how they implicitly know idiomatics. These figures of speech simply *roll off the tongues* of native speakers, and are used in a natural and unforced manner in daily conversations and social

interactions. For second language learners (L2s) this is not the case. L2s do not acquire idiomatic control like native speakers do. According to Hinkel (2017), "idiomatic phrases and constructions have almost always presented an area of difficulty...L2 users may misinterpret non-literal meanings of words and phrases, as well as misuse them in various contexts" (p. 47). L2s should explicitly be taught the properties of idiomatics (see Liontas, 2017, 2019) beginning with a working definition, including detection strategies, and continuing with the pragmatics behind deducing meaning based on context, for example.

Second language learners may find themselves in situations where lack of idiomatic competence could cost them embarrassment, a minor *faux pas*, or worse, complete alienation either from work or a social group. As Hinkel (2014) states when referring to second language learners,

for these individuals, a lack of language skill that prevents them from speaking, listening, reading, and writing according to the norms accepted in the community can be particularly costly and even damaging in terms of lost opportunities for better grades, jobs, professional and economic advancement, or even social relationships. (p. 7)

Unfortunately, for many L2s, it may take being singled-out in a social setting to feel the sting of not understanding an idiomatic expression. Being able to fully participate in social situations, watching television/movies, reading the newspaper/comics/comic strips, following the news, or chatting on social media all require a certain amount of idiomatic competence.

Research has shown that L2 learners admittedly desire explicit instruction on idiom usage (Liontas, 2007, 2015b). In a study by Liontas (2007), participants expressed an interest in learning idioms, despite not having received formal instruction on idioms. Statements such as "idioms help me to better understand the culture and the language and will improve my

communicative competence" (p. 5) and "idioms are an important part of language and reflect cultures" (p. 5) both show how L2 learners are cognizant of the importance of learning idioms and understand their cultural value.

Liontas (2015b) found that L2s welcome strategies on how to identify and break down the meanings of idioms. L2s are able to recognize their deficiencies in deducing meaning from L2 idioms and can pinpoint what they are lacking in formal instruction. Furthermore, they enjoyed the implementation of the multimedia computer program *That's All Greek to Me*. Liontas (2002a) found that L2s support the implementation of audiovisual materials in idiom learning. This demonstrates the need for multimodal instruction—instruction that incorporates several learning modalities, such as images, texts, and audio—and specifically, one that is interactive and fun to use.

Presenting comics and comic strips as language that reflects the social environment in which they are situated gives L2 learners the much needed practical and authentic usage of the language. Comics and comic strips present the language of the here and now; language in its natural state; language that is visual and symbolic; and language that is free and fluid, mimicking the feel and rhythm of normal conversation. Kövecses (2007) points out that metaphor encapsulates American culture in the way that it reveals "distinct patterns of thought within American culture and society" (para. 1). Figurative language such as metaphor (comparing two unlike things), simile (using like or as to make comparisons), metonymy (substituting one thing for another that is related), onomatopoeia (a word that imitates the sound of what is described), hyperbole (over exaggeration), and many more (Liontas, 2018) can be found in comics and comic strips. It is by deconstructing these terms that language learning unfolds.

The teaching of idiomatics is an often overlooked aspect of second language pedagogy. According to Liontas (2001), "although knowledge of idioms, proverbs, metaphors, similes, collocations, and other tropes of figurative language is arguably central to language acquisition and use, instruction in idiomatic knowledge has not been a priority in SLA research or methodology to date" (p. 16). This sentiment is further echoed by Hinkel (2017) when she states, "despite the attention that idiomatic expressions and phrases have received in research, in teaching materials...these units of language are still relatively less commonplace..." (p. 52). Not only has it historically been discounted, but even if it is taught, its priority as part of the curriculum is oftentimes relegated to a one-day-a-week secondary teaching activity.

The purpose of this study is to explore the use of comics and comic strips in the learning and comprehension of L2 idiomatics. This study highlights Vygotsky's (1978) Sociocultural Theory as the theoretical framework that supports the possible implementation of comics and comic strips in the teaching of idiomatics in the second/foreign language classroom, as well as how this theory can be put into practice and best applied. Furthermore, this study will contribute to the field of second language acquisition and L2 idiomatics learning and comprehension, specifically through its exploration of comics and comic strips and the strategies and/or techniques second language learners use to understand idiomatics. Whereas a strategy is a plan of action with a specific goal in mind, a technique is the way one goes about accomplishing a task. Identifying the strategies and techniques that second language learners use in understanding idiomatics will provide invaluable insights into the teaching of idiomatics.

Research Questions

This descriptive and exploratory study will be guided by four research questions:

- 1. What strategies do native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 2. What strategies do non-native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 3. In what ways do each of these groups identify and deduce the meaning of idiomatic and/or figurative expressions in comics and comic strips?
- 4. In what ways might second/foreign language teachers use the information gleaned from this study to support non-native speakers as they learn idiomatics?

Definition of Terms

Defining Idiomatics

According to Liontas (2021),

Idiomatics encompasses *idiomatic* language accepted in common (in)formal usage and *figurative* language best exemplified in the oral and written texts the effective practice of such ideographic and pictographic language mechanisms creatively marks therein to transmit cultural notions, sentiments, and meanings across time and space, and from one generation to the next...In short, *idiomatics* is an umbrella term covering every facet of human communication and symbolic cognition in all its manifestation, from information first cognized in the mind as emblematic content and then encoded into metaphorical messages to how such messages are actually spoken, written, or gestured, and ultimately,

interpreted in the social context in which they are productively so shared while adhering to the established sociocultural norms and practices of a speech community. (p. 3)

As evidenced by the above definition, idiomatics is an all-encompassing term that denotes all forms of native speech, both in informal (e.g., casual lunch conversation) and formal settings (e.g., business meetings), emphasizing the importance of idiomatic competence. As Liontas (2015a) states,

idiomatic competence...includes knowledge the speaker-hearer has of what constitutes appropriate and accurate idiomatic language behavior in relation to particular communicative goals. That is, it includes both linguistic (phonology, morphology, syntax, semantics) and pragmatic (nonlinguistic, paralinguistic, sociolinguistic/functional, discourse, personal/world, intra/intercultural) knowledge. (p. 625)

Table 1 provides a summary of the nomenclature—with definitions and examples—adapted from Liontas (2021).

Table 1

Idiomatics Terms

Term	Definition	Example
allegory	A story with a hidden message	Aesop's Fables
allusion	Making an indirect reference	Big Brother
binomial	Two words that belong to the same grammatical group, joined by "and" or "or"	Safe and sound
cliché	An overused expression	The apple does not fall far from the tree
collocation	Words that occur together	Fast food
hyperbole	Use of exaggeration	I died of embarrassment

 Table 1. (Continued)

idiom	Says one thing, but means something completely different	Break a leg
irony	Saying the opposite of what is meant	Stating that something is clear as mud
lexemic unit	Unit of meaning	Eat, eats, eaten, and ate are all formations of the same lexeme eat
metaphor	Comparison of two unlike things	Time is money
metonymy	Substituting one thing for another that is related	The Oval Office
multilexemic phrase	A phrase consisting of more than one lexeme	Hit the hay
proverb	A short saying meant to teach something	Rome was not built in a day
simile	Use of <i>like</i> or <i>as</i> to compare two things	As bright as a button
slang	Informal words used in a particular group or community	A <i>bro</i> is a friend in American slang
trinomial	Three words that belong to the same grammatical group, joined by "and" or "or"	Lock, stock and barrel

What are VP Idioms?

Liontas (1999, 2002b) was the first to coin the term *vivid phrasal (VP) idiom* in his model on L2 idiom processing, the *Idiom Diffusion Model of Second Languages*. As defined by Liontas, vivid phrasal idioms are idioms that elicit an image (vivid) and are composed of more than one word, hence phrasal. He divided *VP idioms* into three subcategories that are dependent on their relation to their *native-language domain idiom*: lexical-level (LL) idioms, semi-lexical (SLL)

idioms, and post-lexical level (PLL) idioms. Lexical-level idioms are those that have a one-toone match in the learner's native language. For instance, a taste of one's own medicine (someone
getting the same unpleasant experience that they personally have been delivering to others) is an
LL in Spanish due to its literal translation estar probando su propia medicina. To differentiate,
matar dos pájaros de un tiro (to kill two birds with one shot) would be considered an SLL in
Spanish because of its close, but not exact, proximity to the English, to kill two birds with one
stone. Conversely, estar hasta las narices (to be annoyed or tired of something) which literally
means to be up to the nose in Spanish is a PLL due to its high degree of dissimilarity to the
English to be cheesed off (annoyed or frustrated). These three subcategories make classifying
idioms a less daunting task and provide a framework for studying the way in which L2 learners
process idioms.

Comics vs. Comic Strips: What is the Difference?

It is important to define the term comics and comic strips as they will be used in this dissertation (Table 2). The term comics refers to the medium itself. As stated by McCloud (1993), "the artform—the medium—known as comics is a vessel which can hold any number of ideas and images" (p. 6). This is supported by Cohn's (2013) definition that "a *comic* can use any combination of writing and images: single images, sequential images, some writing, no writing, dominated by writing, etc. In fact, all permutations of these combinations appear in objects we call *comics*" (p. 2). While comics is a broader term that may include comic strips, comic books, graphic novels, or to reference single images, comic strips (oftentimes supported by text) are a sequence or series of drawings that tell a story.

Table 2

Comics vs. Comic Strips

Comics	Comic Strips
 refers to the medium that uses images to express ideas can be single or multiple images with or without text 	 are a form of <i>comics</i> are a sequence or series of panels/images include texts or speech balloons

Comics and comic strips are as ubiquitous in American popular culture as apple pie on the fourth of July. They are a popular cultural phenomenon. One of the most prominent American cartoonists was Thomas Nast, considered the "Father of the American Cartoon." He is best known for his images of *Santa Claus*, the *Republican elephant*, the *Democratic donkey*, and *Uncle Sam*. ("Thomas Nast," n.d.). Nonetheless, it was his work as a political cartoonist that catapulted his career. Nast's depiction of the Southerners as the barbaric enemy during the Civil War brought much attention to his anti-slavery stance, along with his depictions of corrupt New York politicians in 1868 (Cronin, 2008). Through his comics, Nast had a voice and through that voice he relayed the political climate in which he lived. Comics were Nast's language. The reference to Thomas Nast is not meant to retrace the history of comics, but rather to show how comics have historically been used to reflect the culture of its time and as a platform to voice its social climate. As Cohn (2013) states "comics are a sociocultural context in which this visual language appears" (p. 2). This notion can be extended to the modern-day American comics/comic strip and its language.

Newspaper comic strips, often called the *funnies*, are still a Sunday classic. Classic comic strips such as *The Family Circle*, *Peanuts*, *Garfield*, and *Blondie* have all become a staple of

American culture. Nowadays, there is even a webcomics (online comics) following with a culture all its own with names such as *Xkcd*, *The Awkward Yeti*, and *The Nib*. *Xkcd* is a math and science focused online comics; *The Awkward Yeti*, a joke-based online comics, follows the day in the life of a blue yeti and includes a medical theme; and *The Nib* uses the online comics platform to promote current affairs through political satire. There is a comic strip for every fancy. The question is are comics/comic strips language? My answer is a resounding *Yes!* Not only are comic strips language, but they are a reflection of the culture they represent, and as the previous examples illustrate, American culture.

Theoretical Considerations

L1 Idiom Processing

L1 (native) learners' idiom processing is different from that of L2 learners. This is particularly relevant to the field of second language acquisition (SLA), as one of the biggest challenges in second language pedagogy is incorporating the teaching of idiomatic expressions in the second language classroom. In order for educators to effectively teach idioms, sound theoretical frameworks based on empirical evidence need to be examined and agreed upon.

Several studies (Cieślicka, 2013; Cieślicka & Heredia, 2011; Hinkel, 2017) on the processing of idioms for L2 learners continue to cite L1 idiom-processing hypotheses (see Bobrow & Bell, 1973; Jiang & Nekrasora, 2007; Swinney & Cutler, 1979; Wray, 2002) and models (see Cacciari & Tabossi, 1988; Cailles & Butler, 2007; Cutting & Bock, 1997; Gibbs, 1980, 1995; Gibbs & Nayak, 1989; Gibbs, Nayak, & Cutting, 1989; Libben & Titone, 2008; Sprenger, Levelt, & Kempen, 2006; Titone & Connine, 1999; Titone, Columbus, Whitford, Mercier, & Libben, 2015)

as the basis for understanding how the L2 learner comprehends, processes, and stores idiomatic expressions.

In Cieślicka and Heredia's (2011) study on 120 native speakers of Polish, Giora's (1997) Graded Salience Hypothesis and Beeman's (1998) Fine-Coarse Coding Theory were employed as the basis for interpretations on non-native idiom processing. The authors point out that limited research has involved the study of idioms and the possible differences in figurative language processing in the left and right hemispheres of non-native speakers, and yet, a hypothesis and theory for L1 idiom processing were adopted. The authors do mention, albeit briefly, Liontas' (1999, 2002) seminal work on L2 idiom processing and his *Idiom Diffusion Model of Second Languages*, but it is more of an aside rather than a central discussion point.

Cieślicka (2013) investigates cerebral asymmetries in fluent non-native speakers of
English and specifically focuses on idiom compositionality during idiom processing. Once again,
an L1 idiom processing hypothesis, the Idiom Decomposition Hypothesis (Gibbs et al., 1989) is
used as the premise for analyses. Additional investigations (Cieślicka, 2015; Cieślicka &
Heredia, 2017; Hinkel, 2017) continue with the theme of explaining L2 idiom processing by
referencing L1 idiom hypotheses. Cieślicka (2015) does provide an overview of L1 and L2 idiom
processing theories with a particular focus on L2 idiom processing and acquisition, however,
emphasis is still placed on L1 idiom processing even though well-grounded and valid L2 idiom
processing models exist. Cieślicka and Heredia (2017) explore cross-language similarities in
Spanish-English bilinguals. Monolingual idiom processing hypotheses such as the Idiom List
Hypothesis (Bobrow & Bell, 1973) and the Lexical Representation Hypothesis (Swinney &
Cutler, 1979) are presented, as well as hybrid models, to provide a basis for discussions on idiom
compositionality and the notion of holistic retrieval of conventionalized expressions. Although

the authors do mention Liontas (1999, 2002b), it is worth noting that not one L2 idiom processing model is given overwhelming support.

Hinkel (2017) traces the history of conventionalized expressions, paying particular attention to idiomatic expressions, their ubiquitous nature, and the need for explicit teaching through ongoing exposure and continual practice in the second language classroom. Hinkel likewise highlights L1 idiom classifications and teaching strategies with no mention of L2 idiom processing models to support L2 idiom pedagogy.

These authors are not mentioned in order to single them out or to diminish their work, but rather to show the prevalence of applying L1 idiom processing hypotheses in relation to L2s in the SLA community.

L2 Idiom Processing

There are three main L2 idiom-processing models that support how idioms are processed by second language learners: the *Idiom Diffusion Model of Second Languages* (Liontas, 1999, 2002b), the *Model of Dual Idiom Representation* (Abel, 2003), and the *Literal Salience Model* (Cieślicka, 2006). Liontas (2002b) was the first to coin the term *vivid phrasal (VP) idiom* in his model on L2 idiom processing, the *Idiom Diffusion Model of Second Languages*. Within the *Idiom Diffusion Model*, Liontas proposed three hypotheses: Lexical-Level (LL) Hypothesis, Semi-Lexical (SLL) Hypothesis, and Post-Lexical (PLL) Hypothesis. These three hypotheses provide further understanding on how second language learners process and comprehend idioms. Liontas was able to confirm these hypotheses in studies conducted on Greek (Liontas, 2001), as well as Spanish, French, and German participants (Liontas, 1999). Through these studies, Liontas confirmed that L2 learners first apply knowledge from their own L1 in order to make

sense of an L2 expression. This comprehension continuum from a lexical-level to a post-lexical level reveals the mechanisms that L2 learners undergo when attempting to process an L2 idiomatic expression. In addition, Liontas' *Idiom Diffusion Model* stresses the distinction between the way L1 and L2 learners process idioms. Whereas L1 learners are able to retrieve an idiomatic expression from their mental lexicon, the same is not the case for L2 learners. Instead of retrieving, L2 learners must create a new lexical entry. To add to the complexity of retrieval for an L2 learner is the component of awareness. If an L2 learner is not able to identify certain phrasal units to be idioms in the first place, thus lacking awareness, then even beginning to attempt to interpret its meaning can be very challenging.

In the second model, the *Model of Dual Idiom Representation* (Abel, 2003), Abel postulates that lexical representations and conceptual aspects of idioms, along with frequency, are integral components in L2 idiom processing. This idea of frequency ties into saliency and how L2 learners' exposure to idiomatic expressions affect the learners' ability to retrieve an idiom entry. The *Model of Dual Idiom Representation* (DIR Model) provides evidence to support the notion of decomposability of idioms when referencing idiom comprehension. According to Abel, a distinction is found between decomposable and nondecomposable idioms as they relate to idiom entries. Idiom entries are not necessary for decomposable idioms, while nondecomposable idioms will have their own entry or they can develop entries depending on frequency, therefore, making frequency a key component in determining whether an idiom becomes part of a learner's mental lexicon. As stated by Abel, frequency is important because it is independent of the idiom's decomposability and regulates the formation of an idiom entry. Abel's DIR Model supports the *Hybrid Model of Idiom Comprehension* (Titone and Connine, 1999).

The third model, the *Literal Salience Model* (Cieślicka, 2006), addresses the priority status that literal meanings of idioms have over figurative interpretations in L2 learners.

Cieślicka's *Literal Salience Model* is based on Giora's (1997) *Graded Salience Model*. Whereas Giora's *Graded Salince Model* regards familiarity of idiomatic phrases as a key component to idiom comprehension, Cieślicka's *Literal Salience Model* argues that salience supersedes familiarity. Cieślicka conducted research on Polish learners of English using cross-modal lexical priming. The participant pool included mainly female students, all in their fourth year of studies in English Philology, and each categorized as a proficient English speaker. Literality, decomposability, and familiarity were examined. Her findings revealed that the literal meanings, due to their salience among L2 learners, are processed first and therefore hold priority during language processing. This notion of saliency is also seen in Abel's (2003) *Model of Dual Idiom Representation* as previously noted.

An overview of the research on the processing of idioms by second language learners suggests a bias toward utilizing L1 idiom processing hypotheses and models to explain how the L2 learner processes idioms. It highlights the importance of referencing L2 idiom processing models/hypotheses over L1 idiom processing models/hypotheses when attempting to gain further understanding into how L2 learners process idioms. It is only by careful examination of L2 idiom processing models/hypotheses and the ways in which L2 learners synthesize idioms that the SLA profession can hope to not only better understand how L2 learners process idioms, but more importantly, to prioritize idiomatic competence as it relates to SLA pedagogy. The following section will take a closer look at the aspects of sociocultural theory that can be applied to comics and comic strips to promote idiomatics in second language acquisition.

Sociocultural Theory

Language as a Central Tool in Mental Development

Vygotsky's (1978) Sociocultural Theory has long been used in various fields ranging from economics to language development, but with respect to comics and comic strips in particular, it has not yet been done. I intend to apply the tenets of Sociocultural Theory that specifically apply to idiomatics through socially constructed objects such as comics and comic strips. Sociocultural theory has had a major impact on how educators around the world teach and help their students achieve their fullest potential. One of the major tenets of sociocultural theory connects learning as a social process.

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (Vygotsky, 1978, p. 57)

It is through the social environment that learning takes place. The development of language is dependent on social interactions. Vygotsky (1978) emphasized the role language plays in children's mental development when stating,

When children develop a method of behavior for guiding themselves that had previously been used in relation to another person, when they organize their own activities according to a social form of behavior, they succeed in applying a social attitude to themselves. The history of the process of the internalization of social speech is also the socialization of children's practical intellect. (p. 27)

As Smith, Teemant, and Pinnegar (2004) state in their summary of sociocultural theory, "knowledge is cultural understanding and competent participation" (pp. 2-19). Vygotsky (1978) posited that there are two separate lines of mental development: the elementary processes and the higher psychological functions. The elementary processes are biological in nature and the higher psychological functions are sociocultural. The importance lies in the "interweaving of these two lines" (p. 46), stressing that "the developmental roots of two fundamental, cultural forms of behavior arise during infancy: the use of *tools* and human *speech*" (p. 25). He stressed the importance of language as a central mediation tool and the role of psychological tools in what is referred to as the *development of higher mental processes of learning*. Vygotsky (1986) defined psychological tools as "gestures, language and sign systems, mnemonic techniques, and decision-making systems" (p. xxv). As such, Vygotsky believed that education plays a prominent role in providing opportunities for these *higher forms of human consciousness*, and specifically, formal education.

Vygotsky (1978) suggested that "school learning, which is concerned with the assimilation of the fundamentals of scientific knowledge" (p. 84) contributes to the concept of the Zone of Proximal Development. Formal education provides the setting for purposeful and intentional instruction that is not always available in everyday life. The classroom setting thus becomes the sociocultural environment that enables and facilitates the formation of language development. A learner's cognitive development is mediated by the social world. Vygotsky argued that children's social learning precedes development, stating "learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions" (p. 90). The social world includes parents, teachers, and peers, and in the classroom, the teacher and peers become the mediators.

As Vygotsky (1978) states, "the most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge" (p. 24). Appel and Lantolf (1994) examined the effects of text recall tasks on L1 and L2 reading comprehension. In their study, 28 undergraduate and graduate students (14 native English speakers and 14 advanced speakers of English as a foreign language) were given two different types of text, one expository and one narrative, and asked to read and then recall the text orally. The results of the study indicated that speaking mediates how participants report their understanding of texts and the ways in which the text recall process assisted reading comprehension. Furthermore, performance results showed a relationship between "the interaction of individual and task rather than on membership of the individual in some a prior category, such as native and non-native speaker or reader" (Appel & Lantolf, 1994, p. 437). This highlights the importance of speech, regardless of native or nonnative fluency, as it relates to reading comprehension. Frawley and Lantolf (1986) investigated the relationship between private speech and cognition. They argued that semantic content rather than the quantity of private speech is what is most important, concluding that all private speech is self-regulatory.

Language is the central tool in mental development. According to Vygotsky (1978), mental development is divided into two levels, the actual development level and the zone of proximal development. Vygotsky defines the actual developmental level as "the level of development of a child's mental functions that has been established as a result of certain already completed developmental cycles" (p. 85). The actual developmental level reflects what a child knows how to do by him/herself and is not influenced by the Zone of Proximal Development. The Zone of Proximal Development takes into account what a child is capable of achieving with

the help of others, such as the assistance of a teacher on how to solve a problem. It is the difference between what a child can do on their own and what they can accomplish with the help or guidance of someone more knowledgeable, referred to as the More Knowledgeable Other.

Furthermore, the zone of proximal development or ZPD incorporates the concept of scaffolding. According to Vygotsky (1978), "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 88). The physical image of scaffolding used to support buildings is analogous to the use of scaffolding in teaching. Scaffolding is a technique that supports learner development and aids the progression from one level to the next. For example, integrating visual aids in reading comprehension. Visual aids assist the reader by providing a visual representation of the text, providing the support that many readers need when faced with challenging texts. Another example of scaffolding is through introducing key vocabulary terms prior to having students read an entire passage by themselves.

Scaffolding is both interactive and collaborative, providing assistance students need with learning, while encouraging language development. The teacher plays an integral role in creating goal-directed activities that model what is desired. As Vygotsky states, "attention should be given first place among the major functions in the psychological structure underlying the use of tools" (p. 35), further stating that "the ability or inability to direct one's attention is an essential determinant of the success or failure of any practical operation" (p. 35). The teacher can facilitate this notion of attention through explicit instruction.

Language as a Social Process

Vygotsky (1978) defines the Zone of Proximal Development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Breaking from Piaget's (1926) beliefs on the purpose of a child's egocentric speech, Vygotsky (1978) posited that a child's private speech from the very beginning is socially driven. According to Vygotsky (1978), "language arises initially as a means of communication between the child and the people in his environment. Only subsequently, upon conversion to internal speech, does it come to organize the child's thought, that is, become an internal mental function" (p. 90). It can be argued that incorporating the use of comics and comic strips in a second language classroom is supported by Vygotsky's notion that the sociocultural environment is the primary source of human development, and exhibits language in a natural way. In other words, learning is tied to the zone of proximal development in that "it awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers" (Vygotsky, 1978, p. 90).

More specifically, Gal'perin's (1992) theory of developmental education further supports comics and comic strip usage in second language acquisition. Gal'perin's *Systemic Theoretical Instruction* (STI) can be seen as an extension of Vygotsky's Zone of Proximal Development (ZPD), taking it a step further with its inclusion of the process of teaching-learning. STI incorporates mediation and internalization as integral components that lead to the formation of mental actions. Vygotsky (1978) posits that mediation involves the use of signs and tools, stating "distinctions between tools as a means of labor of mastering nature, and language as a means of

social intercourse become dissolved in the general concept of artifacts or artificial adaptations" (pp. 53-54). Signs and tools become mediators in the development of mental actions, promoting what Vygotsky defined as "higher psychological function or higher behavior" (p. 55).

Vygotsky (1978) defines internalization as "the internal reconstruction of an external operation" (p. 56), using the act of pointing to describe the internalization process. It is only after pointing is acknowledged by others that it becomes a gesture. He describes internalization as a process, beginning with reconstructing an external activity and ending with the transformation of an interpersonal (among people) process to an intrapersonal (within oneself) process, emphasizing the result of "inner processes only as a result of a prolonged development" (p. 57). This internalization process is the "distinguishing feature of human psychology" (p. 57).

Gal'perin classified these mental actions into two distinct levels: the level of abstraction and the quality of an action (Haenen, 2001). According to Vygotsky (1978), for mediation to occur, tools must be utilized. Karpov and Haywood (1998) refer to the types of mediation as "metacognitive mediation" and "cognitive mediation," while Miller (2011) posits three orders of mediation: first-order mediation, second-order mediation, and third-order mediation. First-order mediation, also called "metacognitive mediation" (Karpov & Haywood, 1998, p. 27) develops in interpersonal communication. Second-order mediation, or "cognitive mediation" (Karpov & Haywood, 1998, p. 28), occurs when humans use artifacts (e.g., comics or comic strips) to shape activities. Third-order mediation consists of the systems in society, such as institutions that develop over time (Lantolf & Poehner, 2014).

Moreover, Gal'perin (1992) addresses the teacher's role in the development of mental actions, outlining steps and conditions in the teaching-learning process. Gal'perin divided mental actions into four different levels of abstraction: material/materialized, perceptual, verbal, and

mental level (Lantolf & Poehner, 2014). In the material/materialized level, physical objects such as visuals aid mental action. In the perceptual level, mental action is achieved without the aid of physical objects and is stored as mental images. The verbal level incorporates external speech, while the final level, mental, occurs when the mental action has been internalized (Lantolf & Poehner, 2014). Table 3 summarizes Gal'perin's levels of abstraction adapted from Lantolf and Poehner.

 Table 3

 Gal'perin's Levels of Abstraction

Levels	Process
material/materialized	physical objects (e.g., visuals such as comics or comic strips) assist in mental action
perceptual	mental action achieved through absence of physical objects; stored as mental images
verbal	use of external speech
mental	internalization occurs

Comics and comic strips are a strong example of Gal'perin's (1992) first level of abstraction, the material/materialized level of mental action, as they represent a physical object. They are a real cultural object that convey language, primarily through the use of images with supporting text. They may then progress to the perceptual level because they are a visual representation of language. Through the support of the MKO or More Knowledgeable Other (Vygotsky, 1978), in this case the teacher or even a peer, comics and comic strips may progress to verbal output. Finally, the mental level is achieved in the absence of any kind of object.

According to Lantolf and Poehner (2014), "a dialectical relationship is established when a user takes up the artifact and uses it to achieve specific communicative goals" (p. 61). This is further

supported by Vygotsky's (1978) notion of practical intelligence and the use of signs and "the dialectical unity of these systems" (p. 24). It may be concluded then that comics and comic strips provide the much-needed resources that enable L2s to communicate in everyday speech that mimics native-like fluency.

Furthermore, dialectical unity of theory and practice is an important element in Gal'perin's (1992) theory and "calls for learners to engage in subject-matter appropriate classroom practices mediated by relevant cultural tools that empower learners to explore and transform their environment" (Lantolf & Poehner, 2014, p. 63). Comics and comic strips are relevant cultural tools which, if implemented correctly, can *empower* students to better understand their cultural surroundings, facilitating cultural knowledge, or cultural competence, and language development.

Applying Vygotsky's (1978) Sociocultural Theory to Comics and Comic Strips Comics and Comic Strips as Language

Cohn (2013a) defines *Visual Language Theory* as "the broad architecture of my thinking about the visual language of comics, drawing, and graphic communication" (p. xv). For Cohn, comics and comic strips embody language. He outlines three elements of language structure: modality, meaning, and grammar. Modality refers to the medium in which language is conveyed. This can be written, audio, visual, gestural, or spatial. These modalities, in turn, affect meaning and grammar. Cohn references comic authors such as Jack Kirby (1999) and Will Eisner (1985) who compare comics to language. Cohn points out that graphic representations illustrate language, arguing that if "structured sequential sounds become spoken languages of the world,"

then the same can be said about "structured sequential images" as representations of *visual languages*" (p. 3).

Cohn (2012) argues that visual language in comics follows similar structures inherent in verbal language. These structures are: graphetics, photology, morphology, semantics, grammar, multimodality, and acquisition. Graphetics is defined as "a term used by some linguists, on analogy with phonetics, for the analysis of the graphic substance of written or printed language (Crystal, 2008, p. 220). Cohn (2012) posits that while verbal language is conveyed through phonology (the study of sounds), visual language incorporates graphetics and photology. In addition, Cohn stresses the importance of perception in visual language as "the elements of visual language must be drawn in such a way as to facilitate visual object and scene perception" (p. 98). The visual object needs to be identifiable, but not an exact replica of reality. This concept of perception in comics is further supported by McCloud. According to McCloud (1993), "when pictures are more abstracted from 'reality,' they require greater levels of perception, more like words. When words are bolder, more direct, they require lower levels of perception and are received faster, more like pictures" (p. 49). This combination of pictures and words in comics and the idea that the cartoon image need not be a direct representation of reality lends itself to the "universality of cartoon imagery" (p. 31).

According to Cohn (2012), photology "is charged with the study of the organization of the graphic modality" (p. 100). He argues that photology is analogous to phonology. This can be seen in the manner in which visual representations are configured, utilizing combinations of "graphemic shapes" (p. 100). In other words, the writing components (i.e., lines and drawings) in comics parallel the phonetics combinations apparent in verbal language.

Morphology (the study of how words are formed) is another characteristic of verbal language found in comics (Cohn, 2012). Cohn points out the similarities between verbal and visual language in the use of bound morphemes vs. free morphemes. Free morphemes (e.g., book or student) are independent, whereas bound morphemes (e.g., -un or -ly) hold no meaning when they are on their own. He states, "speed lines and speech balloons are 'bound morphemes' that cannot appear without affixing to a root object like someone running or speaking" (p. 102).

McCloud (1993) similarly argues that word balloons in comics can be used to promote sound effects and motion.

Semantics is defined as the "study of meanings" ("Semantics," n.d.). In comics, semantics can be found in the use of symbols and icons. These symbols and icons represent language. For example, a musical note represents sound, while a coin represents money. Pedri (2017) highlights the "semantic links between framed images or panels" (para. 5) as the place where meaning occurs. McCloud (1993) further echoes this argument in his categorization of different transitional panels, specifically noting that the "gutter" between panels leaves room for reader interpretation and "plays host to much of the magic and mystery that are at the very heart of comics" (p. 66). It is the extension of reader interpretation that McCould refers to as "closure" (p. 67), emphasizing the role of the reader as the "collaborator" (p. 65) who must infer meaning between panel transitions.

Cohn (2012) further highlights the similarities between visual and verbal language, positing that elements of grammar are found in comics through the inclusion of panel transitions representing the "narrative structure" (Cohn, 2013, p. 12). McCloud (1993) states, "if visual iconography is the vocabulary of comics, closure is its grammar" (p. 67). He argues that grammar patterns are evident in the sequential images between panels (see McCloud, 1993).

Multimodality and acquisition are additionally addressed. Pedri (2017) states,

Indeed, comics' multimodal storytelling practices do not stop at the combining of words and images. In it, not only words and images comingle and interact to tell a story, but also different writing styles and fonts in its verbal track, as well as different visual styles and types of images in its visual track. (para. 4)

Comics facilitate multimodality through the combination of visuals and text to support and enhance comprehension. Visuals are used to support text and vice versa. In addition, text alone may be used to denote meaning and visuals may stand alone to connote meaning. One is not dependent upon the other, but rather they complement one another, adding emphasis to meaning depending on the context. Sound is accentuated through highlighted or bold texts present in speech balloons. Jacobs (2007) points out that "along with lettering and punctuation," the combination of text boxes and visuals facilitate "tone, voice inflection, cadence, and emotional tenor" (p. 22). Moreover, gesturing occurs through the use of body movement and facial expressions.

Acquisition of visual language is concerned with how one acquires a language. Cohn (2012) discusses similarities between "babbling" in a language and a critical learning period, both of which parallel verbal language theories, including second language acquisition. Cohn compares the drawing skills of American versus Japanese children by pointing out how drawing is an integral component of Japanese culture, one that is fostered throughout childhood. In summary form, Table 4 presents the similarities between verbal and visual language adapted from Cohn.

Table 4Characteristics of Verbal Language vs. Visual Language

Characteristic	Verbal Language	Visual Language
Speech production	Phonetics	Graphetics: use of shapes to convey speech
Patterns of sounds	Phonology	Photology: graphic patterns
Study of words (e.g., bound vs. free morphemes)	Morphology	Use of speed lines and speech balloons
Study of meaning	Semantics	Use of symbols
Structure of a language	Grammar	Use of panel transitions
Multimodality (incorporating differing modes of conveying language)	Written, audio, visual, gestural, or spatial	Written, audio, visual gestural, and spatial
Acquisition	Critical learning period	Undefined

Table 4 illustrates the similarities between verbal and visual languages. In verbal language, speech sounds are examined through phonetics, while in visual language, graphetics is employed. Photology in visual language follows similar structures found in the sound patterns of verbal language. Morphological patterns inherent in verbal language are indicated through speech balloons in visual language. Instead of words being used to express meaning, as is evident in verbal language, visual language employs symbols and icons.

Grammar examines the differing rules of a language in regard to word order and how it affects sentence formation. Visual language utilizes panels to show the progression of language (through text and images) from one scene to the next, just as words are formed to create sentences. The manner in which the panels are presented (i.e., the order) and formed (i.e., panel shapes) are the grammar of visual language. Through these panels, differing modalities can be

expressed. For example, the audio mode is conveyed through the use of onomatopoeia and the use of bold or highlighted words. Time, space, and motion (spatial mode) are conveyed through panel depictions (McCloud, 1993). As McCloud notes,

These icons we call panels or 'frames' have no fixed or absolute meaning, like the icons of language, science, and communication. Nor is their meaning as fluid and malleable as the sorts of icons we call pictures. The panel acts as a sort of general indicator that time and space is being divided. (p. 99)

It is the reader's job to infer and make logical conclusions about time based on the panels. Gestural mode in visual language is captured through the characters' facial expressions, hand gestures, and body movement. Gesturing is further stressed when accompanied by supporting text. The parallels in acquisition among verbal and visual language needs to be further explored. Although there may exist similarities in verbal and visual languages in regard to a critical period of language acquisition (see Lenneberg, 1967), there is limited research on the topic as it relates to visual language.

Comics and Comic Strips as Cultural Artifacts

From a sociocultural perspective, cultural artifacts are *culturally constructed* tools (Lantolf & Poehner, 2014). These cultural artifacts can be seen as mediators, or tools, in mental development. According to Cohn (2013a), "comics are social objects created by incorporating the results of two human behaviors: writing and drawing" (p. 1). It is through the introduction and examination of cultural artifacts that one gains critical insight into the beliefs and perceptions of a given society (see Brabant & Mooney, 1999; Chapman, 2011; Hennig & Kirova, 2012).

Cultural artifacts are a reflection of the society that creates them. Comics and comic strips are an excellent example of cultural artifacts (see Brabant & Mooney, 1999: Llull, 2014) and visual artifacts (see Wilson, 2003). According to Decker and Castro (2012), comics are a "useful source in the study of American pop culture" (p. 170). Decker and Castro's case study on utilizing comics in the history classroom demonstrates the nature of comics as a reflection of a culture's historical and political climate. In this particular case study, Decker and Castro chose the *Unknown Soldier* by Dysart and Ponticelli (2009) to discuss the war and violence in Uganda. Through the implementation of the *Unknown Soldier* in the classroom, students' motivation and engagement increased, as well as their ability to identify with the reality of war through its characters and graphic images. The 1989 Tiananmen Massacre in Beijing, China served as the inspiration for a graphic novel depicting the horrific encounter between protestors and soldiers where as many as 10,000 people died ("Tiananmen Square," 2017). In an interview with the author, Lun Zhang, he stated "the comics format provided a key means of capturing the emotion of the demonstrations, in a way that does not necessarily come across in text" (Griffiths, 2020, "Graphic Novel section," para. 3). Capturing emotion is a central component of comics (see Cohn, 2012; Cohn, 2103; McCloud, 1993) and one that resonates with its readers.

Comic strips differ from country to country and language to language; they are an extension of the sociocultural climate in which they are produced. McCloud (1993) underscores the differences among Japanese and American comics, such as the use of omission, silence, and abstraction in Japanese comics that are not characteristic of comics in the United States, as reflections of culture. Cohn (2013) emphasizes the role culture plays in sand drawings of Central Australian communities. Although sand drawings are not exactly comics, what is important is the

notion that culture plays a prominent role in the expression of a community's ideas. Wilson (2003) argues that,

artifacts from visual culture, and the theories, ideas, and ideologies that surround them are of our time and they hold the possibility of informing us...they probe and problematize contemporary society, and they raise issues pertaining to our values and our aspirations. (p. 217)

Comics creators have historically used their medium as a platform for political and social commentary. Stevens (2015) states, "Captain America has much to teach us about the ideals of American mythology... (p. xiv). Captain America, which debuted in March of 1941, featured Captain America surrounded by Nazi soldiers, punching Hitler with the caption "Smashing thru, Captain America came face to face with Hitler" (Marvel, n.d.). Captain America came to symbolize American patriotism and has become increasingly popular since its rise to the big screen in the Marvel film, "The First Avenger" in 2011. Another popular and long running comic strip, *Doonesbury*, is known for its political critique. Recently in the Sunday comics section of the Tampa Bay Times (dated August 9th, 2020), *Doonesbury* featured Donald Trump and William Barr (Attorney General of the United States) discussing Donald Trump replacing the District Attorney of the Southern District of New York. The Southern District is known to be fiercely independent from the Department of Justice and has several ongoing investigations involving Donald Trump. *Doonesbury* uses that action by the President as an example of how Donald Trump abuses power and bullies.

The old English adage, "A picture says a thousand words," truly encapsulates the popularity of comic strips. For example, here in the United States the cartoonist Bil Keane created one of the most beloved comic strips, *The Family Circle*, in 1962 and nowadays it is still

a Sunday favorite. *The Family Circle* depicts the traditional American family where family values are its central theme. Bil Keane used wholesome humor to entertain his audience. Another classic American comic strip is *Peanuts*. Most Americans can identify with the beloved character Charlie Brown and his dog Snoopy. The comic strip *Peanuts* has become so popular that several television series have been produced, such as *A Charlie Brown Christmas* and *A Charlie Brown Thanksgiving*, and there was even an off-Broadway show, *You're a Good Man, Charlie Brown*. One could say that the character Charlie Brown is an American icon. Gardner (2017) refers to *Peanuts* as a medium to draw attention to current events. For example, Snoopy's depiction of his journey to the moon or his battle with the Red Baron both highlight political commentary (Gardner, 2017). All of these examples reflect the ubiquitous nature of comic strips and the cultural connections that are implicit in comic strips.

Conversely, a popular cartoonist in Colombia, called Matador, whose work can be found in one of the most prominent newspapers in Colombia, *El Tiempo*, uses the medium of comic strips to attack corrupt political figures. Matador enjoyed drawing past president Uribe as the semblance of Milhouse from the animated American sitcom, *The Simpsons* (Otis, 2010). Another popular cartoonist, Maitena, from Argentina creates comic strips that deal with women's issues. Maitena is best known for her satirical depiction of the battle of the sexes (Rohter, 2004). Yet another cartoonist from France, Albert Uderzo, created one of the most enduring and iconic French comics, *Asterix*, whose main objective is to protect his village.

All of these examples show how comic strips give voice to the issues and topics of the country they represent. By reading the comics section in the newspaper of any given country, one can readily obtain a quick snapshot of that society's cultural climate. An outsider who reads a comic strip of a particular country may not understand certain icons being used, cultural

references, or the sarcasm employed. For example, in France, *Asterix* (as referenced above) is a pop icon in regard to comics. An outsider to the French language and culture would not comprehend the symbolism behind Asterix and the connection to French history. Asterix is a small warrior from Gaul, a historical region of Western Europe that was inhabited by the Celts, which today comprises France, Luxembourg, Belgium, much of Switzerland, and parts of Northern Italy and Germany (Britannica, 2016). He has a sidekick named Obelix who is opposite in stature, physique, and personality, making the two a comical combination. Asterix goes on many worldly adventures where his wit is more powerful than his sword. Through examining the characters and settings of comic strips, much can be told about that culture's shared beliefs and assumptions. Comic strips speak volumes to the social narrative of that time.

Comics and Comic Strips as Storytelling

Comics and comic strips are a form of storytelling. McCloud (1993) emphasizes the sequential nature of comics. Just as a story includes characters, setting, some type of conflict, and a resolution, so do comics and comic strips. McCloud states "viewer-identification is a specialty of cartooning" (p. 42) as "words, pictures and other icons are the vocabulary of the language of comics" (p. 47). He further states "a huge range of human experiences can be portrayed in comics through either words or pictures. As a result...comics have become firmly identified with the art of storytelling" (p. 152). It is these *human experiences* that make comics and comic strips so relatable and identifiable to its readers. McCloud outlines six different storytelling techniques found in comics: moment-to-moment, action-to-action, subject-to-subject, scene-to-scene, aspect-to-aspect, and non-sequitur. According to McCloud, "comics panels fracture both time and space, offering a jagged, staccato rhythm of unconnected moments. But

closure allows us to connect these moments and mentally construct a continuous, unified reality" (p. 67). Moment-to-moment transitions do not require much effort from the reader as they capture moments that are occurring almost instantaneously, without much separation. Action-toaction transitions depict a single character progressing from one action to the next. Subject-tosubject transitions require readers to construct meaning from a particular scene or idea. As McCloud points out there is a certain "degree of reader involvement necessary to render these transitions meaningful" (p. 71). The reader is no longer the passive receiver of information. Scene-to-scene transitions involve "deductive reasoning" (p. 71) as readers are presented with concepts of time and space, and must reach logical conclusions based on the given scenes. This requires the reader to be an active participant. Aspect-to-aspect transitions highlight or focus attention on a particular feature that exemplifies a certain mood. For example, in an aspect-toaspect transition, one panel may feature flowers and the sun, while the next panel depicts birds flying as a way to capture the idea of springtime. The aspect-to-aspect transitions can be seen as the setting to the storyline, creating the backdrop for further action. The final transition type, non-sequitur, provides no rhyme or reason among panels. This may be the most random and illogical panel sequence where the reader is left perplexed and confused as to the meaning behind the panel choice.

Action-to-action, subject-to-subject, and scene-to-scene are the most popular types of transitions in the western hemisphere as they emphasize the sequential nature of storytelling. McCloud juxtaposes Western vs. Eastern hemisphere comics characteristics by highlighting how in Japan, the non-sequitur is often used, but in the West, it is rarely used. Furthermore, in Japan the aspect-to-aspect is a very popular transition type, one that is not as common in the West.

McCloud (1993) identifies seven different word and picture combinations found in comics: word specific, picture specific, duo-specific, additive, parallel, montage, and interdependent. In word specific combinations, pictures do not play a dominant role in relation to the text. In other words, the picture does not paint the whole picture. In picture-specific combinations, the picture is the main focus, illustrating all necessary information and the words take on a secondary role. In duo-specific combinations, the words and pictures correspond with one another, depicting a unified message. In additive combinations, words are used to augment an image or an image is used to augment words. In parallel combinations, words and images do not converge, but rather follow separate paths. In montage combinations, words become part of the images. Finally, in interdependent combinations, words and pictures are dependent on one another, and are used jointly to communicate an idea.

One of the most distinctive features of comics and comic strips is the word balloon. The word balloon can include words and symbols to convey ideas, emotions, and sound. The concept of emotion in comics and comic strips is one that parallels that of human speech. Depending on how images and symbols are used in comics, emotions are observable. Onomatopoeia (a word that imitates the sound of what is described) is often used to convey character feelings, sensations, and sound. The manner in which the words are written, including the lettering shape and thickness, convey sound (McCloud, 1993). McCloud (1993) argues that lines can be used to denote emotions simply by changing the width/thickness or brush stroke of the line when he poses the question "in truth, don't all lines carry with them an expressive potential?" (p. 124). For example, to depict anger, blunt and jagged lines may be used. This contrasts with the use of a softer brush stroke and thinner line to denote calmness. Comics and comic strips incorporate body language and gestures to convey ideas as well.

Consider the following Calvin and Hobbes comic strip by Bill Watterson ("GoComics," n.d.), with permission from Andrews McMeel Syndication (Figure 2).

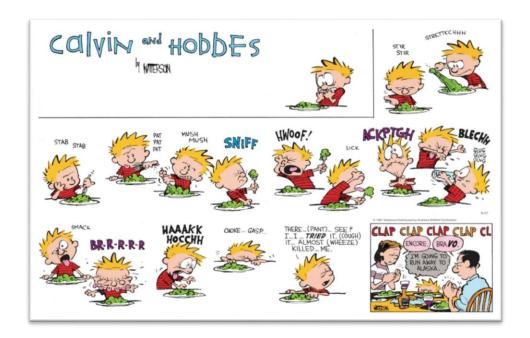


Figure 2. Calvin and Hobbes Comic Strip

The first thing to notice is the design and structure of the comic strip itself. The initial image of Calvin within the Calvin and Hobbes text box provides the setting and sets the tone for the storyline. The image captures Calvin in a most distressed pose: both hands in the mouth, biting his fingers, while staring in horror, eyes wide open, at a green substance covering his entire plate. Through this image, the reader is able to identify with the emotion of distress, possibly evoking childhood memories of a similar scenario. The reader *feels* what Calvin is feeling.

Next, a series of images relay Calvin's step-by-step reactions to the green substance. This process is denoted through the use of continuous panels without separation and dividing lines to show how one emotion blends into another seamlessly, highlighting the fluid and dynamic nature of human emotions. This is further stressed through the positioning of each of Calvin's reactions

and gesturing. Notice that the images are not side by side (linear), but rather forward and back (curved), mimicking the ebb and flow of emotions.

Language is highlighted throughout the comic strip. Sound is elicited through word strings such as STIR STIR, PAT PAT PAT, and MUSH MUSH MUSH to allow the reader to hear each of Calvin's experiences. The nonsensical texts such as ACKPTGH and BLECHH emphasize Calvin's over dramatic behavior. The bold text provides added dramatization, mirroring Calvin's afflicted reactions. Calvin's facial expressions and body language coincide with his emotions as well. Each reaction is supported by a corresponding facial expression and body gesture. For example, Calvin is shown stabbing the green substance on his plate with a look of boredom on his face that is reinforced by his hand against his face with his elbow resting on the table. The text further supports Calvin's emotions through the use of bold letters that are all in caps. The STAB STAB above Calvin's head emphasizes the physical motion connoting boredom and the stabbing noise made by the fork hitting the plate.

Time is captured by the sequential images. The blending of one scene to the next illustrates the passage of time, but with no break. The reader can surmise that Calvin's entire theatrical performance stretched for a long period of time for effect. The final panel is noticeably different than the other panels, signifying closure and the end of the storyline. This is evidenced by the clapping from both his mother and father, as though Calvin's performance is being commended by his parents. The reader can *hear* the *CLAP CLAP CLAP CLAP CLAP CL* (even the ending *CL* of the applause breaking, or being clipped, at the end is audible) of applause from both the mother and father. The clapping sound is further emphasized and supported by the text through the mother uttering ENCORE and the father stating BRAVO. Note the use of all caps in ENCORE and the bold on the last two letters, **V** and **O**. The mother's ENCORE at the end shows

a disconnect between what she is saying and her corresponding body language. Her choice of a celebratory word, ENCORE, does not match with her downcast eyes and overall unimpressed look on her face. This is an important aspect of language understanding as 93% of communication is nonverbal (Mehrabian, 1971). In addition, tone is conveyed. The reader is left with the inflection and stress on the **VO**, highlighting the sarcasm in the father's tone.

The interpretation of the above comic strip is meant to emphasize the language characteristics inherent in comics and comic strips. Language is more than simply deciphering the meaning of words. It is all-encompassing: it comprises body language, tone, and delivery. Language components, from sound, gesturing, and emotions to speaker tone are all evident in comics and comic strips.

Organization of Study

This dissertation is divided into five chapters. In Chapter 1, I begin by providing background information on idiomatics, the significance of the study, and the research questions. I also define key terms such as idiomatics, *VP idioms*, and comics and comic strips. I then include an analysis of the research and theoretical models relevant to idiom processing. Finally, I introduce the theoretical framework guiding this study—Vygotsky's (1978) Sociocultural Theory. In Chapter 2, I present a review of the literature on the use of comics and comic strips in second language acquisition. Through this review, I establish a gap in the literature and support for the need for more studies on the usage of comics and comic strips in the learning and comprehension of L2 idiomatics. In Chapter 3, I discuss the methodology of the study. I include the study site, participants, assumptions, treatment, and selection of materials. I also present the participant tasks, including data collection and data analysis procedures. In Chapter 4, I present

the results of the data analysis, as well as a detailed discussion on the findings. I present these in the same order as the participant tasks. I then connect the findings in support of my theoretical framework, in addition to offering theoretical considerations for other theories supporting my findings. Finally, in Chapter 5, I present a summary of the results, pedagogical implications, and limitations of the study. I end the chapter with future recommendations and final thoughts about the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

In this chapter, I present a review of the literature on comics and comic strips and second language acquisition. The most recent review of the literature on the usage of comics and comic strips in second language acquisition reveals a paucity of research on the application of comics and comic strips in L2 idiomatics. Much of the research on the usage of comics and comic strips in the second language classroom has been applied to the relationship between comics/comic strips and cultural and communicative competence (Friedlander, 2018; Llull, 2014; Ravelo, 2013; Wardani, 2019), reading and writing skills and comics/comic strips (Cabrera, Castillo, González, Quiñónez, & Ochoa's, 2018; Kılıçkaya & Krajka, 2012; Listyani, 2019; Liu, 2014; Merc, 2013; Ranker, 2007; Rosetto & Ciera-Macchia, 2011; Shiang, 2018), and comics/comic strips and affective factors (Clark, 2017; Deb, 2016; Ford, 2011; Hassanirokh, 2018; Issa, 2018; Kohnke, 2019; Popa & Tarabuzan, 2015; Sri Wilujeng & Lan, 2015), but with little or no mention of how comics and comic strips can be used in the second language classroom to teach idiomatics.

Research on Comics and Comic Strips to Promote Cultural and Communicative Competence

Language and culture cannot be separated. Crystal and Robbins (2019) state that "language is a system of conventional spoken, manual, or written symbols by means of which human beings, as members of a social group, and participants in its culture, express themselves" (para. 1). Cultural and communicative competence are both essential components to language learning, and are especially important for second language learners. Cultural competence entails the ability to communicate with people from different cultures, cognizant and mindful of the differences across cultures. Communicative competence includes cultural competence; it involves all aspects of communication that enable a speaker to communicate and interact with others, including cultural sensitivity and savviness. Studies on the use of comics and comic strips to enhance cultural and communicative competence by Ravelo (2013), Llull (2014), Friedlander (2018), and Wardani (2019) are reviewed next.

Ravelo's (2013) study explored the teaching of history through comic strips in a CLIL (Content and Language Integrated Learning) classroom. Ravelo argued that comics are a language with its own set of symbols and conventions that distinguish it from other mediums. The types of shots and angles utilized in comics denote different things. Ravelo categorized seven distinct shots according to their meaning; the extreme wide shot (EWS), the very wide shot (VWS), the simple wide shot (WS), the mid shot (MS), the close-up, the extreme close-up, and the cut-in. In addition, angles can be classified based on perspective, from the high camera angle that creates a more dramatic look to the subjective camera angle (from the subject's perspective). The author contended that comic strips are a valid genre in the teaching of historical facts, specifically through the utilization of two historical comics on the Holocaust. Participants of the

study included five Jewish students between the ages of 16 and 17 years old in a CLIL classroom in Buenos Aires, Argentina. The historical comics *Maus* (Spiegelman, 1986) and *Yossel* (Kubert, 2003) were chosen for their historically significant depiction of the Holocaust. The results of the study revealed that students were engaged and interested in learning about the Holocaust through the comics reading and educational activities. Three out of the five students reported a more complete understanding of the swastika symbol. Overall, participants demonstrated increased knowledge and understanding about the Holocaust when both comics were implemented, reflecting on comics' ability to elicit multiple interpretations through the use of signs and images. Ravelo's study highlights the potential of comics as a pedagogical tool to reinforce historical events and promote cultural understanding. The Holocaust can be a very emotional, complex, and challenging topic to teach, but as Ravelo showed, it can be taught effectively and arguably more creatively through the medium of comics. Furthermore, in a CLIL classroom where English is a second language, the introduction of comics to promote cultural awareness and competence capitalizes on the interest level of comics and its ability to capture a wide student audience.

Llull (2014) examined the potential of comics as a pedagogical tool in a CLIL (Content and Language Integrated Learning) classroom where English is taught through the social sciences at the primary level. His teaching proposal, *The Tintin Project*, was conducted over the course of a year in which comics were used to teach social sciences. Participants (between the ages of 20 and 25 years old) included 100 students from the Cardenal Cisneros University College in Alcalá de Henares, Spain in their third year of the bilingual teacher trainee program. The bilingual teacher trainee program centered around Primary Education, with an emphasis on the integration of the social sciences and natural sciences, such as the inclusion of content areas

that spanned the environment and its conservation to cultures and social organizations. Most of the participants tested at a B2 level in English as outlined in the Common European Framework of Reference for Languages. A B2 level is classified as an independent user who can "understand the main ideas of complex text...interact with a degree of fluency and spontaneity...and produce clear detailed text" ("Council of Europe," n.d., Independent User section, para. 1). The Tintin *Project* served as a framework for the teaching of social sciences through comics. *The Tintin Project* was based on the popular Belgian comics, *Tintin*. Llull outlined four objectives as part of his framework through the incorporation of the *Tintin* comics: (1) consideration for didactic possibilities (2) examining socio-cultural topics (3) the production of didactic activities and (4) incorporating scaffolding. The results of *The Tintin Project* considered two groups of activities, language-focused activities and content-focused activities. The language-focused activities were divided into four distinct categories: scaffolding techniques, communication activities, forums, and activities to learn English idioms. Scaffolding techniques included students dressing up as their comic character, presenting a performance of their comic character, and creating their own materials (e.g., vocabulary flashcards) associated with the comics. Communication activities involved analyzing comic characters' facial expressions and body language, rearranging narrative sequences, and creating alternative dialogues and plots. Forums focused on analyzing the comic strips' content and layout. Activities to learn English idioms explored the use of figurative language, with an emphasis on how figurative language can vary according to the language. Similarly, the content-focused activities were divided into four different categories: activities related to geography, activities related to history, activities related to social aspects, and activities related to cultural aspects. In activities related to geography, students "traveled" through different parts of the world, identifying geographical aspects, such as landscape and

varying ecosystems. Activities related to history investigated historical events depicted in the comics. Activities related to social aspects examined societal norms, economics, and political systems reflected in the comics. Activities related to cultural aspects identified specific language, behavior, norms, and customs, including cultural stereotypes, found in comics. *The Tintin Project* revealed the vast array of educational opportunities available through teaching with comics. Llull highlighted comics' potential to promote communicative competence, from informal student discussions about the topics presented in comics to creating plot changes by rearranging panel sequences. Additionally, Llull provided several examples on how to foster cultural competence through comics by incorporating activities that examine historical events and cultural elements (i.e., symbols, artifacts, language, and values) depicted in comics. In sum, Llull's study is a call to teachers to explore innovative methods, such as comics as a practical pedagogical tool, not only to engage and motivate students in the second language classroom, but to encourage communicative and cultural competence.

Friedlander (2018) offered an insightful look at how online comics can be used in the teaching of Hindi to promote sociocultural communication. He provided a brief history on the usage of images and narrative in India, examining how these two elements have historically been used in storytelling, forming an integral aspect of Indian tradition. Based on his experience of teaching Hindi as a foreign language, Friedlander identified five key factors that make comics appropriate for the foreign language classroom: one, characters in comics are identifiable to readers; two, comics allow for contextualization of the language; three, texts can be presented as chunks as opposed to sentences; four, comics convey sociocultural information; and five, comics, through the implementation of sequential panels, form a story. He concluded with suggestions on the implementation of comics in the foreign language classroom that include

using comics to enhance vocabulary comprehension and to support student motivation.

Friedlander suggested the employment of comics to convey sociocultural aspects of the Hindi language by presenting learners with a variety of native speakers using the language in different sociocultural settings and character portrayals. Furthermore, through the use of specific Indian cultural symbols depicted in the comics, learners are exposed to authentic representations of its culture and traditions. This suggests the potential of comics as a supplementary pedagogical tool to enhance communicative and cultural competence in the second language classroom.

Wardani (2019) explored the use of comics as a novel medium in the teaching of Indonesian as a foreign language. Specifically, Wardani conducted a qualitative study on the use of folklore comics as a pedagogical tool to teach Indonesian literature. Participants included 50 students from the Sabelas Maret University in Surakarta, Indonesia. All participants were Indonesian as a foreign language (BIPA) students. In addition, teachers were interviewed to provide insight into teaching methodologies. Observations, interviews, and questionnaires comprised the data collection of the study. In Wardani's study, participants were presented with a folklore comic and asked to rate its feasibility as a learning medium through a Likert scale. A folklore comic was developed specifically for this study. The selected folklore comic consisted of specific characteristics to facilitate teaching, such as an easy to follow plot, a set number of characters and backgrounds, and the inclusion of moral values. In addition, the folklore comic followed certain stylistic qualities, such as short sentences for ease of understanding and the use of color to engage the reader. The results of the survey indicated that the majority of students found the folklore comic to be very useful as a BIPA learning medium. The results of the interviews indicated that students enjoyed learning about Indonesian culture through the folklore comic. They especially liked the colorful pictures, commenting on the potential for creativity and critical thinking, as well as developing communication and writing skills. The teacher interviews revealed that audio or audio-visual learning media were the primary choice when teaching and that comics had never been employed as a teaching medium. Wardani presents an intriguing argument for the use of comics in promoting cultural competence. Indonesian literature and culture represent integral aspects of the Indonesian language. This is true not only for the Indonesian language, but for all languages, as culture and language are interconnected. The integration of comics to teach Indonesian folklore is a fresh and creative way to teach culture, capitalizing on the interest level of Indonesian foreign language students. This study may provide the impetus for future research in the area of L2 cultural competence and comics, elevating the pedagogical potential of comics in second language acquisition.

Research on Comics and Comic Strips to Support Reading and Writing Skills

Several empirical studies have explored the relationship between the use of comics and comic strips to increase reading and writing skills in the second language classroom: Liu (2004), Ranker (2007), Rossetto and Chiera-Macchia (2011), Kılıçkaya and Krajka (2012), Merc (2013), Cabrera, Castillo, González, Quiñónez, and Ochoa (2018), Shiang (2018), and Listyani (2019). A review of these studies follows next.

Liu (2004) investigated the effect of comic strips on ESL (English as a Second Language) learners' reading comprehension. Liu specifically examined the impact of visual support through comics in L2 reading. Participants of this study included adult ESL learners (representing 46 countries) at both the undergraduate and graduate levels enrolled in a summer language program. Participants took a proficiency placement test to determine writing proficiency. In addition, all students completed the structure and listening portions of the CELT (Comprehensive English

Language Test). A total of 107 students participated in the study and were divided into two groups, 53 in the low intermediate proficiency group and 54 in the high intermediate proficiency group. The students were then randomly split into four treatment groups: low-level text only, low-level text with comic strips, high-level text only, and high-level text with comic strips. Liu utilized two texts, a low level (250 words) and a high level (300 words), and one comic strip for this study. ESL students at the low intermediate level received one text with limited vocabulary, while ESL students from the high intermediate level received a more complicated text, which included higher vocabulary and figurative language such as idioms. The chosen comic strip was relevant to the contexts of the texts in regard to vocabulary, discourse, syntax, and idiomatic language use. Data was collected using IRP (Immediate Recall Protocols), a valid and widely used measure to assess a student's ability to comprehend texts from memory. The results of Liu's study indicated that the low-level students scored significantly higher when high-level text was accompanied by the comic strip as compared to the low-level students receiving only the high-level text without the comic strip. This provides a strong example of the possible benefits of including comics and comic strips to reinforce reading comprehension. In contrast, the high-level students did not benefit from the addition of the comic strip when presented with either low-level or high-level text. This may prove beneficial for future research in determining how differing student proficiency levels affect the degree of reading comprehension when texts are supported by pictures. Nonetheless, the results of this study align with Paivio's (1971) Dual Coding Theory, which presupposes that text supported by visuals enhance comprehension.

Ranker (2007) conducted a qualitative study on using comics as read-alouds in the second language classroom. He visited a first-grade EL classroom for seven months during

which he observed the teacher using comics to teach reading and writing. The participants were bilingual English learners with Spanish as their first language, except for one student who was from Somalia. The teacher spoke primarily in English, only speaking in the students' native language for clarification purposes. The teacher used The Hulk and Spider-Man comic books as the main read-aloud texts to present dialogue and narrative structures. Ranker focused on three lessons that used comics. In the first lesson, the teacher used a Spider-Man comic to discuss how to identify a problem and a solution in narrative structure. The teacher read aloud to the students, stopping during the reading to ask students if they recognized the problem and could offer solutions. In addition, the students produced their own writings where they included a problem and a solution. In the second lesson, the characters Hulk and Wild Girl served as talking points for critical reading. The teacher utilized the critical literacy approach (an approach to learning that examines socially constructed issues, such as power relationships) to explore the stereotypical viewpoints of the meaning of strength by asking students who they thought was stronger, Catwoman or the Hulk. Students were then encouraged to write about strong characters in the writing activity of the day. The third lesson examined the differences of narration and dialogue present in comics. The teacher presented her own personal comic and introduced speech bubbles (dialogue represented in bubble form), a feature commonly used in comics. The teacher used scaffolding during the read-alouds to reinforce understanding and to support student progress. In Ranker's study, comics provided a strong framework for developing reading and writing skills. The teacher successfully utilized comics to promote the reading and writing process by actively engaging her students with a medium they could relate to. This study provides compelling evidence for the implementation of comics to promote reading and writing in the L2 classroom. Furthermore, it highlights the potential for teachers to incorporate pop

culture (e.g., comics and comic strips) in developing literacy skills. While this study focused on EL students in primary education, the results of this study may be used to inform L2 pedagogy at the tertiary level as well.

Rossetto and Chiera-Macchia (2011) suggested that comics "link visual and written semiotic modes" (p. 36) and are beneficial to the writing process by capitalizing on the interest level of the students. This study explored the use of comics in an Italian second language classroom. Participants included 26 year nine students (15 boys and 11 girls of differing cultural backgrounds) learning Italian with only one year of Italian language experience and no exposure to Italian at home. Additionally, the students' Italian teacher provided her perceptions of the study. The students participated in a guided writing activity spanning two lessons where they watched the comic series, *The Simpsons*, and engaged in several communication activities. The students were then asked to create their own Simpsons comic strip narrative in the target language by incorporating visual images from *The Simpsons*. The results of Rosetto and Chiera-Macchia's study revealed that comics are relatable to students and can be a plus in the second language classroom where students may struggle with punctuation and basic grammar skills. Comments from the Italian teacher such as "students developed coherent stories successfully," (p. 38) "students appeared happy to complete the task and did not complain," (p. 38) and "the stories were logical and accurate in language and structure," (p.38) all demonstrate the benefits of incorporating comics in guided writing. This study aligns well with Krashen's (2004) notion of sheltered popular literature that focuses on "literature that second language students will find interesting and comprehensible" (Sheltered Popular Literature section, para. 1) and incorporates literature that is familiar to students, such as comic books. Krashen suggests, "depending on the age and background of the students, this could mean comic books, magazines, romance novels,

mysteries, and newspapers. This 'literature' would be discussed in class with the same seriousness we devote to the classics" (Sheltered Popular Literature section, para. 1). The use of comics (with its combination of visuals and text) may heighten L2 students' awareness of grammatical concepts and language structures, which in turn promote stronger writing skills. This leads to the possibility of having EL students create their own comic strips as an approach to reinforcing reading and writing skills in the second language classroom.

Another qualitative study by Kılıçkaya and Krajka (2012) explored the use of comic strip creation tools among EFL (English as a Foreign Language) learners. In their study, Make Beliefs Comix (a free website where comic strips can be created) was employed to measure student enjoyment in creating comic strips and examining whether creating comics enhances grammar and writing skills. Participants included 25 Turkish English as a Foreign Language students ranging from 14 to 18 years of age. All of the participants were enrolled at a language institution in Turkey as students in a pre-intermediate general English class. The participants created comic strips based on a given grammar function and asked to fill out a questionnaire regarding their perceptions of the comic creation process. The results of Kılıçkaya and Krajka's study indicated a high degree of enjoyment through creating comic strips and a positive attitude toward the creation process. Participant responses such as "creating my own comic scripts helped me improve my writing as well as reviewing my grammar knowledge," (p. E163) "I enjoyed creating my own comic strips," (p. E163) and "I liked creating comic strips as I found them more useful than writing a postcard or what I did last weekend" (p. E163) all revealed the participants' perceptions of usefulness, enjoyment, and relevance concerning the creation of the comic strips. Although this study could not definitively find a correlation between the use of the comic strip creation tool and higher grammar skills, it does show increased motivation for student learning

which for future studies could be used to examine more closely the relationship between comic strip creation and enhanced grammar and writing skills.

Merc (2013) conducted a quantitative study on the effects of comic strips on reading comprehension among Turkish English as a Foreign Language (EFL) learners. Participants included 167 university students who were divided into four groups: low-level text only, lowlevel text with comic strips, high-level text only, and high-level text with comic strips. The English proficiency levels of the participants were lower-intermediate and upper-intermediate based on a placement test by the Anadolu University School of Foreign Languages. The study employed Immediate Recall Protocols (IRP) to assess participants' reading comprehension, as well as providing descriptive statistics for each participant group and a three-way ANOVA analysis. The results of the study revealed three key points: participants with comic strips demonstrated higher recall than those without comic strips; there was higher recall for participants with a higher proficiency level as opposed to those with a lower proficiency level; and participants performed better with a low-level text than with a higher-level text. Merc's study provides compelling evidence for the use of comic strips to enhance reading comprehension. In addition, his study aligns with Paivio's (1971) Dual Coding Theory that posits two types of mental representations, nonvisual representations and visual representations, that are independent of one another. Having both a visual and non-visual representation of an image strengthens reading comprehension, making the application of comic strips a viable option in second language acquisition.

Cabrera, Castillo, González, Quiñónez, and Ochoa's (2018) study examined the use of Pixton (an online comics creation tool) in an EFL (English as a Foreign Language) classroom. Participants included 163 public high school students (12-14 years old, both male and female)

enrolled in an EFL class in Ecuador, in addition to 14 English teachers (four male and 10 female). All students tested at an A1 proficiency level based on the Common European Framework of Reference for Languages (CEFR). According to the CEFR ("Council of Europe," n.d.), A1 proficiency is categorized as a basic user who can "understand and use familiar everyday expressions...can introduce him/herself and... can interact in a simple way" (Basic User section, para. 2). Participants completed a pre- and post-test, and a pre- and post-questionnaire. The teachers were given a questionnaire to determine their perceptions regarding the use of Pixton in teaching EFL grammar and vocabulary. The pre-test assessed prior grammar and vocabulary knowledge; the post-test measured student improvement level as compared to the pre-test; the pre-questionnaire determined students' technological skills; and the postquestionnaire offered insight into students' opinions on the intervention tool, Pixton. Participants were divided into two groups, an experimental and control group. In the experimental group (85 students), students incorporated Pixton in their classroom activities, while in the control group (78 students), students did not use *Pixton*. This quasi-experimental study was conducted over a four-month period where the researchers gathered data by observing both student and teacher behavior while utilizing Pixton in the classroom. The results of Cabrera et al.'s (2018) study revealed that a majority of the students did not use technological tools in their English classrooms. Furthermore, students did not use technology for EFL grammar and vocabulary learning. After participating in this study, however, students acknowledged the usefulness of Pixton to develop their English grammar and vocabulary skills. The post-test showed a significant increase in the experimental group's score on grammar and vocabulary comprehension. Students commented on the motivating factor and practicality of learning through comic strips, such as the use of dialogues and images to convey messages, and their

enjoyment of the characters. Similarly, teachers expressed factors such as increasing motivation, enjoyment, ease of learning, and heightened creativity in utilizing comic strips for grammar and vocabulary development. Cabrera et al.'s study provides a strong case for the utilization of comic strips in grammar and vocabulary development in an EFL classroom. The online comics creation tool, Pixton, proved to be an effective tool in promoting EFL grammar and vocabulary skills, as well as increasing student motivation and enjoyment. Furthermore, teachers believed in the practical aspect of comic strips as an innovative pedagogical tool in the EFL classroom.

Although further studies on the effectiveness of using comic strips in a second language classroom need to be conducted, this study supports its use as a feasible pedagogical tool.

Shiang's (2018) study investigated the effects of producing comics (as an embodied cognition approach) on reading comprehension among English as a foreign language (EFL) students. Participants included 71 (41 male and 30 female) northern Taiwan university students across two classes of Freshman English. Participants were all non-English majors, the majority of which were native Chinese speakers with only four Japanese and advanced Chinese speakers. They all scored below the modest user level of the IELTS (International English Language Testing System) Academic Reading Test. According to the IELTS (n.d.), a modest user "has a partial command of the language and... should be able to handle basic communication in their own field" ("Modest User section," para. 1). Participants were divided into two groups, a comics production group (CG) and a translation group (TG). The CG group consisted of 35 students, while the TG group comprised 36 students. They were further divided into three subgroups. Two narrative texts at a Freshman English elementary level were chosen as the reading material. The first narrative text (460 words) depicted a Taiwanese female golfer's journey in learning English and the second text (357 words) described how a visually-impaired boy used echolocation to

conquer his challenges. Students from both the CG and the TG groups participated in two instruction phases: shared instruction and post-reading group activities. In the shared instruction phase, students previewed the given reading material before class with the instructor providing the necessary background information during class, while the post-reading group activities varied depending upon which group they were in (i.e., the CG or the TG group). Shiang's study revealed that the process of producing comics in the comics production group resulted in high student engagement and an increase in reading comprehension as compared to the students in the translation group. This study supports an embodied cognition approach to EFL reading comprehension through the production of comics. It not only highlights the value of collaboration, but emphasizes the role mental representations play in reading comprehension and the potential benefits of integrating comics in EFL reading instruction.

Listyani (2019) conducted a qualitative study (with the addition of quantitative data) on the effects of visual images, specifically comic strips and pictures, on narrative essay writing in an ELT (English Language Teaching) classroom. Participants included 19 fourth-semester students from a professional narrative writing class as part of the English Language Education Program at the Universitas Kristen Satya Wacana, in Salatiga, Indonesia. This study spanned over a period of one academic semester. Pre- and post-tests were administered, as well as interviews with two students and student journal writing. Five mystery pictures and two comic strips were utilized in this study. The mystery pictures depicted varying scenes without words and, similarly, the comic strips did not employ any dialogue. Students chose one mystery picture and one comic strip and wrote two essays based on the selected visual images, one essay on the mystery picture and the second essay on the comic strip. Students were divided into small groups (one to two students) and worked collaboratively to create cohesive narratives regarding their

chosen picture and comic strip. Teachers provided minimal support, only intervening when necessary. After completing the narratives, students journaled their feelings and perceptions about the use of comic strips and pictures in the writing process. The results of Listyani's study revealed an improvement in student writing and an increase in creativity when students utilized comic strips and pictures as visual aids when writing narrative essays. Comments such as "the use of pictures was also very helpful to me because from pictures, I came to know about the picture of the story I would make" (p. 212), "you have to imagine the right story for your picture, and after you decide it, write down your story idea" (p. 210), and "learning through games is very fun and makes learning become easy to understand" (p. 211) all supported the usage of visual images to enhance student imagination, creativity, and enjoyment during writing activities. Furthermore, because the comic strips and pictures did not employ any words, the students' creative sides were highlighted as they were able to focus on the pictures to support and guide their writing.

Research on Comics and Comic Strips to Enhance Motivation, Satisfaction, and Reduce Anxiety

Various studies and articles have explored the impact comics and comic strips have on affective factors such as motivation, satisfaction, and anxiety in the second language classroom. Studies by Popa and Tarabuzan (2015), Sri Wilujeng and Lan (2015), Clark (2017), Hassanirokh (2018), Issa (2018), and articles by Ford (2011), Deb (2016), and Kohnke (2019) are presented next.

Popa and Tarabuzan (2015) conducted a quasi-experimental study on the effectiveness of comic strips and student motivation in Romanian students learning French as a foreign language.

Participants included high school students (from an urban high school) between the ages of 17 and 18. They were divided into two groups, an experimental (14 students) and a control (15 students) group. Both a pre and post-test were administered. The Motivation Strategies for Learning Questionnaire (MSLQ) was selected and adapted to measure three motivational variables, self-efficacy, intrinsic value, and test anxiety. Participants rated their experience, based on motivation, by responding to items on a 7-point Likert scale. Average scores were calculated before and after the comic strips intervention. During an eight-week period, the students participated in various classroom activities involving the incorporation of comic strips to support reading comprehension, enhance vocabulary, grammar, and construction of texts. In addition, students worked creatively by designing their own comic strips. The results of the study indicated a positive effect on utilizing comic strips in teaching French as a foreign language. Perceived self-efficacy and intrinsic importance both rated high among participants in the study. Furthermore, participants in the experimental group reported a reduction in perceived test anxiety as compared to participants in the control group. Popa and Tarabuzan's study revealed the benefits of using authentic material, such as comic strips, in teaching French as a foreign language. Additionally, this study supports Pintrich and De Groot's (1990) Motivation Strategies for Learning Questionnaire (MSLQ) as a reliable tool to measure students' motivation. Perceived self-efficacy (the belief of one's own capacity to do something), intrinsic value (the value one places on a given activity), and test anxiety (experiencing extreme distress during a test) are all affective factors that can hinder student learning. Comic strips may provide the potential to improve self-efficacy, increase intrinsic value, and reduce test anxiety in the second language classroom. Although this study only examined motivational factors among students learning

French as a foreign language, it underscores the importance and potential pedagogical benefits of introducing authentic materials, such as comic strips, in second language acquisition.

Sri Wilujeng and Lan's (2015) study on the effectiveness of a comics creation tool (Toondoo.com) in enhancing student attitude toward learning Mandarin Chinese, revealed higher student attitude scores among students who worked cooperatively when creating an online comic. This study employed computer-supported collaborative learning (CSCL), which supports learning in a collaborative manner through the use of computers. Sri Wilujeng and Lan conducted a quasi-experimental mixed-methods study with 46 elementary students. Quantitative data collected through a pre and post-test assessed student vocabulary performance and students responded to a questionnaire measuring usability factors, such as usefulness, satisfaction, and easiness. Qualitative data consisted of video-recorded in-class observations, student interviews, and an essay component to the questionnaire where students disclosed their thoughts about the study. Participants of the study included grade five students at a multilingual school in Yogyakarta, Indonesia. They were divided into three different groups: a control group, experimental group one, and experimental group two. The control group consisted of students who were given text-based instruction and asked to create comics individually without online assistance (N=16); experimental group one comprised students who created online comics individually (N=14); and students in experimental group two worked collaboratively to create online comics (N=16). The results of Sri Wilujeng and Lan's study indicated that students who created online comics in learning Mandarin, both individually and collaboratively, showed high satisfaction with the creation process. After satisfaction, the aspects of usefulness and dimension respectively demonstrated high percentages. In addition, the collaborative learning group showed the most improvement in Mandarin vocabulary and comic creation performance. Sri Wilujeng

and Lan's study offered a positive indication for the use of comics to enhance student motivation and attitude in the second language classroom. It supports the notion that creating online comics enhances students' creative process and combined with working collaboratively, fosters student engagement and critical thinking skills. Furthermore, this study is a strong example of the benefits of CSCL.

Clark's (2017) study examined the effectiveness of comics among English Language Learners (ELLs). She began by posing the arguments against the use of comics as reading material, such as the notion that comics are not real texts and that comics do not offer true reading experiences. As an EFL (English as a Foreign Language) teacher in Ecuador, Clark conducted a study on the effects of comics on student motivation. Participants in the study included Ecuadorian EFL students from fifth through seventh grade. Participants were divided into two groups, the comic group and the non-comic group. Those in the comic group were given instruction through the use of comics, while those in the non-comic group used traditional methods, such as writing. The results of her study suggested that students' motivation to read increased when comics were integrated into the curriculum. Clark discussed what the literature reveals regarding comics and second language learning: higher motivation, increased vocabulary, and the development of multiple literacy skills. In regard to higher motivation, a text's attractiveness may suggest that students will invest more time in reading the text, while the issue of students' perceived wants versus needs should be considered. Clark pointed out that vocabulary acquisition is supported by Paivio's (1971) Dual Coding Theory and Oller's (1983) Episode Hypothesis, which posits that "texts (oral or written forms of discourse) which are more episodically organized can be stored and recalled more easily than less episodically organized material" (p. 45). Furthermore, Clark stressed the potential of comics to support multiple

learning modalities, such as visual and auditory. Clark's study is a strong argument for the inclusion of comics in second language acquisition. Her arguments are well supported by research, including implications for future research on the impact visuals have on L2 retention when examining different comic forms (e.g., manga versus superhero).

Hassanirokh (2018) further highlighted the use of comic strips as a form of motivation in the second language classroom. His study involved two groups of intermediate EFL learners. The participants included 91 male and female Turkish students between 11 and 12 years of age. The experimental group were given comic strips as their reading material, while the control group were not given comic strips. Hassanirokh measured students' reading motivation by giving students a pre and post-test questionnaire that asked about their feelings toward reading. The results of the study revealed a strong correlation between the use of comic strips and an increase in reader motivation. Students who were provided comic strips as their reading material indicated a higher level of motivation than those who were not provided comic strips. Hassanirokh's study is supported by Krashen's Affective Filter Hypothesis (1983), positing that students learn best when they are less anxious, while reinforcing the notion that providing interesting materials to students "will contribute to a more relaxed classroom" (p. 60). Consequently, Hassanirokh's study presents a strong argument for the inclusion of comic strips in promoting second language acquisition.

Issa (2018) focused on the production of comics as a viable pedagogical tool in the second language classroom. His article offered an array of teaching suggestions at the tertiary level in the area of TESOL (Teaching English to Speakers of Other Languages), English composition, and creative writing. In addition, Issa presented three lists of suggested readings, the first as preparation for students before creating their own comics, the second for students to

use as reference manuals for writing, and the third to serve as a guide during the comics creation process. Issa highlighted the teaching potential inherent in comics as they offer multimodal learning opportunities. The emphasis on multimodal literacy sets the stage for writing practice, vocabulary development, and creativity. Issa's article provided a much-needed guide on incorporating comics as a creative medium for writing development that is both engaging and motivating.

Kohnke (2019) reflected on the usage of comic strips to promote motivation, engagement, and creativity in the second language classroom. He drew attention to the issue of keeping students engaged through encouraging creativity-driven classroom activities. His article offered suggestions on how to implement comic strips as a collaborative exercise in creativity, fostering a student-centered environment. Students were divided into groups of three to four and presented with a relevant topic pertaining to class. They were asked to create comic strips based on the given topic and then act them out. In addition, Kohnke created his own comic strip to reinforce concepts taught in class. Participants included university students in an English for Specific Purposes course in Hong Kong. Kohnke's observations supported the usage of comic strips to facilitate student engagement, interaction, and collaboration. He shed light on future research concerning the implications of L2 comic strip design. Kohnke's article highlighted student motivation/interest, outlets for creativity, and outside the box thinking when applying comic strips in the second language classroom. It reveals the potential benefits of including comic strips in SLA.

Deb (2016) discussed how humor in the form of comics has found its way into the second language classroom. According to Deb, "anxiety is a common threat" (p. 66) for students learning a foreign language. He suggested incorporating humor through the use of comics to ease

anxiety in the second language classroom. Comics are fun and enjoyable; they are a good stress reliever. He argued for the implementation of comics as a means to promote multiple intelligences (i.e., verbal, kinetic, interpersonal, naturalistic, and intrapersonal). Accordingly, comics have the potential to reach struggling or reluctant readers. Deb's article supports the use of comics to lessen anxiety in the second language classroom. Adding humor, through comics, can be an effective tool to diffuse student tension and stress, and to lower students' affective filters. When students feel comfortable and safe, it creates a positive environment for learning to take place. Comics and comic strips can create an outlet for second language (L2) learners to release negative feelings that may inhibit learning, giving them the much-needed positive reinforcement and motivation to be successful.

Ford's (2011) article, although not empirically based, provided an interesting perspective from a teacher librarian on how comics in the classroom can motivate second language learners. It is a call for teachers in the San Diego Unified School District to incorporate comics in their curriculum as a way to motivate students to read. Ford mentioned the popularity of comics and its pedagogical implications, providing concrete examples on how to use comic strips in the classroom, including research tips on how to find material. Her examples are relevant and useful to L2 educators as they highlight comics' potential to reach a larger student audience.

Summary and Discussion

After reviewing and coding the articles, the following subcategories were examined: research findings, participation age/grade level, geographical location, research approaches, comics language features, and online comics creation tools. Table 5 presents a summary of the research findings on comics and comic strips in SLA.

Table 5Research Findings on Comics and Comic Strips in SLA

Comics and comic strips	Articles
promote cultural and communicative competence	Friedlander (2018), Llull (2014), Ravelo (2013), Wardani (2019)
support reading and writing skills	Cabrera, Castillo, González, Quiñónez, and Ochoa (2018), Kılıçkaya and Krajka's (2012), Listyani (2019), Liu (2014), Merc (2013), Ranker (2007), Rosetto and Chiera-Macchia (2011), Shiang (2018)
enhance motivation, satisfaction, and reduce anxiety	Clark (2017), Deb (2016), Ford (2011), Hassanirokh & Yeganehpour (2018), Issa (2018), Kohnke (2019), Popa and Tarabuzan (2015), Sri Wilujeng and Lan (2015)

Research Findings

As shown in Table 5, three main research themes emerged: comics and comic strips promote cultural and communicative competence; comics and comic strips support reading and writing skills; and comics and comic strips enhance motivation, satisfaction, and reduce anxiety. Concerning comics and comic strips in SLA, four of the articles stressed cultural and communicative competence, eight articles highlighted reading and writing skills, and eight articles focused on affective factors. Research questions investigated the relationship between comics/comic strips and language, reading and writing skills, and student motivation and engagement in the second language classroom. Key findings from the research reveal that comics and comic strips can be used to promote communicative and cultural competence, enhance reading and writing skills, as well as increase student motivation, satisfaction, and reduce anxiety.

Participant Age/Grade Level

Figure 3 reveals that a majority of the studies involved students in higher education (42.9%), followed by 35.7% high school students, 14.3 % elementary school students, and 7.1% adult learners.

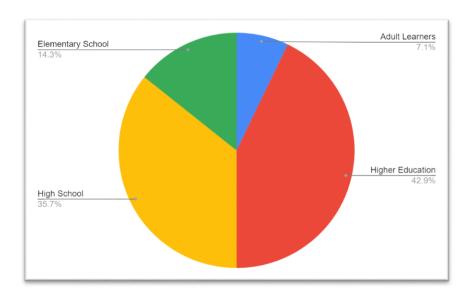


Figure 3. Participant age/grade level

Geographical Location

Figure 4 illustrates the range of countries that were represented in the studies reviewed.

Of the 14 empirical studies, there were an equal number of studies conducted in the United

States (3) and Indonesia (3). The remaining empirical studies were conducted in Turkey (2),

Spain (1), Australia (1), Argentina (1), Romania (1), Ecuador (1), and Taiwan (1).

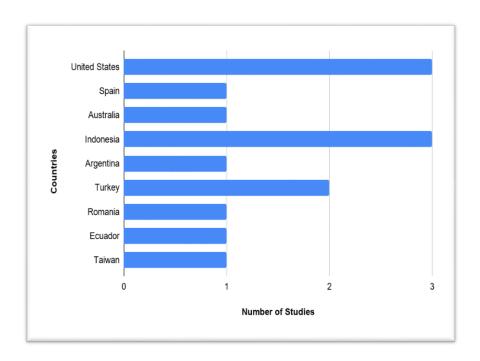


Figure 4. Geographical Location

Research Approaches

In Figure 5, six of the studies employed qualitative research methods, five studies employed quantitative methods, and three studies used a mixed-methods approach.

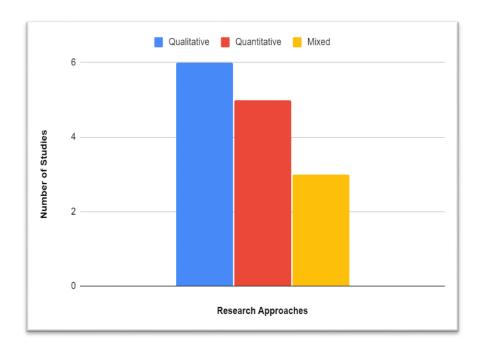


Figure 5. Research Approaches

Comics Language Features

Language features specific to comics and comic strips such as the use of symbols, speech bubbles, character facial expressions and/or gestures, and panel sequences were examined. In addition, features such as relatability of characters, contextualization, and sociocultural contexts represented in comic strips were explored.

Online Comics Creation Tools

Three of the studies (Cabrera, Castillo, González, Quiñónez, & Ochoa, 2018; Kılıçkaya & Krajka, 2012; Kohnke, 2019) explored the use of online comics creation tools: *Pixton, Make Beliefs Comix*, and *Toondoo*. Both *Pixton* and *Make Beliefs Comix* are free websites where students and teachers have the ability to create their own online comic strips. Due to a data breach, *Toondoo* was forced to discontinue its site in November of 2019 ("Toondoo," n.d.).

Although few studies have examined the relationship between the production of comic strips and L2 idiomatics learning, a review of the literature does reveal an increase in student engagement and motivation, as well as promoting grammar and writing skills when online comics creation tools are employed in the second language classroom.

Overall, a review of the literature reveals a gap in the literature on the usage of comics and comic strips in the teaching and learning of idiomatics. Furthermore, a gap exists on strategies L2 learners use to deduce the meaning of idiomatic and figurative language depicted in comics and comic strips. In Chapter 3, I present a descriptive and exploratory approach to evaluating the effects of comics and comic strips in L2 idiomatics teaching and learning.

CHAPTER THREE

METHODOLOGY

Introduction

One of the major challenges in the field of SLA is the design and implementation of a systematic approach to the teaching of idiomatics. In this study, I employed a descriptive and exploratory approach to gather, analyze, and interpret data in the area of L2 idiomatics, specifically through the use of comics and comic strips. Through this descriptive and exploratory study, I aimed to explore second language learners' understanding of idiomatics employed in comics and comic strips.

Study Design

I employed a descriptive and exploratory approach to this study. That is, I combined both descriptive and exploratory approaches. According to Nassaji (2015), "the goal of descriptive research is to describe a phenomenon and its characteristics" (p. 129). Descriptive studies are often used in the healthcare industry to characterize specific medical disorders such as autism spectrum disorder (Biller & Johnson, 2020), the effects of eating disorders (Herzog et al., 2000), or in marketing to gather information about consumer behavior (Page, Mbadiwe, McMorland, & Grod, 2000), but have seldom been used in the field of second language acquisition. Even more rare are descriptive studies on L2 understanding of idiomatics. Similarly, exploratory studies—studies conducted in order to explore a given phenomenon where little or no prior research exists—are not commonplace in second language acquisition research. Stebbins (2001) states,

"researchers explore when they have little or no scientific knowledge about the group, process, activity, or situation they want to examine but nevertheless have reason to believe it contains elements worth discovering" (p. 5). To my knowledge, an exploratory study has not been conducted on the implementation of comics and comic strips in the understanding of L2 idiomatics, not to mention one that combines both descriptive and exploratory approaches. For this reason, I chose a descriptive and exploratory study that allowed me to both describe and explore the use of comics and comic strips in L2 idiomatics learning and comprehension.

Inasmuch as this study explored the extent to which comics and comic strips can be employed in the teaching of idiomatics, my choice for a descriptive and exploratory approach stemmed from the purpose of this study: to explore second language leaners' understanding of idiomatics employed in comics and comic strips. In order for me to effectively gain insight into the methods and strategies that L2s use in detecting idiomatic and/or figurative expressions embedded in comics and comic strips, and extracting meaning, a study which combined both a descriptive and exploratory approach best fit my purpose. According to Liontas (2001), "future studies will need to use a hybrid experimental and qualitative design if they are to describe, explain, and predict learner behavior more accurately with regard to idiom understanding, acquisition, and production" (p. 32). Combining a descriptive and exploratory approach capitalized on the strengths of both approaches, providing a comprehensive analysis of the use of comics and comic strips in L2 idiomatics learning and comprehension.

Paradigmatic Views

Perceptions play a crucial role in identifying what is truth or reality and when applying these perceptions to research, the researcher's belief system is paramount to his/her study.

Maxwell (2005) stresses the importance of using paradigms in research in order to set a "clear philosophical and methodological stance" (p. 43) in support of design choices. In addition, these choices assist in self-reflection, making "basic assumptions that you hold about reality" (p. 44) clear and unambiguous. Roulston (2001) argues that "whether or not a researcher is explicit in accounting for his or her ability to work reflexively, his or her voice is indelibly inscribed within the research process" (p. 281). What is reality? Reality is defined as "the quality or state of being real" ("Reality," n.d.). Based on my personal experience, reality is subjective. My perception of reality may be quite different than a co-worker of mine, therefore resulting in two different "realities." For example, my co-worker's "reality" may be that she is overworked and underpaid, while my "reality" is that she is not overworked (she often arrives late to work and leaves early) and is therefore not underpaid. As a result of being raised with a very strong work ethic, my perception of "overworked" may be different than hers.

I approached this study through an interpretivist framework, which aligns well with the qualitative side to my research (Maxwell, 2005), supporting the notion that "the researcher *is* the instrument of the research" (p. 45). Inherent in interpretivism is the notion that many truths exist and the world that we create is both subjective and co-constructed. Individual assumptions and perspectives shape our reality. Individual experiences are thus a vital component to how our reality is formed. As stated by Sipe and Constable (1996),

Interpretevists attempt to understand the world from the point of view of those experiencing the situations, and are concerned with what will assist them in doing so what is heuristically powerful. Communication is viewed as a give-and-take, transactive process, where X and Y inform and influence each other. (p. 158)

My choice of conducting a descriptive and exploratory study was both deliberate and intentional as it provided a comprehensive look at how second language learners process and understand idiomatics through comics and comic strips. By conducting a descriptive and exploratory study, I hoped to highlight the nuances in the interpretation of idiomatics through my participants' personal accounts and experiences. Such nuances would not be captured by simply doing a quantitative study.

As Denzin and Lincoln (2013) state, "the researcher, in turn, may be seen as a bricoleur, as a maker of quilts..." (p. 6). Furthermore, "the interpretive bricoleur understands that research is an interactive process shaped by his or her own personal history, biography, gender, social class, race, and ethnicity, and by those of the people in the setting" (p. 8). The image of the researcher as a quilt maker implies the piecing together of many cloths that in the end form a beautiful quilt. The pieces of cloth are the data collection and the final result is a holistic interpretation of that data. As a classically trained flamenco dancer, the image of a dancer comes to mind. The classically trained dancer interprets a particular piece of music based on his/her interpretation of the music and the expression of the dance form (e.g., ballet, jazz, contemporary, modern, or flamenco). There is a definite distinction between the varying forms and the dancing takes on a different dimension based on the musical interpretation. A jazz interpretation may include very fluid movements with smooth transitions; a modern interpretation highlights abrupt variations that break from structure; while a flamenco interpretation includes frenzied footwork, hand clapping, and passionate movements. As a researcher, my methods of data collection shape and influence my interpretation of the data.

Denzin and Lincoln (2013) use the image of a crystal to describe the concept of qualitative research. Just as a crystal has many facets or dimensions to it, so does research. I

attempted to provide multiple angles or perspectives in my research, casting a light on more than one dimension. As Maxwell (2005) states, "the bricoleur spontaneously adapts to the situation, creatively employing the available tools and materials to come up with unique solutions to a problem" (pp. 42-43). Through this descriptive and exploratory approach, I hoped to better understand how second language learners deconstruct the meanings of idiomatic and figurative expressions, providing insight into what works, what does not work, and the steps needed in order to better inform L2 pedagogy, specifically through the use of comics and comic strips in the teaching of idiomatics.

Reflexivity

According to Roulston (2010a), reflexivity is "the researcher's ability to be able to self-consciously refer to him or herself in relation to the production of knowledge about research topics (p. 116). Reflexivity is an important component to sound research, offering a researcher's positionality and how he/she constructs meaning. My experiences shape who I am, which in turn, shape who I am as a researcher.

I am Latina. Both of my parents immigrated to the United States from Colombia in their twenties and were married here in the United States. My mother actually arrived in the United States first and then my father followed. Neither of my parents spoke English: it was the sink or swim reality of second language acquisition for them. If they wanted to survive here in the United States, they must learn the language. While my parents were ultimately successful at assimilating into American society, the path to English fluency was not an easy one. My father began as a construction worker where his exposure to English was very rudimentary, went to college at night, and became a Professional Electrical Engineer. My mother worked at a factory,

went to school when she could, and recently retired from over twenty years of teaching at Pinellas County Schools. Both my brother and I were born in the United States, in the state of Florida. My first language was Spanish and it was at school where I learned English. I too had no choice but to learn English and to this day, I still mix up my English idioms. For instance, "like white on rice" makes no sense to me and I always overthink the expression. "Like black beans on rice" on the other hand resonates with me because it is one of my favorite dishes. I always find it interesting that although I consider myself an excellent English speaker, I confuse my idiomatic expressions. This is largely due to having parents whose native language is not English and idiomatic expressions do not necessarily transfer from one language to the next. I also remember from a very early age having to translate for my parents from English to Spanish and vice-versa on a daily basis, especially concerning school and my teachers. I always felt different in school and oftentimes felt like an outsider because my parents were not American.

I am an American. Although both of my parents are immigrants, I am American. I vividly remember kids at school teasing me by saying that I wasn't really American because my parents were from a different country. I did not look American, I did not speak like an American, and I definitely did not bring the right American food for lunch: I guess *arroz con pollo* (chicken with rice) is not your typical school lunch. I also found it interesting that the moment I said my parents were from Colombia, I was immediately viewed as lacking proper English skills, unintelligent, and having a Spanish accent even though I did not have one.

I am a gringa. A gringa is the name given to a Spanish speaker who is a non-native, someone who was not born in a Spanish speaking country, but speaks Spanish. The term gringa can be used in a derogatory manner, and in my case, is seen as a negative in the Latino

community. I am Latina, but with reservations. I am sometimes an outsider in my own community.

I identify myself as both Latina and American. I straddle both worlds. I was brought up in a Colombian household where values such as family, hard work, and education were stressed. I am an American who values the freedom and independence that this country has to offer. I have seen the struggles that my parents faced and know that they made these sacrifices in order for my brother and me to have a better life. I am often reminded of the box I would have to check when filling out questionnaires for school meant to determine ethnicity and race. Are you white or Hispanic? I can remember thinking, "I am white and Hispanic. What do I do?" Now questionnaires give you the ability to check white and Hispanic, and even distinguish whether you are Cuban, Puerto Rican, or Colombian. When I was in school, these options were not available.

I am a mother. I have three beautiful children: two girls (22 and 21 years old) and one son (17 years old). They are all bilingual. They have been raised in a bilingual household where the languages that both of their parents speak are embraced and respected, as well as their cultural backgrounds. I have experienced my children being labeled as non-English speakers simply because I filled out a parent questionnaire that stated that I spoke Spanish at home. The assumption was that my children needed to be placed in an ESOL classroom. Nothing could be farther from the truth.

I am an educator. I have been in education since 1994. I have taught at all levels: from pre-k to high school, university, and corporate training. I am currently an Associate Professor of Foreign Languages at a local state college. I believe that one of the most important aspects of teaching is the relationship between teacher and student. Without a relationship built on trust and

honesty, learning is stifled. I have an open-door policy where students can talk to me whenever they need to. I encourage my students to communicate with me and reach out to me with any issues or concerns as soon as possible. I believe good communication is the basis for a strong relationship and one that fosters learning and growth. Building a positive rapport with my students is an essential aspect to my teaching and one that I strive to do with each class. I find that when students feel safe and welcome, they are more open and willing to learn, and less defensive about trying new things.

These are the lenses that I bring to my research. I do not tend to prejudge things. I know what it is like to be judged and understand what it feels like. I observe and listen to what others have to say. I know that everyone has a story and I respect that. It is this story that shapes the person, making him/her the person that he/she is today. We are a compilation of our experiences, and as such, we are not just one thing.

Language has always fascinated me, second language acquisition in particular. I believe there are certain factors that accelerate its development, while others impede it. I became passionate about researching idiomatics after taking SLA 7911 (SLA Research Lab), an introductory class to the doctoral program in Technology in Education and Second Language Acquisition with Dr. Liontas at the University of South Florida. This class sparked my interest in learning about idiomatics, as I have trouble understanding and navigating this area of linguistics and certainly would have benefitted from the explicit teaching of idiomatics in my own formal education. I identify with the interpretevist/constructivist perspective about research and feel that multiple realities exist and that we each construct our own realities dependent upon our life experiences.

Furthermore, our realities can change and are subject to life stages. It is through social interactions that our worlds are created. I empathize with the obstacles immigrants face coming to the United States and the many stereotypes and stigmas that follow them. I can provide a unique perspective as a successful daughter of immigrants who has been able to assimilate into American society, while still maintaining her cultural identity. I am multifaceted and know that most people are as well.

Descriptive and Exploratory Research in Second Language Acquisition

There is a dearth of research in the area of second language acquisition and the implementation of comics and comic strips in the teaching of idiomatics. Few studies have explored both quantitative and qualitative methods regarding L2 comprehension and understanding of idiomatics (Amer, 2014; Chen, Wu, & Marek, 2017; Liontas, 1999; Müller, Son, Nozawa, & Dashtestani, 2018; Sahragard, Ahmadi, & Babaie Shalmani, 2016). Even more rare, are descriptive and exploratory studies examining the relationship between idiomatics learning and the use of comics and comic strips. Through this study, I intended to fill this gap.

Study Site and Participants

Study Site

I chose the University of South Florida (USF), a Preeminent Research University, as the site for this research study. Preeminent status is awarded to universities deemed high-achieving based on 12 metrics that range from graduation rates to patents awarded ("What is preeminence," n.d.). The University of South Florida is part of the State University System of Florida, which comprises 12 public universities in the state of Florida. The University of South Florida has three

campuses with over 50,000 students: USF Tampa, USF St. Petersburg, and USF Sarasota-Manatee. Of those over 50,000 students, 42% are from diverse backgrounds with over 140 countries represented ("About USF," n.d.). USF offers more than 180 majors across 14 different colleges.

The USF College of Education constitutes 30 different programs with over 2,200 students and 130 faculty members ("College of education," n.d.). The Technology in Education and Second Language acquisition (TESLA) doctoral program, a combination of Second Language Acquisition (SLA) and Foreign or World Language Education (TESOL) faculty, is one of those programs. This program is within the Department of Language, Literacy, Ed.D., Exceptional Education, and Physical Education, attracting many international students representing various countries throughout the world, such as Saudi Arabia, Egypt, Iran, Malaysia, Venezuela, Cuba, Spain, China, and Japan, who are grouped into cohorts based on their entrance into the program. In order to be accepted into the program, students must take either the GRE (Graduate Records Examination), the IELTS (International Language Testing System), the PTE (Pearson Tests of English) Academic, or the TOEFL (Test of English as a Foreign Language) to establish their English proficiency. I chose the TESLA program because of its diverse student population and, more importantly, because it represents doctoral students studying second language acquisition, both native English-speaking students and non-native English-speaking students.

Participants

According to Dr. Liontas, director of the TESLA program, there were approximately 26 students in the TESLA program as of the fall 2020 semester. My intention was to recruit as many

of those students as possible to take part in this study. Twenty-one students agreed to participate in this study: four native English-speaking students and 17 non-native English-speaking students.

Selection of Materials

The choice of which comics and comic strips to employ in this study resulted from an examination of recent comics and comic strips (past ten years), visual appeal of the comics and comic strips, and the depiction of an idiomatic and/or figurative expression(s) that should be easily recognizable in the comics and comic strips. The comics were chosen from a personal repository of comics collected by Dr. Liontas, a leading idiomatologist. According to Liontas (2002), when presenting idioms it "should be done in a manner that mirrors authentic language use, and furthermore, that these idioms need to be current, interesting, and useful in real-life situations" (p. 7). I utilized comics and comic strips that are commonly found in newspapers, news, and advertisements, both in print and online. The rationale was that the comics and comic strips employed in this study should reflect American pop culture and represent an authentic and realistic snapshot of the many ways in which idiomatic and figurative expressions form a part of everyday language.

I utilized nine comics/comic strips representing an idiomatic and/or figurative expression(s) in this study. The nine comics/comic strips consisted of three comics that contained images with no text, three comics that contained images with minimal text, and three comic strips that contained both images and text. Nine comics/comic strips were chosen to control for participant fatigue and cognitive overload. In order to ease participants' potential fatigue and cognitive load, I chose only a select number of comics/comic strips.

Pre-Study Questionnaire

I adapted the Pre-Study Questionnaire from Liontas' (1999) pre-study questionnaire. Liontas' pre-study questionnaire has already been used and provided valuable data on idiom comprehension. I adapted the language and structure used in the pre-study questionnaire as it applied to idiomatics. The Pre-Study Questionnaire was divided into three sections: demographic information, English language experience, and exposure to idiomatic and/or figurative expressions. The demographic information section contained five questions that related to participant background information, such as name, gender, and current year of graduate study. The English language experience section consisted of four questions related to participant experience and knowledge of the English language. The exposure to idiomatic and/or figurative expressions section contained four questions related to knowledge of idiomatic and/or figurative expressions and interest in learning idiomatic and/or figurative expressions through comics and comic strips (see Appendix A for the Pre-Study Questionnaire).

Comic Idiomatics Task

In the Comic Idiomatics Task, participants were presented with nine comics/comic strips and asked to identify and define the idiomatic and/or figurative expressions depicted in each comic. The three comics with images and no text were shown for one minute. The three comics with images and minimal text were shown for one minute 30 seconds. The three comic strips with both images and text were shown for two minutes. In the absence of an already established time frame conducted in a previous study on idiomatics in comics and comic strips, I created my own time frame. I chose a predetermined viewing time frame to give participants sufficient time to identify and deduce the meaning of the idiomatic and/or figurative expressions depicted in the

comics/comic strips. For the comics with images and no text, the idiomatic and/or figurative expression in question should be easily recognizable. Therefore, a one-minute time frame gives the participant adequate time to identify and define the idiomatic and/or figurative expression(s). For the comics with images and minimal text, more time is given (one minute and 30 seconds) for the participants to read the text and identify and deduce the meaning of the idiomatic and/or figurative expression(s), as there may be more than one idiomatic and/or figurative expression depicted in the comics. For the comic strips with both images and text, additional time is given (two minutes) in order to give the participant ample time for both identification and deciphering the meaning of more than one idiomatic and/or figurative expression(s). The most amount of time is given for the comic strips as comic strips contain multiple panels with images and text and may depict several idiomatic and/or figurative expressions. It is important to note that regarding identification and comprehension of idiomatics, allowing an indefinite amount of time for participants to deduce the meaning of the idiomatics employed in the comic strips would be counterproductive. With idiomatics, the participant will either understand the idiomatic and/or figurative expressions or not; there is no in-between. An unlimited amount of time will not help a participant who has never been exposed to the idiomatic and/or figurative expressions in question as they will be unable to retrieve or recall that information from their memory.

I included scaffolding during the Comic Idiomatics Task. Scaffolding as it applies to second language acquisition is a dialogic process between the teacher and student where the teacher provides student support (e.g., feedback) to assist the student with a particular task. Once the participant gave their final answer or their allotted time expired, I supplied the correct idiomatic or figurative expression and asked the participant if they could tell me what the expression meant. I used this type of formative feedback—feedback that is given during an

assessment—to gather further insights into the processing of idiomatic and/or figurative expressions. According to Schute (2008), "the main goal of formative feedback—whether delivered by a teacher or computer, in the classroom or elsewhere—is to enhance learning and/or performance, engendering the formation of accurate, targeted conceptualizations and skills" (p. 175). Adding scaffolding conforms to Vygotsky's More Knowledgeable Other and the Zone of Proximal Development. I provided participant assistance by giving the participants' the correct idiomatic and/or figurative expressions, as well as giving them time to produce a meaning.

Participants were asked to think aloud during this task so that their verbalizations and body language could be recorded. According to Rankin (1988),

by knowing what strategies second-language readers actually use when reading (as opposed to what we think they do), we will not only improve our understanding of reading as a communicative act but also our understanding of how it might best be taught.

(p. 122)

Think-alouds can be an effective method of inquiry (Kucan & Beck, 1997) when used properly. Liontas (1999) employed think-alouds as part of his study on VP idioms. As Liontas states, when referencing participant think-alouds, "both their on-line comments and their retrospective comments have psychological plausibility, that is they reflect the nature of the mental processing involved in the comprehension and interpretation of texts containing VP idiomatic phrases" (p. 208). Subsequently, Liontas (2007) states, "reading alouds, think-aloud protocols, and retrospective accounts should prove beneficial in the investigation of L2 idiom understanding" (p. 26) and "introspections/retrospections (i.e., verbalization of contextual understanding at the sentence and text level) can apply powerful insight into the meaning construction process" (p. 27).

Ericsson and Simon (1980) argue that "verbal reports, elicited with care and interpreted with full understanding of the circumstances under which they were obtained" (p. 247) are both valuable and reliable. Think-alouds have been used to inform reading comprehension among reluctant readers (Cullum, 1998) and among Korean English as Second Language (ESL) students (Hamada & Park, 2013); to investigate reading strategies among Iranian International English Language Testing System (IELTS) candidates (Ahmadian, Poulaki, & Farahani, 2016), Iranian English as a Foreign Language (EFL) learners (Bakhshalinezhad, 2015), and Chinese EFL college students (Lin, 2015); to identify reading problems among Saudi EFL learners (Alkhaleefah, 2017); and to assess Foreign Language (FL) reading anxiety (Güvendir, 2014). Think-alouds capture a participant's thought process, without censorship. This is especially important when attempting to gain insight into how second language learners identify and glean meaning from idiomatic and figurative expressions, which inherently go beyond literal interpretations. Furthermore, I will be using a qualitative approach when interpreting the thinkalouds (Charters, 2003) as quantitative analysis is "too restricting" (p. 80) when interpreting think-aloud data.

I used video recording during the think-alouds. Liontas (1999) included videotaping as a means to further capture participant responses. He states, "one should also bear in mind the initial rationale behind the need of this group in this study: to ascertain even further the on-line reading behavior and body language of SL learners which, in turn, are considered to be indicative of active thought processes of transacting idiomatic meaning" (p. 207). According to Miller and Crabtree (1999), "behavior and conversations are best recorded" (p. 20). Because think-alouds reveal participants' inner speech (Charters, 2003) and dialogue, videotaping will capture any conversational nuances, as well as changes in body language or posture. As Blikstad-

Balas (2016) emphasizes, "video recordings enable researchers to pay detailed attention to more than just what is being verbally uttered" (p. 512), enabling the researcher to "decompose contexts" that are not readily and easily observable in action (Blikstad-Balas & Sørvik, 2015, p. 141). By decomposing contexts, I hope to gain a clearer understanding of the process second language learners undergo (e.g., aha moments) in attempting to glean meaning from idiomatic and figurative language depicted in comics and comic strips.

Vygotsky (1978) states that "children not only act in attempting to achieve a goal but also speak" (p. 25). He observed how children behave when solving problems. His observations were based on children solving practical tasks, noting that children use speech to help them find solutions, and the more difficult the task, "the greater the importance played by speech in the operation as a whole" (pp. 25-26). His observations led him to conclude that "children solve practical tasks with the help of their speech, as well as their eyes and hands" (p. 26). This may be extended to how adult learners use dialogue to solve problems as speech occurs spontaneously and "almost without interruption...It increases and is more persistent every time the situation becomes more complicated..." (Vygotsky, 1978, p. 25), supporting the use of videotaping as a viable method in obtaining insight into second language learners' problem-solving strategies concerning idiomatic and figurative language. Similarly, Liontas (2002) suggests examining second language learners' "metacognitive idiom learning strategies, including awareness and retention strategies" (p. 8). By reviewing both speech and body movements used by participants when faced with the task of identifying idiomatic and figurative expressions depicted in comics and comic strips, I uncovered useful insights to inform the teaching and learning of L2 idiomatics.

Post-Study Questionnaire

The Post-Study Questionnaire provided important feedback regarding participants' thoughts and perceptions about the study. In the Post-Study Questionnaire, participants were asked about challenges in identifying and deducing meaning from the idiomatic and/or figurative expressions depicted in the comics/comic strips, strategies/techniques used, and their feelings about the study. I employed a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. The 5-point Likert scale is commonly used to measure participant attitudes. There has been much debate on the reliability and validity of the 5-point vs. 7-point Likert scale. In a recent study by Simms, Zelazney, Williams, and Bernstein (2019), "no psychometric advantages were revealed for any response scales beyond 6 points" (p. 557). For the purpose of this questionnaire, which was to obtain participants' thoughts and perceptions about the study, a 5-point Likert scale contained ample response scales for measuring participant attitudes.

The Post-Study Questionnaire was divided into three sections: idiomatics identification, idiomatics meaning, and study impressions. The idiomatics identification section consisted of 12 questions related to the difficulty in identifying the idiomatic and/or figurative expressions depicted in the comics and comic strips and strategies or techniques employed. The idiomatics meaning section contained 12 questions concerning difficulty in deducing the meaning of the idiomatic and/or figurative expressions and any strategies or techniques used. The final section, study impressions, asked three questions regarding participants' overall feelings about the study (see Appendix B for the complete Post-Study Questionnaire).

Post-Study Semi-Structured Interview

The Post-Study Semi-Structured Interview consisted of seven questions pertaining to the thoughts and perceptions about how the participant was able to identify the idiomatic and/or figurative expressions (idiomatics detection strategies) depicted in the comics/comic strips and his/her overall feelings about the study. I randomly selected five of the non-native English-speaking doctoral students to partake in the Post-Study Semi-Structured Interview, which I also video recorded. I used video recording to capture participant body language (e.g., shrugging of the shoulders, gestures, body postures, or facial expressions) and to verify my observations.

According to Liontas (2007), gaining insight into participants' thoughts and perceptions when attempting to deduce idiomatic meaning reveals the "difficulties encountered when reading texts containing idioms, in particular the way they make sense of idioms and the sources of textual information and prior world knowledge they use in arriving at a plausible explanation" (p. 26). These invaluable insights cannot be achieved without deeper investigation and probing through intentional participant questioning (see Appendix C for the Post-Study Semi-Structured Interview script).

I chose a semi-structured interview to provide structure to the interview, but with added flexibility to allow participants the option to expand upon given questions and add further insight according to their responses. A structured interview would have been too rigid and inflexible. As Lichtman (2013) states, "...participants can share what they know and have learned and can add a dimension to our understanding of the situation that questionnaire data or a highly structured interview does not reveal" (p. 195). In a semi-structured interview, I can allow the interview to progress according to the interviewee's responses and not the questions themselves, allowing for more personalization and the opportunity for follow-up questions. In a structured interview, I

would have to follow a predetermined list and order of questions with no room for expansion or personalization.

According to Liontas (2015b), interviews offer "new insights into the usefulness of employing different experimental tasks...as a means of collecting more precise feedback..." (p. 311). The strength of an interview lies in the ability of the interviewer to truly listen to the interviewee. Active listening fosters rapport and trust (Weger, Castle, & Emmett, 2010). There is a certain ebb and flow, or cadence, of an interview that occurs between the interviewer and interviewee, depending on what and how the interviewer asks questions, the comfort level of both the interviewer and the interviewee, as well as how and to what degree the interviewee responds to a particular question. Miller and Crabtree (1999) maintain, "semistructured interviews are guided, concentrated, focused, and open-ended communication events that are cocreated by the investigator and the interviewee(s) and occur outside the stream of everyday life" (p. 19). With a semi-structured interview, the rhythm of the conversation takes on a more relaxed feel as the interviewer builds upon the responses of the interviewee, while also establishing rapport. However, this cannot be accomplished in a structured interview where the interviewer follows a preset or fixed list of questions, does not deviate from the script, and is thus more rigid than a semi-structured interview.

Roulston (2010b) posits six different types of interviewers based on their concepts of interviewing: neo-positivist, romantic, constructionist, postmodern, transformative, and decolonizing. For the neo-positivist interviewer truth and accuracy are of utmost importance, resulting in interview questions that strive to minimize researcher bias and influence; the romantic interviewer does not try to control bias, but rather accepts his/her role as a "reflexive researcher" (p. 218), focusing on establishing a positive relationship with the interviewee, one

that is built on trust and empathy; the constructionist interviewer views data as co-constructed with the interviewee, examining the process by which data is created by both the interviewer and the interviewee; the postmodern interviewer strives for innovative and novel perspectives on data collection, with the intention of eliciting discourse; the transformative interviewer aims to enact change and transformation, such as action research and therapeutic interviewing; and the decolonizing interviewer attempts to partake in ethical and culturally sound research in indigenous communities that have historically been objectified and marginalized.

My style of interviewing would fall under what Roulston (2010b) describes as romantic interviewing. It is important to be transparent with my intentions as I hope to connect with my participants. Establishing good rapport with my participants is an essential component to my interviewing style. Roulston emphasizes the relationship between the IR (interviewer) and the IE (interviewee) when she states, "A romantic conceptualization of interviewing will lead the interviewer to work to establish rapport and empathic connection with the interviewee in order to produce intimate conversation between the IR and IE in which the IR plays an active role" (p. 20). My goal was to provide a positive and welcoming environment where the participant feels safe and respected.

Pilot Testing of Instruments

In order to ensure validity and reliability, all instruments used in this study were piloted by native English speakers. I recruited five volunteers from the University of South Florida to screen both the Pre-Study Questionnaire and the Post-Study Questionnaire, as well as the Semi-Structured Interview script and the Comic Idiomatics Task. Their feedback afforded me the opportunity to make the necessary changes I was unaware of or had overlooked. Cohen, Manion,

and Morrison (2007) argue that piloting ensures reliability, validity, and clarity of a questionnaire. Piloting offers vital feedback to help identify any underlying issues (e.g., the use of leading questions, overly complex questions, or ambiguous questions) that may negatively affect the outcome of the questionnaires and would not have otherwise been apparent to the researcher. Furthermore, piloting allows for modifications to be made before the actual delivery, minimizing any potential conflicts.

Data Collection

I collected the data for this study via Qualtrics and Zoom over a period of two months. I sent a Qualtrics survey link to all the participants to complete the Pre-Study Questionnaire. Once participants completed the Pre-Study Questionnaire, I sent Zoom invitations for all the participants to partake in the Comic Idiomatics Task. After the participants completed the Comic Idiomatics Task, I sent a Qualtrics survey link to complete the Post-Study Questionnaire. Finally, I sent Zoom invitations to five non-native English-speaking doctoral students who were randomly selected to participate in the Post-Study Semi-Structured Interview. I conducted these interviews within three days of participants' completion of the Comic Idiomatics Task.

Study Procedure

Participants were asked to complete four tasks: the Pre-Study Questionnaire, the Comic Idiomatics Task, the Post-Study Questionnaire, and the Post-Study Semi-Structured Interview. Five participants non-native English-speaking doctoral students were randomly selected to participate in the Post-Study Semi-Structured Interview. All tasks for this study were conducted via Qualtrics and Zoom. Qualtrics is an online survey platform that facilitates the creation and

collection of survey data in a user-friendly format. Additionally, Qualtrics offers several choices for interpreting data such as the ability to download an Excel-compatible file or create a visualization (e.g., a bar graph or pie chart), which assists in data analysis. Zoom is an online video conferencing platform that is both reliable, secure, and easy to use, with the added benefit of being able to record a meeting to the Cloud, which can be easily retrieved and downloaded.

I emailed a Qualtrics survey (Pre-study Questionnaire and Post-Study Questionnaire) and a Zoom invitation (Comic Idiomatics Task) to all the participants. In addition, a Zoom invitation was sent to a select number of non-native English-speaking participants to partake in a Post-Study Semi-Structured Interview.

Data Analysis

Following a descriptive and exploratory approach to data analysis, I incorporated descriptive statistics, thematic analysis, and coding in order to thoroughly understand my data. I used descriptive statistics to present and describe the results of the Pre-Study Questionnaire and the Post-Study Questionnaire. I conducted thematic analysis and coding to present and interpret the results of the think alouds during the Comic Idiomatics Task and the Post-Study Semi-Structured Interviews.

I used thematic analysis and coding to establish themes or sub-themes found across the think-alouds and semi-structured interviews, which I transcribed. As defined by Braun and Clark (2006), thematic analysis is "a method for identifying, analysing, and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail" (p. 6). Braun and Clark further emphasize the flexibility and "theoretical freedom" (p. 5) inherent in thematic analysis. According to Grbich (2007),

thematic analysis is particularly idiosyncratic and can involve a focus on repeated words or phrases...Themes may come from previous relevant research which you have reviewed, from myths/evidence within the area being studied, or from your gut feelings, as well as from the views of those being observed or interviewed. (p. 32)

I used inductive analysis to code my data through a bottom-up approach, driven by the data (Braun & Clark, 2006). A bottom-up approach stresses the importance observation plays in data interpretation. This aligns well with my interpretivist paradigm as I did not attempt to fit the data into a predetermined code, but rather allowed the data to guide my interpretations and analyses. Roulston (2001) warns of a common pitfall of thematic analysis, stemming from Smith's (1974) notion of "theorizing as ideology." Roulston (2001) states "novice researchers might further explore their roles as researchers and interviewers in the process of data generation and subsequent data analysis" (p. 297). In order to avoid this mishap, researchers should be cognizant and transparent about their assumptions and beliefs (Roulston, 2001).

Summary

In this study, I employed a descriptive and explanatory approach to explore second language learners' understanding of idiomatics utilized in comics and comic strips. I gathered pertinent information regarding participants' demographic information, English language experience, and prior exposure to idiomatics. Participants then partook in the Comic Idiomatics Task where they were asked to identify and deduce the meaning of idiomatic and/or figurative expressions depicted in comics and comic strips. During this task, I collected participant insights into strategies and/or techniques used in both identifying and figuring out the meaning of the idiomatic and/or figurative expressions. I then triangulated my data by having participants

complete a questionnaire regarding strategies/techniques used in idiomatics identification and deducing meaning, as well as conducting semi-structured interviews where I gathered further insights into idiomatics processing and comprehension. Finally, I combined the results from all the participant tasks as they relate to L2 idiomatics learning and comprehension.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

Introduction

In this chapter, I aim to provide evidence in support of my four research questions proposed in this study:

- 1. What strategies do native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 2. What strategies do non-native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 3. In what ways do each of these groups identify and deduce the meaning of idiomatic and/or figurative expressions in comics and comic strips?
- 4. In what ways might second/foreign language teachers use the information gleaned from this study to support non-native speakers as they learn idiomatics?

I present the data following the same order of tasks completed by the participants who volunteered for this study: the Pre-Study Questionnaire, the Comic Idiomatics Task, the Post-Study Questionnaire, and the Post-Study Semi-Structured Interview. For presentation purposes, from here on all participant excerpts are given in original form, unedited. This chapter first presents, based on the Pre-Study Questionnaire, participant demographic information, English language experience, and knowledge of and exposure to idiomatic and/or figurative expressions. This is followed by the results of the Comic Idiomatics Task and a brief discussion. Finally, I

utilize the results of the Post-Study Questionnaire and the Post-Study Semi-Structured Interviews to triangulate my data and as a means of providing further understanding regarding second language learners' processing and comprehension of idiomatics employed in comics and comic strips.

Analysis of Pre-Study Questionnaire

Twenty-one doctoral students—17 non-native English-speaking students and four native English-speaking students—studying second language acquisition participated in this study. Five (23.81%) were male and 16 (76.19%) were female. The average age of the participants was 37.81. The youngest participant was 29 years old and the oldest was 59. Fourteen participants (66.67%) were in their third year or higher in their doctoral program, with only two participants (9.52%) in their first year and the remaining five participants (23.81%) in their second year of study. Twenty participants (95.23%) have lived in the United States for at least three years, with 15.31 years being the average duration. Sixteen of the 17 participants whose first language was not English responded to the question indicating their first language. Figure 6 shows the range of languages: Arabic, Spanish, Bahasa Indonesia, Chinese, Tuareg, and Turkish. Arabic was the language most spoken by the participants (7), followed by Spanish (4), Bahasa Indonesia (2), Chinese (1), Tuareg (1), and Turkish (1).

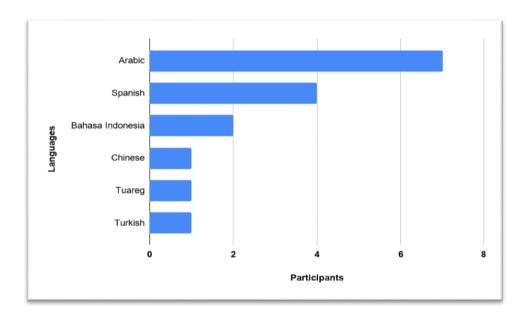


Figure 6. Languages Represented by Non-native English-speaking Participants

Sixteen non-native English-speaking participants (94.12%) had three or more semesters of college experience with English. Only one participant (5.88%) had one to three semesters of college experience with English. Thirteen participants (61.90%) indicated that they read an American newspaper (either in print or online) one to three times a week, with three participants (14.29%) indicating that they read three or more times a week and five participants (23.81%) indicating that they never read an American newspaper. When asked to define an idiomatic expression, 16 participants (76.19%) were able to give a correct response. Consider the following responses:

It's a natural use of the language that creatively enables the speaker to convey an idea or an image using one expression.

A type of informal language that has a meaning different from the meaning of the words in the expression.

An expression or phrase with meaning other than it's literal meaning.

Expressions that are natural to a particular native language.

Natural expression used by native speakers.

Native-like use.

These comments indicate the participants' solid grasp of the meaning of idiomatic expressions. They also show the emphasis placed on the use of idiomatic expressions in "natural" settings. When asked to define a figurative expression, 17 participants (80.95%) were able to accurately define figurative expressions. As one participant expressed: "Figurative language refers to a creative play on language. So, figurative expressions convey meanings that may not be transparent at first look." Here are some additional excerpts echoing similar responses concerning figurative expressions:

Figurative expressions are used to add wit, imagery and beauty to the language.

Expression that paints a picture/figure.

A figurative expression is a phrase that creates and image in the mind of the reader/listener.

Is the language that's intended to create an image, association, or another effect in the mind of the listener or reader that goes beyond the literal meaning or expected use of the words involved.

Colorful expression with hidden meaning.

Seventeen participants (80.95%) responded having been exposed to idiomatic and/or figurative expressions, either through classes that they have taken or classes that they have taught, with the most prevalent response as having been exposed to them in college-level courses. All these students took classes with Dr. Liontas whose research focuses on idiomatics,

hence their exposure. Only four participants (19.05%) reported they had not been exposed to idiomatic and/or figurative expressions. One participant wrote, "I have been exposed to it in my BA, MA, and PhD degree on varying levels of details," while another participant wrote "slightly in language courses that I teach." Eighteen participants or 85.71% of the participants would be interested in learning about idiomatic and/or figurative expressions as part of their English language study, with only three participants (14.29%) disclosing they would not be interested.

When asked whether they see comics being different than comic strips, participant responses varied. Of the 19 who responded, eight participants (42.11%) answered that yes there was a difference, with six participants (31.58%) answering that there was no difference at all. Five participants (26.32%) responded "I don't know." Comments included:

Yes, comics can be visual or multimedia where comic strips are only print.

Comics are shorter the longest comic strips in my understanding could be one page.

Comics makes me think of comic books or movies, while comic strips make me think of stand-up comedy.

... a comic strip might have only a few frames. A comic could have just one frame, or it could be a whole book.

These comments reveal that some of the participants, although having responded there was a difference between comics and comic strips, could not accurately describe the difference.

For question 15 regarding the use of comics and/or comic strips in their home culture, 16 participants (76.19%) replied that yes, comics and/or comic strips are commonly used in their home culture, with only 5 participants (23.81%) reporting that comics and/or comic strips are not commonly used in their home culture. When participants were asked to rate their level of confidence with respect to their ability to identify and figure out the meaning of an idiomatic

and/or figurative expression depicted in comics/comic strips, their level of confidence was notably high. Twenty participants (95.24) felt a certain degree of confidence. Ten participants (47.62%) reported feeling moderately confident, followed closely by nine participants (42.86%) claiming they were confident, with one participant (4.76%) reporting feeling very confident. Only one participant (4.76%) claimed no confidence. This provides telling data about the participants' perceived performance compared to the participants' actual performance as revealed on the Comic Idiomatics Task. I will not elaborate on this point in this section, but will discuss further in the analysis section of the Comic Idiomatics Task.

When asked whether they thought it is important to learn about idiomatic and/or figurative expressions, all 21 participants answered in the affirmative. For question 18: *Have you ever been in a situation where your lack of understanding of idiomatic and/or figurative expressions has caused you embarrassment?* the responses were fairly evenly matched. Eleven participants (52.38%) reported being in a situation where lack of understanding of idiomatic and/or figurative expressions caused them embarrassment, while 10 participants (47.62%) reported not ever having been in such a situation. Consider the following remarks:

I didn't know what he meant. I was embarrassed to ask because he'd laugh at me. So I googled the phrase to learn the meaning and it was too late to respond properly.

I misunderstood the whole situation because the lack of understanding of an idiom!

I don't remember the specific situation but the context was during a daily conversation in English.

Living in Japan, I have felt embarrassed about not understanding some figurative language.

Not embarrassment per se but I may miss the punchline of a joke and not laugh while the speaker expects me to.

I have answered incorrectly, out of context.

These comments clearly show how embarrassment created a hindrance in understanding, reflecting a need for second language learners to be taught idiomatic and figurative expressions. These comments further support the responses given to question 13: Would you be interested in learning about idiomatic and/or figurative expressions as part of your English language study? as cited earlier.

The answers to question 19 regarding participant's interest in learning about idiomatic and/or figurative expressions through the use of comics and comic strips indicate a strong desire. Out of twenty participants who responded, 15 participants (75%) responded they would be interested in learning about idiomatic and/or figurative expressions through the use of comics and comic strips, while only 5 participants (25%) responded they would not be interested. Finally, question 20 which asked participants to share any other comments regarding comics, comic strips, idiomatic and/or figurative expressions yielded the following comments:

I believe that teachers can use comics to add to the variety of strategies they use to teach idiomaticity.

Comics seems like a good way to study idiomatic and figurative language.

I love humour. I am expecting seeing humorous artwork.

These comments affirm the notion that incorporating comics in the teaching of idiomatics is beneficial.

In sum, analysis of the Pre-Study Questionnaire revealed important insights into the participants' demographic information, English language experience, and knowledge of and

exposure to idiomatic and/or figurative expressions. The most telling insights emerged through the participant responses to questions 10-20 regarding knowledge of and exposure to idiomatic and/or figurative expressions. These responses, in conjunction with the other responses to the Pre-Study Questionnaire, provide useful information on the teaching and learning of idiomatics in second language acquisition.

Analysis of Comic Idiomatics Task

Seventeen doctoral non-native English-speaking students and four doctoral native English-speaking students completed the Comic Idiomatics Task. Doctoral non-native English-speaking scores ranged from a 0% to a 44%. Doctoral native English-speaking scores ranged from a 67% to an 89%.

Perceived vs. Actual Participant Performance

As already noted in the analysis of the Pre-Study Questionnaire, 20 participants (95.24%) responded being moderately confident, confident, or very confident in their ability to identify and deduce the meaning of idiomatic and/or figurative expressions depicted in comics and comic strips. The results of the Comic Idiomatics Task reveal some discrepancies in participants' perceived versus actual performance, especially with respect to the doctoral non-native English-speaking students. This provides important information on the teaching of idiomatics, shedding further insights into how students' perceptions do not always align with their actual performance.

Thematic Analysis

I conducted thematic analysis on the participants' think-aloud descriptions during the Comic Idiomatics Task to answer questions three and four:

- 3. In what ways do each of these groups identify and deduce the meaning of idiomatic and/or figurative expressions in comics and comic strips?
- 4. In what ways might second/foreign language teachers use the information gleaned from this study to support non-native speakers as they learn idiomatics?

According to Braun and Clark (2006), "thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data" (p. 5). In preparation for thematic analysis, I first transcribed all of the think-aloud data. I chose to personally transcribe my data as I felt it was important for me to know and become as familiar as possible with my data. As the authors further state, "the time spent in transcription is not wasted, as it informs the early stages of analysis, and you will develop a far more thorough understanding of your data through having transcribed it" (p. 18). Similarly, Lichtman (2013) points out, "it is worth the effort to do it on your own" (p. 261).

After transcribing my data, I followed Lichtman's "three Cs of data analysis: coding, categorizing, and concepts" and her six-steps to processing: (1) initial coding; (2) reevaluating initial coding; (3) creating an initial list of categories, including subcategories; (4) modification of initial list after further reading; (5) revisiting categories/subcategories; and (6) developing concepts based on categories (p. 265). I used Nvivo, a computer assisted qualitative data analysis software (CAQDAS) program, to facilitate the coding process. Nvivo is one of many CAQDAS programs that assist in data organization. I chose Nvivo in particular due to my familiarity with the program and its data organization capabilities, such as the ability to import different types of file formats (e.g., text, audio, or video), create folders and subfolders containing different data sources (e.g., think-alouds, semi-structured interviews), color coding, and the ease in viewing files to maximize coding. I used Nvivo in conjunction with my own note-taking and thorough

reading and rereading of the data. In addition, I employed journal writing as a way to keep track of my ideas and thoughts throughout the entire coding process and to further reflect on my findings. According to Braun and Clark (2006),

Writing is an integral part of analysis, not something that takes place at the end, as it does with statistical analyses. Therefore, writing should begin in phase one, with the jotting down of ideas and potential coding schemes, and continue right through the entire coding/analysis process. (p. 15)

Coding is an iterative process (Lichtman, 2013) and one which Saldaña (2016) posits is a "cyclical act" (p. 9). It is through repetition and not just one or two cycles of coding, but as Saldaña suggests, "possibly the third and fourth, etc." (p. 9), which generates themes or concepts. Those themes or concepts must then go through the process of "sorting and sifting" (Lichtman, 2013, p. 248). As Lichtman states, "You might have 80 to 100 codes that you then organize into 15 to 20 categories and subcategories. These categories can then be organized into five to seven concepts" (p. 248). I began with over 60 codes, which I then consolidated into categories, further arranging them into a smaller number of central concepts. Some examples of codes include the following: I know the phrase, I have heard this expression, making connection, and I cannot guess this one. From these codes, I then created and organized them into broad categories such as background knowledge, no entry in mind, recalling, and reference to L1. Finally, from these categories, I thought of the concepts they represented and how those concepts related to my research questions, such as recollection and referring to their L1.

I now present the data according to the doctoral non-native English-speaking students and doctoral native English-speaking students studying second language acquisition. For clarity of presentation, I have included a sample of one comic (Speed Bump by Dave Coverly) and one

comic strip (Pickles by Dave Coverly) ("GoComics," n.d.), with permission from Andrew McMeel Syndication (Figure 7). Due to copyright limitations I am restricted in the amount of comics/comic strips I am able to display.

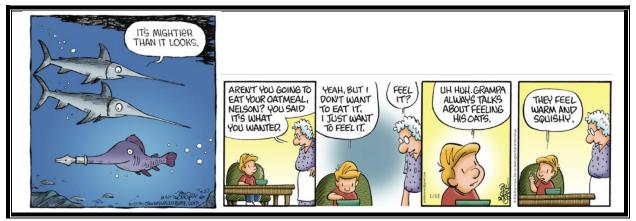


Figure 7. Sample Comic/Comic Strip

Doctoral Non-native English-speaking Students. Seventeen doctoral non-native English-speaking students completed the Comic Idiomatics Task. In the following section, I present the four themes (i.e., context clues, recollection, guessing, and referring to their native language or L1), in order of salience, which emerged after careful examination of the think-alouds provided by the doctoral non-native English-speaking students studying second language acquisition (Figure 8).

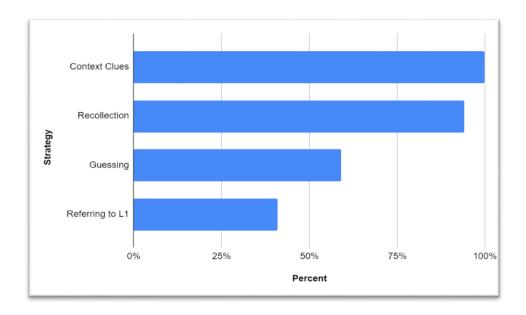


Figure 8. Participant Identification and Meaning Strategies (Doctoral Non-native Englishspeaking Students)

Context clues. All seventeen participants utilized context clues within the comics and comic strips as a strategy to identify and attempt to deduce the meaning of the idiomatic and/or figurative expressions. However, this strategy did not always help participants in identifying or deducing the meaning of the idiomatic and/or figurative expressions. For several participants, looking at the context clues created confusion and frustration. Consider the following from one of the participants who was presented with a comic that depicted the idiom to open a can of worms:

oh my goodness ok (laughing) um worms? I have (touching ear) no idea what is that thing he's holding in his hand? (smiling) worms coming out of the can worms have different facial expressions that guy seem confused did he just open the can and worms came out? one of the worms is hap.. kind of like happy or kind of like about to get revenge I do not get it (smiling) I I don't understand (shaking head left to right).

When the participant questions "What is that thing he's holding in his hand?", it is clear that they have no idea it is a can opener. In addition, affirming "worms coming out of the can" and "did he just open the can and worms came out?" did nothing to assist in identifying the idiom. This shows that even though the participant was able to identify the images that served as context clues (i.e., the can opener, can of worms), these context clues were not helpful in identifying or discerning the meaning of the idiomatic expression depicted in the comic. This suggests that if an entry of that expression did not already exist in the participants' mind, the context clues were not beneficial—a claim Liontas (1999) already made most strongly some 22 years ago. Statements such as "I don't have an expression that illustrates what I see," "I cannot see of an idiom to represent this," and "I'm not too sure whether what um they are trying to like what issue are they trying to depict" further confirm this.

Conversely, context clues were helpful when an entry of the idiomatic and/or figurative expressions already existed in the participants' minds as evidenced by the following comments referring to the idiom *to open a can of worms*:

That's a can opener in his hand...to open a can full of worms.

Can of worm so open a can of worm.

A can full of worm a guy so you opened up a can of worms.

The participants easily identified the context clues and were able to quickly identify the idiom. Similarly, for the idiom *to kick the bucket* participant responses included:

There is a bucket and there is an old man so it's kick the bucket.

I see a guy walking and he's kicking a bucket I know the idiom kick the bucket.

There's a bucket there kick the bucket.

Once again, the participants readily identified the idiom based on the context clues. It is clear that the images in the comics assisted in evoking or triggering an idiomatic or figurative expression already stored in their memory. All it took was seeing the image to spark the participants' memory.

Recollection. Sixteen participants or 94% of the participants employed recollection strategies in an attempt to recall the idiomatic and/or figurative expressions from their memory. Several participants stated, "I know this one," "I know what this is," or "I know the expression." Consider the following from one participant, "I know the idiom early bird gets the worm." This participant quickly identified and correctly supplied the meaning of the idiom because in her words she *knew* the idiom. This suggests that recall was effective if an entry of that idiom already existed in the participants' minds. Similarly, statements such as "I have heard this," "I've heard it tons of times," and "I heard that before" further support the notion that familiarity with the idiomatic or figurative expression was a determining factor in the participants' ability to recall the expression.

Conversely, consider the following statements:

It's not ringing any bells

I'm not sure I recognize

I've never heard that before

I don't know this expression

There is nothing coming to my mind

These comments all suggest the participants' efforts in recalling the expressions, but to no avail. If they were unable to recall the idiomatic and/or figurative expressions from their minds, then they had to resort to other strategies and/or techniques. As one participant indicated,

"I was not familiar...I didn't make the association honestly because I am not familiar with the idiom itself yeah."

Guessing. Ten participants or 59% of the participants used guessing as a last alternative to identifying and/or deducing the meaning of the idiomatic and/or figurative expressions. One participant stated, "I can guess the meaning of this but I don't know the idiom," while another participant stated, "I cannot guess this one at all." This suggests that guessing was not a fruitful strategy. If the participant was unable to recall, utilize background knowledge, understand context clues, or refer to their L1, guessing was not helpful at all. This led to participant frustration with comments such as "I'm not going to even try," "Yeah I'm done," and "Nothing." "I don't know" was a common response from the participants. This is again a telling observation when considering the psychological implications of giving up as it applies to social situations (e.g., a work meeting, classroom discussion, or lunch with colleagues). Not knowing and understanding the idiomatic and/or figurative expressions being used in conversation may lead to feelings of exclusion or isolation, such as feeling left out or embarrassment. This could have lasting effects on a person's self-esteem and their sense of belonging to a group, which in turn, could have negative repercussions for second language acquisition.

It is important to note that guessing was determined through participants' actual use of the word during the think-alouds. It is difficult to pinpoint all instances of guessing as participants did not always outwardly state they were guessing.

Referring to L1. Seven participants or 41% of the participants voiced that making a connection with a similar idiomatic or figurative expression found in their native language helped them to both identify and deduce the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips. For example, one of the participants

expressed the following: "We have an idiom that tell us this about in Arabic language." Another participant stated this: "In Russian would have something similar." Both statements advance the topic of similarity between a learner's native language and second language, and the role it plays in second language acquisition. Having a similar expression to reference and relate to in their native tongue seemed to help participants in determining the idiomatic and/or figurative expressions depicted in the comics and comic strips, along with their meanings. However, this was not always the case. One participant pointed this out: "We have a similar saying in Arabic but we say it differently we say the opposite." This particular participant was unable to either identify or deduce the meaning of the expression represented in the comic. This suggests that similarity with the L1 may interfere with L2 idiomatics comprehension.

A few participants actually spoke in their native language when attempting to identify and/or figure out the meaning of the idiomatic and/or figurative expressions. One participant frequently spoke in Spanish during the think-aloud when attempting to recall the expressions. For example, when explaining the meaning of the proverb *The pen is mightier than the sword*, this participant reverted to their L1 by saying, "Las palabras tienen mas umm fuerza significado que lo que parecen" which translates to "Words are more powerful than what they appear." They also referenced a similar expression found in both Spanish and English: *A quién madruga ayuda*, *Diós le ayuda*, the equivalent to *The early bird gets the worm*. Another participant spoke in their native Arabic during the entire task.

Other participants expressed confusion and difficulties in translating the expressions.

Take for instance the following remarks:

Hmm no I'm combining like two expression.

So in Russian and in Russian we say...I don't know...it's kind of confusing.

I'm not sure how to translate it.

I'm trying to say the meaning in Arabic this is what I understand in Arabic so I'm not sure. That's not the right translation I'm even thinking about it in Spanish what word would like what would be a good idiom to translate to.

Furthermore, as one participant expressed, "I have to switch (hands in the air) now you see the executive functions you know now all of a sudden I have to switch." These statements support the notion that referring back to the L1 did not always help in identifying and deducing the meaning of the expressions. Rather, having to "switch" back and forth from one language to another (i.e., native language to second language) may indeed have been a hindrance.

Some participants spoke about culture. Consider the following comment by a participant: "I feel the ones that stick with me is the ones that has similar um similar idiom to in my culture is does that make sense?" Another participant stated this: "I'm thinking of my culture there is uh idioms in that may be similar." One participant spoke about how the image in the comic depicting to open a can of worms reminded her of "an old style can opener...this kind of can openers in my parents house in like old Soviet Union style" and how as a child in Russia she had read the book *The Wizard of Oz* when referencing the comic that alluded to *The Wizard of Oz*. These comments suggest that making a connection with a similar concept in their home culture was indeed helpful.

Doctoral Native English-speaking Students. Four doctoral native English-speaking students completed the Comic Idiomatics Task. Next, I present the three themes (i.e., context clues, recollection, and guessing), in order of importance, as they emerged through careful analysis of the think-aloud descriptions provided by the doctoral native English-speaking students studying second language acquisition (Figure 9).

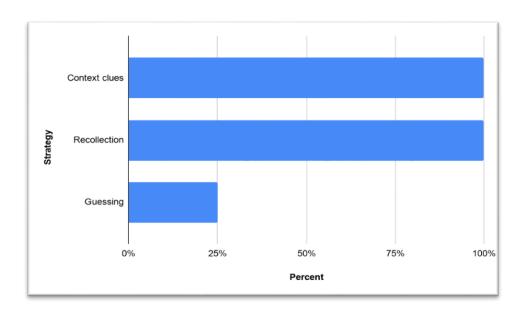


Figure 9. Participant Identification and Meaning Strategies (Doctoral Native English-speaking Students)

Context Clues. All four participants utilized context clues to identify and deduce the meaning of the idiomatic and/or figurative expressions. Take the following comments for the comic depicting *x marks the spot*, "Ok there's a pirate an island buried treasure *x* marks the spot," and the comic depicting *the pen is mightier than the sword*, "the pen is mightier than the sword because there's pen man fish and there's two swordfish." The participants easily identified the idiomatic or figurative expression as soon as they saw the images depicted in the comics/comic strips. There was no hesitation or doubt. Consider another participant's remarks while reading the comic strip depicting *the early bird gets the worm*:

who are you the early bird I find a disgusting worm what does the early dog get every morning I find a disgusting bird AH HA (laughing out loud) so this one is a reference to the early bird gets the worm (laughing).

The participant simply read the text and identified the correct expression without delay. In addition, the participant immediately laughed as soon as she read the punchline.

All four participants identified the cultural and political references in the comics and comic strips. "They look like art by Dali Salvador Dali," "Oh I see Dali's clocks," "Those melted clocks...the Dali museum...over in St Pete" were all remarks made regarding the comic strip depicting *the day is dragging*. For the comic depicting the idiomatic expression *it is what it is*, the following comments were made:

This is uhh a political commentary...it is what it is...I remember hearing that Trump said that.

It's a political reference and that it has to do with our president of the United States.

Donald Trump in the lifeguard uhhh chair uhh that looks like a coronavirus shark so this is obviously a political cartoon.

Once again, there was no uncertainty or delay in participants' responses. For one participant, simply reading aloud the text in the comic depicting an allusion to *The Wizard of Oz* elicited the correct response, "In-person, remote, hybrid...Oh my! Ok so this is a Wizard of Oz reference to lions and tigers and bears oh my." Another participant immediately remarked this way:

Ok OHHH it's an allusion to the Wizard of Oz like it's supposed to sound like lions and tigers and bears oh my it's in-person remote hybrid oh my it's referring to uh how education is being delivered during the coronavirus pandemic.

These comments confirm how either viewing the images or reading the text in the comics/comic strips provided enough information for the participants to identify and deduce the meaning of the idiomatic and/or figurative expressions.

Recollection. All four participants used recall as a strategy when they did not readily know the idiomatic and/or figurative expressions. This was most evident in the comic strip depicting the idiom to feel one's oats. One participant stated it this way: "like if young boys get into a bunch of trouble umm that's an expression umm sowing their wild sowing wild oats...that's the only one with oats that I know." Another participant remarked so: "feeling his oats ok there's an expression sowing your oats." And another commented so: "I know that sowing your oats is..." Each of these participants referenced an idiom that they did know or could recall even if it was not the exact one depicted in the comic strip. They all relied on what they knew and were familiar with when asked to identify and deduce the meaning of the idiom.

Guessing. Only one participant or 25% of the participants relied on guessing when attempting to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics/comic strips. After reading the comic strip depicting *to feel one's oats* aloud the participant stated,

OK I literally don't know what feeling your oats means like my guess based on context with an old grandpa would be that that his his digestive system is working well like feeling his oats as though he ate his oats and everything's working correctly and he needs to go use the restroom so that's my guess for feeling your oats.

Here the participant makes a connection between *oats* and the digestive system, invoking background knowledge. Even though the participant was unable to correctly define the idiom, their attempt at guessing was not random, but rather based on context clues.

Scaffolding

In this section, I present the data on what occurred after I provided scaffolding—support given to students to assist them in a task—to the participants who were unable to provide the

correct idiomatic and/or figurative expressions either after they had given their final answer or after the allotted time. Through scaffolding, I was able to gather rich data regarding idiomatics understanding and comprehension.

Doctoral Non-native English-speaking Students. The doctoral non-native English-speaking students received scaffolding for all of the nine idiomatic and/or figurative expressions depicted in the comics and comic strips: to open a can of worms, to kick the bucket, x marks the spot, the pen is mightier than the sword, it is what it is, lions and tigers and bears oh my, the day is dragging, the early bird gets the worm, and to feel one's oats. I list the expressions in the same order as presented to the participants in the Comic Idiomatics Task. Figure 10 shows the percentage of students needing scaffolding based on the idiomatic or figurative expression.

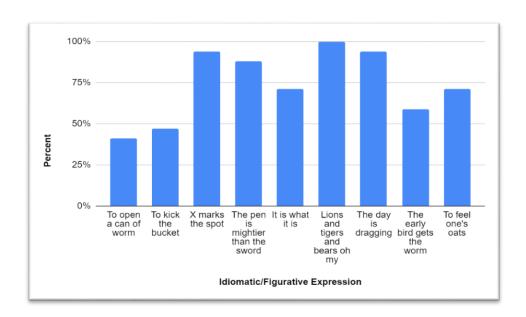


Figure 10. Scaffolding for Doctoral Non-native English-speaking Students

1. To open a can of worms. Seven participants or 41% of the participants received scaffolding for the idiom to open a can of worms. Of those seven participants, two

participants provided the correct definition. When I gave the expression, one participant replied, "Ok connecting it to something similar in my culture opening a door that you're not supposed to open something like that a door that might get you in some trouble that's what I can relate to." The other five participants were unable to supply the correct definition. Comments included "I have no idea" and "I have never heard of it before."

2. To kick the bucket. Eight participants or 47% of the participants received scaffolding for the idiom to kick the bucket. Of those eight participants, not one participant could provide the correct definition. Several participants responded "I don't know" with one participant not even attempting to give a response, but rather stating "I'm not going to even try."
Some participants mentioned that they had heard the expression before but did not know what it meant. Others attempted to deduce the meaning of the idiom by looking at the images in the comic. Comments included:

The bucket is dry...just kick the bucket and see where it goes.

The bucket is empty so and he's very sad he's upset...he's willing to do something but no results.

The bucket is dry...give it a shot.

These comments affirm that context clues were not helpful if the participant did not already have an existing expression stored in their mind that was triggered once they were given a clue.

3. *X marks the spot*. Sixteen participants or 94% of the participants received scaffolding for the idiomatic expression *x marks the spot*. Three of the participants correctly defined the idiomatic expression. As soon as I gave the expression, one participant immediately responded, "Ohhh well yeah where the x is is where the spot is and henceforth where x is

is supposedly where the treasure is." For this participant, hearing the expression triggered a memory of the expression and they were able to define it. The other 13 participants were unable to give the correct definition. Consider the following response:

Uhhh I don't know that no...there is so much going on in the comic I would not be able to figure that out unless I had maybe the expression itself written somewhere and then I could associate it with the comic then that might make it make it easier for me this one is not too clear.

The comic was not helpful to this participant even after being told the correct expression. This shows how having the expression stored in the participant's memory was tied to the participant's ability to both identity and provide the meaning of the expression. Without an existing entry in the mind, the participant was unable to retrieve anything associated with it. Other participants' comments included:

I have never heard that in my life.

I haven't heard that one before.

I don't know.

I don't know anything about it.

These comments further confirm the participants' struggles in making a connection between the expression and its meaning when they lacked an existing mental entry.

4. The pen is mightier than the sword. Fifteen participants or 88% of the participants received scaffolding for the proverb the pen is mightier than the sword. Seven of the 15 participants were able to provide the correct definition. Two of the participants experienced aha moments where the mere mention of the expression elicited an immediate "Ohhh" or "Ohhh yes" as they smiled and confidently gave the correct

meaning. Similarity to the participants' L1 was a factor for another two participants who mentioned a similar expression existed in their native language and were able to provide a correct definition. For example, "Ok we have something closer in Arabic um that sometimes when people write...it gets the writer to what he's aiming for better than a sword and sometimes like stronger faster than a sword." For the participants who were unable to supply the correct definition, most mentioned they had "no idea" or were not familiar with the expression and did not attempt to give a definition. One participant showed frustration by saying "I didn't...I don't," while another asked for help stating, "I don't know this expression what do you what do you mean?"

5. It is what it is. Twelve of the participants or 71% of the participants received scaffolding for the idiomatic expression it is what it is. All but one participant was able to give the correct definition. The 11 participants who were able to supply the correct definition did so as soon as they heard the expression. Many of the participants experienced aha moments with comments such as "Ahhh," "Oh yeah," "Yes," and "Oh yes I know this" followed by the correct response and a smile or laughter. One participant stated, "My teacher always uses that expression she goes it is what it is when something happens." Another participant remarked in this way:

Ok this means that hmm things are the way they are and you sometimes cannot do anything about it so uhh the best thing you can do is just accept things as they are I've heard this and I've said it but I couldn't uhh link my thoughts into thinking that it was this one.

These comments suggest that familiarity and the ability to recall the expression were important factors affecting the participants' capacity to supply the correct definition. As

the above participant stated, the ability to "link my thoughts," did not occur until the participant heard the expression and was then able to connect what they were hearing to an expression they already had stored in their memory.

It is interesting to note that only four of the participants were able to identify the political and cultural references: Trump as the lifeguard and the coronavirus as the shark. Several participants referred to the lifeguard as "the guy" with no mention of the shark or coronavirus pandemic.

6. Lions and tigers and bears oh my (The Wizard of Oz). Seventeen participants or 100% of the participants received scaffolding for Lions and tigers and bears oh my, an allusion to The Wizard of Oz. None of the participants were able to reference the phrase Lions and tigers and bears oh my from the movie The Wizard of Oz. Only eight participants identified the characters from The Wizard of Oz, with several participants not even mentioning the characters at all. Furthermore, the participants who did recognize The Wizard of Oz characters could not name all four characters (Dorothy, The Tin Man, Scarecrow, and the Cowardly Lion). The remaining 10 participants had trouble determining who the characters were and struggled with pinpointing what they were.
Consider the following comments:

They're different people different characters I don't recognize any of them.

There is a lion? And I don't know the other ones.

I just can tell that people or characters in the graphic they're different.

I see something like a lion I see something like what is it?

Several participants showed confusion with comments including:

Where's the tiger? There's a lion and the tiger lion and the tiger and the third one?

Tigers?

Lions and tigers and bears but there's only lion there's no tigers and bears so it's kind of hard to associate with that.

What the connection between the boy the girls and the boy and here I think it's a lion.

One participant mentioned the book in her native language, but did not know how to say it in English. As these examples demonstrate, if the participant could not make a connection with an existing entry in their mind, it was nearly impossible for them to make any sense of the images depicted in the comic and, therefore, construct meaning. The context clues in the comic were not helpful. On the contrary, many a time they caused confusion and frustration.

- 7. The day is dragging (Salvador Dali). Sixteen participants or 94% of the participants received scaffolding for the figurative expression the day is dragging with its allusion to the melting clocks of Salvador Dali's 1931 painting, The Persistence of Memory. Seven participants were able to deduce the meaning of the expression once they heard the expression. Six participants were able to make the connection between the melting clocks and Salvador Dali. Several of the participants who gave an incorrect definition stated that "the day is hard." This incorrect response suggests the importance of being able to identify and interpret the context clues correctly.
- 8. The early bird gets the worm. Ten participants or 59% of the participants received scaffolding for the proverb the early bird gets the worm. Five participants correctly deduced the meaning of the expression, while the other five could not correctly define the expression. Several participants referred to their L1 and spoke in their native tongue

when attempting to figure out the meaning of the expression. For those participants who

could not correctly define the expression, the context clues were not helpful. Comments

included:

I see some apparently it's in yellow is apparently it's a dog.

Worm is related to something disgusting something like not good.

It's an old old and ugly bird.

These comments all show how the participants were unable to connect the images with

the expression. Conversely, the following comment shows a participant successfully

making a connection between the text, the images, and the expression:

Ok hmmm I see a dog a bird and a duck but they are like people and they say who

are you the early bird every morning I find a disgusting worm what does the early

dog get every morning I find a disgusting bird ahhh ok this means the early bird

gets the worm catches the worm.

9. To feel one's oats. Twelve participants or 71% of the participants received scaffolding for

the idiom to feel one's oats. It is important to note that the five participants who did not

receive an intervention did not provide a correct definition. None of the 12 participants

who received an intervention were able to deduce the correct meaning of the idiom.

Many participants asked me to repeat the idiom. Consider the following exchange:

Me: The expression is to feel one's oats. Can you tell me what that means?

Participant: To feel what?

Me: One's oats so to feel his or her oats to feel your oats

Participant: The oats is written like that? Exactly like that?

Me: Correct yes o-a-t-s yes

117

Participant: I have no idea

In the above exchange, it is obvious that the participant had never heard of the idiom *to feel one's oats*. Even after asking for clarification, they were unable to make a connection. In addition, not one of the participants made a connection between *oats* and its nutritional implications. Instead, participants seemed focused on the terms used in the comic strip, "warm and squishy," to describe what the young boy is feeling. Consider the following comments:

The boy is feeling the oatmeal in the bowl?

The boy thought he wants to feel the same feeling.

It's about feelings because he touch he touch the oatmeal and he squeezed it.

You don't want to eat it you just wanna you wanna squeeze it just to feel relaxed and less stressed.

The above comments show the participants taking the word "feeling" literally, unable to make sense as to why the young boy keeps "feeling" the oats. Several participants made no attempt to give a definition. They simply stated, "I have no idea" or "I don't know," with one participant responding "Ok skip." Comments such as these indicate a certain degree of reluctance or a participant's surrender in attempting to propose a solution.

Doctoral Native English-speaking Students. None of the doctoral native English-speaking students required scaffolding for the following six idiomatic and figurative expressions: to open a can of worms, to kick the bucket, x marks the spot, lions and tigers and bears oh my, the day is dragging, or the early bird gets the worm. However, participants received scaffolding for the pen is mightier than the sword, it is what it is, and to feel one's oats. The percentage of students requiring scaffolding is shown in Figure 11.

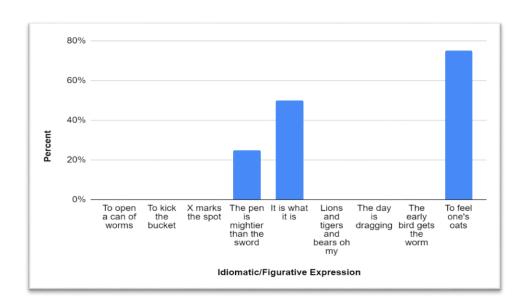


Figure 11. Scaffolding for Doctoral Native English-speaking Students

- 1. To open a can of worms. No intervention needed.
- 2. *To kick the bucket*. No intervention needed.
- 3. *X marks the spot*. No intervention needed.
- 4. The pen is mightier than the sword. One participant or 25% of the participants received an intervention for the proverb, the pen is mightier than the sword. Before the intervention, the participant came close to identifying the expression by saying, "The pen is mightier than it looks." She further stated, "I feel I should know this I knew this at one point...Oh man I can't remember." This shows the participant's attempt at retrieving the correct expression, albeit with difficulty. It is apparent that an entry for that expression existed in the participant's mind for as soon as I gave the expression, she stated, "Ok the pen is mightier than the sword ok is about the power of written words compared to violence." This immediate response demonstrates how hearing the expression sparked the

- memory of the expression, enabling the participant to recall the expression without hesitation.
- 5. *It is what it is.* Two participants or 50% of the participants received an intervention for the idiomatic expression, *it is what it is.* Both participants gave the correct response as soon as they heard the expression. One participant commented "Ohhh I was like that's too obvious." This may suggest that the participant already knew the expression, but was possibly over analyzing or over thinking their response. The other participant just needed to hear the expression in order to give a correct response as evidenced by "Ok it is what it is is an expression that people say when they are in a sense throwing up their hands over something...just saying how things are and things are not going to change."
- 6. Lions and tigers and bears oh my. No intervention needed.
- 7. The day is dragging. No intervention needed.
- 8. The early bird gets the worm. No intervention needed.
- 9. To feel one's oats. Three participants or 75% of the participants received an intervention for the idiom to feel one's oats. All three participants thought the expression was sowing your wild oats and did not realize they had given an incorrect response. While reading the comic strip one participant remarked, "Ahhh I've heard the expression is it spreading his oats?...that's an expression umm sowing their wild oats or something umm so maybe it's a that's the only one with oats that I know." Here it is evident that the participant is trying to bring to mind an expression that they know contains or references oats. Since sowing their wild oats was the only expression they knew, then that was the one they chose. One participant responded, "I've heard of sowing wild oats...feeling oats? No I mean I just

assumed it was close to the other one." Similarly, this participant could only answer based on what they knew and had an existing expression for.

Participant Body Language

Video recording the think-alouds via Zoom also provided me with the opportunity to observe participant body language during the Comic Idiomatics Task. Both the doctoral non-native English-speaking students and the doctoral native English-speaking students displayed similar characteristics during the Comic Idiomatics Task. By no means am I claiming to be an expert in evaluating body language. However, I do feel it is important to point out my observations.

Aha moments. Aha moments occurred when participants were suddenly able to successfully identify and/or deduce the meaning of the idiomatic and/or figurative expressions in the comics/comic strips. These frequently happened after an intervention when the participant heard the correct expression and the expression triggered an immediate "Ahhh" or "Ohhh." During these moments, the participants would visibly smile, outwardly laugh, or bring their hand to their forehead. One participant snapped their fingers, while another even banged on the table every time they correctly identified an expression.

Happiness. Participants outwardly laughed and smiled during the think-aloud when they understood the joke or got the punch line of the comic/comic strip. This was most evident in the comic strip depicting the proverb the early bird gets the worm. As one participant read aloud the text, he began laughing: "Who are you? The early bird (laughing) Every morning I find a disgusting worm (laughing) I like this one (laughing) Ok early bird gets the worm that's a proverb it means the earlier you go the more you achieve." The participant understood the play

on words from the very beginning and showed no hesitation in identifying the proverb and its meaning.

Frustration. Participants showed frustration through outward sighing, gasping, furrowing of the eyebrows, shrugging of their shoulders, putting their hands up in the air, rubbing their face/chin, shaking their head, crossing their arms, or moving away from the screen. These moments often occurred when the participant was unable to offer a response when attempting to identify the idiomatic and/or figurative expressions depicted in the comic/comic strips. For example, as one participant indicated, "I don't really know what it is so you can tell me the expression." This was followed by a gasp and shaking of the head. Another participant, after repeatedly being unable to correctly identify or define the expressions, simply responded "I failed" with a shrugging of the shoulders.

The participants' displays of aha moments, happiness, and frustration all indicate what they were thinking while they were attempting to identify and deduce the meaning of the idiomatic and/or figurative expressions. Liontas (2007) analyzed the body language of adult L2 learners during an on-line reading task, which he regarded as "indicative of active thought processes of transacting idiomatic meaning" (p. 8). While it is impossible to see inside the brain, body language is a reflection of thought processing; it reflects a condition.

Analysis of Post-Study Questionnaire

The purpose of the Post-Study Questionnaire was to obtain information on participant strategies/techniques used to identify and deduce the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips, as well as their overall feelings about the study. They were asked to rank their feelings based on a 5-point Likert scale ranging from

strongly disagree to strongly agree. I present my findings of the Post-Study Questionnaire to answer research questions one and two:

- 1. What strategies do native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 2. What strategies do non-native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?

I organize my findings based on participant responses to identifying and deducing the meaning of idiomatic and/or figurative expressions depicted in the three types of comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. The Post-Study Questionnaire is found in Appendix C.

Idiomatics Identification

Table 6 shows the mean values for all questions pertaining to idiomatics identification.

Table 6Mean Values for Idiomatics Identification

Question	Mean Value	Std. Deviation		
Comics With Images and no Text				
Question 1	3.81	1.18		
Question 2	3.67	1.08		
Question 3	3.86	1.04		
Comics With Images and Minimal Text				
Question 5	3.67	0.99		
Question 6	3.57	0.85		
Question 7	3.40	0.73		
Comic Strips With Both Images and Text				
Question 9	3.38	1.05		
Question 10	3.52	0.85		
Question 11	3.76	0.81		

A quick glance of Table 6 shows the mean values of the questions related to identifying the idiomatic and/or figurative expressions are relatively similar across the three types of comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. The values range from 3.38 (Question 9) on the low end to 3.86 (Question 11) on the high end. In other words, the values ranged from "neither agree nor disagree" to "agree." This means that none of the participant responses fell below a 3.38 or just above "neither agree nor disagree," and no response went above a 3.86 or just below "agree." This shows that the participants felt it was challenging to identify the idiomatic and/or figurative expressions across all three types of comics. Furthermore, the participants agreed that the images and text were helpful, indicating that text was more helpful in the comic strips. A closer inspection reveals slight differences within the types of comics.

Comics With Images and no Text. Figure 12 displays participant responses to the questions regarding comics with images and no text (Questions 1-3).

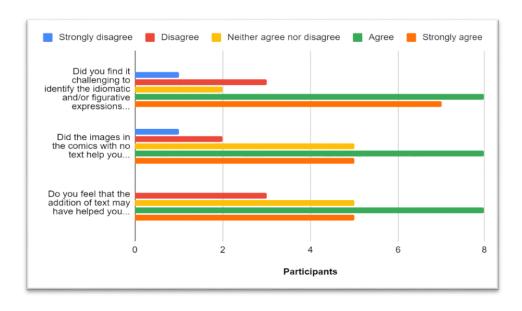


Figure 12. Participant Responses to Comics With no Text

Fifteen participants (71.43%) found it challenging to identify the idiomatic and/or figurative expressions depicted in the comics with images no text. Seven participants (33.33%) strongly agreed and eight participants (38.10%) agreed. Only 19.05% or four of the participants did not find it challenging to identify the idiomatic and/or figurative expressions—three participants (14.29%) who disagreed and one participant (4.76%) who strongly disagreed. Two participants (9.52%) neither agreed nor disagreed. Thirteen participants (61.91%) felt the images in the comics with images and no text helped them to identify the idiomatic and/or figurative expressions. Only three participants (14.28%) felt the images were not helpful, with five participants (23.81%) neither agreeing nor disagreeing. Regarding whether the addition of text may have helped in identifying the idiomatic and/or figurative expressions, 14 participants (66.66%) agreed, with only three participants (14.29%) disagreeing. Four participants (19.05%) remained neutral.

When asked whether they used a specific strategy or technique to identify the idiomatic and/or figurative expressions, participant responses were fairly uniform. Ten participants (47.62%) responded having used a specific strategy/technique, while 11 participants (52.38%) responded they did not use a specific strategy/technique.

Comics With Images and Minimal Text. Figure 13 shows participant responses to the questions related to the comics with images and minimal text (Questions 5-7).

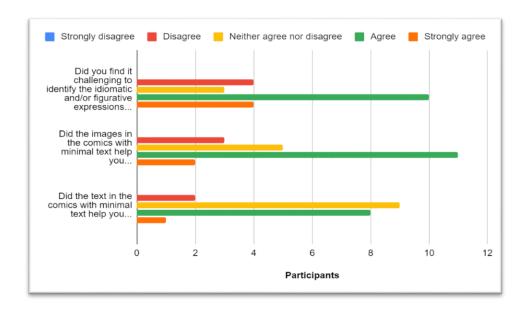


Figure 13. Participant Responses to Comics With Images and Minimal Text

Fourteen participants (66.67%) found it challenging to identify the idiomatic and/or figurative expressions depicted in the comics with images and minimal text. Four participants (19.05%) strongly agreed and 10 participants (47.62%) agreed. Three participants (14.29%) remained neutral, while four participants (19.05%) disagreed. None of the participants strongly disagreed. For question 6: *Did the images in the comics with minimal text help you to identify the idiomatic and/or figurative expressions*, 13 participants (61.9%) agreed—two participants (9.52%) strongly agreed and 11 participants (52.38%) agreed. Five participants (23.81%) neither agreed nor disagreed, while three participants (14.29%) disagreed. No participants strongly disagreed. For the final question in this section regarding whether the text in the comics with minimal text helped in identifying the idiomatic and/or figurative expressions, less than half of the participants (45%) felt the text was helpful. One participant (5%) strongly agreed and eight participants (40%) agreed. Only two participants (10%) disagreed, with none of the participants strongly disagreeing. Interestingly, nine participants or 45% of the participants neither agreed nor disagreed. This suggests that the text in the comics with images and minimal text may not have

made much of a difference in regard to idiomatics identification. In other words, the text in the comics with images and minimal text did not have a big effect on the participants' ability to identify the idiomatic and/or figurative expressions in the comics.

Regarding strategies or techniques used to identify the idiomatic and/or figurative expressions in the comics with images and minimal text, 11 participants (55%) responded they did use a specific strategy. Nine participants (45%) responded they did not use a specific strategy.

Comic Strips With Both Images and Text. Figure 14 shows participant responses to the questions related to the comic strips with both images and text (Questions 9-11).

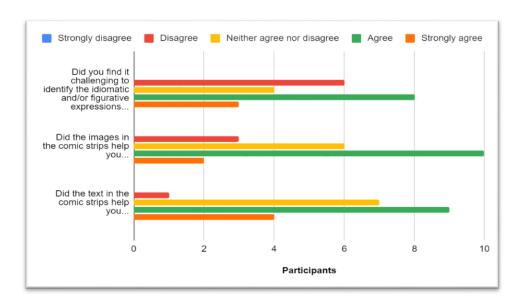


Figure 14. Participant Responses to Comic Strips

When asked whether they found it challenging to identify the idiomatic and/or figurative expressions in the comic strips, 11 participants (52.39%) found it challenging. Three participants (14.29%) strongly agreed and eight participants (38.10%) agreed. The remaining 10 participants (47.62%) either disagreed or neither agreed nor disagreed: six participants (28.57%) and four participants (19.05%) respectively. With respect to the images in the comic strips with both

participants (57.14%) felt the images did help them. Ten participants (47.62%) agreed, while two participants (9.52%) strongly agreed. Only three participants (14.29%) disagreed, with none of the participants strongly disagreeing. When asked whether the text in the comic strips with both images and text helped them to identify the idiomatic and/or figurative expressions, 13 participants (61.91%) felt it was helpful. Nine participants (42.86%) agreed and four participants (19.05%) strongly agreed. Seven participants (33.33%) neither agreed nor disagreed. Only one participant (4.76%) disagreed, while none of the participants strongly disagreed. This shows that when presented with comic strips comprised of both images and text, the participants felt the text was most useful in identifying the idiomatic and/or figurative expressions as opposed to the images alone. This suggests text playing a greater role in idiomatics identification when both text and images are available.

When asked about the use of a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions, 14 participants (66.67%) responded they did use a specific strategy. Only seven participants (33.33%) indicated they did not use a specific strategy. Table 7 presents a comprehensive view of all metacognitive comments in the words of the participants themselves.

 Table 7

 Idiomatics Identification: Metacognitive Comments

Strategy/Technique	Metacognitive Comments
	Observe the situation based on images.
Images	I looked at the images and what they try to tell. Some of them were easy as I already knew the idiomatic expression the images was hinting.

Table 7. (Continued)

I considered the literal meaning of the images to see if they would give me hints about what the idiom might be and it might mean. I think comics like these might use images to suggest both the literal meaning and the figurative meaning, which makes them interesting. Images (cont.) Viewed each image in as much detail as possible. Looking at the images was helpful. I felt that text confused me more. I preferred just pictures with no text. I considered the meanings suggested by both the images and the text, and how they related to each other. I tried to check if the meaning I took from the images and from the text matched each other. With the text, I also tried to imagine what words I could substitute for the idiomatic language and have it mean something that made sense to me. I read the text first, then verified using the images. I tried to connect the text with the images. I rearranged my thoughts to find new creative ways of finding a solution. I used cross-subject Images and/or Text information. The images hint an idiomatic expression and the text helps me narrow it down to the intended expression. When there is more text, it helps me understand better. I looked at both the images and the text for clues about meaning. I also thought about the meaning of the image as a whole, and if I knew any idioms that seemed similar to what the images suggested. I also thought about the words and how they worked with the images. I focused first on the image and then looked at the text to verify.

 Table 7. (Continued)

Images and/or Text (cont.)	I tried to connect the text with the images. I rearranged my thoughts to find new creative ways of finding a solution. I used cross-subject information. Examining the pictures or reading the text. I analyzed the image first then looked at the text to further clarify my understanding so far. The text confirmed what I was able to analyze through the images.
	The context of the comic strip provided ideas for me to think about
Context/Context Clues	which idiom we were referring to.
	Looking at all the details and trying to make a connection with all the elements in the picture.
	Observation of context.
	Context observation.
	I looked at the objects and tried to review my knowledge of expressions containing that object.
	Looking at all the details and trying to make a connection with all the elements in the picture.
Background Knowledge	I also applied my cultural and linguistic background knowledge to see if I could guess idiomatic or figurative meaning.
	I used my background knowledge. I connected the elements in the picture. I abstracted myself trying to put everything together. I was thinking out of the box. I rearranged my thoughts trying to find different/creative perspectives. I connected several subjects to put together my answer.
	I tried to recognize some idiomatic expressions within the text that connected with the images.
	Past experience with similar comic composition.

The metacognitive comments were surprisingly sparse and laconic. Even so, there are some insights that can be gleaned. The above metacognitive comments show that images—either alone or accompanied by text—played an important role in the participants' ability to identify the idiomatic and/or figurative expressions in all three types of comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. Six participants commented on the helpfulness of images. Nine participants expressed how looking at both the images and/or text proved helpful. This was followed by context/context clues and background knowledge. Also, guessing was a factor and while not a metacognitive comment per se, it is important to note.

Idiomatics Meaning

Table 8 shows the mean values for all questions pertaining to idiomatics meaning.

Table 8Mean Values for Idiomatics Meaning

Question	Mean Value	Std. Deviation		
Comics With Images and no Text				
Question 13	3.65	1.24		
Question 14	3.70	1.00		
Question 15	3.55	1.07		
Comics With Images and Minimal Text				
Question 17	3.65	0.96		
Question 18	3.45	0.80		
Question 19	3.50	0.97		
Comic Strips With Both Images and Text				
Question 21	3.57	1.00		
Question 22	3.48	0.73		
Question 23	3.90	0.92		

A quick perusal of Table 8 indicates the mean values of the questions referring to participants' ability to deduce the meaning of the idiomatic and/or figurative expressions are

similar across the three types of comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. Question 18 shows a value of 3.45 on the low end and Question 23 shows a value of 3.90 on the high end. That is, the values ranged from "neither agree nor disagree" to "agree.' This means that none of the responses fell below a 3.45 or just below the midpoint of "neither agree nor disagree" and a 3.90 or slightly below "agree." This shows that the participants found it challenging to deduce the meaning of the idiomatic and/or figurative expressions across all three types of comics. Furthermore, the participants agreed that the images and text were helpful, indicating that images were more helpful in the comics with images and no text, while text was more helpful in the comic strips. A closer examination reveals the nuances between the three types of comics and the participants' ability to deduce the meaning of the idiomatic and/or figurative expressions.

Comics With Images and no Text. Figure 15 shows participant responses to the questions related to the comics with images and no text (Questions 13-15) based on 20 of the 21 participants who responded to these questions.

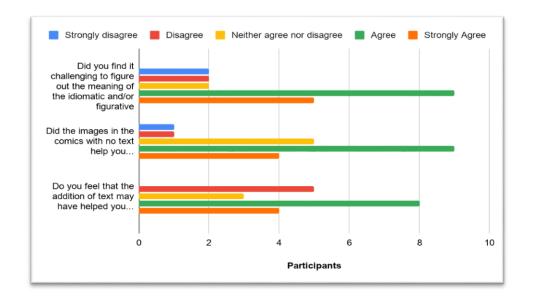


Figure 15. Participant Responses to Comics With Images and no Text

Fourteen participants (70%) found it challenging to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with no text. Nine participants (45%) agreed and five participants (25%) strongly agreed. Only four participants (20%) did not find it challenging—two participants (10%) disagreed and two participants (10%) strongly disagreed. Two participants (10%) remained neutral. Thirteen participants (65%) felt the images in the comics with no text helped them to figure out the meaning of the idiomatic and/or figurative expressions. Five participants (25%) neither agreed nor disagreed, while only two participants (10%) felt the comics with no text did not help them—one participant (5%) disagreed and one participant (5%) strongly disagreed. For question 15: *Do you feel that the addition of text may have helped you to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with no text*, 12 participants (60%) were in agreement. Eight participants (40%) agreed and four participants (20%) strongly agreed. Three participants (15%) neither agreed nor disagreed, while five participants (25%) disagreed. None of the participants strongly disagreed. These responses show fairly similar participant responses on whether they

felt the images or the text were more helpful: 65% and 60% respectively, with images showing a slightly greater impact by five percent.

When asked about using a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with images and no text, participant responses were closely matched. Nine participants (45%) responded using a specific strategy/technique and eleven (55%) responded they did not use a specific strategy/technique.

Comics With Images and Minimal Text. Figure 16 shows participant responses to the questions related to the comics with images and minimal text (Questions 17-19) based on 20 of the 21 participants who responded.

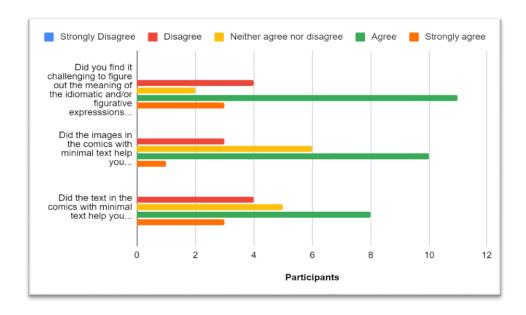


Figure 16. Participant Responses to Comics With Images and Minimal Text

Fourteen participants (70%) found it challenging to figure out the meaning of the idiomatic and/or figurative expression(s) depicted in the comics with images and minimal text. Eleven participants (55%) agreed and three participants (15%) strongly agreed. Only four participants (20%) disagreed, with no participants strongly disagreeing. Two participants (10%) remained neutral. Regarding the images in the comics with minimal text helping them to figure

out the meaning of the idiomatic and/or figurative expressions, eleven participants (55%) felt they were helpful. Ten participants (50%) agreed and one participant (5%) strongly agreed. Six participants (30%) neither agreed nor disagreed, while only three participants (15%) disagreed. None of the participants strongly disagreed. When asked whether the text in the comics with images and minimal text helped them to figure out the meaning of the idiomatic and/or figurative expressions, eleven participants (55%) felt the text was helpful. Eight participants (40%) agreed and three participants (15%) strongly agreed. Five participants (25%) remained neutral, with four participants (20%) disagreeing. None of the participants strongly disagreed. This shows similar results in participant responses to how they felt images or text helped them to figure out the meaning of the idiomatic and/or figurative expressions. This suggests that the presence of images vs. text did not make much of a difference in the participants' ability to deduce the meaning of the idiomatic and/or figurative expressions. Said another way, neither the images nor the text weighed heavier in determining whether the participants were able to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with images and minimal text.

Regarding strategies/techniques used in deducing the meaning of the idiomatic and/or figurative expressions depicted in the comics with images and minimal text, the responses were evenly divided: nine participants (50%) responded having used a specific strategy/technique and nine participants (50%) responded not having used a specific strategy/technique.

Comic Strips With Both Images and Text. Figure 17 shows participant responses to the questions related to the comic strips with both images and text (Questions 21-23).

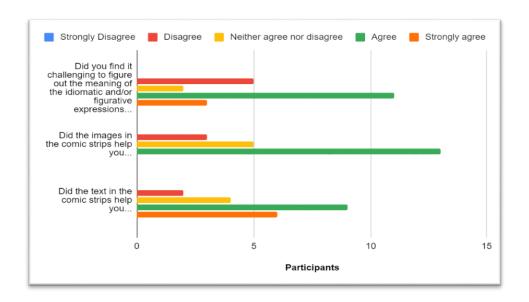


Figure 17. Participant Responses to Comic Strips

For question 21: Did you find it challenging to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comic strips, 14 participants (66.67%) found it challenging. Eleven participants (52.38%) agreed and three participants (14.29%) strongly agreed. Two participants (9.52%) neither agreed nor disagreed, with only five participants (23.81%) disagreeing and none of the participants (0%) strongly disagreeing. When asked whether the images in the comic strips helped them to figure out the meaning of the idiomatic and/or figurative expressions, thirteen participants (61.90%) agreed, with no participants strongly agreeing. This presents interesting data concerning the role images play in comic strips in relation to deducing the meaning of idiomatic and/or figurative expressions. Five participants (23.81%) remained neutral, with three participants (14.29%) disagreeing and none of the participants disagreeing. Regarding whether the text in the comic strips was helpful in figuring out the meaning of the idiomatic and/or figurative expressions, 15 participants (71.43%) felt the text was helpful—nine participants (42.86%) agreed, while six participants (28.57%) strongly

agreed. Four participants (19.05%) neither agreed nor disagreed. Only two participants (9.52%) felt the text was not helpful, with none of the participants (0%) strongly disagreeing.

Participant responses regarding the use of a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions, were fairly evenly divided. Ten participants (47.62%) responded they used a specific strategy/technique, while eleven participants (52.38%) responded they did not use a specific strategy/technique. Table 9 provides a comprehensive look at all metacognitive comments according to the participants themselves.

 Table 9

 Idiomatics Meaning: Metacognitive Comments

Strategy/Technique	Metacognitive Comment
Images	I analyzed the images first, and images alone in some cases did not help me figure out the intended expression. So, text would have helped me more.
	I thought about the meaning the images in the comic suggested.

 Table 9. (Continued)

Images and Text	Read the comic then looked at the pictures.
	I thought about the meanings that both the images and the text suggested, and how they might relate. I tried to check my understanding of the images against the meaning of the language. For the text, I also tried substituting, in place of the idiom, what I thought the meaning of the idiom might be. If it made sense, I thought I might be right about the meaning.
	Image analysis followed by text confirmation.
	I tried to connect the text with the images. I rearranged my thoughts to find new creative ways of finding a solution. I used cross-subject information.
	I read the text first, then verified using the images.
	Looked at pictures and read words.
	Image analysis followed by text confirmation.
	I focused first on the image and then looked at the text to verify.
Context/Context Clues	Context observation.
	Looking at all the details and trying to make a connection with all the elements in the picture.

Once again, the metacognitive comments were sporadic. Nonetheless, there are insights that can be extracted. Similar to the comments for idiomatics identification, looking at the images—either alone or accompanied by text—played an important role in the participants' ability to deduce the meaning of the idiomatic and/or figurative expressions in all three comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. This was followed by context/context clues.

Study Impressions

An overwhelming 95.24% of the participants or 20 of the 21 participants responded having enjoyed partaking in this study. Only one participant (4.76%) responded "neutral." This provides fruitful insights into the implications of participant enjoyment and the use of comics and comic strips in the teaching of idiomatics. Several participants employed the words *fun* and *enjoy* when describing their feelings. Participant responses included the following:

Yes, it was enjoyable. The tasks were not too difficult, were fun to do, and I enjoyed the a-ha moment when I finally got it.

It is fun to see the comic/comic strips.

Yes, I really enjoyed. It is a new way to learn idioms through comics.

Yes, I did enjoy the participation in the study. Thank you!

Yes, it was fun and engaging, it was high order thinking.

Yes, I enjoyed it. I enjoy comics, idiomatic language, and how the images and language suggested both literal and idiomatic language.

These responses clearly show participant satisfaction and enjoyment with the study. One participant expressed having "learnt some new idiomatic expressions," while another participant commented "I learned new idioms." A few participants wrote about some challenges. Consider the following from one participant:

Yes, I enjoyed partaking in this study. It is interesting to me that there are many idiomatic/figurative expressions I do not know even though I am a native speaker of English. Understanding the sociocultural allusions in comics/comic strips is difficult in any language, let alone English.

This participant acknowledges the inherent challenges of understanding idiomatic and/or figurative expressions, even in their native language. Another participant expressed they enjoyed the study "However, I did not like that the tasks were challenging!" This leads to participant frustration. When asked if they felt frustrated during any part of this study, more than half of the participants (57.14%) responded feeling frustrated, while nine participants (42.86%) reported no feelings of frustration. Consider the following comments here:

I didn't like the part where I had to identify the idioms or figurative language.

I don't know idiomatic expressions and it is difficult connecting with the idea English is not my first language.

I could not figure them all out.

I felt frustrated many times during the interview because I couldn't figure out what some comics/comic strips meant.

It was uncomfortable to not be able to identify the ones without text, it was confusing.

Not knowing most of the answers confused me!

These responses confirm participants' frustration at not being able to either identify or deduce the meaning of some of the idiomatic and/or figurative expressions, especially those containing no text. As one participant wrote,

I felt a bit frustrated with the images with no text. Images alone did not help me guess anything useful. Although I was not that frustrated with an image when I already knew the intended expression it was hinting (like the can of worms image).

Similarly, another participant wrote, "It was uncomfortable to not be able to identify the ones without text, it was confusing," while another participant wrote "Idioms with no text support" caused frustration.

Regarding whether they had learned anything new from this study, an overwhelming 90% of the participants (18 of 20 participants who responded) stated they had learned something new. Only two participants (10%) stated they had not learned anything new from this study. Participant responses included the following:

New idioms!

Some new idiomatic expressions.

I learn some idioms' meaning.

Some new expressions.

I've never heard Feel your oats before!

I am not familiar with idiomatic and figurative expressions.

I learned idiomatic expression are an important topic to domain a language.

I need to read more comics and comic strips and for sure get more exposure to idiomatic expressions!

These comments reveal important insights into participants' thoughts about learning idiomatic and figurative expressions through the use of comics and comic strips: (1) They can always learn a new idiomatic or figurative expression and (2) They are aware of the importance of knowing and being familiar with idiomatic/figurative expressions.

In conclusion, I used the Post-Study Questionnaire to gather data on participant strategies/techniques in identifying and deducing the meaning of the idiomatic and/or figurative expressions depicted in the three types of comics: comics with images and no text, comics with images and minimal text, and comic strips with both images and text. The Post-Study Questionnaire revealed that participants did not use one specific strategy, but rather relied on several strategies to help them when attempting to identify and figure out the meaning of the

idiomatic and/or figurative expressions depicted in the comics and comic strips: looking at the images and/or text, background knowledge, context clues, and guessing. The majority of the participants found it challenging to both identify and deduce the meaning of the idiomatic and/or figurative expressions. Images proved most helpful in the comics with images and no text and the comics with images and minimal text. However, text was the most helpful aid in the comic strips.

Analysis of Post-Study Semi-Structured Interviews

I randomly selected five of the 17 doctoral non-native English-speaking students studying second language acquisition to participate in a post-study semi-structured interview, which took place within three days of the Comic Idiomatics Task. All five students (three female and two male) agreed to participate in the semi-structured interview. The average duration of the semi-structured interview was 27 minutes.

According to Lichtman (2013), "all data are gathered in order to answer your research questions." (p. 248). I utilized the results of the Post-Study Semi-Structured Interviews to answer research questions two, three, and four:

- 2. What strategies do non-native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 3. In what ways do each of these groups identify and deduce the meaning of idiomatic and/or figurative expressions in comics and comic strips?
- 4. In what ways might second/foreign language teachers use the information gleaned from this study to support non-native speakers as they learn idiomatics?

Similar to the process I used in analyzing the Comic Idiomatics Task, I first personally transcribed all of the semi-structured interviews and coded the data. Once I completed coding, I began the process of identifying themes. I began with 52 codes. Some of the codes included scenario in picture, action in picture, and similarity to L1. From those initial codes, I organized them into categories such as back to L1, analyze picture, and connection. Then, after carefully reading and rereading, I consolidated the categories into two principal themes: referring to the L1 and context clues.

Referring to the L1. Five of the participants or 100% of the participants mentioned reverting to their native language when attempting to identify and deduce the meaning of the idiomatic/figurative expressions. As one participant stated,

Some of them has you know uh come to my mind just by analyzing the picture and knowing that there is a similar scenario in my language...something can help me um transfer the idiom...thinking about my first language and if they have something.

Having a "similar scenario" in the participant's native language made identifying and defining the expression a much easier task, which the participant confirmed by further stating "my background knowledge of my first language and if the picture exists in my first language also that really make it uh make that job easy (smiling)." Similarly, another participant commented

I was trying to make a reference like connections right? And then the connection is with something in Arabic like uhh like something in my native language so I would go back to that like I'm trying to make comparisons and uh because this thing it is I cannot get so I have to go back to the stuff that I know which is in my native language.

The participant had to "go back to the stuff I know" in order to identify and find the meaning of the idiomatic/figurative expression depicted in the comic/comic strip. Finding a connection

between the participant's native language and the English idiomatic/figurative expression facilitated its identification and meaning. As one participant noted when talking about the comic strip depicting the early bird gets the worm, "I think that the picture for example the bird can lead me immediately to think about uh what idioms connect have relation to the bird in my first language." If the connection existed in their native language, then the process of identification and deducing the meaning of the expression occurred more readily. Consider the following comment from another participant,

When I'm not sure I try to I always go back to my L1 so I'm always going translate I was like do I have something similar in Spanish or either Portuguese because that's like my other language that I use often so I was like do you have something similar in Portuguese or in Spanish.

The participant mentions always going back to their L1 and translating as a type of default strategy or automatic response when "I am not sure." Another participant echoed a similar response by stating "unconsciously I go back to the default language" when attempting to make associations between the languages.

Conversely, referring to their native language for a similar expression was not always productive. The expressions were either too distant or too close to the expression in the participant's native language. One participant remarked how having an expression that was "too far away" from the expression in their native language created a challenge. This participant referenced the comic depicting the characters from *The Wizard of Oz*.

The Wizard of Oz even though it is very popular in the United States it's not as popular in like where I came from so it is popular but not as it is in here so it is something that I learned when I was older not when I was like younger.

In order for the participant to understand the comic, they had to make a connection between the characters, the movie *The Wizard of* Oz, and the famous phrase *Lions and tigers and bears oh my*. Because they were not very familiar with either the characters or the movie, they were unable to make the reference. Likewise, expressions that were too close to the participant's native language created uncertainty. Two participants mentioned being confused when the expressions were too similar to their native language. One stated confusion "when you have expression in my first language that have scenario and scenario is presented here but in a different way," while the other participant pointed out cultural differences. For example, for the comic depicting the proverb *the pen is mightier than the sword*, the participant explained how in their culture the expression is the opposite: "So it says the sword gives better um more honest news than books in the edge of the sword is the difference between uh serious and play." This advances the importance culture plays in second language acquisition. Cultural references will elude second language learners who are not exposed to them. As another participant commented when referencing the comic depicting *x marks the spot*:

I don't have the reference at all in my culture there are no pirates uh at all so...that's why anything that's related to pirates I don't have in my sayings...anything that's related to camels I know you don't have it because I have it.

Here the participant points out their inability to make a connection between seeing a pirate depicted in a comic and an idiomatic or figurative expression. Since pirates don't exist in their culture, they are unable to make the reference. However, had there been a camel depicted in the comic, the participant alluded to having no trouble making a connection with an idiomatic/figurative expression in their culture.

Context Clues. All five participants relied on context clues to help them identify and decipher the meaning of the idiomatic and/or figurative expressions depicted in the comics/comic strips. For many of the participants (four), the images in the comics/comic strips were helpful. Consider the comments:

I can tell from the picture.

Scenario in the picture can give me the meaning.

They had images and you can relate the images to the clues.

My strategy with that one was to look for clues.

These comments all confirm the role pictures played in assisting the participants with identification and construction of meaning. However, the images were not always helpful. This was especially evident in the comic depicting *x marks the spot*. As one participant expressed "I didn't think like X was like an important element in the expression." Several (three) participants mentioned not knowing whether the image in the comic was an X or a cross, while others found it difficult to decide what clues to focus on. As one participant stated "There were so many things happening I didn't know it was the meaning come from or the message was the guy in the background the x the pirate the ship I was completely lost with that one." Consider the following from another participant:

Like the fact that they are on an island maybe it's it's a helpful clue but I'm not sure about the origins or the meaning of the expression so to me I feel like they are distractors like they are on an island the sun is there there's a pirate ship there's a treasure map so I don't know were they helpful clues or not.

The participant further expressed "Why is he on an island? so your your mind probably goes to all those things that are distracting what you think are distracting you from trying to figure out." Another participant talked about distractors when stating:

going back to the pirate one something that was really busy if it was really hard to figure out what am I supposed to focus on especially if I didn't already have something that I was trying to retrieve from my mind as to what that expression was.

Looking at the facial expressions and the body language of the characters within the comic/comic strip was another useful strategy used by the participants. As one participant stated when describing the clues in the comic depicting *x marks the spot*:

Scratching that's the only clue that I had that's what I came up to him because he was the only one that had facial expressions the other ones they have no uh facial characteristics who will be like eureka aha I found something or I'm confused.

Another participant remarked how the comic depicting *the day is dragging* was easier to figure out because the facial expressions were clearly conveyed. They commented "physical expressions did help a lot and when they were exaggerated they helped more." Thus, having the ability to identify the correct clues in the comics/comic strips was a determining factor for the participant's success in identifying and deducing the meaning of the idiomatic and/or figurative expressions. If the participant was unable to identify the correct clues in the comic/comic strip, then the participant did not know what clues they should be focusing on to help them. As one participant stated, "I was focusing on the wrong clues." Another participant commented "I wasn't getting enough clues like I should know I think I should know," while another participant said "It didn't cross my mind even though there is a text and there is a picture." Concentrating on the incorrect clues left the participant baffled.

In addition, culture played a role in the participants' ability to make a connection between the context clues and the idiomatic and/or figurative expressions depicted in the comics/comic strips. Take for example the following comment from one of the participants referring to the comic strip depicting the idiom *to feel one's oats*: "In my culture we don't eat oats... no no I never ate oats until I come to America I was thirty something... so the reference to oats doesn't help at all." Because the participant could not connect oats to feeling energetic, the reference to oats evaded them and provided no clue to deciphering the idiom. As the participant further stated "Here there's a cultural reference I don't get."

Discussion of Findings

In this section, I provide a discussion on the results of the study through combining the findings of the four participant tasks—the Pre-Study Questionnaire, the Comic Idiomatics Task, the Post-Study Questionnaire, and the Post-Study Semi-Structured Interview—with Vygotsky's (1978) Sociocultural Theory, the theoretical framework guiding this dissertation. I employed a descriptive and explanatory approach to present the results of the participants' understanding of idiomatic and/or figurative expressions depicted in comics and comic strips. In addition, I presented participant strategies/techniques. Of the four research questions, the three concerning the understanding of idiomatics employed in comics and comic strips were questions one, two, and three:

1. What strategies do native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?

- 2. What strategies do non-native English-speaking doctoral students who study second language acquisition use to understand idiomatics in comics and comic strips?
- 3. In what ways do each of these groups identify and deduce the meaning of idiomatic and/or figurative expressions in comics and comic strips?

In keeping with the results of the Pre-Study Questionnaire, the majority of the participants had prior exposure to idiomatic and/or figurative expressions. Similarly, the majority of the participants were familiar with comics and comic strips, having been exposed to them in their own home culture. Most participants were either moderately confident or confident in their ability to identify and figure out the meaning of an idiomatic and/or figurative expression.

Additionally, the majority of the participants were interested in learning about idiomatic and/or figurative expressions through the use of comics and comic strips.

The Comic Idiomatics Task revealed interesting insights into the participants' strategies and/or techniques used to identify and deduce the meaning of idiomatic and/or figurative expressions depicted in the comics and comic strips. The doctoral non-native English-speaking students utilized context clues, recollection, guessing, and referring to their native language as strategies to help them in identifying and deducing the meaning of idiomatic and/or figurative expressions depicted in the comics and comic strips. The doctoral native English-speaking students employed similar strategies—context clues, recollection, and guessing—but to varying degrees as already stated in the analysis section. This suggests that non-native English-speaking students and native English-speaking students at the doctoral level studying SLA use similar strategies/techniques when asked to identify and deduce the meaning of idiomatic and/or figurative expressions depicted in comics and comic strips.

The Post-Study Questionnaire uncovered interesting insights into participant feelings and perceptions about the study. The majority of the participants felt the images were most helpful when identifying the idiomatic and/or figurative expressions in the comics with images and no text and the comics with images and minimal text. For the comic strips with both images and text, the participants felt the text was slightly more helpful with identification. In deducing the meaning of the idiomatic and/or figurative expressions in the comics with images and no text, the helpfulness of images ranked higher, while in the comics with images and minimal text the helpfulness of images and text ranked equally. Regarding the comic strips, the participants felt the text was more helpful than the images in deducing the meaning of the idiomatic and/or figurative expressions.

The Post-Study Semi-Structured interview provided valuable insights into the process of identifying and understanding idiomatic and/or figurative expressions through the perspective of five of the doctoral non-native English-speaking students. It revealed these two participant strategies: (1) referring to their L1 and (2) relying on context clues. The results are similar to the ones shown in the Comics Idiomatics Task, which provide further support for these strategies in general and offer triangulation of data.

In Support of Vygotsky's (1978) Sociocultural Theory

Through conducting this study, I discovered that the tenets of Vygotsky's (1978) Sociocultural Theory were applicable to L2 idiomatics. Idiomatics is mediated through socially constructed objects (e.g., comics and comic strips) and through exposure to social situations and within social constructs. It is a process that involves many players—from the parent who speaks to their newborn child describing the details of their surroundings to the teacher at school who

explains a given topic to the friend who describes how to solve a problem. These are all examples of Vygotsky's More Knowledgeable Other, scaffolding, and the Zone of Proximal Development, which are crucial elements in the understanding of idiomatics. Idiomatics understanding entails the ability to communicate in social settings, discern and comprehend social cues, and engage in everyday conversations. This extends to acquiring a certain degree of idiomatics control when learning a language and is especially important for second language learners who desire native-like fluency. In other words, being able to understand and utilize idiomatic and figurative expressions is part of natural language usage and characteristic of native speech.

More importantly, language is inherently tied to culture as exemplified through idiomatics. Comics and comic strips are products of the culture in which they are created. "Comics and comic strips are the pulse of the times" (J. I. Liontas, personal communication, January 25, 2021). A quick perusal of any newspaper in the United States will yield comics/comic strips conveying a social or political commentary about the state of affairs in this country. For example, in a recent Doonesbury comic strip dated February 21, 2021, the central character talks about voter suppression and the riots at the Capitol, while in the comic strip Dilbert dated October 4, 2020, the characters discuss social distancing measures. In order to understand comics/comic strips, one must be versed in their language—one that incorporates both idiomatic and figurative language, representing native speech. Cartoonists create for their audience—native speakers. Therefore, the ability to understand comics/comic strips requires idiomatics control. Most native speakers can readily identify and deduce the meaning of idiomatic and/or figurative expressions embedded in comics and comic strips. The results of the study confirm this. Another important factor in idiomatics understanding is the ability to identify

and comprehend cultural references. Based on this study, the majority of the native Englishspeaking participants identified and understood all of the cultural references embedded in the comics and comic strips. However, the non-native English-speaking participants could not. This can be linked to exposure. Participants who had prior exposure to the idiomatic or figurative expression in question were able to easily identify and deduce the meaning of the idiomatic/figurative expression depicted in the comics and comic strips. Conversely, participants with no prior exposure to the idiomatic or figurative expression were unable to identify or deduce its meaning. When I added a learning intervention—an example of Vygotsky's scaffolding—where I supplied the correct expression depicted in the comic/comic strip and asked the participant if they could give me a definition, the majority of the non-native English-speaking students could not produce a correct definition. This shows that identification and meaning making are not separate processes. If the participant was unable to identify the idiomatic/figurative expression, they were also unlikely to be able to deduce its meaning. This was evident even with an intervention. Furthermore, despite the participants' classifications as doctoral level students studying second language acquisition, the non-native English-speaking students did not perform well in idiomatics identification/meaning.

Second language learners at the doctoral level studying second language acquisition encountered many difficulties in identifying and deducing idiomatic and/or figurative expressions depicted in comics and comic strips. The results of this study clearly confirm this. This presents compelling evidence for the need to teach idiomatics in the second/foreign language classroom. Furthermore, it highlights second language learners' actual understanding of idiomatics and expected understanding of idiomatics, even after many years of formal English language education.

Other Theoretical Considerations

While the findings of this study adhere to the tenets of Vygotsky's (1978) Sociocultural Theory, in the act of analyzing the data, I found there are more concepts which support my findings. First, the results of this study conform to Liontas' (1999, 2002b) *Transactional Idiom Analysis* (TIA). According to Liontas (2002b),

TIA is concerned both with what learners know about idioms in general and with what they know about how they are used in communication. It is especially concerned with identifying the factors that impede or enhance idiom comprehension and interpretation. The only way to obtain good data on these factors, however, is through the systematic observation of learners: TIA provides an approach of analyzing such observations in a manner that can reveal the linguistic systems that learners use to process idioms. TIA analyses are very promising because they seem to afford a window through which to view how learners comprehend and interpret idioms in second language contexts. (p. 26)

The framework of TIA surrounds the four cueing systems—the graphophonic, the lexicogrammatical, the semantic, and the pragmatic (Liontas, 2002b). TIA can be transferred to
idiomatics learning and comprehension. This study provided a "bird's-eye view" (Liontas,
2002b, p. 26) of how second language learners' process idiomatic and/or figurative expressions
depicted in comics and comic strips. Through observation, questioning, and a think-aloud
protocol, I obtained valuable data on the processing of idiomatic and/or figurative expressions.

The main difficulties in identifying and deducing the meaning of the idiomatic and/or figurative
expressions surrounded the participants' inability to recall an idiomatic or figurative expression
based on the images and text in the comics and comic strips. The images and text were only
helpful if the participant already had an existing entry in their mind of that particular idiomatic or

figurative expression. If no mental entry existed, the images and text in the comics and comic strips were not helpful. In fact, they oftentimes impeded the participants' ability to identify and construct meaning, as many of the participants did not know which elements in the comics/comic strips to focus on. This provides important insights for the second/foreign language classroom.

Second, the findings of this study support Liontas' (1999, 2002b) *Idiom Diffusion Model* of Second Languages. The Idiom Diffusion Model as discussed in Chapter One examines L2 idiom processing and the different stages second language learners move through when attempting to construct the meaning of idioms. In this study, the participants showed that if an entry of an idiomatic and/or figurative expression did not already exist, then they were unable to retrieve it. The participants referred to their native language as a strategy to help them both identify and deduce the meaning of the idiomatic and/or figurative expressions. If they could recall a similar expression that already existed in their native language, it was easier for them to identify and deduce the meaning of the expression. This aligns with Liontas' VP Idioms and the way L2s comprehend idioms based on native language similarity. The results of this study showed that the images in the comics and comic strips helped provoke participants' verbal memory, which assisted in participant recall of the idiomatic and/or figurative expressions. In addition, many of the participants felt the images were helpful in assisting with both identifying and deducing the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips.

Third, the results of this study align well with Mayer's (2009) *Cognitive Theory of Multimedia Learning*, which sets forth 12 principles of multimedia learning. Mayer's temporal contiguity principle, multimedia principle, and personalization principle support the implementation of comics and comics strips in the teaching of idiomatics. Mayer's temporal

contiguity principle suggests that optimal learning takes place when words and pictures are presented simultaneously as opposed to presenting them in succession. Showcasing idiomatic and/or figurative expressions depicted in comics and comic strips, which combine images and text, align with Mayer's temporal contiguity principle. Similarly, Mayer's multimedia principle of multimedia learning is supported by the use of comics and comic strips in idiomatics learning. Mayer's multimedia principle states that optimal learning takes place from words and pictures as opposed to just words alone. When L2 learners are presented with idiomatics embedded in comics/comic strips, learning is maximized by the use of both written and visual contexts. Moreover, Mayer's personalization principle, which posits that optimal learning takes place when words are presented in conversational style rather than formal style, is further supported by incorporating comics and comic strips in idiomatics learning and comprehension. Comics and comic strips showcase characters in natural settings where speech is fluid and unforced, revealing several teaching moments of idiomatic and/or figurative expressions being used in everyday conversations.

Summary

In this chapter, adopting a descriptive and exploratory approach, I presented the results of the four participant tasks—the Pre-Study Questionnaire, the Comic Idiomatics Task, the Post-Study Questionnaire, and the Post-Study Semi-Structured Interview. First, I presented the results of the participants' demographic information, English language experience, and knowledge of and exposure to idiomatic and/or figurative expressions. This was followed by the results of the Comic Idiomatics Task, indicating that the native English-speaking doctoral students performed

differently than the non-native English-speaking doctoral students in identifying and deducing the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips.

Then, I conducted thematic analysis on the participant think-alouds. I discovered similarities in the strategies/techniques used to identify and deduce the meaning of the idiomatic and figurative expressions embedded in the comics/comic strips by both the doctoral non-native English-speaking students and the doctoral native English-speaking students. I found that the doctoral non-native English-speaking students used context clues, recollection, guessing, and referring to their native language, while the doctoral native English-speaking students utilized context clues, recollection, and guessing.

Next, I presented the results of the Post-Study Questionnaire and the Post-Study Semi-Structured Interviews. The Post-Study Questionnaire revealed important participant strategies/techniques used in identifying and figuring out the meaning of the idiomatic and/or figurative expressions, as well as their overall feelings about the study. I discovered that these strategies/techniques were similar to what I found after conducting thematic analysis on participants' think-alouds during the Comic Idiomatics Task.

Finally, the results of the Post-Study Semi-Structured Interviews revealed beneficial insights into the strategies/techniques employed by the non-native English-speaking doctoral students when attempting to identify and glean the meaning of idiomatic and/or figurative expressions in the comics and comic strips. I conducted thematic analysis, similar to the think-alouds for the Comic Idiomatics Task and the Post-Study Questionnaire. I discovered similar results regarding idiomatics strategies/techniques as shown in the previous tasks—referring to their native language and relying on context clues. This study confirms Vygotsky's (1978)

Sociocultural Theory as it applies to socially constructed objects. In addition, it supports Liontas' (1999, 2002c) *Transactional Idiom Analysis* (TIA), Liontas' (1999, 2002b) *Idiom Diffusion Model of Second Languages*, and Mayer's (2009) *Cognitive Theory of Multimedia Learning*.

CHAPTER 5

CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS

Introduction

In this study, I followed a descriptive-exploratory approach to both explore and examine second language learners' understanding of idiomatics employed in comics and comic strips. In addition, I provided an analysis of the strategies and/or techniques used by doctoral students studying SLA to identify and deduce the meaning of idiomatic and/or figurative expressions depicted in comics/comic strips. In this final chapter, I present a summary of the results, pedagogical implications, limitations, and recommendations for future research.

Summary of Results

It is clear from the results of the study that second language learners face challenges in identifying and deducing the meaning of idiomatics employed in comics and comic strips. This, in turn, suggests a need for developing a curriculum that addresses those challenges. By looking closely at the strategies/techniques that doctoral students studying second language acquisition use to identify and deduce the meaning of idiomatics embedded in comics and comic strips, I uncovered several important insights into the learning and comprehension of idiomatics through comics and comic strips. One, there is a clear need to teach idiomatics. This is evidenced by the gap in performance between the doctoral non-native English-speaking students and the doctoral native English-speaking students. Two, the strategies/techniques used by both the doctoral non-native English-speaking students.

native English-speaking students and the doctoral native English-speaking students were similar. This shows that the processing of idiomatics among native English-speaking students and second language learners are more similar than they are different. Three, teachers can implement the strategies/techniques gleaned from this study such as utilizing context clues, recollection, and background knowledge in the teaching of idiomatics in the second language classroom.

Pedagogical Implications

The results of this study may prove useful to second and foreign language teachers, educators, and anyone in the field of second language acquisition. Pedagogical implications surround the following five concepts: the need to teach idiomatics, the teaching of idiomatics through authentic material, teaching L2 learners strategies in identifying and deducing the meaning of idiomatic and/or figurative expressions, incorporating multimedia, and empowering students.

Why Teach Idiomatics? In order for second language (L2) learners to effectively partake in social situations, ranging from talking amongst colleagues at work or in the classroom to the ability to order food at the local fast-food restaurant, L2 learners need a certain amount of idiomatic control; they need to understand sociocultural norms. Take for example, the idiomatic expression it's on me. Depending on the context, it's on me denotes two very different things. In the United States, saying it's on me (I will pay for it) is commonplace when at a restaurant and the person expressing it wants to pay for the meal. Conversely, it's on me signifies "I am responsible" when someone makes a mistake and admits responsibility. Consider the following conversation between a husband and wife:

Wife: Why is there garbage in the front yard?

Husband: Oh! No!

Wife: I will go clean it up.

Husband: No. I will. It's on me. I am the one who forgot to put the lid on the garbage bin. For a non-native speaker, it's on me may be incomprehensible. A non-native speaker who never had previous exposure to this idiomatic expression and its correct usage based on context may find themselves in a difficult predicament. It may take repeated misunderstandings for that nonnative speaker to discern the true meaning of it's on me. It is incidences like these that make control of idiomatics such an important aspect of day-to-day social interactions and a call to action for idiomatics to become a mainstay in the second language classroom.

Provide Authentic Materials. Formal instruction of idiomatics through the implementation of authentic materials—materials produced by native speakers for native speakers—in the L2 classroom must be considered if the SLA field wishes to emphasize proficiency-oriented approaches that take into account real-world contexts. Comics and comic strips can provide L2 learners with authentic material that are relatable and relevant. They present language in its organic state. Comics and comic strips are readily accessible either online or in paper format, making implementation practical and cost effective. I am in no way diminishing the importance of introducing varied texts such as literary novels and essays in the second language classroom, but rather to emphasize the relevance of material that represent everyday language and speech, and in a medium that speaks to its audience.

As Liontas (2018b) states, "...a major role in successful interaction is played by communicative context and pragmatic knowledge" (p. 4). Liontas references the ability to understand and detect the communicative undertones of a conversation, the true meaning of a conversation based on its context. For example, the idiom keeping up with the Joneses (to try and do what your neighbor is doing even if you do not have the resources) is a very common American idiom that originated from a popular 1913 comic strip which also holds its title (Jones, 2014). Most L2 learners presented with this idiom for the first time would not understand its meaning, not to mention that it is an idiom. What may happen instead is that the learner becomes embarrassed, gets lost in the conversation, or worse shuts down. As a way to avoid these awkward social situations, L2 teachers should introduce authentic material that showcase real language.

Frequency and salience of features, as noted by Chi (2018), are additional key factors to consider. According to Chi (2018), "learners' noticing of certain features in input is influenced by numerous factors...namely frequency and salience of features" (p. 7). Introducing authentic language examples in the L2 classroom exposes L2 learners to the high frequency and prevalence of idiomatic and figurative language in everyday speech. This can be accomplished by ongoing exposure to authentic material that highlights idiomatic usage. Once students are aware of idiomatic and figurative language, they then can begin to notice them. This *noticing* originates from Richard Schmidt's (1990, 2001) *Noticing Hypothesis* where he states, "noticing is the basic sense in which we commonly say that we are aware of something...We can reflect on the objects of consciousness and attempt to comprehend their significance, and we can experience insight and understanding" (Schmidt, 1990, p. 132). Once students are made aware and start noticing, then input can begin and eventually progress into output.

It is through consistent and continuous exposure to idiomatic and figurative language that students can first become aware, then notice, and finally have the opportunity to internalize and produce them. This requires frequent and ongoing exposure to idiomatics, along with continuous opportunities for practice in real-life scenarios.

Idiomatics Identification and Meaning Strategies. Based on the results of this study, there are several strategies that can be used to teach L2 idiomatics through comics and comic strips.

- Contextualize the graphic. Teachers can help their students contextualize the graphic. That is, they can assist students in placing the graphic in a context or setting—looking at the images and text to figure out the circumstances surrounding the comic/comic strip.
- Evoke and strengthen background knowledge. When presenting a comic or comic strip to students for the first time, it is important to find out what the students already know (background knowledge). Teachers can assist students in evoking prior knowledge by asking direct questions concerning the comic/comic strip.

 This, in turn, can be used to strengthen students' background knowledge, helping them to use that knowledge in order to figure out what is happening in the comic/comic strip.
- *Identify context clues*. Teachers can help students identify context clues within the comic/comic strips that are useful in identifying and deducing the meaning of idiomatic and/or figurative expressions. This includes discussing which context clues are helpful and which are not, eliminating students' focus on distractors in the comic/comic strip.
- Introduce key words. Introducing key words and their definitions are important factors in assisting students with identifying and deducing the meaning idiomatic and/or figurative expressions depicted in comics/comic strips. It may be helpful to provide a list of key words and have students define them as they look at the comic/comic strip.

• *Discuss function and purpose*. Students need to understand the function and purpose behind the comic/comic strip. The comic/comic strip serves a function or role. The creator of the comic/comic strip (cartoonist) also has a purpose, an objective or goal, in mind when creating the comic/comic strip. Teachers should discuss the reasoning behind the choice of comic, such as why the cartoonist utilized a specific format, characters, images, or text.

Figure 18 is an example of a comic strip by Robb Armstrong ("GoComics," n.d.), with permission from Andrews McMeel Syndication, that can be used to teach idiomatics, employing the above strategies.



Figure 18. Jump Start Comic Strip

First, contextualize the graphic. Teachers can begin by asking questions such as What is happening in the graphic? Can you identify the idiomatic expression(s) depicted in the comic strip? What do the images tell you? Where is this taking place? What are the characters discussing? Second, evoke and strengthen background knowledge. Questions may include: What

do you know about COVID-19? How has COVID-19 impacted your life? How has COVID-19 impacted this country and the world? Third, identify context clues. Questions such as What clues help you to identify and figure out the meaning of the expression(s) in the comic strip? Why are both women wearing masks? What features (e.g., specific words, images, actions, or body language of the characters) of the comic strip help you deduce the meaning? Fourth, introduce key words. Teachers can make a list of key words (infectious, pandemic, hindsight) and introduce them to students prior to showing the comic strip or they can ask the students to produce a list of key words themselves. Fifth, discuss function and purpose. Questions may include: Why did the cartoonist chose this topic? What message is the cartoonist trying to convey? What makes this funny?

Incorporate Multimedia. Authentic examples of idiomatic/figurative language usage are readily available and omnipresent in daily life. Simply turning on the television will yield a multitude of examples of idiomatic and figurative language being used in news broadcasts, commercials, television series, and movies. For instance, in the popular movie series, Harry Potter, many idiomatic expressions are employed, such as it's no good crying over spilt potion (Heyman & Yates, 2007). This is a great opportunity as a teacher to point out that it's no good crying over spilt potion is a play on it's no good crying over spilt milk, which means there is no point getting upset over something that has just happened and cannot be changed. The common American idiom get off on the wrong foot (to start something badly) is another good example. Its usage can be found across several popular television shows, such as Grey's Anatomy, Scrubs, How I Met Your Mother, The Simpsons, and Dexter (English ByClips, 2015). Showing video clips of idioms used in everyday conversations affords several teaching opportunities. Namely, students can be asked to identify idiomatic expressions used in the conversations and attempt to

comprehend the meaning of the expressions based on social cues. Providing students with authentic examples of social interactions and dialogues that incorporate idiomatic/figurative language usage are key elements to idiomatics learning, comprehension, recall, and retention.

Employing real world examples of idioms in the L2 classroom through audiovisual contexts, such as those found in popular movies or television series, give L2 learners a realistic and relevant snapshot of authentic language use. Furthermore, it capitalizes on the entertainment value of movies and multisensory technology. L2 learners are immersed in the language; they can see and hear what is going on, paying attention to facial expressions and body language.

Another added plus may be the inclusion of subtitles when watching videos. A study by Frumuselo, Maeyer, Donche, and Del Mar Gutiérrez (2015) revealed that the use of subtitles when viewing videos embedded with informal language, such as idioms, facilitated colloquial and informal language learning. These multimodal learning opportunities give L2 learners an *en vivo*, or live, language experience. Multimodal learning has the potential to benefit all types of learners, appealing to visual, auditory, and kinesthetic learners alike.

Empower Students. One of the cornerstones of sociocultural theory is its emphasis on socially mediated activities. In the second language classroom, the role of the teacher is to mediate learning; it is the role of the teacher to support the learners' development. For this mediation to be effective, goal-directed teaching strategies need to be implemented. These goal-directed strategies need to be fueled by practical, relevant material and should empower students.

Producing comic strips provides many opportunities for student engagement, interaction, and collaboration in the second language classroom, while strengthening reading and writing skills. The act of creating—the sixth level of Bloom's (1956) Taxonomy—puts students in the driver's seat where they control their own learning. It builds confidence and promotes agency.

By encouraging students to take control of their own learning, they become active participants. Not only can learning be fun, but it holds students accountable for their own learning and empowers them. Learning is relevant and real. The potential benefits abound when students are given the opportunity to personalize their learning experience.

Pixton is a website where students and teachers have the ability to create their own online comic strips. Pixton offers free student accounts where they can create comic strips to print, download, or share over the web. A free trial is available for teachers to peruse the site. The teacher account includes the ability to set up a classroom account so teachers can view students' work and check their progress. After the free trial, teachers may utilize the site with monthly fees starting as low as \$8.99 per month for 25 students. Access to Pixton's lesson plan library, the ability to collaborate with other teachers, and a grading rubric are additional features available on Pixton. Pixton's interface is user friendly, making it easy for students to create the layout of their comic strips, including the option to choose their own backgrounds and characters. In addition, Pixton supports the integration of multimedia through sound files. These sound files can be uploaded from the computer or microphone to add audio to the comic strips. Pixton can be beneficial as a collaborative tool to promote group interactions, socialization, and increase student engagement in the classroom. The ability to share a comic strip by simply copying a link makes collaborating easy and quick. Students can work together in pairs or in small groups and create their own comic strips. Once completed, groups can share their comic strips with one another and provide critical feedback. For example, students can be asked to create an original story centered around an authentic scenario, such as ordering food at a local restaurant. Students can be asked to introduce the characters, describe the setting, present the conflict, and provide a resolution. Students can be given a list of five VP Idioms to include in their original story.

Students can rely on one another to solve any conflicts within groups and work together to create their original story. There should be minimal intervention from the teacher. The teacher will be present to answer clarifying questions, but not to assist in students' creative process.

Discoveries

Delimitations are the boundaries of a study. The delimitations in this study included my objectives, research questions, theoretical objectives, sample size, geographical location, university setting, and population studied.

As with any study, limitations are certain to be present. This study was no exception. There were four limitations to this study. First, any conclusions or discoveries resulting from this study are limited to the population being studied; that is, the doctoral native and non-native English-speaking students from the TESLA program at the University of South Florida who volunteered for the study. As such, these findings will not be generalizable and, furthermore, will not apply to "other" doctoral students, such as those enrolled in a doctoral program outside of SLA (e.g., engineering or biology). Second, the potential impact of a participants' cultural background was not considered in this study as it relates to idiomatics. Cultural background was not taken into consideration in this study as idiomatics differs from culture to culture and does not transfer from one culture to the next. Said another way, there is no uniform manner in which idiomatic and figurative language can be interpreted in the exact same manner across cultures. Moreover, because different cultures are unique in the way in which they perceive and experience language, a participants' cultural lens is certain to affect both the learning and comprehension of idiomatics. Third, hermeneutics needs to be taken into account. According to Schmidt (2006),

hermeneutics is the art of understanding what another means by her expressions in language. One needs to know about the language the author used: the grammatical side. One also needs to understand how the author thinks with reference to her particular culture and historical time: the psychological side. (p. 14)

Being aware of both sides—the grammatical and the psychological—are crucial to understanding a person's perspective or take on an event. Every person is unique in the way in which they interpret the world. This can be reflected in different life experiences, upbringing, religious and/or political beliefs, epistemological stances, or ways of thinking and perceiving the world around them. Just as a person's cultural lens is certain to affect their interpretation of idiomatics, so may a person's personal interpretation. Fourth and final limitation, this study was limited by the number of participants who volunteered for this study and the materials themselves. Twenty-one participants volunteered for this study and I utilized nine comics/comic strips. I based the assertions made in this dissertation on the students that were available to me and the materials I used.

Future Recommendations

After conducting this study, I found areas for further examination and exploration. These areas include incorporating print and non-print material in the teaching and learning of L2 idiomatics, conducting different research studies (e.g., quantitative, qualitative, or mixed-methods) on the learning and comprehension of L2 idiomatics in comics and comic strips, and exploring L2 idiomatics recall, retention, and production.

A review of the literature demonstrates a need for more research on the effects of multimedia contexts in idioms learning, promoting multimodal learning. For example, the

current literature suggests that audiovisual contexts do indeed benefit and enhance idiom learning (Almashikhi, 2018; Freyn & Gross, 2017; Frumuselu, De Maeyer, Donche, & Plana, 2015; Khonbi & Sadeghi, 2017; Khoshniyat & Dowlatabadi, 2014; Li & Hew, 2017; Müller, Son, Nozawa, & Dashtestani, 2018; Neissari, Ashraf, & Ghorbini, 2017; Tabatabaei & Gahroei, 2011; Yang & Xie, 2013), and that second language learners enjoy learning in both audio and visual settings (Liontas, 2002a; Tabatabaei & Gahroei, 2011). This could be extended to the teaching and learning of idiomatics. Future research could employ both audio and visual elements in the teaching and learning of idiomatics. When considering the image-provoking feature of Liontas' (1999, 2002a) *VP idioms* and Mayers (2009) *Cognitive Theory of Multimedia Learning*, together they may prove to be quite compelling in support of idiomatics learning through audiovisual contexts.

Future studies may want to incorporate different research approaches that take a deeper look at the learning and comprehension of L2 idiomatics in comics and comic strips, such as combining quantitative and qualitative data. According to Johnson, Onwegbuzie, and Turner (2007), "mixed methods research is, generally speaking, an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research)" (p. 113). A mixed-methods approach could explore whether there is a significant difference in employing comics and comic strips in idiomatics learning and comprehension. In addition, other learning conditions could be included, such as idiomatics in news broadcasts/articles/newspapers, idiomatics in movies/television shows, idiomatics in novels, idiomatics in advertisements, or idiomatics across social media.

Future studies could examine lexical and semantical similarities of idiomatics across different languages. Liontas' *Idiom Diffusion Model of Second Languages* (1999, 2002b) showed that second language learners process idioms faster when there is either a one-to one match (LL or lexical-level idioms) or similar match (SLL or semi-lexical level idioms) in their native language. This "lexical/image continuum" (Liontas, 1999, p. 42)—the comprehension continuum from a lexical-level to a post-lexical level— could be applied to the teaching of L2 idiomatics. Future studies could also explore L2 idiomatics recall, retention, and production. This includes examining input (see Krashen, 1978), intake (see Liontas 1999, 2002b, 2002c), and output (see Swain, 1985). Capitalizing on the potential that *VP idioms* (Liontas 1999, 2002b) have on the ability to stimulate verbal recall from mental imagery, further research may show that idiomatics learning is enhanced through the use of *VP idioms* as opposed to the usage of opaque idioms (more abstract idioms) to encourage learner recall and retention.

Here are some guided questions that may be useful for future research.

- In what ways do comics and comic strips facilitate the learning of idiomatics?
- What specific features of comics and comics strips help second language learners to understand idiomatics?
- Does the lexical-image distance between a learners' native language and second language affect the comprehension of idiomatics?
- What role does humor play in idiomatics comprehension?
- How do comics and comic strips improve L2 learners' production of idiomatics?

Final Thoughts

Comics and comic strips intertwine language and culture, providing a good representation of its social community by promoting social awareness. Language involves more than just words, it involves facial expressions, gestures, and body language. Comic strips provide all of these features with its rich images and text, reinforcing the notion of communicative competence. This is especially important for L2 learners who are faced with attempting to deduce meaning from idiomatic and figurative language they encounter for the very first time. Comics and comic strips may provide much needed humor to diffuse anxiety and stress in the second language classroom. They have a playful quality that is beneficial to creating and establishing a positive teaching environment, and may offer a welcoming comic relief. This, in turn, may result in L2 learners who are more open and receptive to learning.

The teaching of idiomatics requires a curriculum that includes idiomatics instruction from the beginning and not just as an ancillary assignment, but one that is interwoven into the curriculum for continued assessment. It is my opinion that current SLA pedagogy does not dedicate enough time to the teaching of idiomatics. Furthermore, many current foreign language textbooks used at the tertiary level do not even include idiomatics as a topic of discussion (see Blanco & Donley, 2018).

In sum, considering the ubiquitous nature of idiomatics in everyday language, it behooves the SLA profession to consider prioritizing the teaching of idiomatics in the second language curriculum. Comics and comics strips may provide an additional and complementary pedagogical tool to enhance idiomatics learning and comprehension among second language learners. Making the case for implementing idiomatics in the second language classroom requires a buy-in from educators themselves. If teachers are not on board with the benefits of

idiomatics instruction in their L2 classroom, then implementation will find no success and idiomatics will become just *candles in the wind*.

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APPENDIX A

PRE-STUDY QUESTIONNAIRE

Purpose: The purpose of this questionnaire is to obtain information on demographics, English language experience, and exposure to idiomatic and figurative language.

Instructions: After carefully reading the following statements/questions, please indicate your response below.

I. Demographic Information

(Q)	uestions 1-5 refer to your personal background.)
1.	Name (First):
2.	Age (number):
3.	Sex: Male Female
4.	Current year in doctoral program?
	1 st year
	2 nd year
	3 rd year or higher
5	How long have you lived in the United States?
٦.	year (s)

II. English Language Experience

III.

(Questions 6-9 refer to your experience with the English language.)		
6.	Is English your 1st language? (If answer is Yes, please skip to Question #9.)	
	Yes No	
7.	Please indicate your first language:	
8.	How many semesters of college classroom experience do you have with English?	
	3 or more semesters 1-3 semesters No college classroom experience	
9.	How often do you read an American newspaper (in print or online)?	
	3 or more times a week	
	1-3 times a week	
	Never	
Knowledge of and Exposure to Idiomatic and/or Figurative Expressions		
	(Questions 10-20 refer to your experience with idiomatic and/or figurative	
	expressions.)	
10	. How do you define an idiomatic expression?	
11	. How do you define a figurative expression?	
12	. Have you ever been exposed to this knowledge? Yes No If Yes, please describe	

13.	Would you be interested in learning about idiomatic and/or figurative expressions as
	part of your English language study?
	Yes No
14.	Do you see comics being different from comic strips?
	Please describe
15.	Are comics and/or comic strips commonly used in your home culture?
	Yes No
16.	How confident are you in your ability to identify and figure out the meaning of an
	idiomatic and/or figurative expression depicted in comics/comic strips?
	Very confident
•	Confident
	Moderately confident
	Not confident
	Do you think it is important to learn about idiomatic and/or figurative expressions? Yes No
18.	Have you ever been in a situation where your lack of understanding of idiomatic
i	and/or figurative expressions has caused you embarrassment?
	Yes No
	If Yes, please describe

19. Would you be interested in learning about idiomatic and/or figurative expressions
through the use of comics and comic strips?
Yes No
20. Are there any other comments you wish to share at this time regarding comics, comic strips, idiomatic expressions, and/or figurative expressions?

Thank you for completing this questionnaire!

APPENDIX B

POST-STUDY QUESTIONNAIRE

Purpose: The purpose of this questionnaire is to obtain information on strategies/techniques used to identify and deduce the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips, along with your feelings about the study.

Instructions: A Likert scale ranging from Strongly Disagree to Strongly Agree is provided.

After reading each statement carefully, use the scale to indicate the degree in which you agree or disagree to the following questions. For the questions that ask you to provide additional information, your feedback is very much appreciated!

I. Idiomatics Identification

(Questions 1-4 refer to your ability to identify the idiomatic and/or figurative expressions depicted in the comics with images and no text.)

- 1. Did you find it challenging to identify the idiomatic and/or figurative expressions depicted in the comics with no text?
- 2. Did the images in the comics with no text help you to identify the idiomatic and/or figurative expressions?
- 3. Do you feel that the addition of text may have helped you to identify the idiomatic and/or figurative expression depicted in the comics with no text?

4. Did you use a specific strategy or technique to identify the idiomatic and/or figurative expressions? If yes, please describe.

(Questions 5-8 refer to your ability to identify the idiomatic and/or figurative expressions depicted in the comics with images and minimal text.)

- 5. Did you find it challenging to identify the idiomatic and/or figurative expressions depicted in the comics with minimal text?
- 6. Did the images in the comics with minimal text help you to identify the idiomatic and/or figurative expressions?
- 7. Did the text in the comics with minimal text help you to identify the idiomatic and/or figurative expressions?
- 8. Did you use a specific strategy or technique to identify the idiomatic and/or figurative expressions? If yes, please describe.

(Questions 9-12 refer to your ability to identify the idiomatic and/or figurative expressions depicted in the comic strips with both images and text.)

- 9. Did you find it challenging to identify the idiomatic and/or figurative expressions depicted in the comic strips?
- 10. Did the images in the comic strips help you to identify the idiomatic and/or figurative expressions?
- 11. Did the text in the comic strips help you to identify the idiomatic and/or figurative expressions?
- 12. Did you use a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions? If yes, please describe.

II. Idiomatics Meaning

(Questions 13-16 refer to your ability to deduce the meaning of the idiomatic and/or figurative expressions depicted in the **comics with images and no text**.)

- 13. Did you find it challenging to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with no text?
- 14. Did the images in the comics with no text help you to figure out the meaning of the idiomatic and/or figurative expressions? Please rate helpfulness.
- 15. Do you feel that the addition of text may have helped you to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with no text?
- 16. Did you use a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with no text? If yes, please describe.

(Questions 17-20 refer to your ability to deduce the meaning of the idiomatic and/or figurative expressions depicted in the **comics with images and minimal text**.)

- 17. Did you find it challenging to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with minimal text?
- 18. Did the images in the comics with minimal text help you to figure out the meaning of the idiomatic and/or figurative expressions?
- 19. Did the text in the comics with minimal text help you to figure out the meaning of the idiomatic and/or figurative expressions?

20. Did you use a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comics with minimal text? If yes, please describe.

(Questions 21-24 refer to your ability to deduce the meaning of the idiomatic and/or figurative expressions depicted in the comic strips with both images and text.)

- 21. Did you find it challenging to figure out the meaning of the idiomatic and/or figurative expressions depicted in the comic strips?
- 22. Did the images in the comic strips help you to figure out the meaning of the idiomatic and/or figurative expressions?
- 23. Did the text in the comic strips help you to figure out the meaning of the idiomatic and/or figurative expressions?
- 24. Did you use a specific strategy or technique to figure out the meaning of the idiomatic and/or figurative expressions in the comic strips? If yes, please describe.

III. Study Impressions

(Questions 25-27 refer to your **feelings** about identifying and deducing the meaning of the idiomatic and/or figurative expressions depicted in the comics and comic strips.)

- 25. Did you enjoy partaking in this study? Why or why not?
- 26. Did you feel frustrated during any part of this study? If yes, please explain.
- 27. Did you learn anything new from this study? If yes, please explain.

Thank you for completing this questionnaire!

APPENDIX C

POST-STUDY SEMI-STRUCTURED INTERVIEW SCRIPT

- 1. Were the comics and comic strips helpful in identifying the idiomatic and/or figurative expressions? Why or why not?
- 2. What strategies did you use to identify the idiomatic and/or figurative expressions depicted in the comics and comic strips?
- 3. Once you found the idiomatic and/or figurative expressions depicted in the comics and comic strips, were you able to understand and/or decipher their meanings?
- 4. Were there any features (e.g., specific words, images, actions, or body language of the characters) in the comics and comic strips that helped you determine the meaning of the idiomatic and/or figurative expressions? If yes, what were they? If not, what didn't help?
- 5. Did you enjoy locating the idiomatic and/or figurative expressions found in the comics and comic strips? Why or why not?
- 6. If you had to offer 2-3 suggestions on helping students identify idiomatic and/or figurative expressions and comprehend their meanings based on this activity, what would they be?
- 7. Do you think using comics and comic strips to teach idiomatic and/or figurative expressions is a worthwhile investment of time and effort? Why or why not?

APPENDIX D

ONLINE INSTRUMENTS

CIT: Task Instructions

- You will be presented with a total of nine comics/comic strips. Each comic/comic strip will depict an idiomatic and/or figurative expression(s). You will be asked to identify and define the expression(s) therein. Each comic/comic strip will be presented one at a time.
- The entire task should take about 15 minutes. Each comic will show the time allotted (from one minute to two minutes). You will be asked to think aloud during this entire task.

Thinking aloud is verbalizing out loud what you are thinking as you are thinking when solving a problem or answering a question. In other words, saying what are you are thinking, including any difficulties you are having and any strategies or techniques you are using when attempting to figure out the answer.

 As you see each comic/comic strip, express your thoughts in as much detail as possible. Feel free to point out a specific image, character, or word that is helping you identify or figure out the meaning of the idiomatic and/or figurative expression(s) depicted in the comic/comic strip.

- As soon as you are able to identify the idiomatic or figurative expression, say it out loud. If you know what that idiomatic or figurative expression means, then say it out loud as well.
- If you are able to identify and define the idiomatic or figurative expression(s) depicted in the comic/ comic strip before the time allotted, I will be there to introduce the next slide.

- If you are unable to identify or define the idiomatic or figurative expression(s), feel free to say so. If you do not know the expression or its meaning, just try your best, but feel free to also offer your best educated guess.
- I have included two samples with think alouds.

APPENDIX E

IRB FORMS



EXEMPT DETERMINATION

November 5, 2020

Luz-Ayde Himelhoch 3933 Drayton Way Palm Harbor, FL 34685

Dear Mrs. Himelhoch:

On 11/4/2020, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY001662
Review Type:	Exempt 2
Title:	Comics and Comic Strips in SLA: Idiomatics and
	Sociocultural Theory
Funding:	None
Protocol:	Himelhoch Protocol, Version #1, 11/03/20;

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Institutional Review Boards / Research Integrity & Compliance FWA No. 00001669

University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

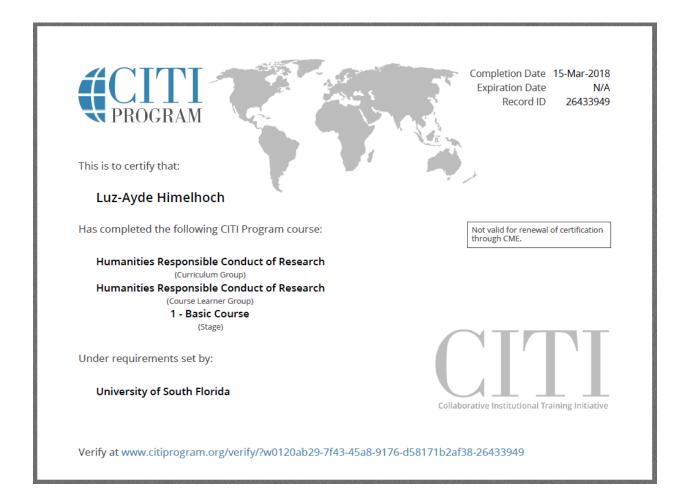
Page 1 of 2



Sincerely,

Various Menzel IRB Research Compliance Administrator

Completion Certificate of Humanities Responsible Conduct of Research Course





Informed Consent to Participate in Research

Information to Consider Before Taking Part in this Research Study

Title: Comics and Comic Strips in SLA: Idiomatics and Sociocultural Theory

Study # STUDY001662

Overview: You are being asked to take part in a research study. The information in this document should help you to decide if you would like to participate. The sections in this Overview provide the basic information about the study. More detailed information is provided in the remainder of the document.

<u>Study Staff</u>: This study is being led by Luz-Aydé Himelhoch, a PhD student at the University of South Florida. This person is called the *Principal Investigator*. She is being guided in this research by Dr. John I. Liontas, Director of the TESLA doctoral program. Other approved research staff may act on behalf of the Principal Investigator.

Study Details: This study is being conducted at the University of South Florida, College of Education, Department of Teaching and Learning, and is supported by Dr. John I. Liontas, Director of the TESLA doctoral program. The purpose of the study is to explore second language learners' understanding of idiomatics employed in comics and comic strips. The research will include a 20-minute pre-study questionnaire where you will be asked about your demographic information and interest in idiomatics learning, a 20-minute Comic Idiomatics Task where you will be asked to identify idiomatic and/or figurative expression(s) depicted in comics and comic strips, a 30-minute post-study questionnaire where you will be asked about challenges in identifying and deducing meaning of the idiomatic and/or figurative expression(s) depicted in the comics and comic strips, and the possibility of a 30-minute post-study semi-structured interview (five to six non-native English speakers will be randomly selected) where you will be asked about your thoughts and perceptions on your ability to identify the idiomatic and/or figurative expression(s) in the comics and comic strips.

<u>Participants</u>: You are being asked to take part in this study because you are either a native-speaker or a second language learner. We want to see if you can identify and define idiomatics embedded in comics and comic strips.

<u>Voluntary Participation</u>: Your participation is voluntary. You do not have to participate and may stop your participation at any time. There will be no penalties or loss of benefits or opportunities if you do not participate or decide to stop once you start. Your decision to participate or not to participate will not affect your job status, employment record, employee evaluations, or advancement opportunities. Your decision to participate or not to participate

will not affect your student status, course grade, recommendations, or access to future courses or training opportunities.

<u>Benefits, Compensation, and Risk</u>: We do not know if you will receive any benefit from your participation. There is no cost to participate. You will not be compensated for your participation. This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life.

<u>Confidentiality</u>: Even if we publish the findings from this study, we will keep your study information private and confidential. Anyone with the authority to look at your records must keep them confidential.

Why are you being asked to take part?

You are being asked to take part in this study to determine if comics and comic strips can be used to facilitate idiomatics comprehension in second language learners.

Study Procedures

If you take part in this study, you will be asked to complete four tasks: a pre-study questionnaire, a Comic Idiomatics Task, a post-study questionnaire, and a post-study semi-structured interview.

- You will be given a pre-study questionnaire to gather demographic information and interest in idiomatics learning. This should take about 20 minutes to complete and will be completed online via a Qualtrics survey.
- You will then complete a Comic Idiomatics Task, which will be conducted via Zoom, where you will be presented with nine comics/comic strips and asked to identify and define the idiomatic and/or figurative expression(s) depicted in each comic or comic strip. You will be asked to think aloud during this task so that your verbalizations and body language can be video recorded. As you see each comic or comic strip, express your thoughts in as much detail as possible. Please say anything and everything that comes to mind. This includes what you are thinking, difficulties you are having, and the strategies and/or techniques you are using to figure out what the idiomatic/figurative expression is and what it means. This task should take approximately 20 minutes.
- After completing the Comic Idiomatics Task, you will be given a post-study questionnaire that will ask about challenges in identifying and deducing meaning of the idiomatic and/or figurative expression(s) depicted in the comics and comic strips, along

with your overall feelings about the study. The post-study questionnaire will be completed online via a Qualtrics survey and should take about 30 minutes.

- You then may be asked (five to six non-native English speakers will be randomly selected) to partake in a post-study semi-structured interview, conducted via Zoom, where you will be asked about your thoughts and perceptions about how you were able to identify the idiomatic and/or figurative expression(s) (idiomatics detection strategies/techniques) in the comics/comic strips and your feelings about the study. The interview will last approximately 30 minutes, which will be video recorded.
- Video recording will be used during the Comic Idiomatics Task and the post-study semistructured interview. The principle investigator and faculty advisor will have access to these video recordings. The video recordings will be maintained for 5 years after the Final Report is submitted to the IRB and will be stored on the PI's password-protected computer. At the end of the 5 years, the digital data will be deleted from the PI's password-protected computer.

Alternatives / Voluntary Participation / Withdrawal

You do not have to participate in this research study. You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Decision to participate (or not participate) will not affect your student status (course grade) or job status.

Benefits and Risks

We are unsure if you will receive any benefits by taking part in this research study. This research is considered to be minimal risk.

The potential benefits of participating in this research study include:

learning about idiomatics; learning idiomatics detection strategies; learning to articulate your own thought process. As a native speaker, you will learn whether or not you are able to identify idiomatic and/or figurative expression(s) depicted in comics and comic strips. As a non-native speaker you will learn about your knowledge of English idiomatics and the process by which such knowledge may be accessed, processed, and, more importantly, interpreted.

Compensation

You will receive no payment or other compensation for taking part in this study.

Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- The research team, including the Principal Investigator and study coordinator.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- Any agency of the federal, state, or local government that regulates this research. This includes the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.

Your information or samples collected as part of the research, even if identifiers are removed, will NOT be used or distributed for future research studies.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

If completing an online survey, it is possible, although unlikely, that unauthorized individuals could gain access to your responses. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this online survey involves risks similar to a person's everyday use of the Internet. If you complete and submit an anonymous survey and later request your data be withdrawn, this may or may not be possible as the researcher may be unable to extract anonymous data from the database.

Data collected for this research will be stored on the PI's password-protected computer.

The following information may be used and disclosed to others:

• Performance task; pre-study survey demographic information and interest in idiomatics learning; post-study semi-structured interview impact on thinking (motivational angle)

Your personal information collected for this research will be kept as long as it is needed to conduct this research. Once your participation in the research is over, your information will be stored in accordance with applicable policies and regulations. Your permission to use your personal data will not expire unless you withdraw it in writing. You may withdraw or take away your permission to use and disclose your information at any time. You do this by sending written

notice to the Principal Investigator at the following address: Department of Teaching and Learning 4202 E. Fowler Avenue, EDU 105, Office 302E, Tampa, FL 33620-5650. While we are conducting the research study, we cannot let you see or copy the research information we have about you. After the research is completed, you have a right to see the information about you, as allowed by USF policies.

If you have concerns about the use or storage of your personal information, you have a right to lodge a complaint with the data supervisory authority in your country.

Contact Information

If you have any questions, concerns or complaints about this study, call Luz-Aydé Himelhoch at (727) 412-1771. If you have questions about your rights, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu

We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are. You can print a copy of this consent form for your records.

I freely give my consent to take part in this study. I understand that by proceeding with this survey, I am agreeing to take part in research and I am 18 years of age or older. https://usf.az1.qualtrics.com/jfe/form/SV_2ICJ0qpfXxk7ezr

APPENDIX F

RECRUITMENT EMAIL

Dear Doctoral Students from the TESLA program,

I would like to ask you, both native English speakers and non-native English speakers, from the TESLA (Technology in Education and Second Language Acquisition) program in the College of Education at the University of South Florida to partake in a research study titled, *Comics and Comics Strips in SLA: Idiomatics and Sociocultural Theory*. My name is Luz-Aydé Himelhoch and I am the Principal Investigator in charge of this research study.

The purpose of this study is to explore second language learners' (specifically those at the doctoral level studying SLA) understanding of idiomatics employed in comics and comic strips in order to inform the teaching and learning of idiomatics in second language acquisition. I am interested in knowing if you can identify and deduce the meaning of idiomatic and/or figurative expressions depicted in comics and comic strips.

Your participation is voluntary. You may decide not to participate in this study and may withdraw from this study at any time and for any reason. You do not need to provide an explanation.

You will be asked to complete three tasks: a pre-study questionnaire, a Comic Idiomatics Task, and a post-study questionnaire. The pre-study questionnaire and the Comic Idiomatics Task should each take about 20 minutes to complete. The post-study questionnaire should take about 30 minutes to complete. I plan to ask participants who are non-native English speakers (who will be randomly chosen) to participate in a post-study semi-structured interview, which should take about 30 minutes to complete. All participants will be sent a Qualtrics survey to complete the pre-study and post-study questionnaires. The Comic Idiomatics Task and the post-study semi-structured interview will be conducted via Zoom at a mutually agreed upon time, which will be video recorded.

Doctoral students from the TESLA program in the College of Education at USF are eligible to participate in this study. You will not be compensated. However, potential benefits for participating in this research study include learning about idiomatics, and your ability to identify and define idiomatics embedded in comics and comic strips.

If you are interested in participating in the three, potentially four tasks, please read the attached informed consent form. Once you have read the informed consent form and agree to participate in all the tasks, please click on the link (at the end of the Informed Consent)

to complete the Pre-Study Questionnaire. After completing the Pre-Study Questionnaire, please follow the Calendly link below to sign up for the Comic Idiomatics Task. If you have any questions/concern about this study, please do not hesitate to contact me.

Calendly Link: https://calendly.com/lhimelhoch1/comic-idiomatics-task

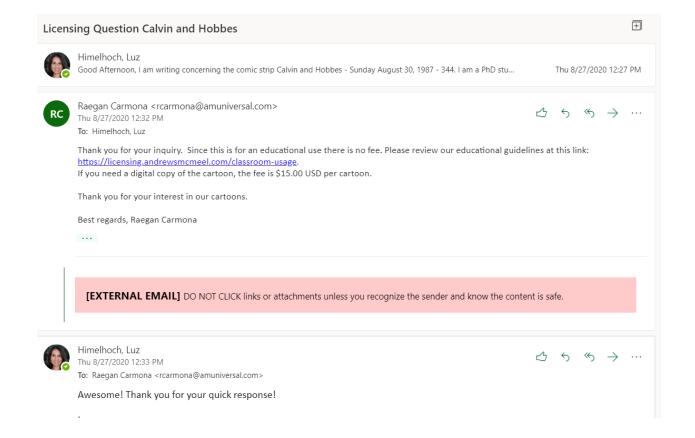


Sincerely,

Luz-Aydé Himelhoch Email: caballero1@usf.edu Telephone: (727) 412-1771

APPENDIX G

COMICS LICENSING



Classroom Usage Statement

There is no need to request permission if you wish to use a comic for educational or classroom usage. Classroom use refers to public and private schools (grade K-12), home schooling (grade K-12), college dissertations, college thesis papers and other restricted college usage only. Comics MAY NOT be used in presentations outside of the classroom, such as employee training, as handouts for non-student use, or in any manner that is not a classroom setting at the K to college level. All other uses will be charged a licensing fee. If your use falls under the classroom use as stated above, you may use up to seven (7) comics per year at no cost as part of our fair-use policy. If you wish to use more than seven, please contact us at universalreprints@amuniversal.com. There will be a fee of \$25.00 (USD) per comic over seven comics.