Where does pretend play go? A lifespan developmental perspective

By

Katherine E. Norman

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Educational Psychology)

at the

UNIVERSITY OF WISCONSIN-MADISON

2023

Date of final oral examination: 12/07/2023

The dissertation is approved by the following members of the Final Oral Committee:

Edward M. Hubbard, Associate Professor, Educational Psychology
Haley Vlach, Associate Professor, Educational Psychology
Mitchell Nathan, Professor, Educational Psychology
Erica Halverson, Professor, Curriculum & Instruction
Peter Wardrip, Assistant Professor, Curriculum & Instruction

Acknowledgements

Research is always a collaborative venture, and I am deeply grateful for the many collaborators who took part in the creation of this dissertation project.

Five years ago, Dr. Edward Hubbard took an extraordinary leap of faith and invited me into the EdNeuro Lab. Despite my wayward humanities background, he provided an academic home in which I could pursue questions about theatre, pretending, learning, and human development. I am forever grateful to have had an advisor with such generosity and curiosity. In another corner of campus, Dr. Erica Halverson built an artistic and educational community for so many graduate students. Thank you, Erica, for your mentorship in so many domains.

Thank you to the rest of my dissertation committee – Dr. Haley Vlach, Dr. Mitchell Nathan, Dr. Bradford Brown, and Dr. Peter Wardrip – for your ongoing time and support. Your feedback at each step of the project has made the work stronger.

Conducting interviews with more than 200 children at the Wonderground took a small legion of collaborators. I am grateful to the leadership team at the Madison Children's Museum, particularly Brenda Baker and Nadia Niggli, who invited us into their space. Dr. Peter Wardrip, Tarah Connolly, and Caleb Probst comprised the initial museum evaluation team and enriched my thinking about research in museum settings. The team that conducted interviews with children at the Wonderground included Abigail Young, Grace Pausma, and Audrey Burke, each of whom approached the work with a deep respect for our young participants. The Wonderground study would not exist without their dedication and thoughtfulness.

In addition to my gratitude for the research partners involved in this project, I am also hugely thankful to the many research participants who shared their thoughts and experiences. The opportunity to speak about this topic with so many people was an honor, and I have sought to meaningfully represent their stories.

This project also owes a debt of gratitude to my graduate student colleagues and friends. Thank you for all the writing groups, coffee, drinks, commiseration, inspiration, and friendship. Thank you to Kailea Saplan and Molly Mattaini not only for all the items in the preceding list, but also for manifesting the best of what cross-disciplinary collaboration can be.

Thank you, Dr. Scott Mckenna Campbell. His brilliant editing and insights have elevated this entire project, and his brilliant self elevates all my days.

Much of the text of this dissertation was generated during my first year at a new job. I am so appreciative of my new colleagues at the Utah Shakespeare Festival and Southern Utah University for making me feel welcome in a new place.

Finally, I share gratitude for my wonderful family. My parents spent their careers in early childhood and high school physics classrooms. They taught me to think like a scientist, to value and listen to every student, and to believe that our work can make a positive impact on the world. My approach to research – and life – is inspired by the example they set.

Table of Contents

Abstract ..... **iv**
Introduction **1**
I. A Few Anecdotes 1
II. Introduction 3
III. Research Questions 5
IV. Dissertation Structure 6
V. Dissertation Design & Guiding Methodology 8
Chapter 1: Context, Theory, and Relevant Literature **15**
I. History, Major Theories and Theorists, and Research Trends 15
II. A Brief History of Early Writing on the Topic 16
III. Foundational Theorists: Piaget and Vygotsky 17
IV. The 1970s: Describing Pretend Play 21
V. The 1990s to Now: What is Pretend Play *for*? 23
V.1 Theory of Mind 24
V.2 Executive Function 26
V.3 Counterfactual reasoning 27
V.4 Language and Early Literacy 28
VI. Evidence for Pretend Play Beyond Early Childhood 28
VII. The Internalization of Pretend Play 31
VII.1 The Development of Private Speech as Analogous to Pretend Play 32
VII.2 Pretend Play and Gesture 36
Chapter 2: Defining Pretend Play **39**
I. The Pretense Debate: Behavioral, Mentalistic, or a Possible World? 39
II. Defining Pretend Play 42
III. The Importance of Play to Pretend Play 44
IV. Pretense as a Spectrum of Behavior 48
V. Operationalizing the Construct 51
V.1 Anecdotal Examples 52
VI. Closing Thoughts 56
Chapter 3: Pretend Play in Childhood: *I was a princess and Daddy was a guy named Josh* **58**
I. Introduction 58
II. Methods 60
II.1 Participatory Action Research 60
II.2 Setting 61
II.3 Data Collection Protocol 65
II.4 Coding and Interpretation 69
II.5 Participants 73
III. Results & Discussion 76
III.1 Design Principles 76

III.2 Empirical Findings 82
IV. Limitations & Future Directions 93
V. Significance 95
Chapter 4: Pretend Play in Young Adulthood: *Bradley Does Not Exist* 97
I. Introduction 97
I.i Research Questions 99
II. Pilot Study 100
II.1 Data Collection Protocol 100
II.2 Coding and Interpretation 102
II.3 Participants 103
II.4 Results and Discussion 103
III. Undergraduate Reporting of Pretend Play – Full Study 112
III.1 Data Collection Protocol 112
III.2 Coding and Interpretation 116
III.3 Participants 118
III.4 Results & Discussion 121
IV. Limitations and Future Directions 147
V. Significance 149
Chapter 5: Constructing a Model of Pretend Play Development 150
I. Introduction 150
II. Methods and Analysis 151
II.1 Grounded Theory to Generic Inductive Analysis 154
III. A Model of Pretend Play Development: early childhood to young adulthood 156
III.1 Unpacking the Model 156
III.2 Comparison to Prior Literature 166
III.3 Assessing for Quality 171
IV. Significance & Future Directions 172
V. Concluding Thoughts 178
Works Cited 181
Appendix 202

Abstract

Pretend play is a common activity for children across the world, yet specifics of its definition and developmental trajectory remain elusive. Pretend play's connection to a host of valuable competencies in early childhood is a frequently studied topic. Contemporary research, however, continues to rely upon definitions developed during a period of mid-twentieth century pretend play research dominated by observations of external behavior. This observation-based research described pretend play's presence only during a narrow developmental window in early childhood. Despite pretend play's relevance and presence in contemporary human development research, very little work has been attempted to either replicate or challenge the idea that it is a discrete developmental stage in early childhood. In this dissertation, I take a methodological pivot to constructivist epistemology and self-report interview studies with various age-groups to enable a re-examination of what pretend play is and how it develops.

Chapter 1 provides a review and critical analysis of the history of research on pretend play in order to interrogate the foundations of its accepted developmental trajectory. Chapter 2 contrasts that history against contemporary evidence surrounding pretense and play behaviors beyond early childhood, situates pretend play within a continuum of pretense behaviors, and develops the operational definition used in my subsequent work. Chapter 3 presents an empirical study of children's self-reports during play in an outdoor play space and finds that rates of pretend play reports are constant until at least age 10. Chapter 4 reports on interviews with undergraduate participants in which they shared stories of both current and retrospective pretend play behaviors, further demonstrating that pretend play does not end during early childhood but instead persists well into adulthood. In the final chapter, I draw upon these empirical data to construct a novel model of pretend play development from early childhood through young adulthood. This model suggests that pretend play persists much longer than dominant narratives suggest and raises additional questions about how the phenomenon may transform, internalize, and manifest at different ages. This revised developmental trajectory has the power to immediately impact research and the potential to eventually influence educational practice and policy.

Introduction

I. A Few Anecdotes

I believed in fairies. In elementary school, I would sit in the garden and talk to them. Before my parents mowed the lawn I would run out and warn the fairies to vacate until it was safe to return. In fourth grade, I got into a fight with a group of boys who – after I shared a book about fairies in our reading circle – insisted fairies were not real. I *believed* in fairies. I also played a great deal of pretend, but I knew the difference between pretense and talking to fairies: the fairies were real. An adult observing me might have labeled my talking to fairies as pretend play, but – to my elementary school self – it was not.

In middle school, I attended ballet class several times each week. During barre work I would pretend that I was dancing with a favorite character from a book. I made sure none of my teachers or fellow students ever noticed while I covertly played out extended scenes with my imaginary partner. I knew he was pretend, but imagining I was dancing with him both delighted me and improved my focus and technique.

On the morning of the day in which I am writing this introduction, my partner and I played out an extended scenario featuring Madame Croissant and Twillbe. He was Madame Croissant; I was Twillbe. Twillbe – a vaguely Dickensian British orphan – has been a recurring

character over the past few months; Madame Croissant was a new arrival this morning. We moved in and out of these characters throughout the course of the morning as we made breakfast and prepared for the day.

Later this afternoon, I received an email from my colleagues in the Bit Tour – the moniker that the current touring company of Montana Shakespeare in the Schools has bestowed upon themselves. During my work with this company in rehearsal, the baseline mode of communication was bits. Pretense was so much the assumption for all interactions that we had to develop a code-phrase to indicate when a moment was genuine.

Sharing these playful instances highlights a contradiction that I have experienced across several years researching pretend play: pretend play is studied almost exclusively in early childhood, yet my own lived experience suggests that such a narrow focus may be missing aspects of the phenomenon. This disconnect between the research literature and my own experience suggests one of two possibilities: 1) I am super weird, or 2) that decades of scholarship on the phenomenon of pretend play have been overly narrow in their focus. Studying human development and psychology has convinced me that, while I may be W.E.I.R.D.,[1] the ways that pretend play has persisted across my life likely aren't unique. To better understand the gap between accepted research and my own experience, I began to question why pretend play research was so narrowly focused on early childhood, how porous the barrier between reality and pretense might be, and how the phenomenon might persist beyond the early childhood years. Answers to those questions could have significant implications for both human developmental research and for educational practice and policy.

[1] W.E.I.R.D. – From a nation that is Western, Educated, Industrialized, Rich, Democratic (Henrich, Heine & Norenzayan, 2010).

II. Introduction

Pretend play is an apparently universal trait in human development, emerging at about the same time – 18-months – in toddlers across cultures and languages (e.g., Dissanayake, 2017; Lillard, et al. 2014; Lillard & Smith, 2011). It is an oft-mandated pedagogy and performance standard across preschool and kindergarten, where it is linked to a host of positive developmental outcomes (Pyle, et al., 2017; Yogman, et al., 2018). Children who demonstrate higher rates of pretend play display enhanced correlational competencies in varied domains including emotional-regulation, collaboration, social skills, empathy, executive functioning, self-regulation, autonomy, and creativity (e.g., Lillard, et al., 2013; Samuelsson, 2023; Smith, 2017; Weisberg, 2015). Despite the great value curriculum designers and funders place upon pretend play in the early years, the practice effectively vanishes from US school curricula across demographics as soon as students enter first grade. For example, following its presence in national and state-level guidelines for preschool and kindergarten learning outcomes, pretend and/or make-believe is absent from national Common Core Standards as soon as formal schooling begins (e.g., *Common Core Standards,* 2016; Spirakus, 2018; Utah Core Standards, 2020; Utah Education Network, 2023; WI Early Learning Standards, 2017).

Imaginative play at any age is currently imperiled by a reduction of opportunities for self-directed play in American schools. In addition to the pervasive absence of space and time designated specifically for pretend play beyond early childhood, all self-directed play in elementary school has been systematically curtailed in recent decades as recess and free play time is dropped to make space for more academic learning (CDC, 2016). The recession of play has primarily impacted low-income elementary school students, who have the least access to unstructured self-directed play time during the school day as compared to their more affluent

peers (Almonacid-Fierro et al., 2022; Barros, et al., 2009; London, 2019). Why is pretend play—a seemingly universal human practice connected to a range of positive outcomes—so highly valued in early learning spaces and simultaneously absent from elementary, middle, and high school classrooms?

I propose that the absence of pretend play in school curricula beyond the early years stems from the assumption—deeply embedded and underexamined in the research literature—that pretend play is a discrete developmental stage confined to early childhood. While few contemporary scholars make the strong claim that pretend play fades away completely in middle childhood, there is a yawning absence of evidence addressing pretend play beyond early childhood. Research articles, books, and reviews on the topic consistently focus on the early years and end their summaries of the developmental pattern of pretend play at around 7-years-old. There are only two or three existing studies that specifically examine pretend play in populations outside of early childhood (see Chapter 1, Section VI).

In assigning pretend play exclusively to early childhood, we unwisely collapse 'playfulness' with 'childishness.' There are versions of pretense behaviors, such as games and role play (e.g. Lankoski & Järvelä, 2012; Rognli, 2008; *The International Journal of Role-Playing*), drama therapy (e.g. Emunah, 2019; Feniger-Schaal & Orkibi, 2020), and artistic practices (e.g. Russ, 2020; Walton, 1990), that are acknowledged and researched across the lifespan but are not included in the domain of "pretend play" research. The specific affordances of arts learning, for example, are theorized to present unique and profound opportunities for learning at all ages (e.g., Halverson, 2021; van de Water, et al., 2015). Existing work on the value of pretense in clinical or arts education spaces points to the need for more research on the ways in which the pretend play we recognize and value in early childhood may persist

throughout the lifespan. These domains of practice demonstrate that pretense is not a feature unique to childhood; imagining that play disappears—or even wanes— with age neglects the sociocultural factors that shape not only who plays and how they do so, but also what types of play are valued and studied.

The neglect of the socio-cultural factors that influence pretend play may stem from the behaviorist tradition of pretend play research. As will be fully explored in Chapter 1, foundations for the study of pretend play were established during a period of psychology dominated by behaviorism and positivism. An assumption that pretend play was, by definition, an observable behavior implied that identifying it would be "an easy contrast for even naïve adult observers to make" (Matthews & Matthews, 1979). As the entire field of psychology has moved away from strict behaviorism and embraced different epistemologies and methods, pretend play has not received a foundational reexamination of its definition and developmental trajectory. A review chapter on pretend play in the 1983 *Handbook of Child Development*, for example, notes that ''prior to the acceptance of these findings [i.e., pretend play's locus in early childhood]. . . it will be necessary to replicate in other settings and countries'' (Rubin et al., 1983, p. 727). However, to my knowledge, no further studies on the developmental trajectory of pretend play have been conducted. In this dissertation, I intervene in the behaviorist tradition of pretend play research by centering participant voice through self-report interviews and by interpreting the data through a constructivist epistemology (further described in Section V).

III. Research Questions

In this dissertation, I am interested in the ways that pretend play may persist and change beyond early childhood. The project 1) presents a thorough literature review and critical analysis

of the history of research on pretend play to interrogate the foundations of its accepted developmental trajectory; 2) contrasts pretend play's history against contemporary evidence surrounding pretense and play behaviors beyond early childhood, and 3) gathers and analyzes new empirical data on the topic to construct a model of pretend play development from early childhood through young adulthood. The research questions guiding Chapter 3 (pretend play in childhood) and Chapter 4 (pretend play in young adulthood) are as follows:

RQ0: Do people report engaging in pretend play behaviors?

RQ1: What sorts of pretend play behaviors do people report engaging in?

RQ2: What are the contexts they report for their pretend play?

RQ3: What are the motivations they report for playing pretend?

The final chapter shifts from analyzing the interview data within each age-group to analyzing trends in the data across age groups in order to address research question four:

RQ4: What is pretend play's developmental trajectory from early childhood through young adulthood?

IV. Dissertation Structure

Chapter 1 presents a review of the literature on pretend play and a loose historiographical examination of how the arc of research on the topic has developed over the past century. Chapter 1 also likens pretend play to other behaviors that may follow similar developmental trajectories, namely: private speech and gesture. Private speech provides a useful analogy and justification for reexamining a phenomenon that was long constrained to a single developmental window. Gesture research offers potentially analogous structures to think about embodiment and externalization – qualities that differentiate pretend play from imagination and day dreaming.

Chapter 2 focuses on definitions. Pretend play is a challenging concept to define in part because it is, inherently, two concepts. It contains both pretense and play – two terms both lacking easy and clear definitions. The chapter contains an exploration of the challenges of definitions, describes a novel conceptualization of pretend play on a spectrum of pretense behaviors, and proposes a working definitional framework to guide the subsequent empirical studies.

Chapters 3 and 4 present two empirical studies of pretend play. Chapter 3 presents the first study of pretend play in childhood through the direct self-report of children. The chapter provides insight into rates of pretend play during a very small and specific slice of time for 3 to 11-year-old participants at an outdoor play space. Chapter 4 uses a similar self-report interview method to ask young adults to self-report on both their current pretend play behaviors and their memories of pretend play at earlier ages. The combination of current and retrospective reporting generates insights into broad swaths of time and the general presence or absence of pretending. Both Chapters 3 and 4 focus on the four research questions described above in ways that trouble the false equivalency of pretend play with early childhood.

Chapter 5 concludes the dissertation by reading across the theories, history, and definitions explored in Chapters 1 and 2, and the data collected in Chapters 3 and 4, in order to construct a model of pretend play development from early childhood through young adulthood. Maintaining epistemological congruence with Chapters 3 and 4, I follow Charmaz's approach to *constructivist* grounded theory to guide the development of this model: "a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data" (Charmaz, 2007, p. 187). The model of development proposed in Chapter 5 has been built inductively from data unique to this dissertation. Chapter 5 also offers final concluding thoughts for the project.

V. Dissertation Design & Guiding Methodology

Pretend play emerged as a topic of interest to psychologists and human development scholars at a time when behaviorism held strong sway over the field.[2] The bulk of research that set the foundational understandings of pretend play's definition and developmental trajectory occurred in the mid-twentieth century and applied observational methods within a positivist epistemology.[3] In this dissertation, I return to the foundational questions of what pretend play is and how it manifests for participants at different ages. The central mission of this dissertation is to re-examine pretend play's developmental trajectory by analyzing people's self-reported experiences of play rather than outsiders' observational perceptions. This project is grounded in a constructivist epistemological approach as an intentional counter to the preponderance of positivism that has shaped the field since the 1960s. Pretend play does not exist without humans to enact it. As a constructed category of behavior it cannot be disentangled from the experiences of the people engaging in it. It is inherently subjective; therefore, in this dissertation, I aim to co-construct meaning with the interview participants in Chapters 3 and 4.

A constructivist framing is a departure from a significant positivist bent in pretend play research in human developmental psychology (see Chapter 1). Positivism's dominance in pretend play research of the mid-twentieth century followed prevailing trends in psychology (for review, see Braat, et al., 2020) and assumptions about the behavioral nature of both social life broadly and pretend play specifically (see Chapter 2). Following shifting trends in research and adopting a more nuanced definition of pretend play (see Chapter 2) motivates the value of a constructivist approach to the current data. Rather than attempting to access an idea of objective

[2] These methods and a history of the field are described in detail in Chapter 1.

[3] A view of the social world that assumed an objective reality that could be observed and measured (e.g. Crotty, 1998).

reality, a constructivist approach assumes that meaning is generated through the interaction between the researchers and subjects (Crotty, 1998). I assert that constructing an understanding of pretend play through cross-sectional sampling of participants' self-reporting at different ages, and placing that new understanding in conversation with the existing research literature, will result in a deeper, more nuanced, culturally grounded understanding of the developmental trajectory of pretend play.

In order to understand participants' experiences of pretend play, both Chapters 3 and 4 are analyzed through a phenomenological lens. Both chapters aim to "distill primarily interview data to their essences ... to determine what [the phenomenon of interest, i.e. – pretend play] 'is' or 'means' to a collective body of participants" (Saldaña & Omasta, 2018, p. 151–52). I aim to construct an understanding of participants' experiences of the phenomenon and what it means to them, rather than attempting to access an understanding of the phenomenon itself (Creswell & Poth, 2018; Omasta & Landroche, 2020). This approach values the subjectivity, interpretations, and variance in participant response, rather than striving for an ideal of objectivity (Leavy, 2017). I assume that pretend play is a socially and personally constructed category of behavior; therefore, a phenomenological approach is appropriate as I seek to examine "the various ways things manifest and appear in and through our being in the world" (Vagle, 2018, p. 22).

Phenomenology fulfills a basic methodological need by providing a meaningful way to describe a topic that is simultaneously highly complex, under-researched, and not easily quantifiable (Saldaña & Omasta, 2018). In centering participant experience, phenomenology also aligns with both my ethical approach to this project and my personal goal to design through a critical feminist research lens (e.g., Denzin, 2017; Nielson, 2019; Wigginton & France, 2019) by

creating positive experiences and relationships with participants and aiming to develop shared agency between participant and researcher in the interview setting.[4]

Chapters 3 and 4 apply a phenomenological analytical lens within age-groups. In addition to a consistent methodology, both Chapters 3 and 4 use similar methods:[5] semi-structured interviews with variations in the design to accommodate the ages of participants. In order to enable Chapter 5's comparison across age-groups, I apply the same coding and interpretive process to the data in both Chapters 3 and 4. This involves a three-step process: in-vivo coding of the data, a memoing process, and then a detailed dramaturgical coding phase (Saldaña, 2016). In-vivo codes are derived from the specific and direct words and actions of the participant (Strauss, 1987). The prioritization of the participants' specific words and physical actions makes in-vivo coding particularly useful in generating codes for understanding how participants at different ages report and make sense of their own pretend play. As Saldaña points out, coding with young people's direct words and actions enhances our understandings of the worldviews of children, whose views are typically marginalized in favor of adult perspectives (Saldaña, 2016). Utilizing in-vivo (or emic) coding for Chapters 3 and 4 aligns with the grounded theory approach of the final chapter. The logic of grounded theory requires the construction of codes from the collected data rather than applying preconceived categories (Charmaz, 2006).

The middle-step (which happens concurrently across both the initial and secondary coding phases) consists of generating personal meaning-making memos to make sense of, explore, and expand on emerging themes in the data. The final step of the process involves

---

[4] As Audrey Burke – one of the brilliant research assistants on this project – phrased it: "the important point is… the children should feel that they are doing the science, and that the science is not being done to them."

[5] I am using the terms "methodology" and "methods" as distinct ideas: the methodology of the project is the lens through which the research questions are considered and decisions are considered, made, and justified; the methods are the concrete actions of the study such as sampling, data collection, analysis, and reporting (Mills, 2014; Schwandt, 2014).

identifying patterns and emergent themes in the data through dramaturgical coding and building construct tables (Miles, Huberman & Saldana, 2014). Building construct tables around the primary dramaturgical codes enables an analysis of the high levels of variability that exist within the data and an examination of what conditions may influence that variability (Miles, Huberman & Saldana, 2014). Dramaturgical coding applies conventions from dramatic literary and performance analysis to the stories that participants tell in an interview (Saldaña, 2016; Saldaña & Omasta, 2018).

Dramaturgy in theatre and performance focuses on clarifying and understanding the entire three-dimensional dramatic composition (e.g., Cattaneo, 2021). This method includes not only the text, but also the Setting and other people present, the Objectives and Obstacles of the characters, the Tactics or Actions characters use to achieve their Objectives, and so on.[6] This analytical approach aligns with my research questions: what actions people engage in (RQs 0 and 1 – dramaturgically, their Actions), the contexts in which they act (RQ 2 – dramaturgically, the Settings and Relationships), and their motivations for action (RQ 3 – dramaturgically, the Objective/Motivation). Dramaturgical coding[7] also aligns with the content of the interviews due to the overlap of pretend play and drama. The patterns and themes constructed through this three-step analytical process are then interpreted and reported through the project's constructivist and phenomenological lens.

---

[6] I think there are marvelous overlaps between the work of the dramaturg and that of the social science researcher; one simply works in theatrical worlds and the other in social worlds. The idea of dramaturgy as social science method is more present in the current European approach to the field than in American research (e.g. Østern, 2021; Szatkowski, 2019).

[7] Dramaturgical coding emerges from the legacy of Goffman's 1959 *Presentation of the Self in Everyday Life*, but is distinct from Goffman's sociology. Goffman's use of the term "dramaturgy" was applied to a metaphor of life itself as a theatrical event (Goffman, 1959; Smith, 2013); conversely, Saldana's (and my) use of the same word does not assume an overarching metaphor of performativity, but rather finds specific value in using the theatrical practice of dramaturgy in analyzing stories shared in interviews.

The final chapter moves from attempting to understand the phenomenon itself and towards developing a developmental model of pretend play development from early childhood through young adulthood. The axis of analysis shifts from examining participant responses within age-groups to examining responses across age-groups. In this chapter, I conduct additional analysis on the data collected for Chapters 3 and 4 through a loose constructivist grounded theory approach (Charmaz, 2007). The goal of grounded theory is to develop a theory or conceptual framework inductively through data: to find and name patterns that emerge in the interviews and offer an abstract understanding of the studied phenomenon (Birks & Mills, 2015; Brenner, 2006; Charmaz & Thornberg, 2021; Thomas, 2011; Tie, Birks, Francis, 2019).

The constructivist approach sees both data and analysis as generated through shared experiences and relationships with participants (Charmaz, 2001; Charmaz & Mitchel, 1996). The previous stages of the process are woven together, the fractured descriptive dramaturgical codes of Chapters 3 and 4 pass forward into a unified storyline that connects the core categories, and the developmental model that reflects this specific data set is constructed (e.g., Tie, Birk, & Francis, 2019). The project is designed to center Charmaz's four criteria for quality grounded theory studies: Credibility, Originality, Resonance, and Usefulness (Charmaz, 2006; 2014). A description of how each criterion has been met is provided in Chapter 5. Examining across age-groups, rather than within, enables the generation of a model of pretend play development from early childhood through young adulthood. Below is a visualization of how each piece of the project fits together.

Alignment of Interview Questions with Research Questions: "Plumb Grid"
[expanded from Chenail's "Plumb Line" (1997)]

	RQs → / Participants ↓	RQ0/1 Do they/What sorts of pretend play?	RQ2 Contexts	RQ3 Motivations	RQ4 Development of Pretend Play
Study 1	Early Childhood	Interviews at the Wonderground			Generating a model of Pretend Play Development from Early Childhood through Young Adulthood
		What's your favorite thing you got to play here today? [prompt] What was one of your favorite things you did? [prompt] Tell me more about...	What did you do there? Who did you play with? [prompt] Tell me more about... [follow their responses, keep asking questions]	Why was that your favorite? [prompt] What drew you to [activity/ location]; why did you choose [activity/ location]? [prompt] Tell me more about...	
		Phenomenological Analysis			
	Middle Childhood	Interviews at the Wonderground			
		What's your favorite thing you got to play here today? [prompt] What was one of your favorite things you did? [prompt] Tell me more about...	What did you do there? Who did you play with? [prompt] Tell me more about... [follow their responses, keep asking questions]	Why was that your favorite? [prompt] What drew you to [activity/ location]; why did you choose [activity/ location]? [prompt] Tell me more about...	
		Phenomenological Analysis			
	Late Childhood	Interviews at the Wonderground			
		What's your favorite thing you got to play here today?	What did you do there? Who did you play with?	Why was that your favorite? [prompt] What drew you to [activity/	

		[prompt] What was one of your favorite things you did? [prompt] Tell me more about...	[prompt] Tell me more about... [follow their responses, keep asking questions]	location]; why did you choose [activity/ location]? [prompt] Tell me more about...	
		Phenomenological Analysis			
Study 2	Young Adulthood (and retrospective)	Interviews with undergraduate students			
		Think about your life now. Do you think you ever engage in pretend play, not including play with young children, at your current age? [If yes] Can you give me one recent example of playing pretend? Include as much detail as you can. [If no] Why do you think you don't engage in pretend play anymore? -Can you remember playing pretend in the past?	Are there circumstances that lead you to doing it more or less frequently? -What are they? -Who were you with? -Where were you? -Do you think you would [do X] in a different setting? -Why/why not? -When do you think you stopped? -Are there any contexts where you could see yourself playing pretend now?	Why do you think you engaged in that behavior? What do you get out of it? Tell me about another example of pretend play -[Repeat prompt cycle] -Why did you stop?	
		Phenomenological Analysis			

Chapter 1: Context, Theory, and Relevant Literature

I. History, Major Theories and Theorists, and Research Trends

We begin with a sketch of the history of the interest in and study of pretend play in Western thought: from the ancient Greeks until today. The scope of this chapter will stay narrowly focused on "pretend play": a practice distinct in its specificity from the more general concepts of both pretense and play.[8] Establishing the history of psychological research on and around pretend play is vital for three reasons. First, this history highlights the assumption that pretend play is uniquely connected with childhood. Second, charting the pivot from research what pretend play *is* to contemporary research about what pretend play *does* exposes that fact that current studies examining potential causal relationships between pretend play and other cognitive and behavioral outcomes are still largely dependent upon definitions and developmental trajectories introduced decades ago—often with limited sample sizes and narrow methods. Third, while it is unreasonable to expect that every article on pretend play devote valuable page space to the history of the concept, the omission of a general historical understanding of the field leads to the very real possibility that contemporary studies may be over-reliant on secondary sources when articulating their own definitions and theoretical

[8] Not all pretending is playful, and not all play involves pretense. Chapter 2 provides a detailed definition of terms.

frameworks. The implications of historical trends on contemporary scholarship will be expanded upon in the following sections.

II. A Brief History of Early Writing on the Topic

The value, mechanisms, and functions of pretend play have held a central place in Western thought since the writings of the Ancient Greeks. Both Plato and Aristotle dedicated words to the phenomenon, though with opposite opinions of its worth. Whereas Plato dismissed all types of mimetic action as mere imitative copies of ideal (or Platonic) forms (Plato, 1970), Aristotle argued that pretense was interpretive and transformative of reality (Aristotle, 1982). Plato warned that children's make-believe play, in its capacity for subversion and the transformation of rules, was the "biggest menace that can ever afflict a state" (1970, p. 798). Aristotle suggested that children's make-believe was the origin of all poetry (1982).

In the centuries following the foundational works of these philosophers, pretend play continued to capture the imagination of European philosophers and artists, such as Kant, Nietzsche, Goethe, and more (Goldman, 1998). In addition to philosophy, the twentieth century saw pretend play examined through the lenses of psychoanalysis (Freud, 1959), literary/dramatic theory (Schechner, 1993; Turner, 1978), and anthropology (Goldman, 1998; Mead, 1934). Specifically psychological writing on the subject of pretend play in humans arrived in 1901 with Groos' seminal *The Play of Man*. Groos proposed that children's "dramatic play" served an evolutionary function as rehearsal for adult survival.[9] Since then, psychology has undergone several waves of interest in pretend play. The first wave came in the early twentieth century, when encouragement for pretend play started appearing in child development manuals, where the

[9] This theory is still prevalent in contemporary research on pretend play's purpose in humans (i.e. Goldstein & Lerner, 2018; Jaggy, et al., 2023; Lillard, et al., 2013).

practice was proposed to support the 'proper' socialization of the child (i.e., girls playing with dolls are learning how to be maternal; boys playing soldier are developing patriotism) (Hall, 1906; Palmer, 1916). In the 1940s and 50s, pretend play experienced its first burst of empirical popularity in psychological research as a method through which to study other topics, such as personality formation, sibling rivalry, or family roles (Hartley & Goldenson, 1952; Sears, 1947). Piaget and Vygotsky were also writing during these decades, but their work was not translated and disseminated in English-language academia for another decade. This distinction is not meant to privilege English-language research above other languages, but rather recognizes that this English-language dissertation is tracking the English-language history of research on the topic.

It was not until the late 1960s through the 1970s that pretend play itself became a topic of interest to scholars in English-speaking nations. This "third wave" (Fein, 1981a, p. 1097) of psychological interest in pretend play was fueled by the translation and dissemination of writings from both Piaget and Vygotsky in the 1960s. Psychological research on pretend play in the 1970s differed from the earlier waves in its empirical organization and its focus on the concept of "pretend play" as a worthy topic of study in and of itself, rather than pretense as a method and measure to access other developmental phenomenon (Fein, 1981a).

III. Foundational Theorists: Piaget and Vygotsky

Piaget published his seminal book *Play, Dreams and Imitation in Childhood* in 1945; the first English translation emerged in 1951. Based on observations of his own three children, Piaget presented a cognitive developmental account of play through the early childhood years (Piaget, 1962). For Piaget, pretend play was a critical—though inherently transient—feature of early childhood. He described the trajectory of pretend play as an inverted-U. For Piaget, pretend

play emerged at 12-18 months, peaked at 4 to 5-years of age, and then declined into middle childhood (Fein, 1981; Piaget, 1962; Sutton-Smith, 1966). This inverted-U trajectory is shaped as pretend play arises from and then fades into other forms of play: Piaget proposed that the onset of pretend play follows the decline of sensorimotor play, and that it is later offset by the appearance of games with rules (Piaget, 1962). Piaget's perception of pretend play fits within his overarching Stage Theory of development, in which all developmental "stages" are reached in a step-like process, in which one builds toward and then gives ways to the next (i.e., Piaget, 1965).

In Piagetian theory, pretend play is based on the development of representational thought: the ability to play with tangible signifiers (e.g., a banana) and the signified concept of the pretense (the banana as a phone).[10] Symbolic play is one of the defining markers of Piaget's preoperational stage of development (Piaget, 1965). In the preoperational stage, cognition is still ruled by egocentrism; make-believe, Piaget claimed, permits young children to assimilate the world to the ego without being hampered by the need for accommodation (i.e., adaptation to the present reality) (Bretherton, 1984). In the Piagetian framework, it thus followed that as children move into the operational stage their symbolic imaginative play fades away. Piaget described how "the more the child adapts himself to the natural and social world the less he indulges in symbolic distortions and transpositions, because instead of assimilating the external world to the ego he progressively subordinates the ego to reality" (Piaget, 1962, p. 145). For Piaget, pretend play was an element of an inherently transient stage in development. Piaget ascribed little causal

[10] The banana-phone appears throughout scholarly writings on pretend play as almost an urtext/ur-example of childhood pretense. This chapter thus follows the tradition of the banana-phone.

significance to pretend play in development, seeing it as little more than a steppingstone in the progression towards logical thought (Fein, 1981b; Piaget, 1962).[11]

Vygotsky offered a strikingly different perspective on the development of pretend play. Whereas Piaget's description of pretend play was rooted in his cognitive developmental theoretical framework, Vygotsky's approach was rooted in his sociocultural theory of development. Vygotsky's sociocultural theory views child development as a socially mediated process, wherein higher-order cognitive functions are internalizations of prior external action and social communication[12] (McLeod, 2020; Smolucha & Smolucha, 1986; Vygotsky, 1978). Within this sociocultural framing, Vygotsky assigned a strong causal role to play. Whereas Piaget saw pretend play as evidence of immature thought, Vygotsky's asserts that "in play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself. …play is itself a major source of development" (Vygotsky, 1978, p. 102). For Vygotsky, play serves two primary functions: freeing the child from situational constraints, and creating a Zone of Proximal Development wherein the "more knowledgeable other" is the child themself within the rules of the imaginary situation (Vygotsky, 1933/1967). The three decades between the original work and the translated work reflected in the in-text citation immediately preceding this sentence hide within them the massive geopolitical struggles of the mid-20th century. Piaget's work was written chronologically after Vygotsky's, but the Russian Vygotsky's writings were trapped for so many years behind the Iron Curtain that they did not reach a wider

[11] Piaget's Stage Theory has undergone significant critique within other domains of development. Pretend play research has not yet critically examined its Piagetian legacy.

[12] This progression is Vygotsky's "General Law of Development", and posits that all mental functions appear twice in development: first on the *inter*psychological plane (as a function distributed across people and environments), and then on the *intra*psychological plane (as an internalized version of the external function) (Vygotsky, 1931/1997).

audience until a decade after the Swiss Piaget's had been translated into English (e.g., van der Veer, 2015; Yasnitsky, 2018).

In a 1933 lecture titled "Play and its Role in the Mental Development of the Child" [13] Vygotsky describes the maturation of the toddler to the preschooler as a transition from the demand for instant gratification to the realization of long-term desires and goals. (1933/1967). For Vygotsky, the intention of realizing unrealizable desires manifests through the creation of imaginary situations. This feat is achievable through the separation of the fields of object and meaning. In creating an imaginary situation, a child must decouple an object from its objective meaning, and instead follow the "rules" of the imaginary situation. For example, the stick is no longer a stick, but a horse; therefore, the child behaves "as if" the stick was a horse, and not a stick (Vygotsky, 1933/1967, p. 882). This liberation from material reality begins as a social and active process; the child requires an external object or relationship to act as a pivot between thought and object (ex: the mother as an emblem of the concept of "maternal" for the child pretending to mother a doll; the stick as an object that can be ridden, evoking the concept "horse"). Unlike Piaget's theory of pretense as symbolic play, Vygotsky argues that objects are used to pivot meaning from situational reality to abstract thought, and that the symbolic possibilities of an object are tied to the possibility of representational gestures (Vygotsky, 1933/1967). A stick can be ridden like a horse more easily than a postcard can; therefore, it is in the *action* of riding the horse/stick that the pretend play occurs, meaning that the decoupling of object and meaning between stick and horse "is play, and not symbolism" (ibid., p. 881).

[13] The uncredited translator for this lecture's first English publication notes that the Russian language uses a single word—*igra*—for practices that in English are termed as either *play* or *games*. This may result in potential ambiguity when Vygotsky's Russian original is translated into English (in Vygotsky, 1933/1967)

Another divergence from Piaget's cognitive developmental theory of pretense comes in Vygotsky's description of pretend play's trajectory: rather than fading away into middle childhood—as with Piaget's inverted-U—Vygotsky rather proposes that pretend play is "converted to internal processes at school age, going over to internal speech and abstract thought" (Vygotsky, 1933/1967, p. 882).

IV. The 1970s: Describing Pretend Play

Following the translation and dissemination of Piaget and Vygotsky's writings on pretend play, the late 1960s and 1970s saw an explosion in interest, research, and publication from Western psychologists on the topics of both play generally and pretend play specifically (Fein, 1981b). Seminal play scholar Brian Sutton-Smith recounts his experience with that burgeoning interest of play by noting that before the mid-60s "…I thought very few others gave a damn about understanding play. Then, in the mid-1960s in the United States, the work of Piaget began to appear, describing child's play as a form of cognition and adding cachet to the study of play even among cognitive theorists" (Sutton-Smith, 2008, p. 97). The burst of pretend play publications in the1970s continues to shape definitions of the practice today in two significant ways relating to this dissertation's goals: first, the decade's narrow theoretical focus on pretend play as a phenomenon of early childhood, and second, the decade's over-reliance on observational measures of pretense behaviors—a method which may have inadvertently perpetuated the perception of pretend play as a practice unique to early childhood, when it is most readily externally observable.

The first major study examining the impact of a pretend play intervention was Smilansky's 1968 book *The Effects of Sociodramatic Play on Disadvantaged Preschool*

Children, and it set the stage for the dozens of play intervention studies that would follow. Like Piaget, Smilansky drew her conclusions on the development of play from observational methods (though she observed much larger samples than Piaget) (Smilansky & Shefatya, 1990). Also like Piaget, Smilansky describes a trajectory for sociodramatic play as emerging around 18-months, becoming less frequent around the age of six years, "until, at seven, sociodramatic play tends to disappear" (Smilansky, 1968, p. 11). The acceptance of this inverted-U trajectory of pretending guided research questions and study design throughout the 1970s, with authors primarily citing Piaget (1962), Smilansky (1968), and—importantly—Eifermann (1971) as evidence.

Eifermann's 1971 descriptive study of play on school playgrounds is particularly important because it was upheld throughout the 1970s as empirical support for Piaget's theory that pretend play fades away after the preoperational stage (Fein, 1978; Smith & Lillard, 2012). Eifermann and her study team carried out a large-scale observational study of Israeli children's (ages 6-14 years) play on school playgrounds during recess. Observations were carried out over 10-minute increments and documented the play of ~65,000 children. Pretend play was not a focus of the study, since Eifermann was most closely observing games with rules. Out of the fourteen schools involved in the study, only two were specifically analyzed for pretend play (one upper-class and one lower-class school). In the published paper, Eifermann reports that her findings "verified, in accord with Piaget's general statements, that symbolic play, in the one [upper-class] school that was tested for this purpose, is already rare at the age of 6 to 8—and remains steadily so throughout school—while in the corresponding [lower-class] school, there was still some noticeable symbolic play in the two first grades, with a significant decline thereafter" (Eifermann, 1971, p. 295–296). Despite this small sample size, and the questionable validity of observation of external as a method of reliably identifying pretend play, Eifermann's

study was frequently cited through the following decades as providing empirical evidence for the decline of pretend play in middle childhood. A review chapter on play in the 1983 *Handbook of Child Development* notes that ‘‘prior to acceptance of [Eifermann’s (1971)] finding . . . it will be necessary to replicate in other settings and countries’’ (Rubin et al., 1983, p. 727). However, to my knowledge, no further studies on the precise developmental trajectory of pretend play have been conducted.

Eifermann’s reliance on observational methods to examine play were in keeping with most psychological research of the time. This was in part due to the legacy of behaviorism and behavioral definitions of pretend play. A simple, generalized definition of pretend play was frequently offered as: behavior in a symbolic frame, imaginary situation, or “as if” mode (Piaget, 1962; Reynolds, 1976; Rubin, et al., 1983; Vygotsky, 1933/1967). The inclusion of “behavior” within the definition implied pretend play would contain clearly observable contrasts between real-world behavior and behavior generated in the symbolic mode: “an easy contrast for even naïve adult observers to make” (Matthews & Matthews, 1979). Chapter 2 will explore the debate between behaviorist and representational theories of pretense and argue against this behaviorist approach and its accompanying overreliance on observational methods.

V. The 1990s to Now: What is Pretend Play *for*?

In the early 1990s the research focus shifted from attempting to understand pretend play itself—its qualities, parameters, and developmental trajectory—to attempting to understand its relationship with other outcomes and cognitive skills (Yogman, et al., 2018). This shift was catalyzed by a 1987 paper from Leslie linking pretend play to the emergence of Theory of Mind (Leslie, 1987; for review, see Lillard, Pinkham & Smith, 2010; Wellman, 2010). Since that 1987

paper, the central driving question in contemporary pretend play research has been "What is pretend play *for*?" The current wave of scholarship is focused on the potential causal support pretending may lend to the acquisition of cognitive skills—such as Theory of Mind, Executive Functioning/Self-Regulation, counterfactual reasoning, and symbolic referencing—rather than on the development of pretending itself. Importantly, research on all of these topics adheres to the same predominantly unchallenged assumption present since the 1960s: that pretend play is a distinct and temporary phase of development. The following paragraphs review the domains of development most commonly linked with pretend play in the rough order (there was a great deal of overlap) in which they emerged in the research tradition.

V.1 Theory of Mind

Theory of Mind refers to the ways that people understand their own and others' minds (Wellman, 2011). It is concerned with the human impulse to construe other people and their actions in terms of such mind-related constructs as desire, personality, and intention (Lillard, 2001; Wellman, 1990). The potential link between pretend play and Theory of Mind (ToM), first articulated by Leslie (1987), identifies parallels between the mental processes needed for playing pretend and those needed for inferring other's mental states. In order to engage in pretend play, a child needs to interpret an action as being representational—the banana is not really a telephone, but Mom is pretending it is (Weisberg, 2015). This false-belief understanding is necessary for both pretend play and for understanding other people's mental states. There is a further connection between these domains observed in children with Autism Spectrum Disorders. Children with ASD often demonstrate deficits in both social cognition and pretending behaviors (Bigham, 2010; Corbett, et al., 2019; Hobson, et al., 2013). While a small body of work indicates that fantasy disposition predicts ToM improvement throughout the preschool year (Dore &

Lillard, 2014), and that children's performance on false-belief tasks improves when the task is couched within a fictional scenario (Cassidy, 1998; Wellman, et al., 2001), most work on the relationship between pretend play and ToM has been correlational—and even within these correlational studies the relationship has been inconsistent (Lillard, et al., 2013).

Both Theory of Mind and pretend play deal with a foundational debate between the potential underlying mechanism that enables each: the Theory Theory[14] vs. the Simulation Theory. The Theory Theory of both ToM and pretend play attributes a person's ability to correctly interpret the actions/intentions of another person to a psychological knowledge of mental concepts such as desires and beliefs. Conversely, the Simulation Theory proposes that people do not need this type of folk psychological knowledge, and instead asserts that people predict and interpret the behavior of others through an imaginary simulation of their experiences (Carruthers and Smith, 1996; Davies and Stone, 1995; Meini & Voltolini, 2010). For example, if we want to predict what Timmy will do or feel when facing a roaring bear, a Theory Theory theorist would posit that we would call upon our body of folk psychological knowledge to decide that in the presence of danger Timmy would feel the mental concept "fear". Conversely, a Simulation Theory theorist would expect us to "step into Timmy's shoes" and imaginatively adopt his point of view. We would take this imaginary scenario as input and plan our own feelings/actions within this hypothetical scenario, and then attribute our decisions to the simulated person—in this case, we would apply our own fear to Timmy in front of the bear. A Theory Theory perspective of ToM implies that pretend play may play only a small causal, or even an epiphenomenal role, in ToM development. Conversely, a Simulation Theory of ToM centers an element of pretense (specifically, imagined perspective-taking) as the primary

[14] Personal Opinion: the Theory Theory is a terrible name for a theory.

mechanism through which we interpret and understand the actions of others (Gordan, 1995; Stich & Nichols, 1995).

V.2 Executive Function

Executive Function (EF) has largely been defined as an umbrella term for a trio of core cognitive skills: Working Memory, Inhibitory Control, and Attentional Flexibility (e.g., Diamond, 2013; Jones, et al., 2016; Miyake, et al., 2000). More recent work expands the definition of EF to refer to "the development of skills in using control in the service of specific goals" (Doebel, 2020; Munakata & Michaelson, 2021; Perone & Simmering, 2021). The frequency and complexity of children's pretend play is correlated to their capacity in EF (Berk & Meyers, 2013; McClelland, et al., 2019; Nicolopoulou, et al, 2015; Rosas, et al., 2019; Schmitt, et al., 2015; Tominey & McClelland, 2011). For example, a greater degree of fantasy orientation in pretend play—meaning, a greater distance between the rules of the "real" world and the self-imposed rules within the pretend frame—is associated with greater capacity in EF skills (Pierucci, et al., 2014; Thibodeau, et al., 2016). Similarly, work on psychological distancing suggests that pretending to be a character, such as Batman, improves children's scores on behavioral measures of EF (White & Carlson, 2015; White, et al., 2016). Causal studies of make-believe play are almost entirely absent due, in part, to the near impossibility of establishing control groups in which pretend play is removed. (Lillard, et al., 2013). However, work that experimentally alters (i.e., increases or enriches) the amount of pretend play in which a child participates has experimentally shown improvements in EF for intervention vs. control groups (i.e. Goldstein & Lerner, 2018; Jaggy, et al., 2023; Tominey & McClelland, 2011). [15]

[15] And the pilot data from my 2020 master's thesis that was interrupted by the pandemic.

V.3 Counterfactual reasoning

Counterfactual reasoning is defined as reasoning about states of affairs which are contrary to known facts (Roese, 1997). The connection between pretend play and counterfactual reasoning was first proposed by Leslie (1987), who argued that children in pretend contexts reason counterfactually by creating a reality that exists counter to the one known or believed to be true—for example, a scenario in which a (real) banana is a (pretend) telephone (Amsel et al., 1996; Bretherton & Beeghly, 1989; Woolley, 1995a). Both pretend play and counterfactual reasoning engage with hypothetical statements that are not true in the real world but are considered true in a possible or pretend world (Lillard, 2001; Rafetseder, et al., 2010; Weisberg, 2015). Engaging with these hypothetical worlds enables the capacity to infer causality about both past and future scenarios—a type of thinking sometimes called mental time travel (Suddendorf & Corballis, 1997). Both counterfactual thinking and pretend play may rely on the same cognitive abilities: disengaging with the current reality (also called "decoupling": i.e., not eating the banana), making causal inferences within the alternate reality (if the pretend phone 'rings' I will answer it), and finally, quarantining the results of the fictional scenarios from reality (thus avoiding "representational abuse," wherein the concepts for bananas and telephones are confused) (Leslie, 1987; Weisberg & Gopnik, 2013). Despite children's skill in decoupling, empirical work testing the possible connection between pretend play and counterfactual reasoning has yet to determine the specific mechanisms by which young children are able to infer causality within fictional frames and to quarantine their created fiction from reality when playing pretend (Amsel & Smalley, 2000; Buchsbaum, et al., 2012; Rafetseder, et al., 2012).

V.4 Language and Early Literacy

In pretend play, the object of the banana signifies the phone; in spoken language the word "banana" signifies the object of the fruit; in written language the text "banana" similarly signifies the object itself. Words—like objects or roles in pretend play—are symbolic: they reference objects or ideas in the world without necessarily sharing any of the features of their referent (the word banana arguably shares none of the features of the fruit). Language and early literacy are connected to pretend play through the symbolic reasoning required for all three skills. There is a robust body of literature linking a single representational capacity to different types of symbolic cognition (Bialystok, 2000; DeLoache, 2004; Lillard & Kavanaugh, 2014). Due to its reliance on symbolic thought, scholars have proposed that pretend play may bolster language and literacy for young children (Bruner, 1983; Hirsch-Pasek, et al., 2009; McCune, 1995). Still unknown is whether pretend play supports language development, vice versa, or whether the relationship is due to an unknown third variable (Lillard, et al., 2013).

VI. Evidence for Pretend Play Beyond Early Childhood

Across the 60+ years since pretend play became a topic of interest for English-language researchers of human development, it has been studied almost exclusively in early childhood. Psychological research on pretend play was catalyzed by English-language publications of the work of Piaget and Vygotsky in the 1950s. The 1960s and 70s saw an explosion in interest, research, and publication from Western psychologists on the topic. Piaget asserted that pretend play stopped once children entered the concrete operational phase; he saw it as a marker of immaturity (Piaget, 1962). Vygotsky considered pretend play to be a "leading factor of development" but reported that it ceased "at school age" (Vygotsky, 1933/1967, p. 15).

An assumption at the time that pretend play behaviors were, by definition, clearly externalized and therefore easily identifiable led to a trend of using observational methods in pretend play studies (Garvey, 1977; Matthews & Matthews, 1979). This trend followed the lager behaviorist approach across psychology as a whole at the time (for review, see Braat, et al., 2020). An over-reliance on observational measures of pretense behaviors continues to dominate research designs. That over-reliance on observational methods may be inadvertently perpetuating the perception of pretend play as a stage unique to early childhood—the time when it is most commonly externalized and easily identifiable. An observer watching a soccer game played by older children has no way, through observation alone, to know if any of the players are *pretending* to be Megan Rapinoe or David Beckham during the game. Despite this, decades-old observational studies of children's play continue to guide research in the field.

In the thirty years since the current wave of interest the study of pretend play began, the established developmental trajectory of the phenomenon—in which pretend play fades during the transition from early to middle childhood—has rarely been challenged. Authors may not make the strong claim that pretend play fades entirely, but the concept certainly fades almost entirely from research in middle childhood and beyond. "Play" is considered a practice attached to childhood, not adulthood; and, if the purpose of play is to support the development of culturally valued adult capacities such as symbolic thought or self-regulation or Theory of Mind, then there seems little reason to study pretend play in adults who have already mastered these skills. However, the limitations of past research and existing evidence from both developmental psychology and other fields convincingly point towards pretend play as lifelong practice.

My assertion that pretend play persists into middle childhood and beyond is supported by two empirical studies: Smith & Lillard, 2012; and Perone & Göncü, 2014.[16] Because pretend play behaviors in older children and adolescents may be difficult, if not impossible, to observe from an outside perspective, Smith & Lillard designed a self-report survey asking undergraduates to describe when they stopped pretending as they did when they were children. Responses to this survey indicated that the mean-age for when the cessation of pretending occurred was at 11 years and 3 months—significantly later than the age presented by the vast majority of developmental psychology literature on pretend play. Another survey question asked participants to report when they "stopped pretending in the way that [they] pretended as a child" (pg. 530). Importantly, 30 participants responded to this question with memories that were within one-year of their current age. These 30 participants, out of 113 total participants—27% of the sample—were automatically excluded from analysis because it was assumed that they "misinterpreted the question" (pg. 533). While Smith & Lillard's study vitally challenges the dominant perception of pretend play as a practice unique to early childhood, the study is limited by their survey language of pretending "like a child" and the exclusion of participants who reported pretending late into adolescence. The choice to frame the topic in language that explicitly connects pretend play to childishness is not explained in the paper. The presence of "like a child" suggests how entrenched the connection between pretend play and childhood is. The fact that 27% of the sample reported current pretend play practices despite this wording

---

[16] A third paper, Göncü & Perone's 2005 "Pretend Play as a Lifespan Activity," argues that improvisational theatre is evidence of pretend play in adulthood. As argued in Chapter 2, I consider pretend play and theatrical pretense to be related but distinct phenomenon and, therefore, am intentionally not including Göncü & Perone's 2005 paper in this analysis.

indicates that pretend play behaviors persisting into young adulthood may be significantly more prevalent than previously reported.

The second empirical study motivating my hypothesis comes from Perone & Göncü (2014). Perone & Göncü administered a written questionnaire to assess pretend practices in adulthood. Graduate student participants (average age = 30) shared reports of lifespan episodes and benefits of pretend play. All participants stated that they engaged in pretend play during early childhood; 96% engaged in pretend play in adolescence, and 94% of the graduate student participants engaged in pretend play in adulthood. It is noteworthy that, when the topic was not phrased as "pretending like a child" (as in the Smith & Lillard study, in which on 38% of participants reported current pretend play), and instead simply phrased as "pretend play" (sans childishness) the positive response rate was 94% (Perone & Göncü, 2014).

These findings should have led to a rigorous reexamination of the foundations of the field. As of yet, they have not. One reason for this may be the inclination of psychological research to study *effects*, rather than focusing on the basic science of the qualities and mechanisms of phenomena themselves. There is not yet a coherent mechanism to explain both these contemporary findings (Perone & Göncü, 2014; Smith & Lillard, 2012) and findings from earlier literature that saw pretend play fading away (e.g., Eifermann, 1971; Piaget, 1962; Smilanski, 1968). This dissertation proposes *internalization* as a developmental mechanism that could explain both.

VII. The Internalization of Pretend Play

Vygotsky theorized that internalization could explain why pretend play fades from view in middle childhood. He proposed that that pretend play is "converted to internal processes at

school age, going over to internal speech and abstract thought" (Vygotsky, 1933/1967, p. 882). In 1992's *The House of Make-Believe,* Singer & Singer echo Vygotsky and offer internalization as the mechanism that could explain the apparent disappearance of pretend play around the start of formal schooling. They propose:

> In middle childhood overt play is gradually and subtly transformed into private thought. It does not disappear, but a deeper level of inner experience becomes central to the nature of the child. **One of the mysteries of human development involves the transformation of children's play from a behavior expressed in overt speech and action into one that flowers and expands privately** ... We will propose here that, for better or worse, our impulse for make-believe and pretending, for role-enactment and fantasy, **scarcely fades away at all**. The **constraints imposed by society**, along with **increasing brain complexity and cognitive abilities**, make it possible to miniaturize our floor games into images, silent self-talk, and, gradually, an elaborate stream of consciousness that meanders along with an inner "voice-over" (1992, p. 232, emphasis mine).

In the almost-century since Vygotsky's work, and the three decades since the publication of *The House of Make-Believe*, no researchers have yet tackled this "mystery of human development." There is no existing empirical work on the possible internalization of pretend play. In this absence, research from two other fields—private speech and gesture—can offer insights into pretend play.

VII.1 The Development of Private Speech as Analogous to Pretend Play

Similar to pretend play, private speech is a phenomenon that appears almost universally around 2-years-old and presents as a regular occurrence until around 8-years (Alderson-Day & Fernyhough, 2015). The term "private speech" refers to overtly vocalized speech that is not addressed to anyone other than the speaker—i.e., talking to yourself (Berk, 1999; Duncan & Cheyne, 2001; Girbau, 2007). Speech progresses from external social talk, to external private talk, to internal self-talk through a combination of developing neurocognitive capacities and sociocultural expectations (Perrone-Bertolotti, et al., 2014). Decades of research focused almost exclusively on private speech in childhood, while the commonplace occurrence of private speech

in adulthood was all but overlooked (Duncan & Cheyne, 2001; Duncan & Tarulli, 2009). Much like my current argument on the limitations of observation as a method to access pretend play behaviors beyond early childhood, Diaz (1992) suggested that private speech may not disappear after childhood, but rather become more challenging for the experimenter to observe using traditional observational methods. Examining private speech in adulthood began to gain ground in the early 1990s. Now, there is significant evidence suggesting that—in certain circumstances—inner speech is often re-externalized as adult private speech (Fernyhough, 2004). The use of private speech in adulthood appears to be driven by three primary factors: task difficulty, sociocultural context and expectations, and individual differences (Alderson-Day & Fernyhough, 2015).

One example of a study demonstrating strong evidence of both the existence of private speech in late adolescence/early adulthood and of the influence of task difficulty comes from Duncan and Cheyne (2001). Undergraduate participants were recorded while alone in a room as they attempted to follow instructions to create three origami shapes, each growing in complexity. Duncan and Cheyne reported high rates of private speech: all participants engaged in self-talk at least once during the trials, and 27 of the 53 participants engaged in private speech during every trial of the origami folding task. Speech instances followed the inverted U-typical of the Task Difficulty Effect in private speech—widely replicated in studies with children (Duncan & Cheyne, 2001). Duncan and Cheyne conclude that their data clearly challenges an ontogenetic account of the internalization of private speech, wherein it is temporary phase of development that declines once it has served its purpose (2001). Interestingly, when participants were debriefed on the task and asked if they had spoken to themselves, 22 responded that they had not, when in fact all 53 had. It was unclear from this study if this was due to self-talk being largely

unconscious (in which case, students were genuinely unaware of their private speech), or if the 22 negative responses were tied to the social stigma against talking to oneself.

In another paper, Duncan & Tarulli suggest that children's growing sensitivity to—and awareness of—the social convention against talking to oneself may be a primary factor in the decline of private speech in middle childhood (2009). Reducing overt private speech in the presence of others due to social stigma and cultural expectation mirrors the potential sociocultural reasoning for the decline of overt pretend play. Taken together, the research literature is clear that private speech is a lifelong practice, but that direct observations become harder to obtain beyond childhood because self-talk in the presence of others tends to be limited due to cultural stigma (Duncan & Tarulli, 2009; John-Steiner, 1992).

A study by Kronk (1994) examined the influence social context on rates of private speech. Kronk documented instances of private speech utterances from participants during a pencil and paper test in a room with both a performatively uninterested test proctor and a student who was a confederate of the research team (1994). For the first 10 minutes of the test the confederate was silent; for the final 20 minutes the confederate engaged in occasional private speech utterances. Kronk found that 46 out of the 47 study participants engaged in private speech at some point during the test; 37 began before the confederate did, and all increased the frequency of their private speech once the confederate began (Kronk, 1994). Kronk drew two conclusions from this study: first, that her data supported the presence of private speech in young adulthood, and second, that the absence of observed private speech in older children in prior studies may have been due to an observer effect and the significant social stigma around "talking to yourself" (a variable limited by the uninterested test proctor).

To explain the existence of private speech in adulthood, Fernyhough offers a 4- level model of inner speech—presented in Figures 1 and 2. In a significant departure from the Vygotskian internalization perspective, the Fernyhough model allows for movement between the levels at any point in development (Fernyhough, 2004). For example, under high cognitive pressure, there can be movement from Level 4 to Level 3, or even back to Level 2. Re-externalized speech—whether due to the need to offload cognition into spoken language, or due to the safety of a context wherein self-talk is socially acceptable—manifests as adult private speech.

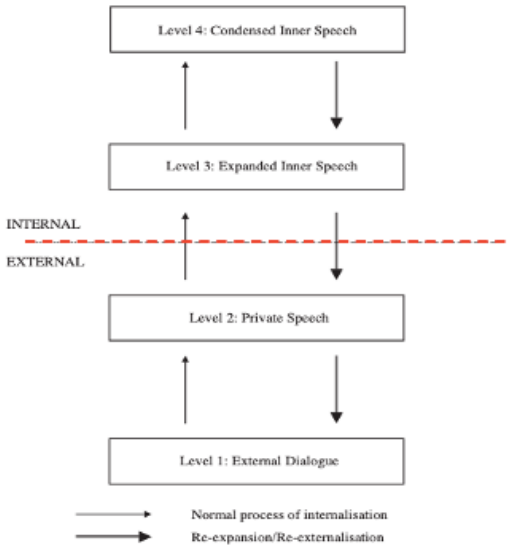


Figure 1. **Fernyhough's** (2004) 4-Level model of speech internalization. Colored emphasis mine.

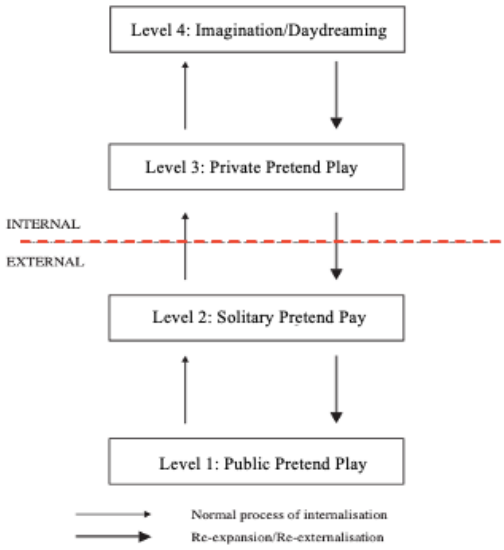


Figure 2. **My** analogy of Fernyhough's model to demonstrate the dual directions possible in the internalization of pretend play. Colored emphasis mine.

Taken together, the research literature is clear that private speech is a lifelong practice, but that direct observations of the phenomenon become harder to obtain beyond childhood because self-talk in the presence of others tends to be limited due to cultural stigma (Alderson-Day & Fernyhough, 2015; John-Steiner, 1992).

Both pretend play and speech begin as primarily social, overt phenomena. In middle childhood—likely due to a confluence of sociocultural and neurocognitive factors—private

speech is internalized, but the behavior can persist as either covert private speech, or overt private speech in certain admissible social contexts. I propose that pretend play may follow a similar developmental trajectory. Private speech not only offers a model by which we can more clearly formulate hypotheses regarding pretend play, but also suggests potentially useful methods with which to test said hypotheses. This dissertation proposes a lifespan developmental model of pretend play wherein pretend play behaviors are internalized in middle childhood due to a combination of not only developing brain structures and cognitive capacities, but also increasing impositions of social and cultural expectations. This model also proposes that, within socially admissible contexts, overt pretend play may re-externalize throughout the lifespan.

VII.2 Pretend Play and Gesture

Similar to private speech, research on gesture can offer useful theoretical models to consider the transition from internal cognitive processing to external action. Gestures are actions that serve cognitive or social functions, rather than actions that initiate change in the physical world (Nathan, 2021). The Gesture as Simulated Action (GSA) framework asserts that gestures arise from embodied simulations of internal motor or perceptual states (Hostetter & Alibali, 2008). The GSA approaches gesture through an assumption of embodied cognition: when speakers think about a particular action, they create a neural experience of actually performing that action, which involves activation of the premotor and motor systems. For example, “when thinking about how they would interact with *imagined* objects or *imagining* themselves moving in ways that embody particular actions” these simulations involve motor plans that can come to be expressed as gestures (Hostetter & Alibali, 2018, emphasis mine). These gestures are manifested as either co-speech or co-thought (Chu & Kita, 2011). Gestures can be roughly

grouped into categories including beat, indexical, iconic, metaphoric, or character viewpoint gestures[17] (Nathan, 2021).

According to the GSA, the enactment of a mental model in a physical gesture depends on three things: 1) the producer's mental simulation of an action or perceptual state, 2) the activation of the motor system for speech production, and 3) the height of the producer's current gesture threshold (Hostetter & Alibali, 2018). The third of these three factors, the height of the gesture threshold, is the most salient for our interest in pretend play. The gesture threshold is the minimum level of activation that a mental simulation must have in order to give rise to an overt action, such as a gesture (Hostetter & Alibali, 2018). This threshold can vary depending on factors such as the current task demands (e.g., strength of motor activation when processing spatial imagery), individual differences (e.g., level of spatial skills, cultural expectations around the appropriateness of gesture), and situational considerations (e.g., communicative or cultural contexts) (Nathan & Martinez, 2015). The concept of a threshold that differentiates internal cognitive activity from externalized enacted activity also appears in Alderson-Day and Fernyhough's (2015) models of private speech, as well as my proposed model of bi-directional pretense and imagination.

[17] Further linking the potential connection between gesture and pretense, there may be a connection between character viewpoint gestures, Theory of Mind, and perspective taking. A 2015 study by Demir, Levine, and Goldin-Meadow found that 5-year-olds who generated a higher frequency of character-viewpoint gestures in narrating a story were able to create stories at ages 6, 7, and 8 that were more highly focused on the character's goals, indicating an increased capacity to perspective-take.

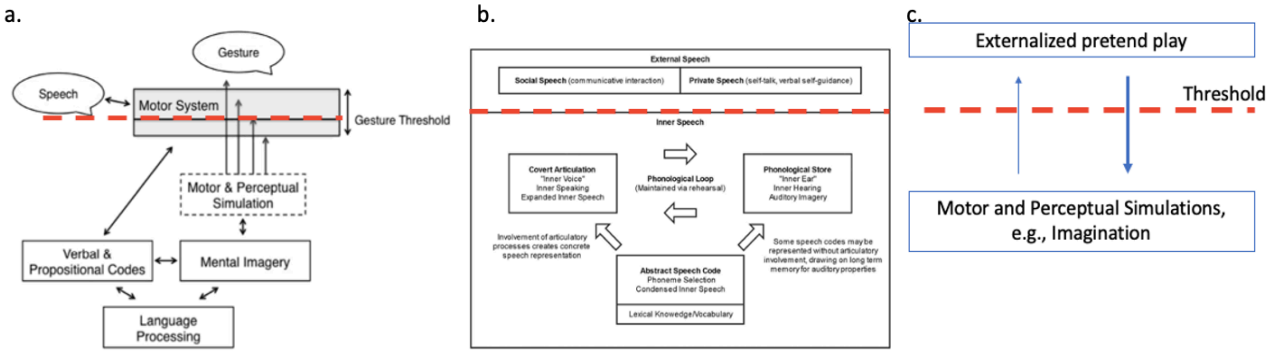


Fig. 3. Image a. presents Hostetter & Alibali's Gesture as Simulated Action framework (2018), b. presents Alderson-Day & Fernyhough's model of inner speech, and c. presents a contracted image of my proposed framework of the movement from imagination to pretense. I have added the red line to visually emphasize the overlapping concept of the threshold between internal cognitive activity and external motor activity in all three domains.

The similarities between the GSA and Fernyhough's bi-directional speech model extend to the factors that influence the height of the threshold between internal and external activity. Whereas task difficulty is an important moderator for rates of private speech, the GSA additionally specifies the *types* of task demand that influence gesture frequency rather than a broad concept of "difficulty." Tasks that recruit more motor or visuospatial imagery, or tasks that ask participants to generate inferences, increase the frequency of gesturing (Nathan, 2017; Nathan & Martinez, 2015). Situational/sociocultural considerations and individual differences are causal variables that also impact the rates of both private speech and gesture.

The biology of our psychology tends to recycle things. These three factors—task demands, situational context, and individual differences—are the dominant variables that influence the threshold for externalizing cognition into either vocalized private speech or as physically enacted gesture. I hypothesize that these three factors will also emerge as elements influencing the transition from internalized imagination and daydreaming to externalized pretend play behaviors.

Chapter 2: Defining Pretend Play

One reason for the lack of research on pretend play throughout the lifespan may be the difficulty of operationalizing the concept. Empirical studies on the causal and correlational impacts of pretend play from the 1990s to now typically offer little more than a cursory definition of the concept. This trend often manifests in a definition of pretend play as "acting as-if" (e.g., Lillard, 1993; Weisberg, 2015). However, when trying to apply constraints to determine if a behavior is pretend play or not, this definition falls woefully short. The ability of very young children to not only engage in pretense but also to recognize pretense in others, presents a robust debate regarding the foundational mechanism of pretend play: is the capacity to "act as if" behavioral or mentalistic?

I. The Pretense Debate: Behavioral, Mentalistic, or a Possible World?

In 1987, Leslie published "Pretence and representation: the origins of 'theory of mind'" and sparked decades of debate contesting whether pretending is a mentalistic practice or a behavioral one. This debate informs not only definitions and perceptions of pretend play, but also neighboring cognitive skills such as Theory of Mind and counterfactual reasoning. In pretend play, a child behaves according to a non-real set of parameters: the banana is a phone, the doll is a baby, etc. If the child truly believed that the banana was a phone, she would be acting within a

(fictional) world in which she had built a single-level representation wherein banana=phone. This single-level representation represents an error rather than a pretense. Children rarely commit such representational abuse, so Leslie proposed the mechanism of metarepresentation (1987). In a metarepresentational view of pretense, both the real (it is a banana) and fictional (it is a phone) representations exist at once, and the child "decouples" the fictional meaning from the real world through the mental concept of PRETEND (e.g., Stich & Tarzia, 2015).

This mentalistic view of pretense is most strongly countered by the behavioral view, which posits that pretense is primarily "acting-as-if", and has little to do with innate mental concepts such as PRETEND (e.g., Friedman & Leslie, 2007; Weisberg, 2015). Strong evidence for a behavioral perspective of pretense stems from Lillard's 1993 Moe the Troll study; an experimental paradigm that has been repeated, varied, and challenged many times (for review, see Lillard, 2001). In the original Moe study, children were introduced to a troll named Moe, who was described as "hopping like a kangaroo." The children, however, were told that Moe had never seen a kangaroo and had no knowledge of kangaroos. When asked if Moe knows what a kangaroo is, the majority of 3- and 4-year-old participants correctly answered in the negative. When then asked if Moe was "pretending" to be a kangaroo, 63% of children said yes (Lillard, 1993). Lillard interpreted this finding as evidence that 3- and 4-year-old children understand pretense as a *behavior* rather than being tied to a mental state.

This study has been repeated numerous times, altering variables such as: the central character (Moe/Zolar the Jumping Bean/Simba from *The Lion King*), the mode of narrative (spoken/pictures/puppets), and perspective (first person/third person) (e.g., Hall, Frank, & Ellison, 1995; Lillard, 1996; Lillard & Sobel, 1999; Lillard, et al., 2000; Rosen, Schwebel, & Singer, 1997). While certain variable changes lead to higher rates of mentalizing—for example,

having children respond in the first person as the character (Mitchell, 2000) — 3 and 4-year-olds consistently respond to the Moe task by ascribing pretense behaviors at odds with mental states at rates higher than chance. In a summary of the research stemming from the Moe the Troll paradigm, Lillard concludes that—across all of these variations— "children's responses to questions regarding what aspects of self—body or mind—are needed to pretend suggests that they are not generally privy to their own mental involvement during pretense" (Lillard, 2001, p. 514). Beyond existing challenges from scholars concerning potential flaws in the study design itself (e.g., Hickling et al., 1997; Rosen, Schwebel, & Singer, 1997; Woolley, 1995b)[18], I argue that Lillard's summary betrays a fatal flaw in the debate itself: representing pretense as *either* mentalistic *or* behavioral creates a false dichotomy between the body and mind in pretending.

A binary mentalistic vs. behavioral debate loses the inherently embodied nature of pretense (see Section II of Chapter 2), as well as the social and contextual elements of pretending (Carlson, et al., 1998; Haight, et al., 1999; Tomasello, et al., 1999). Given the limitations of both the mentalistic and behavioral premises, I put forth Harris's (1991) suggestion that children understand pretend situations as existing ''elsewhere''—much as a theatrical play or a story exists on a stage or in a book—without the need to hold a concept of PRETEND in the mind. Harris's description of an "elsewhere" space is echoed in theories that describe pretense as a game space (Stich & Tarzia, 2015), a distinct epistemic space (Chalmers, 2001; Nichols & Stich, 2003), multiple modules (Perner, 1991; Rakoczy et al., 2004), a twin earth (Lillard, 2001), a

[18] The primary three concerns within the cited papers above are that there is no logical alternative explanation for Moe's action, that Moe's behavior is more salient to a child audience than is his mental state, and that Moe's action contradicts his mental state. I propose a fourth concern with the Moe paradigm: answering "correctly" requires the 3- and 4-year-old participants to hold in mind and manipulate multiple discrete pieces of information. I hypothesize that this task may overload young children's working memory capacity to such an extent that it loses its validity as a measure of knowledge about pretense.

magic circle (Stenros, 2014), and a Pretend World Box (Nichols & Stich, 2003). Conceptualizing pretense as an "elsewhere" space supports our challenge to the concept of pretend play as unique to childhood in two ways. First, it frees pretense from its place as an anchor in the chain of developmental causality, thus freeing it to exist beyond an expected function (i.e., pretend play fades away once ToM is developed, or symbolic representation is mastered, etc.). Second, an "elsewhere" view of pretense—I propose most clearly metaphorized as a "pretend frame" (Boland, 2013; Bretherton, 1989; Vygotsky, 1933/1967; Walton, 1990; Weisberg, 2015)—allows pretend play to be defined by both its metarepresentational *and* behavioral qualities; a nuance which supports a meaningful lifespan perspective.

Pretend play cannot be merely behavioral; without an intentional awareness of the pretense, "acting as-if" manifests as delusion and error rather than pretending. Simultaneously, pretending cannot be merely mentalistic: a purely metarepresentational view of pretend play neglects action and behavior and thus fails to differentiate pretend play from fantasy or imagination. A working definition of pretending must incorporate not only an active intention to pretend, but also an embodied animation/real-world instantiation of that intention. In this section, I will argue for a definition of **pretense as embodied imagination**.[19]

II. Defining Pretend Play

For a single sentence encapsulation of this idea, I propose using Picciuto and Carruthers' (2016) philosophical definition of pretend play: "**to pretend that P is to *act as if* P (without *believing* it) while *imagining* that P"** (p. 317). To clarify this idea, consider the same action in three contexts: Imagine three small children: Bella, John, and Irene. Each picks up a stick and

[19] Although, see Footnote 18 for a complication of the concept of "embodiment."

waves it about. According to an outside observer, each child performs the exact same behavior; however, only one child is pretending. To an outside observer, it looks like Bella is *acting as if* the stick is a magic wand; however, Bella is waving the stick because the weight feels good and it makes an exciting swishing noise—Bella is not pretending. To an outside observer, it looks like John is *acting as if* the stick is a magic wand; however, John is waving the stick because he truly *believes* it is magic—John is not pretending. To an outside observer, it looks like Irene is *acting as if* the stick is a magic wand; Irene knows that the stick is not a wand but is a stick. She is, however, *imagining* that the stick is a wand and intentionally projecting that mental image onto the stick which informs her behavior in relation to the stick/wand—Irene is pretending. To clarify pretense vs. imagination and highlight the embodied nature of pretend play we can add a fourth child to this hypothetical narrative: Ashley is sitting nearby and thinking about what it would be like to wave a magic wand, but she does not pick up the stick, project the mental concept of "wand" onto the stick, nor *act* on her thoughts; Ashley is *imagining*, not pretending.

Psychological approaches can specify the cognitive mechanisms underlying this philosophical account of pretense. In *Children's Imaginative Play: A Visit to Wonderland*, Ariel proposes three mental operations underlying the capacity for pretend play: *animating*, *identifying*, and *disclaiming* (Ariel, 2002). In pretend play, the pretender *animates* a mental image by projecting it onto reality—whether onto an object (the banana becomes a phone), the self or others (I/you become Batman), or the environment (this room is my spaceship/that empty space contains my imaginary friend). The pretender then *identifies* the objective entity (the banana/me/the room) with the animated mental image (the phone/Batman/a spaceship). That identification includes embodied reactions to/interactions with the fictive reality of the activated mental image rather than the objective reality of the entity. Finally, the pretender *disclaims the*

seriousness of the first two mental operations; she knows that the banana is not a phone and is not trying to convince anyone else that the stick is in fact a wand. The intentional projection of a mental representation onto reality, coupled with an embodied response to/interaction with/animation of that fictive representation, provides a satisfactory account of different types of pretense. These three operations mimic Picciuto and Carruthers' philosophical definition: animating ~ imagining; identifying ~ acting; and disclaiming ~ not believing.

III. The Importance of Play to Pretend Play

The above definition serves well to describe pretending, but what about *play*? The study of play (as a concept distinct from "pretend play") has long been dogged by the difficulty of definitions (Ariel, 2002; Sutton-Smith, 2003; Samuelsson, 2023; Weisberg, 2015). The four most common definitional criteria – stemming from a philosophical tradition initiated by Huizinga (1955) – include that it must be pleasurable or induce a positive affect, be voluntarily engaged in by the child[20], require active participation, and have no extrinsic value (Burghardt, 2011; Chudacoff, 2007; Huizinga, 1955; Krasnor & Pepler, 1980). There are, however, multiple reasons to push back against these commonly applied criteria. Göncü and Vadeboncoeur assert that these four common criteria would better serve research if they were approached as questions, rather than assumptions (2017). In a scathing and beautifully simple chapter by Sutton-Smith and Kelly-Byrne, the authors point out that a great deal of child's play is brutal, unpleasant, and obligatory (1984). The potential negative affect of play has been further documented by scholars such as Schousboe (2013), Berk, Mann, & Ogan (2006), Trammell (2023) and others. In addition to qualities of voluntariness, positive affect, flexibility, and

[20] There, again, is the assumption that play is implicitly childish.

socialization, their opposites can also be present in play: obligatoriness, negative affect, rigidity, and dysfunctionality. Sutton- Smith and Kelly-Byrne argue that:

> In rehabilitating play from its former neglect [in scholarship], the scholarship of this century has followed the direction of **psychological functionalism** in seeking usages to which play might contribute. Basically, the bulk of the evidence has consisted in drawing formal parallels between a play or game activity and some form of adult functioning (1984, p. 314, emphasis mine).

Sutton-Smith and Kelly-Byrne argue that, rather than a scientific theory of play, Western psychology has instead developed an *ideology* of play, one that is based in the capitalistic values of industrialized Western nations. Cultures value certain things, and then develop definitions around those values systems. Academic research on play that focuses on play's value as functionally analogous to culturally valued adult capacities loses the complexity and nuance—and darkness and dysfunction—within play.

In addition to Sutton-Smith and Kelly-Byrne's argument that the study of play has been co-opted by capitalistic "psychological functionalism," contemporary scholars are also pushing back on the Euro-centric whiteness in the majority of play studies. Trammel asserts that "To repair play, we must first recognize how deeply indebted the concept of play is to White European thought and consider how this lineage has created significant blind spots in our discourse of play" (2023, pg. 22). Expanding on Sutton-Smith and Kelly-Byrne's observation that play can create a negative experience, Trammel continues that the assigning the qualities pleasure and voluntariness to play "are all pathologies of an understanding of play that ignores the traumatic and painful aspects of play" (pg. 26).

Sutton-Smith & Kelly-Byrnes and Trammel both observe that the concept of "play" is political. Definitions of play in research have traditionally been based more in ideology than phenomenology. Countering this idealized ideology of play, Sutton-Smith and Kelly-Byrne offer

a counter definition with only two necessary defining qualities: first, that the content of play is quarantined from the rest of life as a *framed* event, and second, that "the metacommunicative function always maintains primacy"; meaning, all players must be aware of the frame, and that the metarepresentational frame must be the primary defining boundary between play and not-play (ibid., p. 318). This definition admits a much wider spectrum of behaviors than the more commonly used definitions stemming from the Huizinga tradition.

In a similar vein to the rejection of "positive affect" and "voluntariness" as necessary constructs of play, there is a contemporary movement pushing back against the criterion that play must—by definition—be noninstrumental, unproductive, or lack an explicit goal beyond the play itself. Taking a socio-political view of play, I believe that defining play as necessarily noninstrumental is tied more to our cultural conflation of play with childishness and assumptions of childhood as being unproductive than with the qualities of the phenomenon itself. The absence of "instrumentality" as a defining criterium appears in gesture research as well, but with helpful specificity. A gesture is defined as an action that, rather than initiating change in the world, functions to enact cognitive or social change (Nathan, 2021). This definition offers useful nuance to the concept of noninstrumentality: the purpose of the play event is not directed at initiating physical change in the world but may often, like gesture, contain productive goals directed at generating cognitive or social/relational change.

The expectation that play lack extrinsic value has generated a longstanding binary debate between "play" and "not play" (e.g. Pyle, et al., 2017). Many contemporary play scholars push back against this dichotomous conception of play vs. not-play, and advocate instead for a model of play as a spectrum or continuum, particularly within the context of learning, education, and the concept of playfulness (Hassinger-Das, et al., 2017; Pyle, et al., 2017; Samuelsson, 2023;

Zosh, et al., 2018). The proposed continuum ranges from free play on one end to direct instruction on the other. Between these poles fall play practices such as guided play and games. (McCandliss, et al., 2014; Weisberg, Hirsh-Pasek, & Golinkoff, 2013; Yu, et al., 2018; Zosh, et al., 2018).

Figure 2.1: Zosh, et al.'s model of Play as a Spectrum (2018).

Rather than relying upon non-instrumentality as the defining marker between play and not play, I propose a specific application of Sutton-Smith & Kelly-Byrne's two-part definition. First, all participants must be aware of the pretense. This meets Sutton-Smith & Kelly-Byrne's definitional criterium of maintaining the primacy of the metarepresentational frame. Pretend behavior stops being play if the pretender is trying to convince another person that the pretense is real; in that case, it becomes deceptive—rather than playful—pretense. Second, the goal and outcomes of the behavior must be not only physically, but also temporally bounded within the event. Even if the behavior generates real-world change within the representational frame that remains beyond the temporal bounds of the play event, the behavior can still be considered play if the goal of the event was achieved within the metarepresentational frame. If I pretend that I am a contestant on *The Great British Bake Off* and have conversations with imaginary hosts while I bake, the real cookies that persist beyond the temporal bounds of the play event do not negate the playfulness that occurred while baking them. This definition fits Sutton-Smith and Kelly-Byrne's definitional criterium of quarantining the content of the play. I will provide further examples of applying this definition to various pretense behaviors in Section V.i.

IV. Pretense as a Spectrum of Behavior

As with play studies, much ink has been spilled in the scholarly debate of defining pretense vs. not pretense. A clearly dichotomized perspective of "pretend play" vs. "not pretend play" would certainly make certain types of research and data collection easier; however, such a binary perspective risks losing access to the richness and variety of pretense present in human (and non-human) behaviors. Therefore, I propose a novel theorization of pretense as a spectrum of behaviors which contains pretend play and, at times, can and does contain explicit external goals (though goals that still exist within the play-frame). A spectrum theory of pretense is my own intervention into scholarly writing on pretend play but falls closely within precedent set by both play studies and drama theory. Drama theorists have proposed a spectrum model to conceptualize the degree of "role-distance" taken on by pretenders in fictive theatrical scenarios (Boland, 2013; Carroll, 1986; Carroll & Cameron, 2005; Heathcote, 1985). Drama theory provides a useful example of a way to conceptualize the cognitive and behavioral impact of interacting with pretend spaces (Booth, 2003; Goffman, 1986; Heathcote, 1985;).

My conceptualization of pretense as a spectrum of possible behaviors achieves three important aims. First, it enables researchers to engage more fully with the complexity and nuance of human[21] pretending behaviors while still limiting the scope of inquiry within a specific definition of pretense. For example, the model of the Spectrum of Pretense in Figure 2.2 includes "Imagining" and "Narrative Fiction" within the circle of broad pretense behaviors, due to the possibility of the subconscious and innate embodiment of language.[22] Second, a spectrum model

[21] For an overview of the rich variety of pretend play in animals, see: Bateson, 1972; Burghardt, 2005; Mitchell, 2007; Lillard, 2017.

[22] This possibility can be almost metonymically represented with Pulvermüller, et al.'s "lick, pick, kick" study (2005), in which they identified overlapping cortical networks active in the perception of action words. Merely the mental imagination of actions activated the premotor cortex somatotopically (i.e. – tongue with "lick", fingers with

of pretense allows psychologists interested in the potential causal function of pretend play in early childhood (or its role throughout the lifespan) to parse the distinct but overlapping variables of *pretend* and *play*. Finally, the model expands possibilities for analysis of a single core concept—pretending—from a narrow focus on early childhood behaviors to pretense behaviors across the lifespan. A spectrum view of pretense enables us to identify how the same cognitive mechanisms that underly early childhood pretend play may be active in adolescent and adult practices like private role-taking, games set within playframes, or socially constructed pretense environments like Renaissance Faires, Live Action Role Play games (LARPing), escape rooms, or haunted houses.

"pick", etc.). Theories of embodied cognition offer the possibility to productively trouble what "behavior", "action", or "embodiment" means in an imaginative/pretense/role play context (Jeannerod, 2001; Lankoski & Järvelä, 2012; Shibasaki, 2012). These items are currently represented by a "?" in the model because more research is needed to identify the degree of embodiment and definitions of "behavior" present in imaginative events.

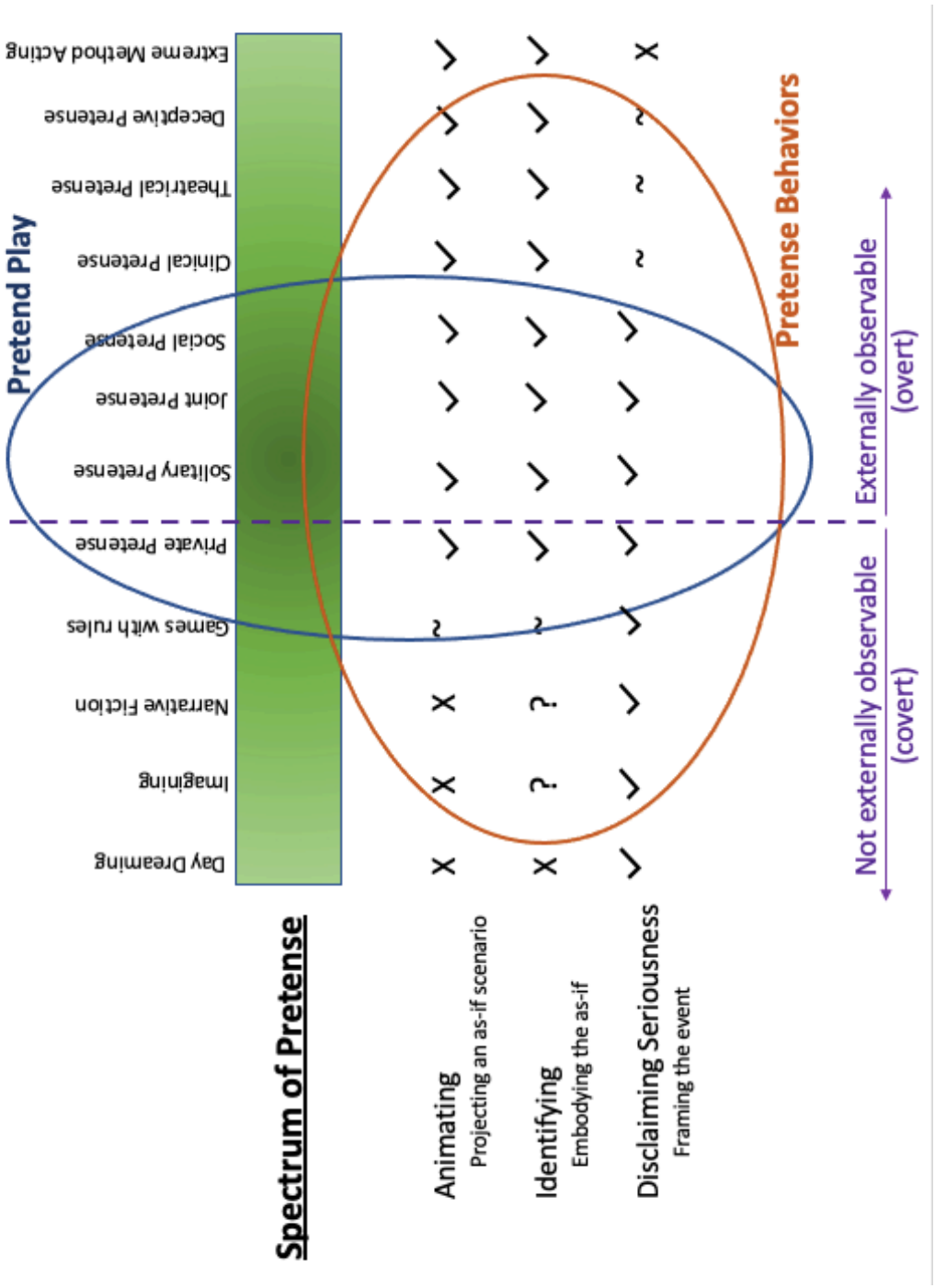


Figure 2.2: A model visualizing the author's novel theorization of a Spectrum of Pretense.
X indicates that the mental operation is not present.
✓ indicates that the mental operation is present.
~ indicates that the mental operation may or may not be present.
? indicates that more research is needed (see Footnote 18).

V. Operationalizing the Construct

This dissertation operationalizes the core construct of "pretend play" across the spectrum of possible behaviors described above by combining Ariel's three criteria of pretense with Sutton-Smith and Kelly-Byrne's two-part definition of play. I do not claim to offer an all-encompassing and final definition of "pretend play"; rather, I have chosen these criteria as balancing both specificity and nuance to support this particular project. Pretend play is the process of animating an as-if scenario, identifying with that animation through an embodied response, and disclaiming the seriousness of the pretense by both keeping the primacy of the metarepresentational frame and by ensuring that everyone involved is explicitly aware of the frame.

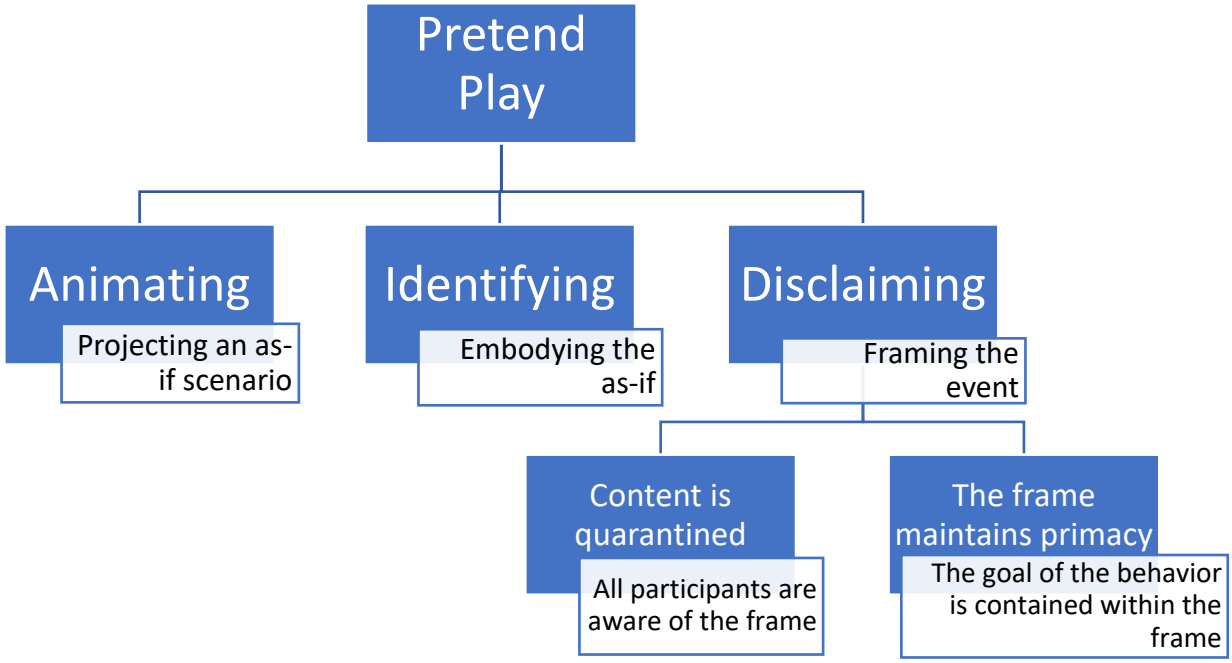


Fig. 2.3: A flow chart depicting the pretend play criteria applied in this project.

V.1 Anecdotal Examples

The only empirical evidence for pretend play beyond early childhood comes from the aforementioned Smith & Lillard and Perone & Göncü papers. However, the internet provides fascinating anecdotal evidence of adult pretend play with which to test these definitional criteria. For example, numerous Reddit threads involve adult posters sharing their experience with pretend play behaviors and seeking consolation or affirmation from the virtual community. These posts provide excellent anecdotes with which to practice applying the pretend play definition offered in above. For example, a thread-initiating post from u/Elli_Khoraz asks:

> Never asked anyone this because I feel too embarrassed in real life. Preface with saying I'm 29F. Whenever I have time home alone I like to play pretend. … An example would be if I was sat watching a TV show then I'd pretend I was hanging out with a particular video game character and talk to myself - but pretending I was chatting to them. Does anyone else do this? Is it more usual than I think? Or is it just absolutely bizarre?

Her description of her activity meets all three qualities of pretend play: she *animates/imagines* an as-if scenario by projecting the fictional character into the space next to her, she *identifies with* this animation by embodying the as-if through externalized conversation, and she *disclaims* the seriousness of the activity by keeping alive the knowledge of the pretense rather than believing the character is truly present with her. She also appears to meet Sutton-Smith's two defining qualities of play: she frames the event, and everyone involved in the event (in this case, just u/Elli_Khoraz) is aware of the frame. This is a clear example of pretend play in adulthood.

Many responses within this thread affirm u/Elli_Khoraz's experience and assure her that her pretending is not bizarre. These threaded replies share experiences across the spectrum of pretense. For example, u/Taste of Natatouille writes "I still imagine a parkour runner following alongside the car when in the passenger seat, if that's what you mean." u/Taste of Natatouille is *animating* an as-if scenario by projecting that parkour running onto the landscape outside the car

window. We can assume that they are *disclaiming* the seriousness of that projection, since the post indicates knowledge that the parkour runner is Imaginary. Based on this brief post, however, the poster does not appear to be *identifying* with that projection in any way. u/Taste of Natatouille is describing imagination rather than pretend play.

A third, complicating example comes from u/Jumpyropes. They reply to u/Elli_Khoraz's initial question with: "Yeah, it helps getting through chores too. Pretending that I'm a Cinderella-like housemaid when doing laundry." This post creates an excellent test case for my proposed definition. Pretending to be a Cinderella-like housemaid in order to help get through chores involves *animating* an as-if scenario, and then *identifying* with the scenario through imaginative role-taking. I feel safe assuming that the author of the post also *disclaims* the seriousness of that role-taking, since they do not indicate a real-life belief that they are, in fact, a Cinderella-like housemaid. This is a clear example of pretense. But is it pretend *play*? Using a definition of play that includes the constraints that the activity must induce a positive affect, be voluntary, and by noninstrumental or have no goal besides the play itself (i.e. Chudacoff, 2007; Huizinga, 1955; Krasnor & Pepler, 1980; Thompson & Goldstein, 2019) would disqualify this Cinderella anecdote from being categorized as pretend play. It has a clear instrumental goal: getting through chores. Conversely, this Cinderella example does fit within my application of Sutton-Smith's two-part definition of play: everyone involved is aware of the frame, and the frame maintains primacy—meaning, the goal of the behavior is temporally bounded within the pretend play event. The action of cleaning is a part of the framed play event. I strongly argue that the fact the chores get done in real-life does not negate the playfulness of the event.

Below are four further examples of behaviors that fall along a spectrum of pretense, and demonstrations of applying of my definitional criteria to each:

- Standardized Patients

Medical simulation centers often hire actors to pretend to be patients in order to enable medical students to practice responding in real-time to the presentation of symptoms in another human. Within these interactions, the "patient" and the med student are both *animating* an as-if scenario (in this case, the symptoms assigned to the patient). They are *identifying* with that as-if by engaging in a fully embodied response, and they are *disclaiming* the seriousness of the event: they know that the symptoms are only pretend. This is an example of pretending. However, our additional play-specific two criteria within disclaiming are not met. Everyone involved is aware of the frame, but the *goal* of the behavior is not contained within the metarepresentational frame. The goal of the event, improved reactions to future real-life situations, occurs outside of the pretend frame. This qualifies as an example of clinical pretense or rehearsal, not pretend play.

- Model UN

In Model UN, students pretend to represent various countries and come together in a highly regulated setting to address simulated problems. They are *animating*, *identifying*, and *disclaiming*; in addition, everyone involved is aware of the frame and the goal of the behavior is contained within the fictional frame of the event. Based on my proposed definition, I assert that Model UN is an example of pretend play in adolescence, even within its highly regulated and game-like structure.[23]

---

[23] Vygotsky complicates the demarcation between pretend play and games by arguing that any play involving an imaginary situation is inherently a game with rules. Conversely, any game with rules inherently creates an imaginary situation (Vygotsky, 1933/1967; Lillard, 2001). This is further complicated by the meaning lost and shifted through translation: the uncredited translator for the first English publication of Vygotsky's "Play and its Role in the Mental Development of the Child" notes that the Russian language uses a single word—*igra*—for practices that in English are termed as either *play* or *games*. This may result in potential ambiguity when Vygotsky's Russian original is translated into English (in Vygotsky, 1933/1967).

- Sexual role-play

When engaging in positive and consensual role-play during sex—whether through explicit costuming, taking on fictional personas, or layering on a fictional context—participants *animate* the as-if, *identify* with the imaginative circumstances, and *disclaim* the seriousness of the pretense. In addition, everyone involved is aware of the frame (if not, it become deceptive pretense), and the goal of the behavior is contained within the fictional frame of the event. Sexual role-play offers an excellent example of an adult behavior that precisely meets the definitional criteria of pretend play.

- Theatre

On its surface, theatre seems an obvious candidate for pretend play in adolescence and adulthood. Acting is often defined as "acting as-if" (e.g., Stanislavsky, 1936/2008)[24]. I include theatrical pretense on my spectrum of pretense behaviors but argue that theatre practices generally are not examples of pretend play specifically. Theatrical pretense typically manifests in two forms: rehearsal and performance. Rehearsal places the goal of the behavior outside of the fictional frame. Rehearsal is preparation for performance, therefore does not fit my definition of play.

[24] It is intriguing to note that the common definitional shorthand for pretending as "acting as-if", used extensively by Vygotsky, echoes precisely the language of Russian acting theorist Konstantin Stanislavski—whose theatrical work Vygotsky reviewed as a theatre critic while a university student (van der Veer, 2015). Stanislavski's theory of acting—known as the "System"—describes theatrical performance as "acting as-if" (Stanislavski, 1936/2008). In fact, Vygotsky directly quotes Stanislavski's System in both his 1932 "On the Problem of the Psychology of the Actor's Creative Work" and his 1934 "Thinking and Speech." Unlike Vygotsky, whose work was trapped behind the Iron Curtain until decades following his death, Stanislavski was able to travel, and in 1922 brought his System to America, where it morphed into the "Method" that quickly took hold as the dominant acting theory in the US for the rest of the century (Benedetti, 2004). It is possible that Stanislavski's "as-if" and cognitive psychology's "as-if" both arose independently; indeed, I am aware of no explicit link between the two. However, Stanislavski began publishing his theories in Russia in the early 1890s; meanwhile, I am unaware of any psychologists using the "acting as-if" phrase in connection to pretend play until the 1960s at the earliest—other than Vygotsky in the 1930s, who was explicitly aware of Stanislavski's System. A full historiographical tracing of the "as-if" concept across both theatrical and psychological contexts could shine a fascinating and informative light on the ways that art and science might mutually inform both each other and our cultural understandings of how the mind functions (i.e., Cook, 2020).

In performance, the presence of an audience fundamentally changes the nature of the pretense phenomenon. Theatre theorist Knowles presents an oft-cited semiotic definition of theatre performance, wherein meaning in theatre emerges from the interaction of the conditions of performance, the conditions of production, and the conditions of reception (2004). Within that semiotic understanding of theatre, the goal of the behavior is projected outwards beyond the frame of performance towards an audience (the conditions of reception), and the meaning of the event is made in the meeting between actor and audience. The primacy of the audience in defining what theatre performance is also exists throughout the writings of theatre anthropologist Richard Schechner (e.g., Schechner, 1973; 1994). In theatre, the audience is aware of the fictional/metarepresentational frame but are not themselves engaged in identifying with the as-if of the performance. This distinction becomes blurred in certain theatre forms, including interactive children's theatre (such as British panto), immersive site-specific theatre events (such as Punchdrunk's well-known *Sleep No More*), or performance art styles that intentionally blur the line between actor and spectator (such as the work of the Neo-Futurists, or Boal's Theatre of the Oppressed). These exceptions, while inviting productive nuance to our definition, serve to prove the rule that "traditional" theatre, composed of distinctly separate actors and audience, is not an example of pretend play for either party.

VI. Closing Thoughts

The singular concept of pretend play is actually comprised of two distinct phenomena: pretense and play. Defining "pretense" invites us to clearly differentiate between what is real and not-real. Within a constructivist empirical worldview (or research-view), the subjectivity of experience makes that differentiation an impossible task. The human-built category of "play" is

similarly subjective. Play is as much a political and cultural concept as it is a clear category of behavior. In this Chapter, I have attempted to provide a working definition of pretend play that is specific enough to provide a framework for the following empirical studies, yet broad enough to admit the nuance and complexity of the topic. The inherent subjectivity of the topic points towards the deep validity of a phenomenological approach to the ensuing data. In Chapters 1 and 2, we have explored what scholars have written about pretend play. In Chapter 3 and 4, I will present what a Midwestern sample of children and young adults have to say about it.

Chapter 3: Pretend Play in Childhood: *I was a princess and Daddy was a guy named Josh*

I. Introduction

Building upon the foundations laid by Piaget and Vygotsky, and in confluence with the prevailing trends in developmental and cognitive science of the time, decades of research on pretend play have focused exclusively on early childhood (see Chapter 1). In 1992, Singer & Singer described the early childhood years of 3 – 5 as the "high season" of imaginative play (pg. 64). This developmental trajectory – and the Singers' specific term "the high season of pretend play" – continues to be frequently cited by pretend play scholars in justifying a continued focus on early childhood in both research and educational intervention (e.g., Carlson & White, 2013; Jaggy, et al., 2023; Kalkusch, et al., 2022; Taggert, Heise & Lillard, 2017; and many more).

This scientific focus on early childhood shapes educational and cultural perceptions.[25] Pretend play is named and valued in preschool classroom but consistently vanishes from standards and curriculum at first grade (i.e., *Common Core Standards,* 2016; Spirakus, 2018; Utah Core Standards, 2023; WI Early Learning Standards, 2017; etc.). One reason that perceptions of pretend play are anchored in early childhood may be due to prior research on the topic having relied exclusively upon observational measures. Studying pretend play through self-

[25] And vice versa; see the Future Directions section for a questioning of ways that shifting cultural norms might inform what practices cognitive developmental research might have access to and observe.

report interviews with children offers a new window of insight into children's own understanding of their play behaviors, particularly regarding behaviors that may not be easily externally observable. Inviting children's self-report is not only valuable in providing an alternate perspective on the development of pretend play, but it is also necessary in the phenomenological framing of this entire dissertation (For review, see the Introduction).

This project joins the winding trajectory of developmental psychology as we continue the movement away from strict behaviorism and towards more nuanced multidisciplinary methods, including self-report. As Jack and Roepstorff offer, "if we do not trust the subject, the subject will have no reason to trust us" (2003). In designing ethical, collaborative, in-context research practices – especially with young collaborators – building trust is inseparable from the success of the science; we cannot have one without the other. Therefore, in this study, we center self-report. This serves our epistemological approach, our research ethic, and our research questions. Focusing on self-report also serves as a counterbalance to the preponderance of literature built on decades of observational methods in pretend play research.

We[26] examined the following Research Questions by engaging with participants in early, middle, and late childhood during outdoor free play at the Wonderground – a new outdoor exhibit at the Madison Children's Museum:

RQ0: Do children report engaging in pretend play behaviors?

RQ1: What sorts of pretend play behaviors do children report engaging in?

RQ2: What contexts do they report for their pretend play?

RQ3: What are the motivations they report for playing pretend?

[26] Pronoun use is intentional. In this Chapter, the Wonderground research was very collaborative. It involved a research team from the UW-Madison department of C&I, our partners at the Madison Children's Museum, and a team of undergraduates research assistants. The next chapter uses "I" pronouns because that study was conducted independently by the author.

II. Methods

II.1 Participatory Action Research

The pretend play analysis presented in this study is one element of a larger evaluative partnership with the Madison Children's Museum. Based on the analysis of Chapters 1 and 2, I was motivated to seek out opportunities to talk with children about their play, and center their experiences in our ongoing design of research, play, and learning spaces. The evaluative partnership between the Madison Children's Museum and Dr. Peter Wardrip's lab in Curriculum & Instruction presented an opportunity to establish a stable location in which to conduct interviews. In a methodological parallel to pretend play research, the majority of evaluation that occurs within children's museums is based on adult-feedback, either through adult evaluators observing children's play or data collected from children's adult companions through conversations or surveys (i.e., Birch, 2018; Cronin, et al., 2020; Wolf & Wood, 2012). Missing is the voice of children in sharing their own experiences. We are unaware of any previous evaluative work or research in children's museums based on children's own self-initiated self-report. Our partners at the Madison Children's Museum were excited by our design of an interview station and the intentional invitation of children's voices into the evaluation project.

The purpose of the evaluative project was to enable action: i.e., to directly inform the ongoing revision and design of the museum to better serve its youth patrons. The purpose of the pretend play research embedded within the evaluative project is to better understand pretend play through participant reporting in order to improve our educational practices. This dual goal – improved understanding leading to improved practice – is a central tenant of Participatory Action Research (PAR) (Baum, MacDougall & Smith, 2006; MacDonald, 2012; Wood, 2019). Another principle of PAR vital to this project is a careful attention paid to power dynamics and an

intentional situating of participants of co-researchers (Cornish, et al., 2023; Kindon, Pain & Kesby, 2007). These principles of PAR shaped the design of both the evaluation and research that occurred at the Madison Children's Museum.

II.2 Setting

The research site was the Wonderground: an outdoor play space at the Madison Children's Museum, which opened in October of 2021. The museum play space was designed primarily for patrons ranging from babies through 11-years-old. Adolescents and adults are welcome, but the play space was primarily designed for —and marketed to — families with younger children. A children's museum playground as the research site enabled the research team to interact with a wide range of ages at once, as opposed to grade-segregated school playgrounds such as those Eifermann and her team observed (discussed in Chapter 1). The museum play space has elements intentionally designed to promote different types of play, including a log cabin containing props and costume pieces that the designers specifically intended for imaginative play. According to ongoing meetings with the design team before the space was built and several internally shared planning documents from the museum, the space's design intentionally supports different types of play, including imaginative play, making it an optimal environment to look for pretend play beyond early childhood.

We were approved for a waiver of informed consent through the IRB since these interviews were designed and conducted as an element of the evaluation project for the museum and would have occurred with or without the additional pretend play analysis. Our primary mission in the Wonderground was to gather information that was valuable to the museum's education and design teams. This evaluative element shaped and constrained the design of the data collection. The evaluation report was created specifically for the museum, and is therefore

not included this publicly available version of this dissertation. Those interested in that evaluative report are invited to reach out to the author (Katherine E. Norman).

II.2.i The Interview Station

This project provides a novel contribution to the fields of both pretend play research and children's museum studies by centering the contributions and voices of youth in data collection. Countering decades of observation-based research by centering participants as the experts in their own experience was central to the mission of this evaluation and research project. To achieve this goal, the interview station was designed to function as an interactive element of the playground rather than a break from or interruption to play. This inviting and playful research station was developed through an iterative process of experimentation, notetaking, and revision, shaped by PAR principles. The picnic table beside the log cabin emerged as an effective location to conduct interviews (Figure 3.1). This location sits along the edge of the play space, so the interview station did not interrupt play, but it could see and be seen by the majority of the playground. This made the researcher visible to children and supported self-reporting during interviews since children could easily point or gesture to the playground around them.

The process of discovering this productive location enabled additional observations about how to embed a research station into a play space, such as the importance of spatial relationships. The spatial relationships of the interview station inherently informed the power dynamics of the interviews in productive and obstructive ways. For example, when a researcher once unthinkingly sat on side B of the picnic table (Figure 3.2), a full hour passed without a child approaching the table. When she switched to side A of the picnic table she quickly had several children approach the station. This suggests that children were less willing to engage with a stranger when doing so would place them in a physical space that curtailed their freedom to

control the interaction. Positioning children on side A of the table granted them the power of mobility, the choice to wander away, and the expansive space of the playground behind them.

Fig 3.1: A photo of the pre-renovation Wonderground, with an arrow pointing to where the research station was set up.

Fig 3.2: An aerial photo of the pre-renovation Wonderground, with an arrow pointing to sides A and B of the picnic table. The researcher always sat on side A; participants could freely approach on side B.

In order to visually highlight and introduce the interview station, we (the evaluation team) introduced bright red aprons for the interviewers to wear and a chalk sandwich board set beside the table (Figure 3.3). The red aprons intentionally echoed the purple aprons worn by museum staff; in shape they connected us to the museum, and in color they differentiated us as members of the UW-Madison. Through the design process we tested several different messages on the colorful chalk sandwich board, and – based on fieldnotes of interactions with museum patrons – settled on: "Help us do PLAY science!" Based on reviewing several months of fieldnotes, we noted that children seemed to be intrigued by the word "play" and the colorfulness of the board, and adults were drawn in by the word "science."

Fig 3.3: A photo of the chalkboard set up next to the interview station.

II.3 Data Collection Protocol

We scheduled researchers at the Wonderground based on when the museum had its highest volume of visitors. These days and times varied by season, and our team adapted as needed. Upon arrival, the interviewer started each interview session with a trip around the Wonderground to review the exhibits and features, note the weather, observe any events or new items present, etc. These observations were jotted down and later recorded as ongoing fieldnotes. Then, with sign and apron, the interviewer sat at the picnic table and participated in the playground space by smiling at people as they passed, saying hello, chatting with visitors, etc. If a child stopped to read the sign or hesitated to look at the station, the interviewer offered an invitation: "Hello! Would you like to tell me about your play today?" This invitation was only offered to children who showed an interest in the interview station. The researcher never interrupted the play of a child who had not initiated an interest in the interview station.

Children who chose to participate were asked to describe their play in the Wonderground that day. The semi-structured interview protocol included questions on the content of their play as well as context and motivation (for final interview protocol, see pg. 205 – 207 of the appendix). In addition to centering self-report as a way to counter the preponderance of observational studies, self-report as method also aligns with analogizing pretend play development with private speech (see Chapter 1). Successful studies of private speech in adulthood have relied upon self-report methods (Heavey & Hurlburt, 2008; Uttl, et al., 2012). Semi-structured interviews enabled us to center the child as the expert in their play experience, and to co-construct an understanding of their play at the Wonderground with them (Evans, 2017; Ginsburg, 1997). The wording of the interview questions was refined through a 3-month piloting phase. Age was the only demographic question asked in the interview; researchers also noted,

however, if the participant was male-presenting, female-presenting, or non-binary-presenting. This is an imperfect and highly subjective assumption but offered potential insight into gendered differences in engagement with the interview station.

All members of the research team went through a multi-step training process before conducting interviews with children that were used in analysis. Training included several stages: an introduction to the theory and methods being used, several practice rounds within the team wherein researchers would take on the roles on interviewer and children and practice interviewing each other, several practice rounds at the Wonderground with oversight and feedback provided by the team leader, and – once the researcher and team leader were both confident in their capacity to enact the interview protocol and notetaking system – independent interviewing included in analysis.

In order to capture the complex social interactions of these interviews (e.g., Glaser, 1998), we developed a system of written indicators – similar to a stage script – to later convey what had happened in an interview. The written system that the research team developed and practiced together included guidelines such as:

-Use the first-person "I" for statements from the children
    Ex: I like the swings
-Use the following conventions to specify actions and who is talking:
    -For anything *you* [the interviewer] say, put it in quotes
        Ex: "What did you do there?" I ran around
    -If the child does any meaningful gestures or acts things out, describe the action using parentheses
        Ex: "What was your favorite thing to play today?" The little house (points to the cabin)
    -If there are interjections that feel important in your notes, differentiate them from the child's words with brackets
        Ex: "What did you do there?" [Mom prompts her - you liked the dress-up clothes, right?] (Child nods)

Handwritten notes were recorded during each interview in blank data sheets using the above notation system (See section III.1.ii for the reasoning and justification for this method; see the Appendix, pg. 202-204 for an example of the blank data sheets and the complete data collection protocol and notation system). This system of written notes was transferred from hard-copy pages to an online spreadsheet at the end of each data collection session.

In addition to taking notes during the interviews, the interview team also took observational fieldnotes throughout each visit. These included observations that were meaningfully connected to our research questions and the evaluative goals of the museum (which were focused on a better understanding of how patrons were making use of the new exhibit space) but happened outside of individual interviews. These fieldnotes were then typed in a shared document for access by the whole team and incorporated as an additional data source during coding and interpretation. The interview protocol was designed with the primary goal of addressing the museum staff's questions regarding patrons' use of the new play space and, as a secondary goal, of enabling further analysis of pretending behaviors. The final interview script – developed through several phases of testing and development – is included here:

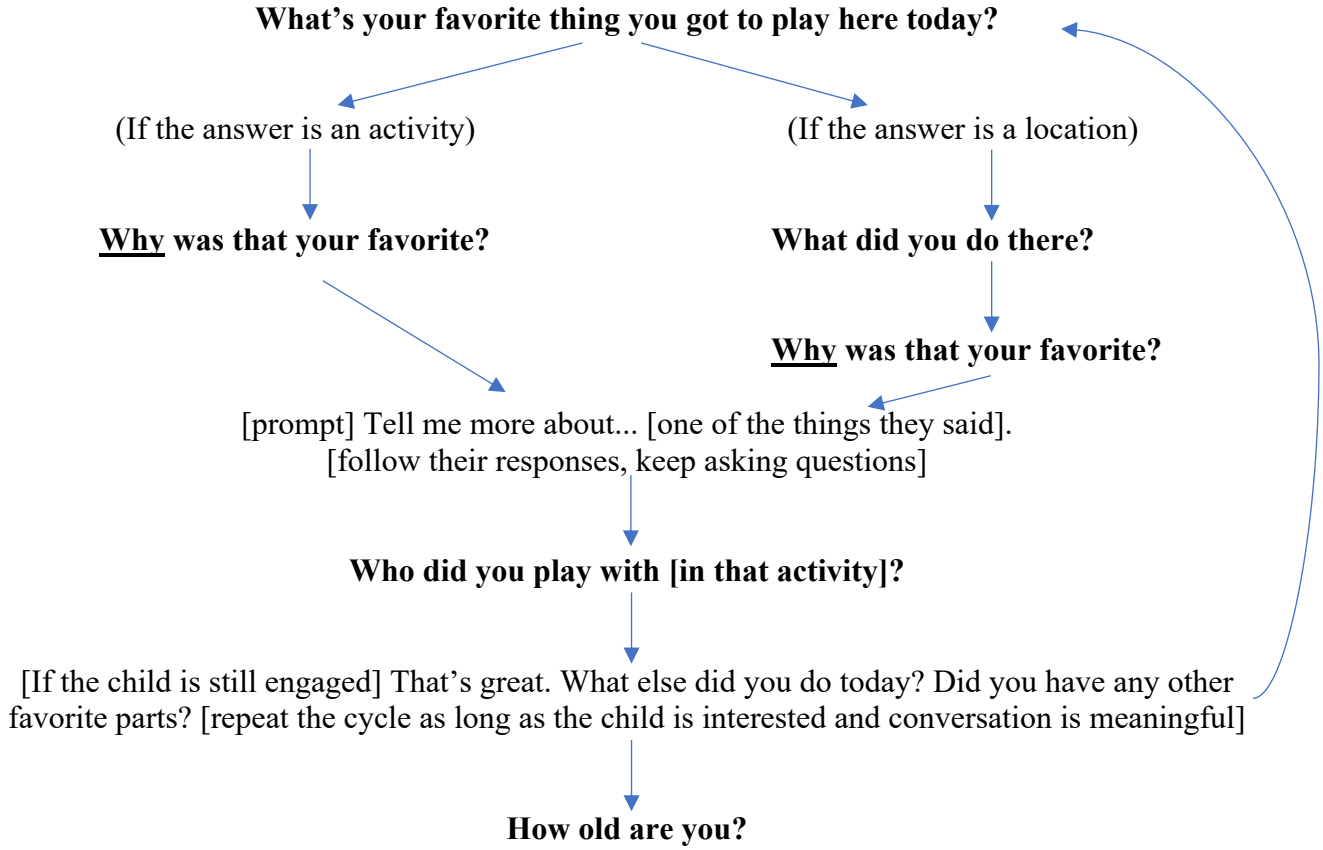
Semi-structured Interview Protocol for one-on-one youth participant conversations at the Wonderground

Note: make the interview its own fun activity in the space! A chance to share your ideas!

Allow children to approach you.

Say hello/smile as they walk past, but allow them to initiate a visit to your table. If they stop or seem curious, you can invite them with "Hi! I'm trying to learn about how kids are playing in the Wonderground! Would you like to tell me about your play here today?"

Play Questions



Thank you so much for talking with me!

II.4 Coding and Interpretation

In order to answer the initial question of RQ0— Do children report engaging in pretend play behaviors —we began with simple descriptive statistics and quickly encountered a productive challenge. The first phase of analysis consisted of a round of in-vivo coding (Saldaña, 2016). Based on our definition of pretend play (Animating, Identifying, Disclaiming), we assumed it would be simple to generate an initial descriptive report of the number of participants in each age-group who reported pretend play behaviors based on their use of disclaiming words such as "pretending," "imagining," "playing," playing "like," or acting "as if." Some participants did indeed clearly report pretending, for example: "I played camp. It's when you pretend like you're camping." A number of participants, however, reported engaging in behaviors that we knew could not be literal based on our knowledge of the space. For example, one 3-year-old boy said that "I fished" and his grown-up clarified that he meant [behind the cabin]. In the cabin are several old-fashioned fishing poles, and behind the cabin in the Wonderground is a dry streambed made of rocks. There are no fish. If the child saw the dry streambed and truly tried to go fishing using the fishing poles provided by the playground, his behavior was not pretense. Alternatively, it is possible that was he aware that there were no fish and was consciously pretending to go fishing, but he did not use precise disclaiming language to frame his behavior as non-literal. Or this young child might recognize the frame of pretense[27] around this play space and was referring to literal actions he enacted within the pretend-frame. His lack of specific disclaiming language troubled a categorization of pretend play vs. not pretend play.

Another example of this grey area comes from the following interaction with a 6-year-old girl, in which she describes why the cabin was her favorite place to play:

[27] The concept of the play frame was introduced in Chapter 2.

Participant: It looks like a real house that a homeless person would go in.

Interviewer: “What did you do there?”

Participant: We cleaned.

Interviewer: “For real cleaning or pretend cleaning?”

Participant: Pretend. But we really sweeped the floor and made the beds.

This participant offers us a marvelous contradiction in describing her behavior as both “pretend [cleaning]” and “but really sweeped the floor.” A wave of pretend play research in the 1990s focused on how clearly children could differentiate between what was real and what was pretense. A series of studies firmly established that children are very skilled at holding in mind the two worlds of pretense and reality simultaneously and almost never confuse the two (for review of this extensive body of literature, see Harris, 2000). A participant in the Wonderground who told us he was “training to be a superhero” never jumped off the high structures in the playground. Even within the pretend frame of his play, he knew he could not really fly. The lack of disclaiming language used by participants in the Wonderground does not indicate a confusion about reality vs. pretense; I do, however, insist that it invites us to consider with increased sensitivity and nuance how children are thinking about their play, and the porous nature of the frame between pretense and reality. This topic is explored further in Section III.2.i of this chapter.

Honoring the specific language of our participants demanded that we take seriously the difference between using explicit disclaiming as opposed to its absence. We therefore developed two conceptual themes which we used for a second round of coding for RQ0. “As-If Behaviors” include all non-literal behavior either directly reported by the child (Ex: “I played family and I pretended to be the mom”) or inferred by the research based on our knowledge of the space (Ex:

"I made corn soup in the cabin" when we know there is no food in the cabin). As a sub-theme within "As-If Behaviors" we also coded for direct reporting of "Pretend Play Behaviors." A behavior was only coded as Pretend Play if it met the three criteria of pretend play as reported by the participant – meaning, they *explicitly disclaimed* the reality of the behavior within their description of it, in addition to the criteria of *projecting* and *embodying* the As-If scenario. The above camping example was, therefore, coded as both an "As-If Behavior" and a "Pretend Play Behavior" while the corn soup example was coded only as "As-If."

Once we established a baseline for RQ0, RQs1, 2, and 3 (types, contexts, and motivations for pretend play) invited an inductive approach. Examination of these questions sought to "describe the categories that *emerged* from the data during the analytic process" (Brenner, 2006, p. 360, emphasis mine). Given the current paucity of research on pretend play outside of early childhood – and the complexity and nuance of the topic itself (see Chapter 2) – phenomenology fulfilled a basic methodological need: providing a meaningful way to describe something that is not easily quantifiable (Saldaña & Omasta, 2018). The interview data was examined through a three-step process: in-vivo coding of the data, a memoing process, and then a detailed dramaturgical coding phase (Saldaña, 2016). In-vivo codes were derived from the specific and direct words and actions of the participant (Strauss, 1987). The prioritization of the actual words and physical actions of the participants makes in-vivo coding particularly useful in generating codes for understanding how students at different ages report and make sense of their own pretend play. As Saldaña points out, coding with young people's direct words and actions enhances our understandings of the worldviews of children, whose views are typically marginalized in favor of adult perspectives (Saldaña, 2016) – just as pretend play research has been dominated by the inferences of adults observing children's play. In addition, this

dissertation project culminates in the construction of a grounded theory. The logic of grounded theory requires the construction of codes from the collected data, rather than applying preconceived categories (Charmaz, 2006). The middle-step of analysis (which happened concurrently across both the initial and secondary coding phases) consisted of generating personal meaning-making memos to make sense of, explore, and expand on emerging themes in the data.

The final step of the process involved identifying patterns and emergent themes in the data through detailed dramaturgical coding and building construct tables (Miles, Huberman & Saldaña, 2014). Dramaturgical coding applies conventions from dramatic literary and performance analysis to the stories that participants tell in an interview (Saldaña & Omasta, 2018; Saldaña, 2016). Dramaturgy in theatre and performance is a methodological approach to theatre used to focus and clarify the legibility of an entire dramatic or theatrical composition (e.g. Cattaneo, 2021); this includes not only the text (i.e., words of the interview participant), but also the Setting and Relationships, the Objectives and Obstacles of the characters, the Tactics or Actions characters use to achieve their Objectives, and so on. Dramaturgical analysis aligns with the content of the interviews due to the overlap of not only pretend play and drama, but also the live event nature and narrativity of the data collection method. Based on themes emerging in the first phase of in-vivo coding, our research team developed the following dramaturgical approach specific to this data set:

- Super-objective (OBJ): to PLAY.

  We can assume this super objective because it is how we framed the interview: “tell me about your play today.” All actions that were shared were, therefore, actions connected to

the verb *to play*. Play may mean something different to everyone, but the concept "play" persists as the goal and driving force for all behaviors reported in interviews. If any non-play behaviors happened in the Wonderground, they would not emerge in these interviews because we did not ask about them.

- Action (ACT): Saldaña calls these tactics; these are the actions that participants report in connection to the OBJ.
- Motivation (MOT): motivation is distinct from objective; OBJ is the overarching goal, motivation is unique to the specific reported action. For example, ACT – turning the generator crank; MOT – to prevent it from exploding; OBJ – play.
- Setting (SET): where did the play happen.
- Relationships (REL): with whom the play happens.

This coding structure was inspired and informed by the dramaturgical coding systems proposed by Saldaña (Saldaña & Omasta, 2018; Saldaña, 2016), but adapted and created specifically based on themes emerging in this particular data set. The dramaturgical codes were then interpreted phenomenologically in an effort to understand children's own understanding of and experience with pretend play.

II.5 Participants

In the pilot study, conducted from mid-April to mid-May of 2022, we interviewed 78 participants and used that initial data to inform the next iteration of the design. Participants included in the analysis ranged from 3 to 12 years old. Participants included in play analysis were organized into three groups: early childhood (3 to 5-years-old), middle childhood (6 to 8-

years old) and late childhood (9 to 12-years-old). These age group categories come from Berk & Meyers' 2015 childhood development textbook[28].

	Total Participants	Female-presenting	Male-presenting	Non-binary-presenting
Early Childhood	26	17	10	0
Middle Childhood	39	28	11	0
Late Childhood	13	7	5	0
Totals	78	52	26	0

Table 3.1: Ages of participants in the pilot study

The stable protocol applied in the formal data collection conducted between June and November of 2022 was created through the iterative piloting phase. The pilot and formal phases have not been pooled because the piloting phase was fluid, in contrast to the stable protocol design that was followed formal data collection. Pilot data is included here to reflect the valuable conversations we had with participants during this design phase and to provide additional evidence in support of formal data collection findings.

During formal data collection, the researchers interacted with 170 participants. Of the 170 children who interacted with the interview station, 150 participants were included in the play analysis conducted in this study. The 150 participants included in analysis were those aged 3 - 12 years who described at least one play instance at the interview station. Participants younger than 3-years were not included in play analysis due to their limited language skills; participants older than 12-years were too few to provide meaningful insight into teenaged experiences in the

[28] There are many ways to categorize developmental stages. I have selected Berk & Meyer's breakdown of developmental stages for two reasons. First, because their category of early childhood matches the "high season of pretend play" described by pretend play researchers from Piaget (1945) to Lillard (2017) and beyond. Second, because this is the textbook series that the UW-Madison uses in its EdPsych child development courses.

Wonderground. Interactions with participants of all ages were included in the fieldnotes since all interactions gave meaningful insight into the success or failure of the integration of the research station into the play space. Based on internal reporting shared by the museum, the distribution of the ages of participants mirrors the distribution of ages of museum visitors. Drawing our sample from those who happened to be at the museum and those children who self-selected to interact with the interview table was a convenience sample. This group of participants, however, authentically represented the perspectives of children of varying ages engaged in free play.

	Total Participants	Female-presenting	Male-presenting	Non-binary-presenting
Early Childhood	52	33	19	0
Middle Childhood	65	41	24	0
Late Childhood	33	18	14	1
Totals	150	92	57	1

Table 3.2: Ages of participants in the full study

There was some variability in the amount of information each participant shared. Some children offered a single idea, others shared expansive descriptions of their play. Collectively, the 150 participants shared 234 play instances, defined as a single clear behavior or interaction with a specific exhibit feature. For example, if a child described playing in the cabin and balancing on the log wall, that was counted as two play instances.

	Early Childhood	Middle Childhood	Late Childhood	Total
Play instances reported	73	100	61	234
Average instances reported/child	1.40	1.54	1.85	1.56

Table 3.3: Play instances reported by age-group in the full study.

III. Results & Discussion

III.1 Design Principles

There exists very little published literature on children's self-reporting in museum-settings. Evidence for the success of the interview station in the Wonderground, expounded on below, suggests that embedding playful interview stations into the design of museum spaces can be an effective way to solicit children's feedback. This success suggests several design principles for use in future research.

III.1.i Child-Initiated Participation

The interview station was designed to exist as a playful option within the Wonderground, rather than as an interruption to play. Central to achieving this integration was respecting child-initiated participation. Allowing children to initiate and control their interaction with the researcher led to positive experiences for the participants and rich data for the interviewer. When parents or museum staff initiated the interaction or encouraged children to talk with the researcher, the children tended to be much more hesitant and either unwilling to interrupt their play or uninterested in the interview.

Evidence of the success of the design comes from varied and positive child-led interactions, as recorded in the fieldnotes. For example, our fieldnotes include 6 instances of toddlers crawling over and onto the table and/or the researcher, indicating the full immersion of the interview station as part of the playground. One 2-year-old participant wanted to be a scientist herself, and she sat at the station for 10 minutes helping me take notes:

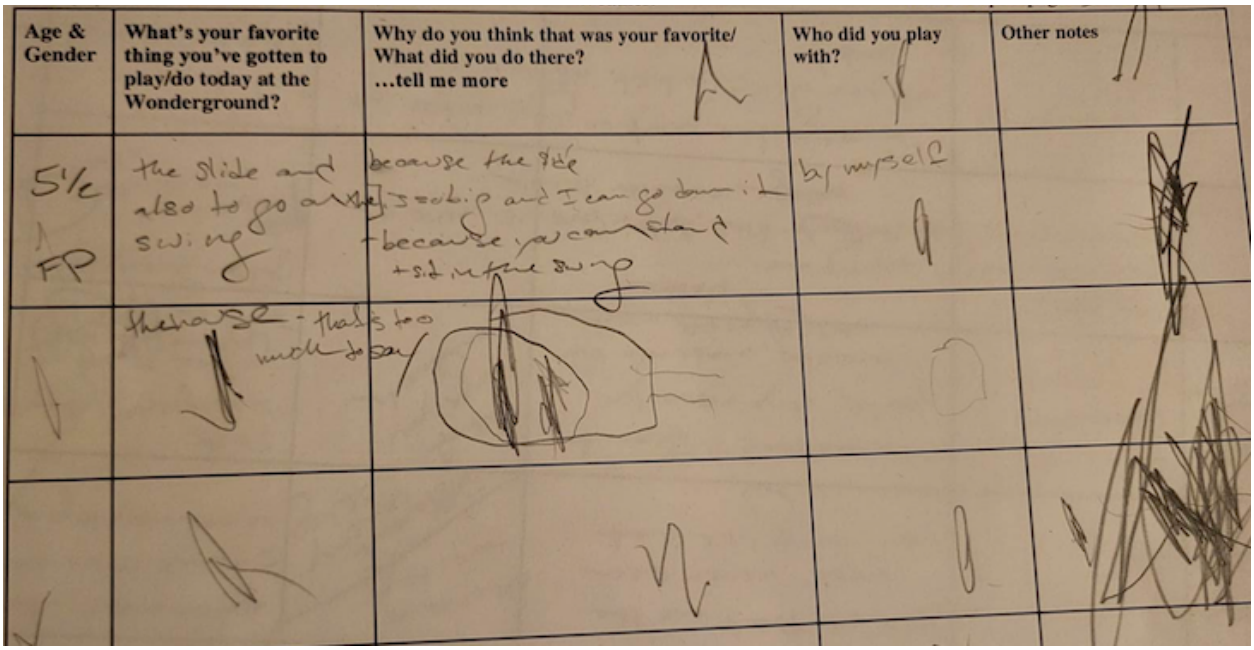


Fig 3.4: A photo of the "science notes" created by a 2-year-old participant in the Wonderground.

Fig 3.5: According to the 2-year-old participant, that is a picture of me.

Other children made comments such as "I love play science!" Museum staff told us that they had several families ask if the "play science table" would be out that day, since their children so enjoyed sharing their ideas. Children seemed to appreciate being approached as experts and having the opportunity to tell things to the grown-up researchers. As Audrey Burke –

one of the brilliant research assistants on this project – phrased it: “the important point is… the children should feel that they are doing the science, and that the science is not being done to them.” An example of children consciously sharing their expertise comes from a 4-year-old participant. She visited the table, was invited to share her ideas, but said she needed to play more before she could give us answers. As she left, she told us: “I’ll be right back. You can learn more about science if I tell you!” Many children just wanted to hang out with the researchers; we heard all about their birthdays, classrooms, favorite video games, siblings, and more. One day, a pair of siblings started a game that involved hiding behind the cabin and then sneaking up on the researcher sitting at the picnic table and yelling “Boo!” The researcher pretended to be very scared, and the children ran back behind the cabin laughing. The researcher timed this interaction: the game lasted a full 18-minutes and, at its height, involved 8 children. These observations provide strong evidence to indicate that we successfully integrated the interview station into the play space.

There are limitations to this approach. Since we were reliant on waiting for children to approach, the researcher had very little control over how much data was collected in a day. There were days when we sat at the station for hours and gathered no interview data; on other days the table was flooded with interested participants. Allowing children to initiate interactions meant relinquishing control, which may not always be possible depending on the timeline of the evaluation or study. Not approaching children also means that there were often fascinating play behaviors that we observed happening on the playground that we were unable to ask about because that child did not choose to approach the interview station. Letting go of this level of control over the process can be challenging and it limits the specificity of data that can be collected. I assert, however, that the value of the rich unconstrained data collected through child-

initiated interviews, and the positive experience of the youth participants, outweighs the cost of relinquished control.

III.1.ii Data Collection Method

An important methodological discovery made during the pilot phase of the iterative design process was the value of handwritten notes during and directly following the conversation, as opposed to recording conversations. We approached the initial testing and design phase uncritically accepting the assumption that recording is the most effective way to approach interviewing in research (e.g., Lee, 2004; Tuckett, 2005). However, early in the process we encountered a number of unexpected challenges and affordances within the playground space and the engagement of our young participants. The Wonderground is a very fun space; if the interview is not immediately interesting once a child initiates contact, they simply leave. In trying to start the conversation by asking for permission to record, we immediately lost the attention of most of our early participants. Another challenge came from the parents and guardians, who were more protective and less willing to encourage their children to participate in interviews when the recorder was present.[29]

Yet another challenge to recording emerged in the quality of the conversations with children: their responses proved highly variable and physically active. For example, when asked what his favorite thing to play in the Wonderground was, one child started cartwheeling. Another ran across the playground and shouted from the top of the climber "This thing!" Another took the researcher on a tour and silently pointed to her favorite parts. None of these interactions could be captured via voice recorder; the meaning of interactions came as much from physicality and

[29] Theatrical dramaturgy might again help us analyze social interactions here and suggest that the recorder functions as a mediating device that separates interviewer and participant, counter to the value of unmediated physical co-presence that exists both in live theatre performance and in live in-person interviews. This seed of a question is for another paper.

gesture as from sound and speech. While still trying to make the voice recorder work, we were simultaneously taking written notes and trying to catch participant responses that the recorder was missing. In doing this, we noticed that children and grown-ups were drawn in by the visual materiality of note taking. Children would approach the interview station to ask what we were writing or ask to see what other kids had said. Participants would watch the researcher write down their responses, and sometimes excitedly ask us to read it back, or point to the place on the page that held their words. Sometimes children would leave and then return later to tell us more and would want to watch us write it down. The transparency of the written work also set adults at ease, since they could see exactly what we were writing on the page. The child's visual experience of an adult physically transcribing their words emerged as a powerful elicitation device within the interviews. Writing down the interviews—rather than recording them—began to appear as an unexpected *affordance* of the design, rather than a limitation. This challenged our assumptions about the value of recording and transcribing interviews, prompting further research into theory and method regarding recording.

While recording devices may offer the promise of "rigor and validity" (Seale and Silverman, 1997), they need also be acknowledged as objects that intervene in and change the nature of the interview space. In describing the use of recorded interviews in grounded theory, Glaser counters their seeming objectivity with his concern that the method focuses attention solely on the words of the interview, rather than the full social context and human interactions of the interview (1998). Lee's historical examination of the use of recording devices in qualitative research describes recording as a gesture towards positivism in an otherwise constructivist methodology (Crotty, 2003; Lee, 2004). The recorder is perceived—incorrectly—as an "apolitical, acultural, and aproblematic" research tool (Nordstrom, 2015, pg. 390). Our

experience collecting data with children in the Wonderground demonstrated the profound ways that the recorder can inform, transform, or simply miss meaningful interactions.

Attempting to record conversations transformed the social communication of the interview past the point of reciprocal conversation and into an acquisitive interaction. At the same time, writing live notes of the interviews proved an active affordance through its elicitation of child and adult engagement. Rutakumwa, et al. advocate for a choice of method in interviews (recording vs. written) based on consideration of the contextual factors which influence data collection and encourage researchers that in some circumstances "not recording is the best approach, not 'second best'" (2020, pg. 566). In their empirical comparison of the data quality between audio-recorded transcripts and interview scripts written during and directly after the interview, Rutakumwa's research team found that verbatim transcriptions based off recordings were more detailed, but content and the depiction of key themes was comparable across both recorded and written data collection methods. Rutakumwa concludes that "Choosing not to use an audio recorder, because of a likely negative impact, should not be viewed as a weakening of research conduct but rather as a successful indicator of the researcher's sensitivity to the integrity of the research project" (pg. 577). The indurate assumption that audio recording produces more 'accurate' or 'trustworthy' data ignores the influential effect of specific contexts and relationships (Caronia, 2014). Within the specific context of the Wonderground and the relationships built between researchers and child participants, I propose that handwritten notes taken during the interview provided the strongest record of the interaction for further analysis.

III.1.iii Design principles for children's self-report interview stations in museums

These methodological findings suggest design principles for future museum studies based in children's self-report and PAR. These design principles consist of recommendations to:

- Embed the interview station into the play experience, rather than an interruption to play.
- Allow children to initiate and control the interaction.
- Actively center youth as the experts from whom the researcher is there to learn.
- Tell the children why you want to learn from them (Ex: we want to hear what you think so that we can learn how to make the Wonderground even better).
- Use a visual data collection method, such as handwritten notes; this transparency puts parents at ease and aids in response solicitation from youth.
- Aim for a diversity in researcher identity to reflect the varied identities of youth participants; youth may be more likely to approach someone who shares some aspect of their identity.
- Allow enough time for an open-ended evaluation schedule; relying on child-initiation means that the interviewer cannot control the number of interviews completed per day.
- Honor what the participants share – even and especially when it is weird or surprising.

III.2 Empirical Findings

III.2.i Do children report engaging in pretend play behaviors?

Our first, foundational question was **RQ0:** Do children report engaging in pretend play behaviors? As described in the "Coding and Interpretation" section above, we coded participant responses for both As-If behaviors and Pretend Play. In the pilot study, conducted from mid-April to mid-May of 2022, we interviewed 78 participants about their play in the Wonderground that day. The frequency of children reporting pretend play (meaning, using disclaiming language when they described their as-if behaviors) was exactly the same across all three age groups: 15.4% of each group:

Age Group	Number of Participants	Number Reporting As-If Behaviors	Number Reporting Pretend Play Behaviors
Early Childhood	26	7 (26.9%)	4 (15.4%)
Middle Childhood	39	11 (28.2%)	6 (15.4%)
Late Childhood	13	5 (38.5%)	2 (15.4%)
Totals	78	23 (29.5%)	12 (15.4%)

Table 3.4: Rates of As-If and Pretend Play reporting by age-group in the pilot study.

This small sample suggests that pretend play may persist into middle and older childhood in similar frequency to its presence in early childhood.

The dramaturgical coding in the pilot study exposed an intertwined relationship between what types of pretend play children reported and the contexts for their play – RQs 1 and 2. The setting of the play deeply informed what type of pretense children reported. Following dramaturgical conventions, within the concept of "Setting" I included both the physical location and the people present. In the first draft of the interview protocol for this pilot study there was not a specific question asking children who they played with. During pilot data analysis we realized that this was a necessary question, and it was added to the revised interview protocol used for the formal data collection process.

RQ3 – motivations for pretend play – also went through an ongoing revision process in the pilot/design phase of the study. The initial phrasing of the question as "What did you do there/why was that your favorite?" led to a disparity in responses depending on the first part of the answer. For example, if a child responded that their favorite thing to play was the swings, the follow-up question was consistently "Why was that your favorite?" since it was assumed that the answer to "What did you do there?" was "swing." Conversely, if a child answered that their favorite thing to play was the cabin, the follow-up question tended to be "What did you do

there?" and often did not progress to the important "Why" question. Within a dramaturgical framework, that means there was very little to draw from when looking for Motivations in the pilot phase. The final, stabilized interview protocol was presented on page 69.

Formal data collection broadly replicated the pilot study's findings related to RQ0 – Do children report engaging in pretend play behaviors? Instances of As If/Pretend Play were reported across all three age-groups. However, the full data set differed from the pilot data in that it did not replicate the precisely equal rates of pretend play across age groups present in the pilot, and instead suggested a decrease in pretend play rates as participants reach late childhood:

Age Group	Number of Participants	Number Reporting As-If Behaviors	Number Reporting Pretend Play Behaviors
Early Childhood	52	17 (32.7%)	10 (19.2%)
Middle Childhood	65	21 (32.3%)	13 (20.0%)
Late Childhood	33	6 (18.2%)	3 (9.1%)
Totals	150	44 (29.33%)	26 (17.3%)

Table 3.5: Numbers and rates of participants reporting As-If and Pretend Play behaviors.

Age Group	Number of Play Instances	Number of As-If Instances	Number of Pretend Play Instances
Early Childhood	73	17 (23.3%)	10 (13.7%)
Middle Childhood	100	21 (21.0%)	13 (10.0%)
Late Childhood	61	6 (9.8%)	3 (4.9%)
Totals	234	44 (18.8%)	26 (11.1%)

Table 3.6: Numbers and rates of play incidents including As-If and Pretend Play behaviors.

It is noteworthy that the rates of using disclaiming language were not significantly different across age groups, indicating that stages of cognitive or linguistic development were not the primary reason for the presence or absence of disclaiming language. In fact, the presence or absence of disclaiming language persisted at similar rates in interviews with adult participants,

conducted during one Adult Swim event at the museum. During an Adult Swim Night, I interviewed 29 participants, ranging in age from 22 to 42-years-old. 3 adults – 11% of our small sample – reported As If/Pretend Play behaviors that night, and two of those three did not use disclaiming language when describing their behaviors.[30]

The presence or absence of disclaiming language was likewise unrelated to type of play; it was present or absent in roughly equal rates whether children were describing realistic play like making soup or fantastical play like being a zombie. Potential reasons for its absence could include: the fact that the interviews were conducted in the playground, and therefore might have been experienced as inside the play frame; the As-If aspect of the play might have been so obvious to the child as to be assumed or implied; the lack of disclaiming language could indicate that the interviewer was being invited into/included in the As-If frame; or a number of other explanations requiring specific research to untangle.

It is possible that – for certain children – the experience of their own behaviors was literal even if an adult observer would have categorized the same behavior as pretend. I assert that the occasional absence of disclaiming language does not indicate confusion between pretense and reality but rather highlights the porous nature of the pretend frame (Harris, 2021; Weisberg, 2015) and the blurry boundaries between "pretending" and "reality." The porous nature of that boundary between "real" and "not real" in children's self-reporting provides further reason for

[30] Museum staff were interested in how adults were interacting with their new space and so invited me to run the interview station during the Adult Swim event. It was a very fun night and many adults were excited to participate and share their ideas. Notably, it was a Halloween event. It is very likely that the presence of costumes informed the types of behaviors – such as pretend play – that patrons enacted.

These interviews are included in the Museum's evaluation report (included in the appendix, starting on pg. 207), but are not included in this pretend play analysis. The process of creating the interview station was focused on youth participants; no adult interviews informed the design of the research station or the interview protocol. Adults were also not the focus of this study's research questions. Their interest in the research station, however, suggests exciting possibilities for future research in adult play!

thinking of pretend play as a spectrum of behaviors (as discussed in Chapter 2), rather than a dichotomous either/or. Therefore, for the duration of this chapter, I will refer to As-If/Pretend Play to indicate that I am referring to the full spectrum of non-literal/representational play reported in the interviews, whether explicitly disclaimed or not.

The most significant finding of RQ0 is that As-If/Pretend Play was indeed reported by children across all three age-groups. Participants in Early and Middle Childhood reported almost equal rates of As-If/Pretend Play on the Wonderground: 32.7% and 32.3% of participants, respectively. Rates of As-If/Pretend Play began to fall in Late Childhood but was still present at 18.18%. A more specific breakdown by participants' age in years is presented in Figure 3.7.

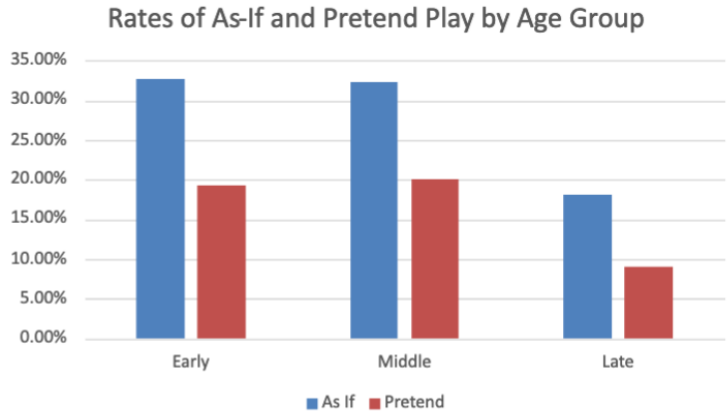


Fig 3.6: Bar graph presenting rates of As-If and Pretend Play reporting by age group.

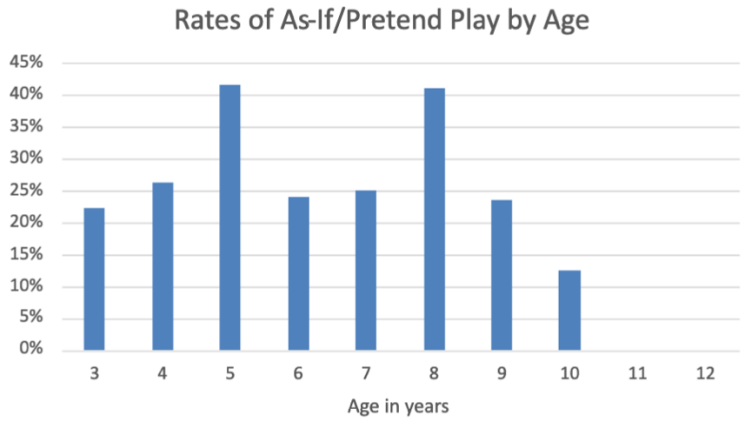


Fig 3.7: Rates of As-If/Pretend Play reporting based on the age in years of the participant.

The rates of As-If/Pretend Play presented in Figure 3.7 directly replicates the finding from Smith & Lillard's 2012 retrospective study on pretend play described in Chapter 1. Smith & Lillard identified 11 years and 3 months as the average age for the cessation of pretend play; interviews in the Wonderground revealed no As-If/Pretend Play after 10-years-old. It is also important to highlight the peaks of As-If/Pretend Play at both 5-years and 8-years-old. This dual peak directly contradicts decades of research and writing on the "high season" of pretend play existing only from the ages of 3 to 5-years. Singer & Singer's term "high season of imaginative play" was coined in 1992 (pg. 64) and continues to be frequently cited by pretend play scholars in justifying a continued focus on early childhood (Berk, 2018; Carlson & White, 2013; Jaggy, et al., 2023; Kalkusch, et al., 2022; Taggert, Heise & Lillard, 2017; and many more). Based on this sample of participants, the "high season of imaginative play" may extend deep into elementary school and seems to start to fade near the start of middle school rather than the start of "formal schooling" (Jaggy, et al., 2023; Piaget, 1945; Singer & Singer, 1992; Vygotsky, 1933/1967).

III.2.ii Themes, Settings, Relationships, and Motivations for Pretend Play

Having established that children across age-groups did indeed report As-If/Pretend Play in the Wonderground, the remaining research questions dug deeper into the context and qualities of that imaginative play. To examine the Settings, Relationships, Actions, and Motivations of the participants we return to the analytical structure described above: in vivo coding, memoing, and dramaturgical coding to better understand the participants' own experiences of the phenomenon of pretend play.

As was observed in the pilot study, we again saw a deeply intertwined relationship between RQs 1 and 2: the context of the play significantly informed what types of play children reported engaging in. To answer **RQ2** – What are the contexts children report for their pretend

play? – we turn to the Setting and Relationship aspects of dramaturgical analysis. The Cabin was by far the most popular setting for As-If/Pretend Play; perhaps unsurprisingly since it was intentionally designed by the Wonderground team to facilitate imaginative play. The second most common setting in which As-If/Pretend Play was reported was the entire playground: i.e. – playing dragons and running "all over" the space; pretending to be a mountain goat and jumping on features spread across the space, etc. All other locations described by participants only emerged once. Settings for As-If/Pretend Play are presented in Figure 3.8:

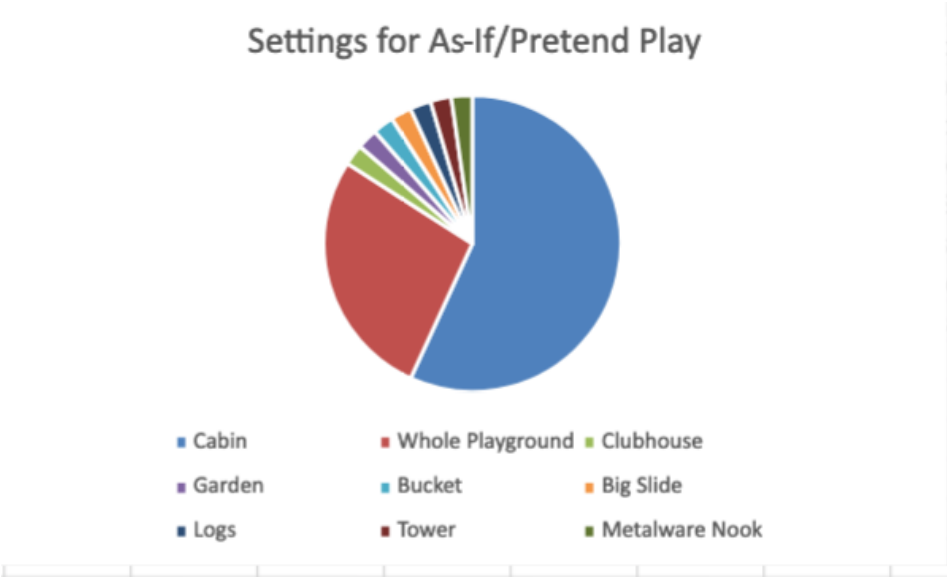


Figure 3.8: A pie chart depicting the places in the Wonderground in which participants described playing pretend.

As-If/Pretend Play was centered in the cabin for all age-groups, but participants in Middle Childhood reported the most variance and creativity in their As-If/Pretend Play locations and activities. Early Childhood As-If/Pretend Play was largely socio-dramatic and located in and around the cabin; Middle Childhood participants had the highest instances of highly fantastical play, which occurred in spaces outside of the cabin and the specific narratives suggested by that domestic space. There were only six instances of As If/Pretend Play from late childhood

participants, and this play was evenly divided between the cabin and playground, and between sociodramatic and fantastical play. Table 3.7 presents the number of As-If/Pretend Play instances at each location. These numbers strongly suggest that the affordances of the cabin – dress up clothes, props, the narrative suggestiveness of the space, etc. – strongly influenced the types of play occurring there and across the Wonderground.

Setting	**Early Childhood**	**Middle Childhood**	**Late Childhood**
Cabin	11 (65%)	10 (48%)	4 (67%)
Whole playground	4 (24%)	6 (29%)	2 (33%)
Clubhouse	1 (6%)	-	-
Garden	1 (6%)	-	-
Bucket	-	1 (5%)	-
Big Slide	-	1 (5%)	-
Logs	-	1 (5%)	-
Tower	-	1 (5%)	-
Metalware Nook	-	1 (5%)	-
Totals	17	21	6

Table 3.7: Numbers of As-If/Pretend Play instances at each feature within the Wonderground.

The dominance of the cabin as the setting for pretend play also influenced the types of Actions that participants reported (RQ1). By far the most common Action participants shared across all interviews centered around food. The most common specific action was “cooking” or “made/making” food: making soup, making cupcakes, making pumpkin apple cider, and more. Other common actions in and around the cabin included doing chores, playing family, and playing dress-up. The affordances and objects in that play space clearly invited very specific types of domestic/socio-dramatic play, replicating earlier research on the impact of props on types of pretend play (e.g. Howe & Hogan, 2001).

All reported fantastical play occurred in spaces other than the cabin, and – while all reported cabin play was relatively similar in content – contained a great deal of variance.

Participants reported playing dragons and zombies, pretending they were mountain goats, or acting as if the giant bucket were a generator about to explode. This variance in types of fantastical/non-sociodramatic play further supports the finding that the space directly influences play: the cabin shaped realistic pretend play, while the flexibility of the rest of the playground allowed a similar flexibility in imaginary circumstances leading to a great deal of diversity in As-If/Pretend Play behaviors.

The other aspect of context important to understanding play is knowing with whom children are playing and the relationships present in play. Across all ages, participants were more likely to engage in imaginative play with other children than with adults. Based on who participants described playing with we identified seven categories of Relationships: playing alone (Self), with pre-existing friends that they traveled to the Wonderground with (Friends), friends they met in the Wonderground that day (New Friends), Sibling(s), Parent(s), Staff members of the museum, and other people such as babysitters, grandparents, etc. (Other Grown-ups).

Relationship	**Early Childhood**	**Middle Childhood**	**Late Childhood**
Self	4 (24%)	3 (14%)	0
Friend(s)	3 (18%)	7 (33%)	2 (33%)
New Friend(s)	3 (18%)	3 (14%)	0
Sibling(s)	2 (12%)	4 (19%)	2 (33%)
Parent(s)	3 (18%)	3 (14%)	1 (17%)
Staff	1 (6%)	0	1 (17%)
Other Grown-ups	0	1 (5%)	0
Totals	17	21	6

Table 3.8: Numbers of times a specific relationship with reported in an As-If/Pretend Play instance at the Wonderground.

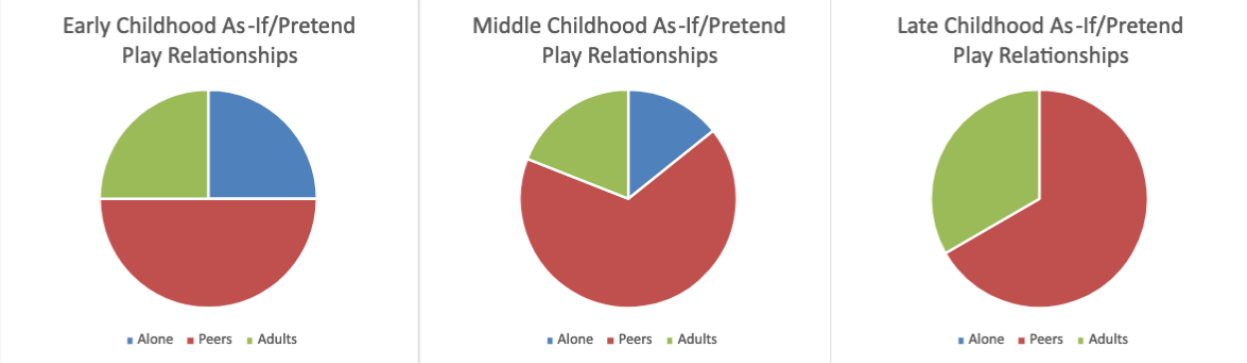


Figure 3.9: Pie charts depicting rates of playing pretend alone, with peers, or with adults in early, middle, and late childhood.

At each age, participants were progressively less likely to play As If/Pretend alone. 24% of Early Childhood participants reported playing alone, 14% of participants in middle childhood, and no one in late childhood played pretend alone. As independent play decreases from early to middle childhood, it is countered by an increase in play with peers. Types of play and locations for play do not appear to be impacted by play relationships; play alone, with peers, or with adults appeared at similar rates across Settings and Actions.

RQ3 examines what the motivations are that children report for playing pretend. In moving through our analysis, from in-vivo coding through memoing and into dramaturgy, we realized that the answers that participants offered as to *why* they engaged in their chosen actions were offered almost exclusively from within the play frame itself. When asked "why was that your favorite" or "why did you choose to play that," participants consistently responded with in-frame reasons for their play. For example, the motivation for playing dragons was to get the dragons; the motivation for superhero training was to get better at being a superhero; the motivation for playing monsters was to escape from the monsters; the motivation for playing dress-up was to "be the mom," and so on. Participants' responses fell entirely into three

categories: they either answered from within the imaginative scenario, they verbally responded that they did not know why that play instance was their favorite, or they offered no answer at all.

We see several possible explanations for this trend of in-frame answers in motivation responses. First is the fact that since the interviews were happening within the play space, the answers were offered within the play space as well. The interviewers were, at times, explicitly incorporated into play; it is possible that the interviewer was also invited into the play frame during the interview through the in-frame answers offered by children. It would be valuable to discover if children offered the same in-frame motivation responses if the question were asked in a space physically outside of the playground and temporally distinct from the play instance. Another possibility is that the metacognition needed to identify and name the motivation for one's action is a cognitive skill beyond the current developmental capacity of many of these participants. This is a less likely explanation, since the in-frame motivation responses occurred at roughly equal rates across ages; for example, a 5-year-old shared that reason she liked "playing the big sister" was because she had to make dinner, while a 9-year-old shared that the reason she was pretending to be a grandma was that "they have to do what I say." Both of these instances were based in group sociodramatic play in the cabin, and both gave in-frame reasons for choosing that type of play. The consistent use of in-frame motivations suggests that it is due to the structure of the space or the nature of the activity, rather than due to participants' metacognitive capacity across ages. Phenomenologically, this suggests that our participants understand their actions as being motivated primarily by the needs of the imaginative scenario rather than by external motivators.

IV. Limitations & Future Directions

This data, and the conclusions drawn from it, is limited to the population it represents and should not be widely generalized. While the distribution of ages mirrors that of all attendees to the children's museum, the gender imbalance exists only in the study sample. Based on patron survey, museum attendance is roughly equal across boys and girls (the only genders reported in the surveys). Our sample skewed female. A possible causal factor is the fact that the research team was comprised entirely of women, and young participants may have been more willing to talk to a researcher who shared their gender identity. The data is also limited by the population of the city in which it took place – we did not ask participants to self-report their racial identity, but museum attendance reflects the make-up of the majority-white population of the city.

This study is also limited by a small sample of As-If/Pretend Play descriptions from participants across age groups, but especially from those in late childhood. The full sample size of 150 interview participants offers strong evidence regarding the presence or absence of As-If/Pretend Play in the Wonderground across ages: this data enables the confident claim that As-If/Pretend Play persists through middle childhood and may not begin to fade in frequency until 9 or 10-years-old. However, the small subsets of those who reported As-If/Pretend Play within the full sample of 150 participants means that there are very few substantive themes or patterns we can identify in the context or motivations of pretend play within age group. This is particularly true for the six participants in late childhood who described As-If/Pretend Play. Observations on context and motivations should therefore be seen as preliminary and in need of further research.

This is only the third study to look for evidence of pretend play beyond early childhood, and the first that is based in current – rather than retrospective – reporting (Smith & Lillard, 2012; Perone & Göncü, 2014). The fact that each of these three studies has provided evidence

that pretend play persists far longer than the dominant developmental model indicates a robust need for further research to replicate these findings, clarify the timeline of pretend play's presence, address the limitations described above, and garner more data in order to better understand contexts and motivations for the behavior. The most vital next steps are threefold. One: increasing the sample size would allow a more meaningful analysis of trends within As-If/Pretend Play behaviors, rather than simply an argument as to whether or not they exist. Two: repeating a similar interview protocol with a different demographic of children and researchers, and different location, would shed important insights on the relationship between culture, location, relationships, and play behaviors. For example, would the same interview protocol replicate these findings in another language, in a more rural or more urban setting, if there were more genders represented in the research team, or if participants were reporting on a play space that was not intentionally designed to foster imaginative play, etc.?

Three: triangulating interpretation across multiple data collections points will deepen our understanding of pretend play across ages. Given the absence of self-report studies in pretend play, in this study we intentionally focused the design on interviews. A productive next step would be to combine observation and self-report in the same play space in order to more directly determine if interviews were revealing behaviors that would otherwise be hidden. As described in Chapter 1, the foundational research that set early childhood as the window for pretend play is, by now, decades old. It is possible that pretend play's expanded presence in this study could be due to changing cultural trends, rather than changing methods. Conducting observation and interview at the same time are necessary to tease apart these factors.

V. Significance

This data presents preliminary evidence for the consistent presence of As-If/Pretend Play through middle childhood. Unlike the longstanding developmental trajectory that describes the ages of 3 to 5-years as the "high season of pretend play" (Singer & Singer, 1992), this study suggests that As-If/Pretend Play rates persist throughout elementary school. The decline of As-If/Pretend Play in late childhood replicates the findings of Smith & Lillard's 2012 retrospective study. This finding directly challenges decades of research on pretend play focused exclusively on early childhood. An overly narrow focus on early childhood in research may be distorting our understanding of the nature and developmental trajectory of the phenomenon.

This study is also, to my knowledge, the first that takes a phenomenological approach to understanding pretend play through the perspective of children. Participants' varied use of disclaiming language and their consistent description of motivations from within the play-frame invites a number of possibilities for future consideration. Further research on how children perceive their own actions within imaginary scenarios may offer meaningful insight into how pretend play, learning, and development interact. Taking seriously children's description of their play highlights the porous nature of the pretense frame, and the spectrum of behaviors that can be considered pretend play.

This study also makes a significant contribution to the field in its use of PAR principles applied to human developmental research. The design principles described in Section III.1.iii will enable future researchers to take this approach to research further in play-based and museum settings.

This study offers vital preliminary evidence that the "high season" of pretend play is not confined to the early childhood years. Pretend Play may persist at roughly even rates through

elementary school, and not begin its downward trajectory until closer to 10 or 11-years old. These findings suggest a need for ongoing research and a reorientation of our understanding of the developmental trajectory of pretend play and the many developmental and educational outcomes it may support. This study is, however, the first of its kind and therefore in need of replication and expansion. This presents[31] an exciting invitation to further research on pretend play beyond the early childhood years.

[31] Nay, demands!

Chapter 4: Pretend Play in Young Adulthood: *Bradley Does Not Exist*

I. Introduction

The Wonderground interviews provide evidence that pretend play occurs at roughly equal rates through 10-years-old before beginning its downward trajectory. This contradicts decades of research that locates pretend play exclusively in early childhood (for review, see Chapter 1). Chapter 3 presented the first study of pretend play based in the self-reporting of children. Chapter 4 extends this methodology to a new age-group: young adults.

The Smith & Lillard 2012 study – described in Chapter 1– tested their hypothesis that pretend play continues "into and perhaps through elementary school" (pg. 528) via a retrospective survey with undergraduate participants. The embedded assumption that pretend play is a phenomenon distinct to childhood informed the child-centric language of their retrospective survey, and may have informed participant responses. The questionnaire was designed to "elicit memories," was focused on pretend play in middle childhood, and asked participants to remember pretending "like a child" (pg. 529, 530). I believe that the authors' assumptions that pretend play is tied specifically to childhood shaped their language in a way that inhibited participants from reporting on the possibility of more recent pretend play. Indeed, when participants were asked to report when they "stopped pretending in the way that [they] pretended as a child" (pg. 530), 30 participants responded to this question with memories that

were within one-year of their current age. These 30 participants, out of 113 total participants—27% of the sample—were excluded from analysis because it was assumed by the authors that these participants had "misinterpreted the question" (pg. 533). In the paper, Smith & Lillard do not consider the possibility that 27% of their sample might still have been engaging in pretend play into their young adulthood. Smith & Lillard's work is invaluable for the evidence it gathered in support of a longer developmental trajectory of pretend play than that of the dominant Piagetian view. I assert, however, that the methodological shortcomings of the study actively misrepresent the rates of current pretend play experienced by those older than 11 years – the cut-off proposed by Smith & Lillard in that 2012 paper. Including the 27% of the sample that they discarded for "misinterpret[ing] the question" may have enriched, rather than weakened, their findings.

The Smith & Lillard participants who reported current pretend play are in good company with those in Perone & Göncü's 2014 study of graduate students (also described in Chapter 1). When the language of "like a child" was removed from the study design, 94% of their sample reported currently pretending as graduate students. All of the participants were in graduate programs related to early childhood education. Perone & Göncü's study was primarily interested in the presence (or absence) of pretend play, and how participants perceived its benefits from a teaching perspective. The authors did not include analysis of the types of play participants reported: they asked only for location, partners, and perceived benefits.

Taken together, these two papers (Perone & Göncü, 2014 and Smith & Lillard, 2012) point to the exciting need for expanded data collection regarding pretend play behaviors at different points throughout the lifespan. This topic could fuel years of research. In this chapter, I assert that combining a rough replication and expansion of Smith & Lillard's and Perone &

Göncü's surveys is a productive next step, but with a vital change to both. Rather than a written questionnaire, this study seeks to increase understanding of undergraduate pretend play through semi-structured interviews.

I.i Research Questions

Chapter 4 examines the same Research Questions as Chapter 3, but with young adult participants reporting on both current and past behaviors, rather than children reporting on current behaviors. The two studies cited above focused on a retrospective survey of middle childhood from the perspective of undergraduates (Smith & Lillard) and current and retrospective reporting from graduate students (average age = 30 years, Perone & Göncü). The study presented in this chapter uses interviews to ask for both current and retrospective reporting from a novel age group: young adults (18 – 25 years old). The study seeks to examine four research questions:

RQ0: Do participants report pretend play behaviors?

RQ1: What sorts of pretend play behaviors do participants report engaging in?

RQ2: What are the contexts participants report for their pretend play?

RQ3: What are the motivations participants report for playing pretend?

This study occurred across two phases. In the pilot phase, the focus was on designing the methods that would be used in the full expression of the study. The only two existing studies examining pretend play beyond early childhood – Smith & Lillard and Perone & Göncü – both used written surveys and found very different rates of pretend play reporting: 27% vs 94%, respectively. A large part of that difference, I believe, is due to the "like a child" framing in the Smith & Lillard. Phase one of this dissertation project was, therefor, aimed at refining methods and instrument design. Phase two then implements the established and refined interview protocol

to examine the research questions with a larger sample size. In the following sections, I report on both the first phase of piloting and the second phase of the full study. In the pilot section I share the methodological findings. The methodological findings provide justification for the final study design.

II. Pilot Study

II.1 Data Collection Protocol

In the spring of 2022, I conducted a round of pilot interviews with undergraduate students at the UW-Madison. The initial purpose of these pilot interviews was to develop a narrative survey that would be used in formal dissertation data collection. Live interviews allowed me both to test questions and prompts to identify the most effective language towards designing the narrative survey, and to solicit participant feedback on the design of the research. Participants were informed that the purpose of the interview was two-fold: one goal was to learn about pretend play, and the other goal was instrument creation. Participants seemed interested and invested in providing their thoughts not only in response to the pretend play prompts, but also in thinking about research, offering ideas on the design, and reflecting on their experience of answering the questions. Their responses were invited through a semi-structured narrative interview, wherein anchor questions were consistent across each participant but our conversations were fluid and followed the interests and contributions of the respondent. The pilot interview protocol used in this pilot phase is included in the Appendix, pages 205 - 207.

The interviews were comprised of open-ended narrative prompts. Part I of the interview included demographic questions to help situate the data within the specific population being surveyed, and to start building rapport. That section contained questions including, but not

limited to, age, gender, racial/ethnic background, current academic major, and hobbies. Part II of the interview offered narrative prompts asking about participants' memories of pretend play across four age-spans: Current/Young Adulthood (18-25 years), Adolescence (12 to 17-years), Middle Childhood (7 to 12-years), and Early Childhood (defined as 3 to 7-years-old). These four age categories adhere to the structure of Smith & Lillard's retrospective survey. Narrative prompts asked participants to share stories about specific examples of engaging in pretend play at each time point, and to describe the content, context, and motivations for each pretend play episode. If there were no memories of pretend play for a certain timepoint, participants were assured that "none" was a valid response and we moved to the next nearest age at which they did remember playing pretend.

Asking participants to share specific examples enabled me to capture rich and nuanced data through participant storytelling (e.g., Clandinin and Connelly, 2000; Shkedi, 2004). I selected a narrative interview design because I assume that the phenomenon in which I am interested, pretend play, is by its nature narrative-constructivist. This is to say, the data's value arises from the stories, descriptions, and meanings generated and shared by the participants. The purpose of this method is to better understand the phenomenon by inviting participants to generate stories about specific episodes of pretend play (i.e., Mueller, 2019). Additionally, basing the interview design in participant storytelling aligns with the dramaturgical coding approach applied in Chapter 3 with the Wonderground interviews, which seeks to understand participant motivations and actions within specific settings (Miles, Huberman, and Saldana, 2014). Focusing on specific play episodes also creates a consistent structure with Study 1, which asked youth to describe specific instances of their play that day.

Part III of the pilot interviews consisted of instrument creation questions. Participants were asked about their experience participating in the interview, whether or not they thought they would respond differently in a written/more anonymous format, and what they thought the experience of their peers might be with the interviews. This section of the pilot interviews was examined separately from the empirical questions and narrative prompts.

The interviews were, with participant permission, recorded. Unlike the Wonderground interviews, I elected to record these interviews for three reasons: first, the exchange was already being technologically mediated by zoom, so the act of recording did not introduce any additional technology to the interaction. Second, undergraduate participants are much more familiar with both the concepts of research and of recording than young children are. Third, the undergraduate utterances were much longer, and would have been more difficult to meaningfully capture by hand as compared to young children's typically brief utterances. The zoom recordings were then transcribed by AI (using the IRB-approved platform REV), followed by a round of hand cleaning the transcripts to ensure that the written record reflected what was spoken by the participant.

II.2 Coding and Interpretation

The undergraduate interviews then underwent the same three-step coding process as the Wonderground interview data. First, an initial round of in-vivo coding with the aim both of privileging the verbatim words of the participants and of generating a baseline of what was said. The middle-step (which happened concurrently across both the previous and ensuing coding phases) consisted of generating personal meaning-making memos to make sense of, explore, and expand on emerging themes in the data. I then completed a round of dramaturgical coding structured within construct tables (Miles, Huberman & Saldana, 2014), and interpreted the codes through a phenomenological lens. In this chapter, the analysis stays focused within each age

category on which participants reported. Chapter 5 will shift its analytical lens and examine reporting across age groups.

II.3 Participants

Participants were recruited through the EdPsych SONA system and received course credit for completing the interview. For the pilot study, I conducted seven interviews: six female participants (introduced themselves with she/her pronouns) and one male/non-binary participant (introduced themself with he/they pronouns). The participants ranged in age from 19 to 36-years-old. Six participants were aged 19-23 years, the 36-year-old was a returning adult undergraduate student. In the full expression of the study, I did not include participants older than 25 in order to stay focused on pretend behaviors in young adulthood. However, for the purposes of instrument creation in this pilot phase, I have included the 36-year-old's responses in analysis.

II.4 Results and Discussion

II.4.1 Methodological Findings – Interview vs. Survey

One of the questions I sought to answer with the pilot phase of the study was the relative merits of conversational and live zoom interviews compared to the full anonymity of written surveys. The two extant studies on pretend play beyond early childhood (Perone & Göncü, 2014; Smith & Lillard, 2012) each used one of these different methods. The anonymity of surveys seemed potentially important to the design because pretend play beyond early childhood may be construed as childish, embarrassing, weird, or shameful (Walsh, 2019). I assumed that the anonymity of surveys could enable more honest reporting than face-to-face interviewing on this potentially sensitive topic (Gnambs & Kaspar, 2015). However, participant responses during the pilot phase indicated otherwise. The covert aspect of the reported behaviors appeared to stem from assumptions in the participants that playing pretend in young adulthood is "embarrassing"

or “just a thing kids do.” When the interview invited stories of these behaviors without shames or judgement, participants described being more willing to share. Despite the potentially embarrassing nature of the topic, in the meta portion of the interview – when participants were asked about their experience of answering the questions – most said that they actually enjoyed sharing their experiences. One articulated her appreciation that the semi-structured interview format was more like a conversation and less like a test, and that “you [I/Katherine] were able to ask questions that related to the things that I was saying, and not just like, you know, moving on to the next question, right from there.” Another participant said they felt like they “benefitted” from sharing these stories. Several participants said that they thought they were alone in practicing these behaviors. One said she found out her sister also talked to imaginary audience and expressed relief in realizing “Oh, I’m not crazy!” Another described feeling like they had a “vulnerability hangover” at the end of the interview, but that they enjoyed the conversation.

Someone else shared that if they were typing, they would get straight to the point, “to do this just to get out of it, but talking I'm more so having the conversation, reflecting on what I'm thinking and answering questions.” None of the participants indicated that the substantive content of their responses would be different had they been written in an anonymous survey as opposed to talking. In addition to participants’ generosity and willingness to share their stories, there were several interviews in which participants gave fairly brief answers to the initial questions, and then opened up with rich insight and story only at my final question: “Is there anything else you want to share before we end?” Therefore, based on this participant feedback in the pilot interviews, I decided to continue with a zoom interview format in the full study rather than pivoting to written surveys.

II.4.2 Methodological Findings – Limits of Memory

The second methodological finding that informed the design of the interviews for the full dataset emerged from the age-categories in which I asked for retrospective stories about pretend play. In the pilot study, I asked for stories across four age-groups: Current/Young Adulthood (18-25 years), Adolescence (12 to 17-years), Middle Childhood (7 to 12-years), and Early Childhood (defined as 3 to 7-years-old). These four age categories intentionally mimicked the four categories in Smith & Lillard's 2012 retrospective survey. In the interviews, however, participants consistently reported not clearly remembering Early Childhood well enough to give clear examples. Each of the 7 participants were confident that they did play pretend in Early Childhood, but most could not provide specific examples. This is unsurprising, given the broad age range in which people experience childhood amnesia (i.e., Peterson, 2020; Wang & Gülgöz, 2018). Therefore, I removed that section of the interview in the full expression of the study and asked for stories connected to Young Adulthood (current), Adolescence (middle and high school), and Childhood (elementary school).

II.4.3 Empirical Findings

The key empirical assertion constructed from the pilot data is that pretend play is a common practice among UW undergraduate students. Every single participant (seven of seven) shared stories of pretend play at their current age. These methodological findings, and the preliminary empirical finding that pretend play does exist in young adulthood, informed the design of the full study. Interpretation of the dramaturgical Actions, Motivations, and Contexts participants reported in their stories led to the formation of the following assertions (Erickson, 1986; Saldaña & Omasta, 2018):

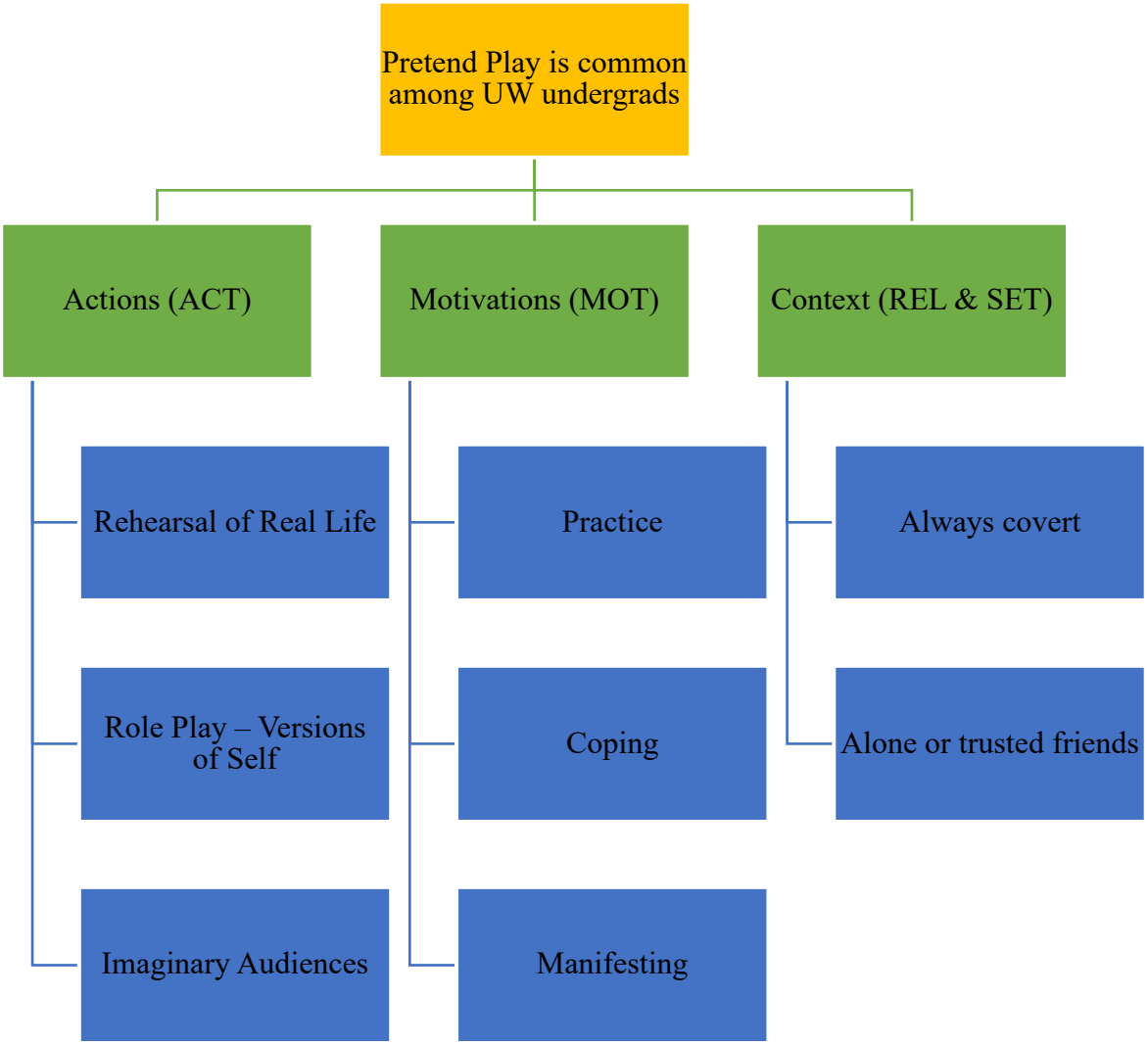


Fig 4.1: A diagrammatic representation of the key assertions regarding pretend play in Young Adulthood in the pilot study.

Every single participant shared stories of pretend play. Their stories constellated around three themes: Within this consistency of engagement with pretend play behaviors, there was 1) a great deal of variance in the Actions that participants shared; 2) several repeated themes in their

Motivations for pretend play, and 3) the Settings for pretend play were always described as covert, confined either to the self when alone or to play with highly trusted friends.

There were few pretend play behaviors reported by more than one participant; however, there are several trends in the Actions in their stories. Undergraduate pretend play behaviors clustered around three themes or sub-assertions: 1) Practice or Rehearsal of Real Life events, past or future; 2) Role Play; and 3) interacting with a variety of Imaginary Audiences. These behaviors are inextricably bound in the motivations participants reported for engaging in them—from a dramaturgical perspective: the Motivation informs the Action. Three strong themes emerged in the reasons people gave for their pretend play: 1) Practice for future real-world events was Motivated by the goal of increasing Confidence; 2) Role Play was Motivated by desires to Express or manifest an ideal of their "full-fledged" Self; and 3) Pretend Play served as a Coping Mechanism that provided comfort when dealing with challenges, stress, or negative emotions.

A quick review of this project's definition of pretend play will support our examination of these three themes. Pretend play involves *Animating* an imaginary as-if scenario, *Identifying* with this animation/imagination through embodied enactment, and *Disclaiming* the reality of that Identification by keeping the goals and actions of the play within the physical and temporal bounds of the metarepresentational frame (for review, see Chapter 2). The first theme of undergraduate pretend play – practicing real life events – meets these three criteria, even if the actions sometimes blur the boundaries of this definition. Examples of pretend play as rehearsal of real life were related to events both past and future. For example, one participant described "re-having" arguments alone in her bathroom mirror, fully voiced and embodied. She described going through a challenging period that led to an increase in conflict, and how these arguments

didn't always go the way she wanted; so, she "re-had" them alone later. In this fictional argument, she could re-write the ending to experience the outcome she would have preferred.

This Action is connected to both the Motivating themes of experiencing/manifesting one's preferred reality and a method of coping with the stress of an argument that didn't go the way she wanted. These rehearsed arguments also served the purpose of future preparation: so that she would be ready to "defend [her]self later." Practicing in advance of a future argument let her figure out "what's the professional way of saying – excuse my French – fuck off. What's the professional way of saying that. So, I had to do a lot of practice on that." This concept of pretend behavior as practice for future encounters blurs our given definition of pretend play since the goal is outside of the temporal bound of the pretend frame. A phenomenological approach to data interpretation, however, necessitates including Rehearsal since it was frequently cited by participants as a primary Action and Motivator in their pretend play. This misalignment between my academic definition and participants' understanding and reporting of their own behaviors and motivations is reflected in [Rehearsal] being bracketed in the Assertions in Fig 4.1. Other examples of Rehearsal of Real Life include stories participants shared about acting out how one will behave at an event or what one will say to colleagues or friends in a specific setting. Like the example described in detail above, all Rehearsal of Real Life was motivated by a need to practice behaviors before an event occurs to build confidence, a desire to experience oneself as one desires in that future setting, and as a coping mechanism for social anxiety.

The second Action theme in pretend play is Role Play that allows an Experience or Expansion of the Self. Expanding one's experience of Self could be done by pretending to be someone else, or by pretending to inhabit an idealized version of the Self. One participant described pretending while dancing:

> When I'm dancing I'm imagining my myself as being like someone who's really cool who has great dance moves, who like, like is like Beyonce essentially. … I'm envisioning myself to like, you know, be this bad girl and like, you know, <laugh>, um, and really like feel myself.

Another participant described creating completely fake personas:

> Sometimes when my friends and I go out to dinner, we'll kind of create fake personas and we'll have conversations with each other as if we are these like imaginary people that we have thought up and we kind of just have like fun with it because we are very close. You know, we know each other really well. So, after a certain amount of time going out to dinner, talking about the same things gets a little bit old. So, when we go out to dinner, sometimes we will be like 30 year old bankers from New York, or we'll be like travel nurses or like whatever we're feeling like that night.

Unlike expanding the Self through pretending to be other than one is, several participants described pretending as a way to experience their own Selves. For example, one participant described acting out alternate realities:

> So like a lot of my make believe like, um, realities had to do with like me being the main character and like everything working out for me. Like my realities are, you know, what the ideal scenario would be in a certain, um, situation for my life.

Another participant described pretending to be characters from tv and movies as a way to experience other possibilities:

> I guess, doing these different kinds of like imitations or performances gives me access to different parts of my own self. Um, it gives me, first of all, it feels like a movement of myself within myself. I wanna give you like data words, not like, um, like fluffy words, but it's empowering somehow because I can be more than just whatever role I'm driven roles I'm driven to perform today by the imperatives of my, um, socioeconomic life.

Experiencing/Expanding the Self served a meaningful purpose, according to participants. There was a theme of moving toward a manifestation of this idealized other Self. In experiencing this possibility, it became more real: “I think sometimes we, we make believe or we pretend ourselves and act as if, and, and we're doing it to become better or better versions of ourselves.” Beyond using the pretend as a step towards the real, participants also seemed to derive comfort simply from the framed experience itself. This met the definitional criteria of the goal of the

action being contained within the physical and temporal frame: “it's kind of like escaping to me, like, you know, like when I get to sit down and like kind of like just talk and like act like somebody else or like, you know, be in my own world, it's like escape. So when I get overwhelmed … like if I'm like pretty overwhelmed, I'll try and find time.” This demonstrates how these behaviors also stem from the motivational theme of Pretend Play as a Coping Mechanism. Several participants described their reason for pretending as “fun,” “stress relief,” and “just feeling joy.”

This theme of behavior – Experiencing/Expressing the Self – overlaps with the third theme of behavior: Imaginary Audiences. The presence of an Imaginary Audience emerged across a number of different behaviors. One participant described reading essays out loud to an imaginary panel of experts and debating with them in order to help her writing. She said she would always warn her roommates before this happened. Two participants told stories of pretending to record social media videos. Both described narrating processes like putting on make-up or picking out an outfit to an anonymous YouTube audience, but never actually recording or posting videos. Other Imaginary Audiences exist as podcast listeners – “I’m interpreting it [life] out loud to the audience in my head” – or as a studio audience that a participant performs for as she cooks alone in her kitchen.

These Imaginary Audiences served a variety of purposes for participants. All three motivational themes are present in participants’ descriptions of what they gain from these pretend onlookers. Some participants describe the Imaginary Audience as a way to [Practice] for a real audience, like the student who described discussing her essays with an imaginary version of her teacher. More prevalent, however, were the themes of Expression/Manifestation of Self. Several participants shared experiencing validation through expressing themselves to Imaginary

Audiences, as opposed to posting real videos to real viewers of social media: “It's like kind of like, I way to engage with myself and I feel like even growing up, I haven't really been the type to like express myself in front of people. So like doing it by myself or like in front of a mirror, in front of a camera, like gives me the opportunity to like see myself in full-fledge form of like just me being comfortable and like just me, like having fun without the fear of like being judged.” Imaginary Audiences were the type of behavior most strongly connected to the motivational theme of Pretend Play as Coping Mechanism. Talking to an Imaginary Audience helped one participant manage their OCD symptoms when they felt stressed out; another shared that she often lost focus on tasks due to her ADHD but performing for an imaginary audience helped keep her focused. Talking to an Imaginary Audience as a way to manage stress was also a prevalent theme.

The importance of Pretend Play as Coping Mechanism and as a way of safely Expressing/Experiencing oneself is set in contrast to the primary Obstacle reported by participants: the necessity of time alone for these covert behaviors. None of the participants described any public pretend play. Most said that they only ever engaged in these behaviors when alone and would never do so around other people. For the participant who described taking on fake personas with her friends, the pretend was still covert and exclusive to that friend group: she described a moment of panic when a person external to their pretense – a diner at another table – tried to engage with them as their pretend personas. The requirement of space and time alone to play pretend presented the biggest obstacle to participants engaging in these behaviors. Many shared that the frequency of their pretend play has decreased in college simply due to the scarcity of time alone: “I have five or have four roommates and I'm with all of them all the time. And I think sometimes when you're in a circumstance like college and it's such a social setting,

that there's not always enough time for you to like, be in your own like, like kind of space"; "And I feel like in general, as a high schooler, you have more time to like kind of indulge yourself more into things that you like to do. So I feel like now as a college student, I like, I remember like I, I do it, but I don't do it constantly, but I remember like at the age of 18, like 17, 18, 19, I just remember doing it so often." If one of the primary functions of pretend play is as a coping mechanism for people to practice and process events within the safety of a fictional frame, then the sudden loss of the privacy during college may be an area of undergraduate mental health that deserves more attention.

Despite this pilot's small sample size, the data generated through these conversations is very rich. The methodological findings from the pilot informed the design of the full study, and the empirical findings provided a baseline upon which to build with a larger sample size.

III. Undergraduate Reporting of Pretend Play – Full Study

III.1 Data Collection Protocol

From the fall of 2022 into the spring of 2023, I conducted 35 interviews with undergraduate students at the UW-Madison using the interview protocol developed through the pilot phase. The semi-structured narrative interviews allowed consistent questions across participants to anchor the research, while enabling our conversations to be fluid and follow the interests and contributions of each respondent.

The interviews were comprised of open-ended narrative prompts. Part I included demographic questions to help situate the data to the specific population being surveyed and to start building rapport. That section contained questions including, but not limited to, age, gender, racial/ethnic background, current academic major, and hobbies. Part II of the survey/interview

offered narrative prompts asking about participants' memories of pretend play across three age-spans: Current/Young Adulthood (18-25 years), Adolescence (12 to 17-years), and Childhood (7 to 12-years). Narrative prompts asked participants to share stories about specific examples of if/how they engaged in pretend play at each time point, and to describe the content, context, and motivations for each pretend play episode. If there were no memories of pretend play for a certain timepoint, participants were assured that "none" was a valid response and we moved to the next nearest age at which they did remember playing pretend. The interviews were, with participant permission, recorded. The interview protocol is included here:

Undergraduate Reporting of Pretend Play
Semi-structured Interview Protocol for one-on-one young adult participant conversations

Notes and set-up

- Bulleted questions are priority/essential; others are prompts or follow-ups depending on the response and time
- At the beginning of the interview do introductions, ask for permission to record, start the recording, then start the intro script below
- Before the recording begins, even in the study description on SONA, encourage participants that camera on or off are both welcome

Introducing Interview: Script

Thanks so much for agreeing to participate in this interview, I'm excited to talk with you. The purpose of this interview is to learn about people's engagement with pretend play. Overall, I expect this interview to take about half an hour to 45-minutes. We'll start with a few basic getting-to-know-you questions, and then talk about pretend play! There's no right or wrong way to answer any of the questions, and you are always free to "pass" any questions you don't want to answer.

- Any questions before we get started?
  -[Answer]
  -Great! Let's start with those getting-to-know-you questions. I'll ask some questions about your identity and to learn a little more about you. For example, I use she/her pronouns, I'm white, I grew up in the Midwest, I work in the Educational Psychology department, and in my free time I really like playing music! I'll try to avoid saying your name in the rest of the recording, so you stay anonymous.

Getting to know you

- What is your gender?
- How old are you?
- What's your racial identity?
- Where did you grow up?
- What's your major and year in school?
- Would you tell me about any hobbies you like to do? Things like playing sports, or video games, artmaking or crafting, baking, hiking, anything!
  -How often do you get to engage in that?
  -What do you think draws you to that activity?

Introducing Pretend Play: Script

Thanks for all those answers! Now, we're going to shift to talking about pretend play. Broadly, we all know what pretend play is – we can recognize it in kids playing house or putting on a cape and pretending to be a superhero. To offer a more formal definition:

By pretend play, I mean "*acting as-if*," or including your body and physical actions in your imagination.
Pretend play behaviors might look like:

[Possible examples]
-Talking to an imaginary audience as you do your make-up in the morning, as-if you were recording a youtube tutorial
-Playing a role-play game and acting as-if you were your character while in the game, even if only for a moment
-Having characters and silly voices that you enact with certain very close friends
-And many more!

I'm interested in learning about the variation in if or how often people engage in pretend play behaviors, so there are no wrong answers!

- Any questions?
  -[Answer]

Pretend Play Questions

Current

- Think about your life now. Do you think you ever engage in pretend play, not including play with young children, at your current age?
- [If yes] Can you give me one recent example of playing pretend? Include as much detail as you can.
  -Who were you with?
  -Where were you?
  -Do you think you would [do X] in a different setting?
  -Why/why not?
  -Why do you think you engaged in that behavior? What do you get out of it?
- Tell me about another example of pretend play

-[Repeat above prompt cycle]

- Last round: any other recent examples of pretend play?
  -[Repeat above prompt cycle]
- How often do you think you engage in pretend play? Daily, weekly, monthly?
  -Are there circumstances that lead you to doing it more or less frequently?
  -What are they?

- [If no] Why do you think you don't engage in pretend play anymore?
  -Can you remember playing pretend in the past?
  -When do you think you stopped?
  -Why did you stop?
  -Are there any contexts where you could see yourself playing pretend now?

- [For both] Is there anything else you'd like to share about your pretend play now?

*Jump to the most recent age category that they remember playing pretend in their past; continue interview from there.

Adolescence

- Think about your life as a teenager, roughly ages 12 to 17 – middle and high school. Do you think you ever engaged in pretend play, not including play with young children, during that time?

- [If yes] Can you give me one example of playing pretend? Include as much detail as you can.
  -Who were you with?
  -Where were you?
  -Do you think you would [do X] in a different setting?
  -Why/why not?
  -Why do you think you engaged in that behavior? What do you get out of it?
- How often do you think you engaged in pretend play? Daily, weekly, monthly?
  -Are there circumstances that lead you to doing it more or less frequently?
  -What are they?
- [If no] Why do you think you didn't engage in pretend play as a teenager?
  -When do you think you stopped?
  -Why did you stop?

- [For both] Is there anything else you'd like to share about your pretend play as a teenager?

Childhood

- Think about your life as an elementary schooler, roughly 7 to 12-years-old. Do you think you ever engaged in pretend play during that time?

- [If yes] Can you give me one example of playing pretend as a child? Include as much detail as you can.

-Who were you with?
-Where were you?
-Do you think you would [do X] in a different setting?
-Why/why not?
-Why do you think you engaged in that behavior? What do you get out of it?

- How often do you think you engage in pretend play? Daily, weekly, monthly?
-Are there circumstances that lead you to doing it more or less frequently?
-What are they?

- [If no] Why do you think you didn't play pretend play in elementary school?

- [For both] Is there anything else you'd like to share about your pretend play as an elementary school student?

Potential Connections

- After thinking through pretending at all these different ages, do you see any connections or through-lines in how you have or have not engaged in this type of behavior over the years?
-[possible prompt] Have the types of activities changed or stayed the same?
-[possible prompt] Have your motivations – what you get out of doing it – changed or stayed the same?
-Tell me more…

Closing

Thanks so much for your engagement in this conversation!

- Is there anything else you'd like to share about pretend play?
- Do you have any questions for me?

Thanks again for sharing your time and your experiences!

III.2 Coding and Interpretation

The recorded interviews were transcribed, hand-cleaned, and then underwent the same three-step coding process as the Wonderground and pilot data. First was an initial round of in-vivo coding with the aim of both privileging the verbatim words of the participants and generating a baseline of what was said. The middle-step (which happened concurrently across both the previous and ensuing coding phases) consisted of generating personal meaning-making

memos to explore and expand on emerging themes in the data. I then completed a round of dramaturgical coding structured in construct tables (Miles, Huberman & Saldana, 2014).

As described in Chapter 3, dramaturgical coding applies conventions from dramatic literary and performance analysis to the stories that participants tell in an interview (Saldaña & Omasta, 2018; Saldaña, 2016). Dramaturgy in theatre and performance is a methodological approach to theatre used to focus and clarify the legibility of an entire dramatic or theatrical composition (e.g. Cattaneo, 2021). In dramaturgical coding, this includes a focus on Setting and Relationships within the stories shared by participants, the Objectives and Obstacles of the characters, the Tactics or Actions characters use to achieve their Objectives, and so on. Dramaturgical analysis aligns with the content of the interviews due to the overlap of not only pretend play and drama, but also the liveness and narrativity of the data collection method. Based on themes emerging concurrently across the Wonderground and undergraduate interviews in-vivo coding, I developed the following dramaturgical approach specific to this data set:

- Super-objective (OBJ): to PLAY.

  We can assume this super objective because it is how we framed the interview: "can you give me a recent example of playing pretend?" All actions that were shared were, therefore, actions connected to the verb *to play*. Play may mean something different to everyone and be motivated by different needs, but the concept "play" persists as the goal and driving force for all behaviors reported in interviews.
- Motivation (MOT): motivation is what *motivated* the specific reported action; i.e., what did participants gain from the behavior/why did they engage in it.
- Action (ACT): Saldaña calls these tactics; these are the specific actions behaviors that participants report in connection to the OBJ and MOT.

- Obstacle (OBS): this code is to reference any time the participant shares an obstacle to their ability to play. (Obstacles are not connected to the research questions of Chapter 4 but emerge as an important category of meaning in Chapter 5.)
- Setting (SET): where did the play happen.
- Relationships (REL): with whom did the play happen.

III.3 Participants

Participants were recruited through the EdPsych SONA system and received course credit for completing the interview. This was a convenience sample, but also – in its capacity to include the age-group of interest – an authentic sample. The original study title in the SONA system was "Undergraduate Reporting of Pretend Play." Of the first 25 students who signed up to participate in the study under that name, 24 of them were female. Given the overall demographics of the students in Educational Psychology courses, it is expected that samples may skew female; however, a skew this big suggested that there may have been something about the study itself that was hindering male students from registering. Considering that the potential social stigma around pretend play may be informed by gender, and aiming for the intentional theoretical sampling invited by grounded theory (i.e., Glaser & Strauss, 1967), we changed the name of the study in SONA to "Games and Play Study" after the first 25 interviews. Of the next 10 participants to register, 8 were female and 2 were female/nonbinary; no male participants registered to participate. The absence of male participants may be due, then, rather to the mode of the study than its topic: there is some evidence that men are less likely to engage in verbal self-report than women (Gnambs & Kaspar, 2015). Ongoing analysis indicated that themes and responses were beginning to repeat in our sample of 35, so I chose to cap the sample size there rather than continue attempting to recruit more male participants. This study, therefore, is a

report primarily on young adult women's reporting of pretend play. The paucity of other research examining this topic with this age group means that even a heavily gender-skewed sample offers novel and valid insights.

All participants were undergraduate students at the UW-Madison and ranged in age from 18 – 23 years old. There was some variation in majors, but all participants were in a field related to the sciences, health, and/or education.

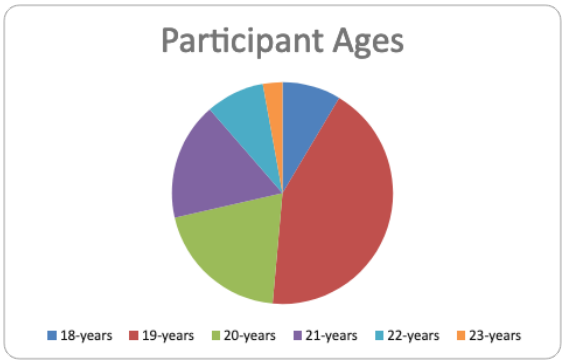


Figure 4.2: A pie chart visualizing participant ages.

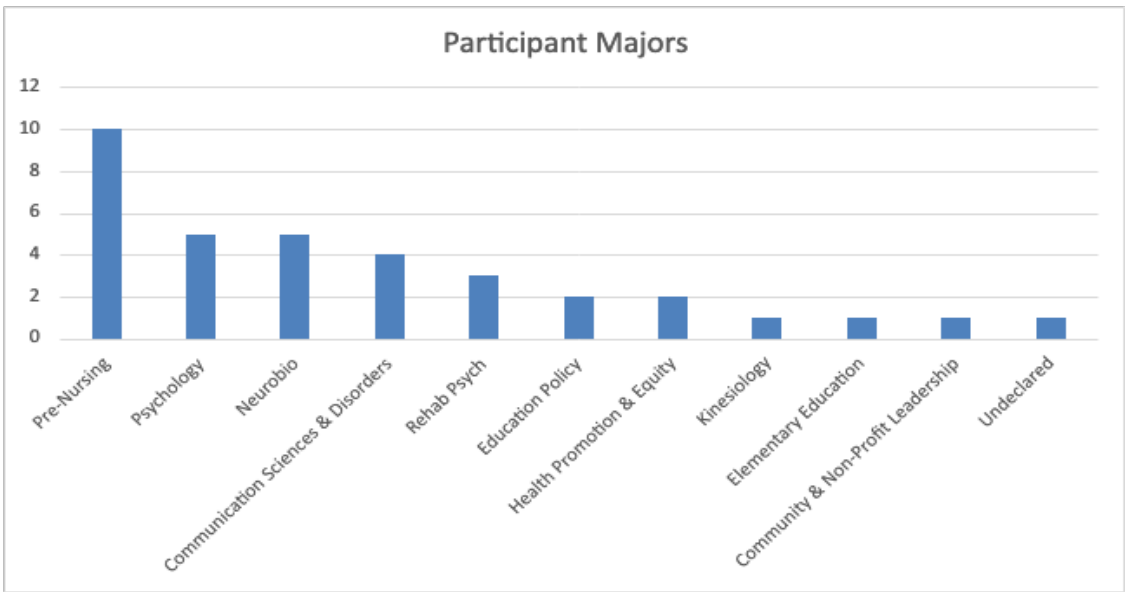


Figure 4.3: A bar graph visualizing participant majors.

The race and gender reported by participants was fairly homogenous: 91.4% of the participant group was female (N = 32), 6% was nonbinary (N = 2), and 3% was male (N = 1). 80% of the participant group reported their racial identity as white (N = 28) and 20% reported being BIPOC (N = 7). Of the BIPOC participants, 2 reported that their racial identity as Black, 2 reported that they were Latina, and 1 participant each reported being Asian America, Indian American, and Asian.

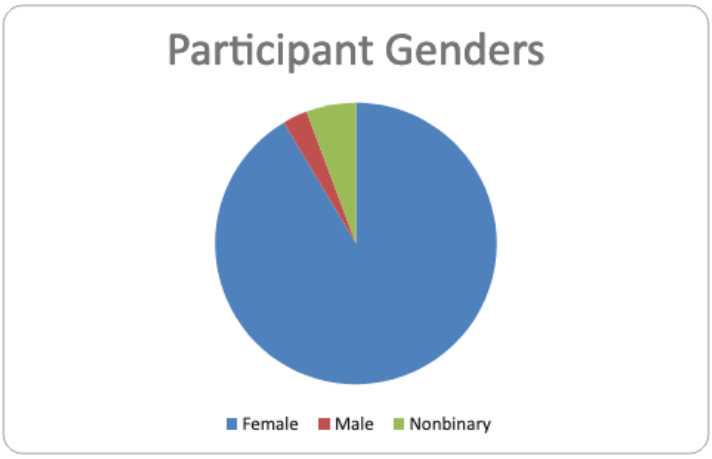


Figure 4.4: A pie chart visualizing participant ages.

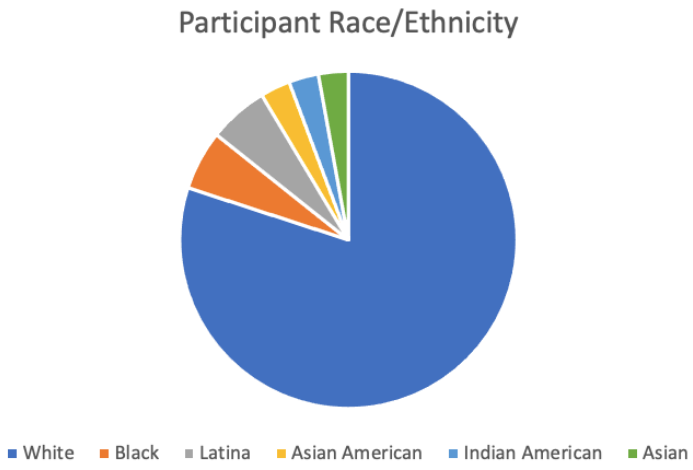


Figure 4.5: Pie chart visualizing participant race/ethnicities.

Since students often travel to attend university, the final demographic question asked participants where home was for them. 89% of participants were from the Midwest (N = 31). Of those 31 Midwestern participants, 12 were from a self-described rural region, 11 suburban, and 8 from urban areas. 2 of the remaining 4 participants were from the Northeast, 1 from the Southwest, and 1 was an international student from Taiwan.

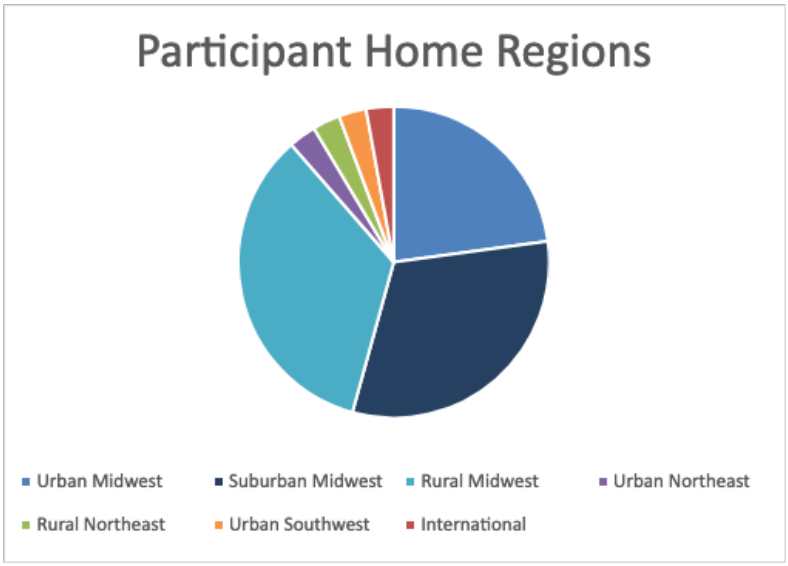


Figure 4.6: Pie chart visualizing participant home regions.

III.4 Results & Discussion

III.4.i Do Participants Report Pretend Play Behaviors?

The responses from the full data set strongly indicate that pretend play is a common – though not universal – behavior amongst UW undergraduate women. In **RQ0** we asked if people would report pretend play behaviors at three age categories: Young Adulthood (current), Adolescence, and Childhood. 28 of the 35 participants responded with a confident "yes" that they do engage in pretend play at their current age in Young Adulthood. While this strongly

indicates that pretend play is a pervasive behavior for this demographic and age group, it also differs from the findings of the pilot study. Whereas all seven participants in the pilot study confidently claimed to play pretend in young adulthood (100%), only 28 of the 35 participants (80%) in the full data set confidently claimed playing pretend at their current age.

This percentage falls in between the 94% of graduate student participants reporting current pretend play in interviews in the 2014 Perone & Göncü study and the 27% of undergraduate participants who indicated current pretend play in a survey administered in Smith & Lillard's 2012 study. Of the 7 participants who did not confidently report pretend play in this study, 4 responded with variations of maybe/being unsure/extreme rarity, and 3 responded with a firm "no" that they do not engage in pretend play at their current age. There were no unifying demographic qualities than set these three firm "no" responses apart from the rest of the participant group. All three participants who reported no current pretend play behaviors did report play pretend through middle school. When asked why they stopped in engaging in that type of behavior, answers included simply growing up and growing out of it, losing interest in that type of activity, and that they didn't know. All 3 who reported not pretending as young adults shared robust and detailed stories of pretending in elementary and middle school. Respondents who offered some version of "maybe" gave varying examples of imaginative activities and were unsure if they "counted" as pretend play. In that scenario, I would review the definition from earlier in the interview and encourage them to answer in a way that was true for them. Following that prompt, 4 participants maintained uncertainty. Examples of their behaviors include a singular D&D session with friends that the participant said they enjoyed but would never initiate or seek out, and several descriptions of vivid imaginations or daydreaming that never externalized.

An important distinction that emerged in the full data set, and was not identified in the pilot, is how much change happens between middle and high school – in pretend play and in life. Many of the participants who responded that they did play pretend during their adolescence went on to specify that their pretending was unique to middle school and did not occur in high school. Based on the specificity of their answers and examples, I have divided Adolescence into two categories: Middle School and High School. These categories roughly correspond to the ages of 11 to 13-years-old for middle school and 14 to 18-years-old for high school. These ages are estimates; not every district breaks apart grades in this way. Participants, however, had an easier time connecting behaviors to a grade as opposed to a year-based age.

When asked if they engaged in pretend play behaviors as teenagers, roughly the middle and high school years, 24 participants (68.6%) responded with a confident yes in middle school; only 15 participants (42.9%) – less than half the full sample – answered a firm yes for their high school years. 5 participants responded with a version of "maybe" and 6 gave a firm and confident "no" that they did not play pretend in their middle school years; 4 participants responded with "maybe" and 16 responded with "no" regarding pretend play as high schoolers.

Moving further back into memory, 34 of the 35 participants (97%) said that they had played pretend in their elementary school years. The 1 participant who did not share examples of pretending said she had "maybe" played pretend, but that it was only when initiated by friends and that she could "never get into it." Across her whole life, she described herself as "always pretty literal… I've always liked things to be like, in my hands. Like, if somebody were like, oh, 'let's like, play pretend baseball' it's like, that doesn't make any sense. That's no fun. I want to go and like actually, like, throw a ball."

	Yes	Maybe	No
Young Adulthood	28 80.0%	4 11.4%	3 8.6%
Adolescence: High School	15 42.9%	4 11.4%	16 45.7%
Adolescence: Middle school	24 68.6%	5 14.3%	6 17.1%
Elementary	34 97.1%	1 2.9%	0 0.0%

Table 4.1: Rates of Yes, No, or Maybe reporting on pretend play at different ages.

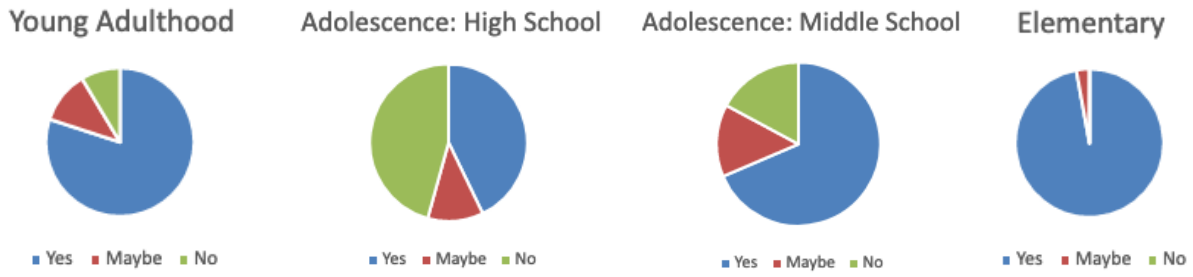


Figure 4.7: Pie charts visualizing rates of pretend play across four age categories: Elementary, Middle School, High School, and Young Adulthood.

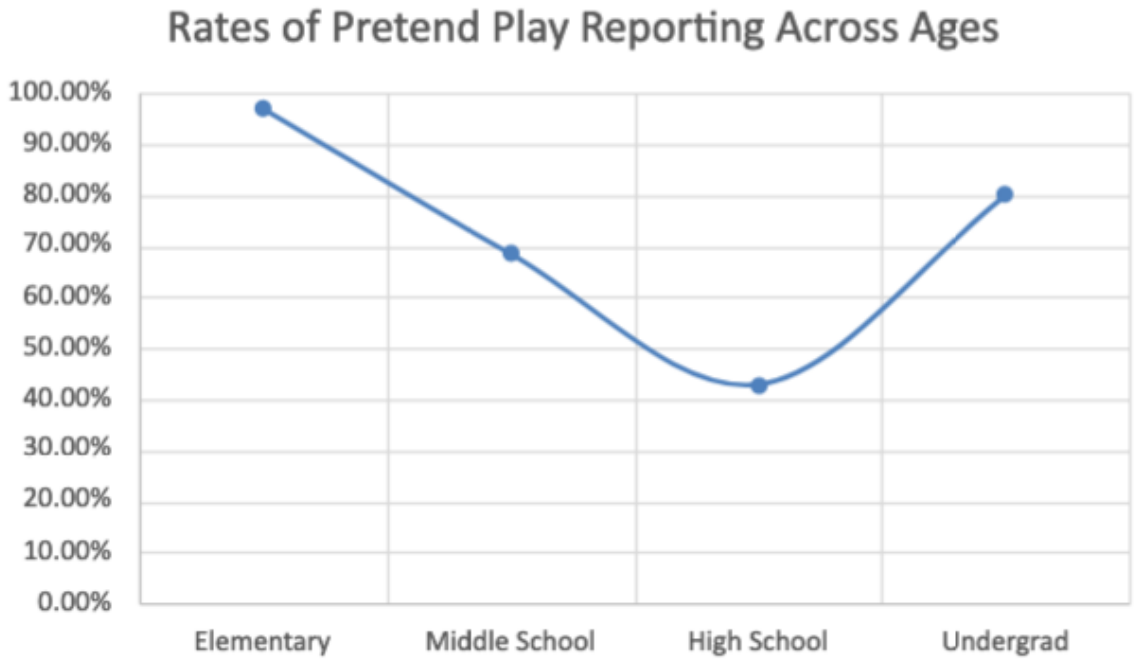


Fig 4.8: A visualization of the percentage of participants who provides a confident "yes" that they played pretend at various ages.

Figure 4.8 presents a visualization of the percentage of participants who confidently reported engaging in pretend play at different ages. The behavior does fade away after childhood, but – as is not currently commonly reported in pretend play research – has a significant uptick in frequency in young adulthood.

III.4.ii Pretend Play in Young Adulthood

Research Questions 1, 2, & 3 as related to young adulthood will draw from the 28 interviews in which participants reported current instances of pretend play:

RQ1: What sorts of pretend play behaviors do people report engaging in?

RQ2: What are the contexts they report for their pretend play?

RQ3: What are the motivations they report for playing pretend?

Through the coding and interpretation approach described in section III.2, several key assertions emerged in the categories of Action, Motivation, and Setting & Relationships. The primary assertion – that pretend play is a common, though not universal, behavior among undergraduate UW-Madison women – foregrounds the following assertions (Erickson, 1986; Saldaña & Omasta, 2018):

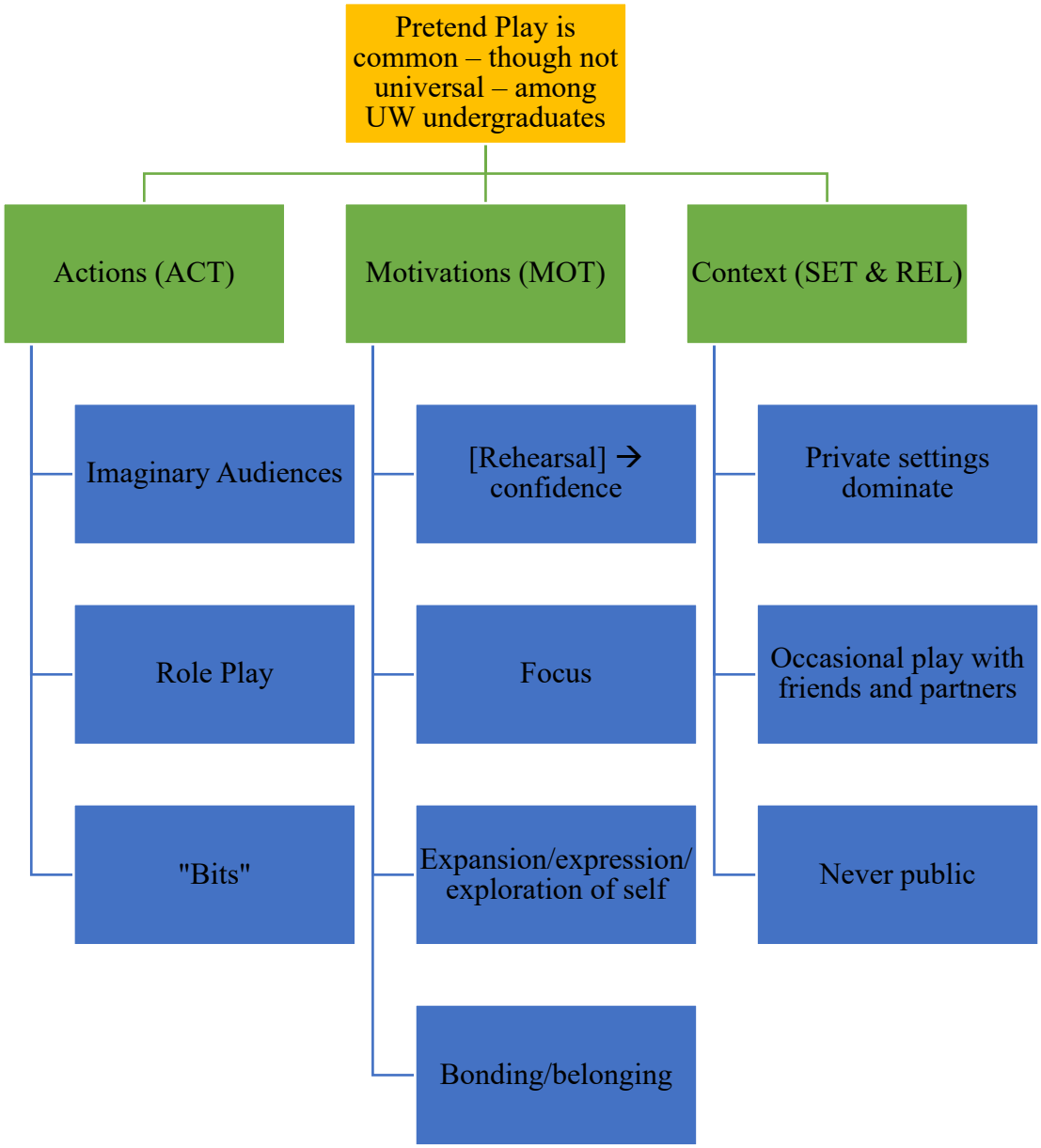


Fig 4.9: A diagrammatic representation of the key assertions regarding pretend play in Young Adulthood.

Participants reported highly variable examples of current pretend play. The behaviors they reported were dramaturgically coded as the Actions in their stories. Within that variability, however, several distinct categories of Action emerged: interacting with Imaginary Audiences,

[Role Play], and engaging in Bits. Motivations and Contexts were both more consistent than the Actions, and all three Research Question categories were inextricably intertwined.

Imaginary Audiences

Interacting with Imaginary Audiences was the most common type of pretend play reported. Participants described highly varied vocal and embodied Actions directed towards imagined others. The second most common action was various types of Role Play. The differentiating quality between Imaginary Audiences and Role Play is the locus of the pretense: in Imaginary Others actions the participant's real self[32] interacts with pretend others; in Role Play behaviors the participant shifts their own identity and acts as if they were other than they perceive themselves to be.

There were numerous Imaginary Audiences with whom participants described interacting. Each imagined other was catalyzed by distinct Motivations, and each of the three primary Motivations that emerged from the data were attached to this genre of Action for different participants. The Imagined Others included:

- [Professional Audiences]

Participants described Actions such as pretending that there was an audience present in order to build their confidence while rehearsing public speaking presentations for school or pretending to sit in front of hiring managers in order to prepare for interviews. The Motivation for these actions was always practical and focused on building confidence through rehearsal. One response that captures the main idea of this theme came from a participant describing preparing for med school interviews: "I was definitely pretending that I was like, in a different environment, like as if I was in the office space. Like, I think it put me in the right mindset by

[32] "real" "self"

imagining that. …I would pretend that I was in it, and like act out the answers." In the above bullet point, this sub-Action – [Professional audiences] – is bracketed. Using imagination to prepare for real-life scenarios does not fit within this dissertation's definition of pretend play; however, a number of participants identified it as a pretend play behavior in which they engage. The brackets indicate this tension: the code is included based on the phenomenological goal to honor the themes emerging from the participants themselves, the brackets acknowledge this Motivation may fall outside the academic definition of the concept. This tension highlights one of the challenges of pretend play research: the behaviors are so variable, so personal, and so broad that they pose a difficulty in identifying what is pretend play and what is not. In this study, I rely on participant reporting: if they consider an action to be pretend play, it is included.

- Social Media Audiences

Another common Imaginary Audience was that of social media viewers, primarily modeled on YouTube or TikTok. The ways that participants interacted with these audiences included tutorials or narration. Tutorials were often tied to putting on makeup, getting ready, or cooking; narration was more connected to daily life. The most common external narration for pretend audiences – all participants were clear that they never actually recorded nor posted these videos – was connected to getting-ready tutorials. Creating pretend tutorials for Imaginary Audiences was prompted by several Motivations. Tutorials were Motivated by either a need for Focus, Confidence, or Belonging. Sometimes these goals overlapped. For example, one participant described doing this type of externalized pretend tutorial for Imagined Audiences almost daily as she got ready: "I think it helps me like, concentrate more on like what I'm doing. Like, I guess I struggle with mental health issues. And I feel like that kind of distracts me from that. ... I'm just like getting in the mindset of like focusing on something I like, rather than, like,

maybe something is stressing me out in school or in my life. It [talking out loud as if creating a tutorial] just really helps me focus on the task at hand." Others described their narration for imaginary TikTok audiences as "validating" or that it makes them "feel connected" to the influencers and online communities of which they are a part.

Narration for imaginary social media audiences lacked the concrete teaching goal of the imaginary tutorials. Narration – in which participants spoke aloud sections of their day for an Imagined Audience – was primarily connected to the Motivations of Confidence or Expression of/Expansion of Self. Several participants described "manifesting main character moments" and narrating their lives for an imagined TikTok audience of thousands. Participants describe narrating their lives to Imagined Audiences because it made them feel "cool" or like "other people are caring and also watching."

- Friends, Relations, or Personal Role Models

Speaking aloud to real people who are not present was not as common as the above two sub-Actions, but still emerged as one of the ways that Imaginary Audience behaviors manifested. Similar to having an imaginary friend, several young adults described speaking aloud to valued family members, friends, or – in one interview – a past teacher who were/was not there. Speaking to trusted or loved others who were not present helped participants Express themselves and feel a sense of Belonging, even when alone.

- Performance Audiences

Often occurring in the shower (with its great acoustics), Performance Audiences describes scenarios in which participants imagined performing as a singer or dancer for a live audience. This action is distinct from Role Play actions, in which participants take on an identity other than their own. This Imaginary Audience is present for the participant themselves as they

sing or dance in mirror or in the shower and serves to either boost the participants' Confidence or to Expand/Express their sense of Self. A participant shared that "When I'm listening to music and I'm in the shower, I think I usually imagine some form of audience of, you know, like, oh, I'm on *America's Got Talent*, and I'm singing this, you know, amazing song in front of everybody. And I know that I'm not a good singer. But it's, it's fun."

- Other Versions or Facets of Self

Most participants in the above Action and sub-Action categories told stories about their own actions using the pronoun "I." In several interviews, participants used the pronoun "we." When I asked a participant about her use of the word "dialogue" in describing verbally narrating certain activities she clarified: "I think dialogue because it's almost like a conversation. Like, I don't really see it as like a monologue. It's almost like I see it as like, I'm, like talking like someone else. But I guess I'm just talking to myself. So wouldn't be a monologue. ... Probably I think another facet of myself." Pretending to talk to or as these Versions of Self was connected to several Motivations.

Participants described the Motivations for having Versions of the Self be the Imaginary Audience to whom they speak as including increased Focus on a task, building their own Confidence, and Expansion/Expression of Self. For example, another participant spoke at length about talking to other facets of herself: "I think if I'm talking to myself, it's almost like a sep—not really like a separate person. But I kind of can almost conceptualize it that way of like, all right, like what are we doing today? You know, like, what are we doing? And then it's like, the self-narration thing, it's kind of like... It sounds like so much more complicated than it actually is, I think it's the me who's like talking and verbalizing things, and then the me that's like, still trying to figure out what's going on. And I'm talking to her."

No matter who the Imaginary Other was, the Settings for these behaviors were always covert. These behaviors occurred when the participant was alone and at home – the specific literal physical Settings for stories in all of the above categories were either the bedroom, bathroom, or kitchen. There were never other people involved. Relationships in these Actions were contained to the Self and the Imagined Other. Participants also shared that they would not enact these behaviors were someone else to be present or walk in. Based on the responses of two participants, however, it appears possible that the Motivation remains when others are present, so the Action internalizes. One participant described her verbal Imaginary Audience cooking show narration in the kitchen shifting when her roommates were present: "...Sometimes, like, I'll make a facial expression that'll kind of correspond with that [narration], which I know looks weird. And I think it's funny when that kind of slips out or I'll kind of find myself like mouthing things a little bit. But typically when other people are around I do it much more internally."

[Role Play] – Versions of Self

In Actions themed as Role Play, the locus of pretense shifts from an imagined other to an imagined self. The diverse Actions that I have themed as either Role Play or Bits have some overlap in behavior but are differentiated by their accompanying Settings and Relationships. The Actions and Motivations connected to Role Play are always contained within the participant. Bits, in contrast, are Actions shared across several people, and the single Motivation consistently reported for these Actions was Bonding and Belonging. Sometimes taking on an alternate persona is the Action of the Bit, but the two are differentiated within the interpretation of the Relationship and Motivation dramaturgical codes of this study: Role Play is defined as personal; Bits are relational. In adolescence and childhood, there are a range of identities that participants reported assuming in Role Play. Within the dramaturgical Action of Role Play in young

adulthood, there emerged only one theme in how participants shifted their identities: they role played as alternate or idealized versions of themselves.

- Role Playing Versions of Self

Whereas some participants reported talking to other versions or facets of themselves as an Imaginary Audience, others moved that locus of pretense into themselves and acted as-if they were other than who they perceive themselves to be. One participant described the Action as "shifting my identity." Taking on an idealized Version of Self was tied to the Motivation of building confidence or Expanding/Exploring their sense of Self. One participant described the confidence she builds by taking on "the role of a more confident version of [her]self":

> If I have a very, like something important coming up that I feel nervous about – whether it be a test, or an interview, or just something that I just feel very anxious about – I feel like the way I go about it too, is it almost feels like dissociation in terms of like, I take on the role of like, a more confident version of myself, whether it be like who I hope to be in the future, or like someone, someone who knows that, like it will be okay. And then that someone is telling the nervous version of myself, like, 'Oh, you got it.' ... And so I guess just like, taking on that embodiment of someone else that knows what they're doing in terms of like, trying to manage anxious feelings.

Her use of the word "dissociation" stands out as an indicator of how different this confident persona feels to her as compared to her usual self.

Another participant similarly described pretending to be a future version of herself as "a subtle shift in mindset in terms of like playing that role of someone of who I want to be one day." For that participant, pretending to be her future self helps her bridge what she called the self-confidence gap: "So it's like, having like, the quickest reference point that like, okay, like, I know I can do it, I have created an a, like a vision, like, there's nothing that's stopping this version of myself to be from becoming that version of myself. … I guess it kind of like helps me meet that self-confidence gap." Reports of Role Playing as one's future self were always Motivated by the goal of Expansion of Self and the intent of moving into that way of being in

reality. Participants talked about that goal in various ways. One shared that she "tried to improve and pretend myself at the same time." Another participant identified the grey area between pretend play and reality and how the two may inform each other: "It may be pretend in the moment of doing it, but it's like trying to move you towards things you want." This grey area connects to the spectrum of pretense proposed in Chapter 2: the difference between pretense and reality is not always clear. Returning to some of the theoretical work on one of the cognitive domains connected to pretend play can also help us understand the pretense/reality distinction in this Action. As described in Chapter 1, pretend play may be causally or correlationally related to the development of counterfactual reasoning. Leslie (1987) argued that children in pretend contexts reason counterfactually by creating a reality that exists counter to the one known **or believed** to be true. Objective reality matters less, in this context, than the reality that the participant believes to be true. These participants did not believe their idealized selves to exist in reality, so they described their embodiment as these idealized selves as pretend play.

A quick review of this project's definition of pretend play supports our examination of the Actions reported by participants. Pretend play involves *Animating* an imaginary as-if scenario, *Identifying* with this animation/imagination through embodied enactment, and *Disclaiming* the reality of that Identification by keeping the goals and actions of the play within the physical and temporal bounds of the metarepresentational frame (for review, see Chapter 2). This concept of pretend behavior as practice for a real future self blurs the definition of pretend play given in this dissertation since the goal is outside of the temporal bound of the pretend frame (see Chapter 2 for a review of terms). A phenomenological approach to data interpretation necessitates including Role Playing Versions of Self since it was frequently cited by participants as an example of their pretend play. This misalignment between my academic definition and

participants' understanding and reporting of their own behaviors and motivations is reflected in [Role Play] being bracketed in the Assertions in Fig 4.8.

The theme of Role Playing as Versions of Self that emerged from these interviews resonates strongly with existing research on Possible Selves, a theory of adolescent identity development. Possible Selves are cognitive constructs that represent an individual's ideas of what they might become, hope to become, or fear to become (Dunkel & Kerpelman, 2006; Markus & Nurius, 1986). Holding a model of Possible Selves motivates current action towards or away from that possibility, and allows a evaluative context for the current self (Markus & Nurius, 1986; Oyserman & James, 2001). Research has causally linked the positivity or negativity of imagined Possible Selves with outcomes such as mental health, anxiety and depression, behavior at school, and relationships; interventions that teach and encourage participants to imagine a Best Possible Self show increases in well-being (e.g. Carrillo, et al., 2019; Loveday, Lovell & Jones, 2018; Oyserman, Terry & Bybee, 2002). The majority of research on Possible Selves and identity development define the concept as a cognitive one; the few studies that connect Possible Selves to embodied or pretend play are focused on early childhood (e.g. Carr, et al., 2010; Edmiston, 2007; Kyratzis, 1999). The emergence of enacted and embodied explorations of Possible Selves in young adulthood, as shared by the undergraduate participants in this study as pretend play Actions, suggests new avenues for understanding the concept and for intervention.

Bits

Actions coded as Bits are much more distinct from reality than the nuanced behaviors enacted while Role Playing Versions of Self. In this context, "Bits" refers to the concept of comedic bits: short comedic theatrical routines or repetitive recognizable jokes. Bits are often

recognizable in comedy genres such as standup or improv performance, but the term also exists in slang as reference to brief comedic or pseudo-theatrical actions in conversation or life.[33] Actions themed as Bits were the only reported pretend play that always involved a partner, and that partner was always connected to the participant in an intimate and trusted relationship such as best friend or romantic partner. Bits are inherently performative; the pretense exists in relationship to others. The Setting of Bits was always private, typically occurring at home.

Bits are brief in expression, but can include ongoing jokes or pretend narratives. The category emerged from stories of collaborative pretend play, such as:

> Like one of my friends, we just like suddenly started talking like Valley Girls to each other. … We have an ongoing joke about Bradley. How we keep stealing each other's Bradley. Bradley is not real, Bradley does not exist. And we just like fight back and forth and be like "Bradley's mine."

When asked why she and her best friend pretend-fight over pretend-Bradley, this participant shared that "It's fun, it's playful. It's a way to connect with each other. ... It's kind of like a way, I guess, to connect with them in like, a not normal way that most people would do." Another participant described an ongoing Bit in which she and her roommates act out stories about what their pet rats (named Culvers and QuikTrip) did all day when the roommates gather for dinner. Each roommate takes on the character of one of the rats, including specific voices and gestures. Like for the imaginary Bradley above, the Motivation for this play is described as bonding and connection:

> We do it when we're like, around the dinner table. That's just like a time when we're all together really the only time during the day that we can all come together. And just casual catch up on the day, then leads to this, like joking, and then leads to all the stories that we create about, you know, the rats. … it's like, I'm committed to the bit.[34] It's fun.

---

[33] Bits outside of formal performance contexts – those that appear in informal conversation and build playful bonds and relationships – appear to be undertheorized in social sciences research. This is touched on again in section IV: Limitations and Future Directions.

[34] At the time of writing, summer of 2023, "commit to the bit" is trending on TikTok.

Relational pretend play in the form of Bits is the only category of Action that has a consistent Motivation. All Motivations reported in attachment to these behaviors are focused on fun and connection and bonding with others. The pretense enables unique ways to play and bond in young adulthood outside the stressors and expectations of daily life. This was true, for example, for the participant who shared that she and her best friend often pretend to be dogs and communicate entirely in their own secret language of barks.

Bits also manifested through the use of accents. Similar to the Valley Girls above, several participants shared that they use British accents with their close friends.[35] The Motivation across the multiple reports was always just to bond through having fun and making each other laugh. Context differed across participants: some shared that this play only arose when they were relaxed and in a good mood; others reported doing it more frequently when stressed in order to lighten the mood and make their friends feel better.

In sum, reports from female undergraduate students at the UW-Madison indicate that pretend play is a diverse but common activity. The majority of pretend play occurs individually through interacting with Imaginary Audiences or engaging in Role Play as Versions of Self. A sub-set of participants report playing pretend with close friends, Motivated by bonding and building connections through fun and playfulness. The stories of pretend play participants reported in young adulthood were significantly different than the stories shared from their middle and high school years.

[35] In a fun coincidence, while I was finishing the coding phase of these interviews *The Guardian* published an opinion piece by Alaina Demopoulos titled "Why are so many young Americans adopting fake British accents?" The article calls Gen Z's tendency to slip into British accents a "verbal tic" and connects the trend explicitly to the popularity of several television shows. I wonder if there is an element of self-distancing inherent in adopting an accent that Gen Z is more likely to utilize based on the generational trauma they have experienced, but that is a whole different dissertation!

III.4.iii Pretend Play in Adolescence

Young adult participants reported distinctly fewer examples of pretend play from their teenage years than they perceived in their current behaviors. Whereas 28 of the 35 (80%) participants reported engaging in pretend play in young adulthood, only 15 participants (42.9%) reported playing pretend in high school, and 24 participants (68.6%) shared stories of playing pretend in middle school. This indicates that pretend play may be less prevalent in adolescence than it is in young adulthood. This trajectory will be explored in more depth in Chapter 5. In this section of Chapter 4, we will now examine how participants' retrospective reporting addresses each research question: do participants report pretending in adolescence, what types of pretend play are prevalent, what motivates these behaviors, and what contexts surround these behaviors. Figure 4.10 presents assertions regarding participants' pretend play in adolescence. While rates of play differed between middle and high school, types of play did not. Therefore, these assertions are built upon all responses to the Adolescence section of the interview.

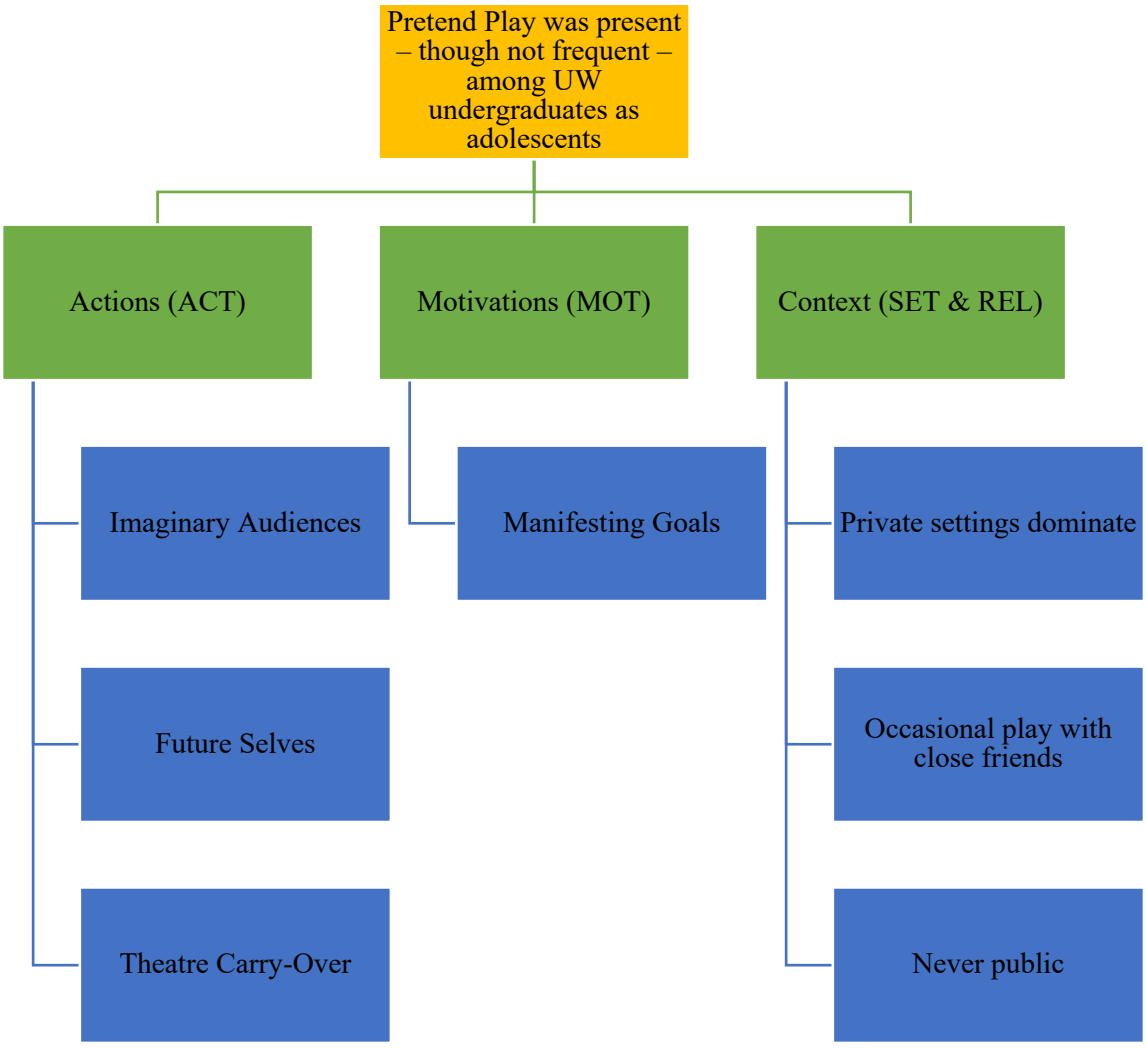


Fig 4.10: A diagrammatic representation of the key assertions regarding pretend play in Adolescence.

Unlike in young adulthood, Motivations for pretend play in adolescence were remarkably consistent: participants connected their play to the concept of Manifesting Goals, such as manifesting an ideal version of self or a hoped-for world. Whether pretending to record YouTube tutorials for Imaginary Audiences, Role Playing as a future self, or carrying a theatre character into real life, the goal was always that the pretense would eventually manifest itself as real. This theme of pretense as a steppingstone to reality was not always present in young adulthood. For example, the Bit of personifying their pet rats had no goal of manifestation – the Motivation was

play and bonding. In their teen years, all participants who reported pretend play tied their stories to the hope that these behaviors would eventually manifest themselves in the real-world. Settings and Relationships were consistent with young adulthood reporting: pretend play always happened in private, usually alone, and sometimes with trusted close friends.

The Actions that participants reported from adolescence both followed and diverged from the young adulthood Actions. Interacting with Imaginary Audiences was once again the most common Action reported, and contained a similar variety of audiences as those reported in young adulthood. Participants described Professional Audiences, Social Media Audiences, and Performance Audiences.[36]

Role Play – Future Self

In their adolescence, participants shared Role Play exclusively connected to goals for their Future Selves. The specificity of a "Future" Self differentiates these behaviors from those reported in young adulthood. Participants reported pretending in young adulthood as other Versions of Self, such as a more confident self. A different Version of Self is distinct from Role Playing as a Future Self. In adolescence, all Role Play was as a hoped-for or potential Future Self. As teenagers, participants described pretending to be their Future Selves in various ways. These pretend play episodes were always Motivated by the goal of eventually manifesting their imagined self into reality. One participant described how she and a friend would frequently sit in her mom's car while it was parked in the driveway and pretend that they were older and had their licenses. She shared that it was "aspirational… you could pretend to do it before you actually got to do it." Embodying Future Selves also emerged as associated with academic and career goals:

[36] Please see section **III.4.ii – Imaginary Audiences** for a review of these behaviors.

> In high school, doing homework or staying up late, I would like imagine myself doing that work for that [med school] purpose. Like, this could be me in med school, you know, staying up late and doing this homework, and then I kind of like, recreate the scenario as if I was med school, and like my homework for my eighth grade math class was for medical school. … It definitely gave me some motivation. Just because like, I knew that's what I was working to. And like, how proud I would feel in that moment, when I like, get to that moment, that future self that I was envisioning.

Another participant described pretending that she was playing for the Women's National Soccer Team, when she was really just in her back yard. She said it gave her confidence and made her feel closer to that future goal. Every instance of Role Play from adolescence as reported by participants was based in embodying ideal Future Selves.

This domain of Action again resonates with the identity theory of Possible Selves, described in the Young Adulthood section above. A distinction between the Action of Role Play – Future Selves described by participants in this study and existing research on Possible Selves is a lack of emotional variance. Possible Selves in theories of identity development contain both positive and negative possibilities, both ideal selves and feared selves (e.g. Markus & Nurius, 1986; Oyserman & James, 2011). In describing Pretend Play actions, participants only ever described enacting ideal selves, with the goal of moving towards manifesting that ideal. Best Possible Self interventions have undergone extensive research; for example, a 2021 meta-analysis included 34 studies (Heekerens & Eid, 2021). These interventions typically encourage participants to imagine, visualize, write about, or describe their Best Possible Self. By not including action along with imagination, these interventions may be missing a powerful tool that some adolescents are already engaged in doing. Acting out ideal Possible Selves in pretend play may be a powerful method of linking cognition, motivation, and action (Dunkel, 2000; Heekerens & Eid, 2021; Markus & Nurius, 1986; Oyserman & Saltz, 1993).

Theatre Carry-Over

Bits did not emerge as a category of Action in adolescence, but a new theme emerged: Theatre Carry-Over. This theme was less prevalent than either Imaginary Audiences or Role Play, but arose across 4 of the 15 interviews in which participants confidently claimed playing pretend in high school. As outlined in Chapter 2, in this dissertation I draw a clear distinction between theatre performance – which is audience-focused – and pretend play. That division, however, becomes blurred when theatre experiences carry-over into non-performance spaces. Several participants described being part of theatre productions in high school and carrying pieces of their characters with them beyond the physical theatre space. The Motivation for this carry-over was the same as the other Actions described in adolescence: pretending was a step towards Manifesting Goals, or manifesting aspects of these characters in reality. This was clearly articulated by a participant describing her role in *Legally Blonde, the Musical*:

> My favorite role was my junior year, I was in *Legally Blonde*. I was like, the cheerleader friend Serena. I fully embodied her for like that whole time that we were doing that. And I noticed even in school, I'd have those postures for a bit after the show. I was like, dang, I just really got into my character there. … And then like, if I like wear my hair up in a high ponytail I make a joke that like, oh, time to go into my 'Serena boss mode' because I wore I wore my hair up for like rehearsal and for the show, to try making myself feel like more competent, I guess. I still do that. Sometimes if I'm going to work, and it's gonna be a rough day, I'll put my hair up instead of like, low ponytail, it's gonna be a high ponytail. I'm not going to be taking no shit from no one that day. ... it's a Serena ponytail day.

These stories from participants phenomenologically support the academic definitions of pretend play offered in Chapter 2 of this dissertation. No participant named theatre performance itself as pretend play, but they did name their behaviors as pretend play when their characters carried-over into action outside of the performance space.

III.4.iv Pretend Play in Childhood

Unsurprisingly, participants reported the greatest frequency of pretend play during their childhoods. Important to this study, however, is the observation from the pilot study that asking for retrospective reports of early childhood were largely unsuccessful and unproductive. Childhood reporting was described for participants as elementary school, roughly 7 – 12 years old. As described in section III.4.i, 34 participants (97.1%) gave a definite "yes" that they played pretend in elementary school. The 1 participant who did not give a definite yes was coded as maybe; they shared that they would participate in pretend play when it was initiated by peers, but it was not a thing they enjoyed or ever self-initiated. Significantly, participants described pretend play <u>through</u> elementary school, rather than fading in the first few years as described in most contemporary accounts of pretend play's developmental trajectory. Concrete examples of pretend play consistently extended into 4th, 5th, and 6th grade. This trajectory and changes across time of types and rates of pretending will be examined fully in Chapter 5.

For the 34 participants who confidently shared pretend play stories from elementary school, they almost universally lit up when we reached this phase of the interview. When sharing stories about pretend play in adolescence or young adulthood, answers were often couched in phrases such as "this is embarrassing, but…" When sharing stories of their elementary school play, participants smiled and openly shared a wide range of stories with diverse Actions and Motivations. The dramaturgical themes that emerged from the elementary school stories are:

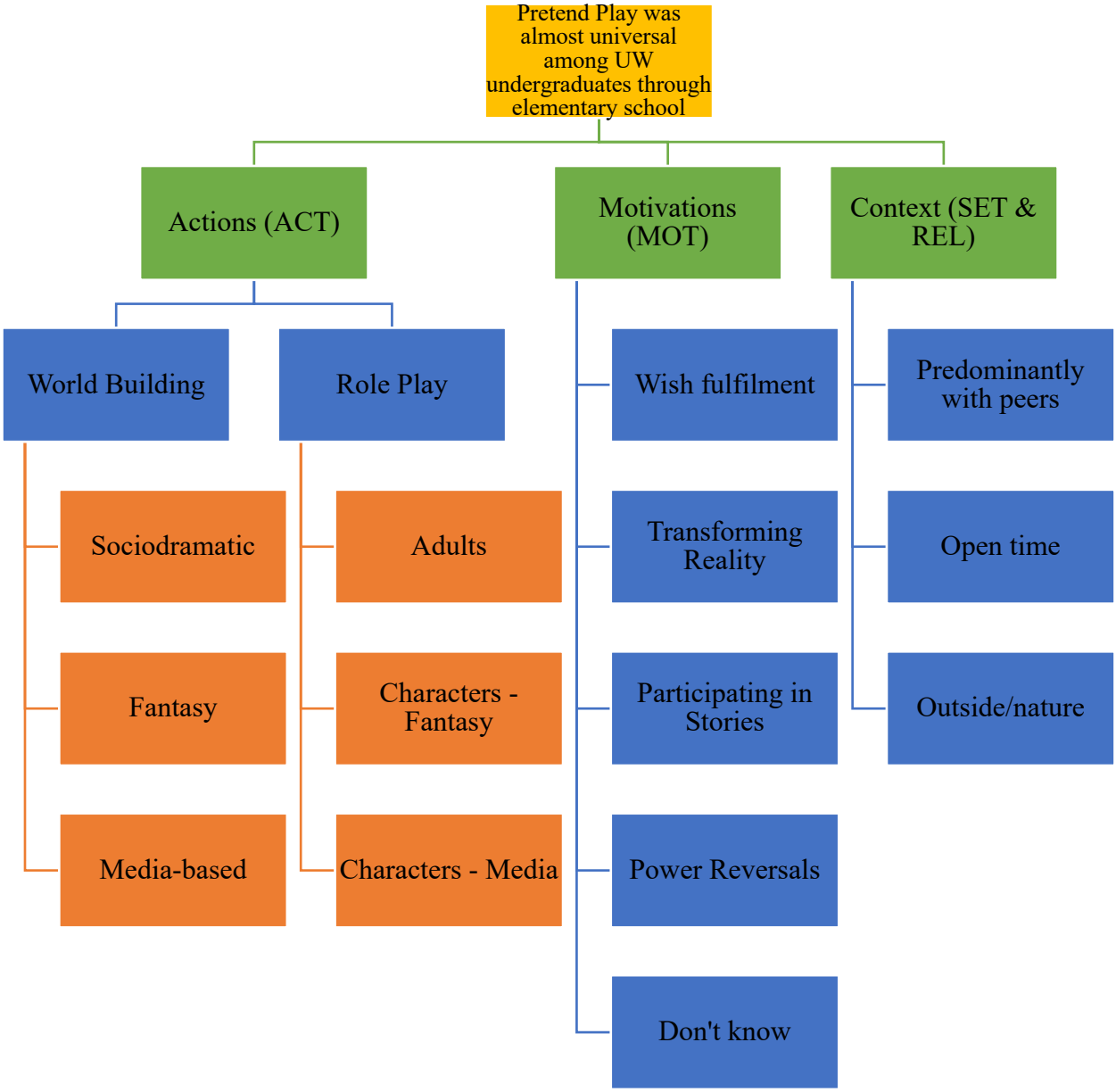


Fig 4.11: A diagrammatic representation of the key assertions regarding pretend play in Childhood.

World Building & Role Play

In adolescence and young adulthood, there was always a singular locus of transformation in the pretense: within the self or outside the self. In childhood, participants commonly reported behaviors that transformed both the self and the setting. These world-building behaviors fell into several categories: sociodramatic, fantasy, and media-based. In sociodramatic play, participants reported building worlds and taking on roles of realistic scenarios and real adults in their lives. A commonly reported Action was that of playing "teacher." The details varied across participants, but the behavior typically included imaginatively transforming a room at home into a classroom, transforming friends or stuffed animals into students, and transforming oneself into the teacher. Other examples of sociodramatic play included playing house, playing family, and playing teenager. Fantasy play included both World Building and Role Play in fantastical scenarios. The backyard pool became an ocean for the mermaid.

Motivations were similar for engaging in both sociodramatic and fantasy World Building and Role Play. These Motivations included Wish Fulfillment, Transforming Reality, and Power Reversals. Wish Fulfillment was provided as a Motivation for both sociodramatic play and fantasy play. Examples included wanting to be a werewolf and wanting to be a mom – for participants' memories of their elementary-age selves, fantasy vs reality did not seem to make a difference for the Wish Fulfillment Motivation. Transforming Reality was an importantly specific verb for the participants who shared this Motivation. For adolescent or young adult reporting, their Motivations were frequently connected to a goal of improving their reality. Conversely, in reporting on their elementary school behaviors, several participants instead described the goal of simply changing or transforming their reality, or "just make it different."

The intention was not to escape reality, because "I don't think I knew what reality was at that age." Instead, the goal was just to transform their daily lives.

The other two Motivation themes that emerged were Wish Fulfilment and Power Reversals. These two themes overlap, but maintain their distinction. Participants reported using pretend play to manifest desires to be mermaids and fairies and teachers and nurses. The theme of Power Reversals emerged only in sociodramatic play. For example, a participant described her Motivation for playing family as:

> …like with the power dynamic, where it's like, I wanted to pretend like I was in their [parents'] position. And like, I could tell people like, oh, like go, like, I would be playing with my friends or something. I'd be like, oh, like you can go vacuum the living room or something. And just kind of like, having that ability to like, almost like order people around was maybe, like, interesting or exciting. Just because as a kid, you're never really put in that position.

Pretending to be teachers and nurses and moms allowed our participants' elementary school selves to experience more power and autonomy than elementary schoolers typically have.

Media-based play could be realistic or fantastical, but was distinguished by consciously playing out stories or playing as characters from pieces of media. Examples of media-based World Building and Role Play included a long-running game in which the participant and a cousin became Shrek and Donkey (from the movie *Shrek*) and had to save the galaxy from Darth Vader, a detailed world built by a participant based on the *Borrowers* books, a swing set transformed into a Fire Nation battlefield that the participant had to navigate as a character from the television show *Avatar,* and more.[37]

Motivations for media-based World Building and Role Play in childhood constellated around the idea of participating in the stories that participants loved at the time. One participant described a lot of media-based World Building during recess throughout elementary school: "we

[37] Then, everything changed when the Fire Nation attacked.

were really into *Princess Bride*, *Pirates of the Caribbean*, things like that. It [pretend play] was a way to be a part of those stories, and have deeper engagement with those stories." Participants used their pretend play both to embody characters and to expand on stories in the media that they loved.

A Motivation theme that emerged in young adult participants reporting on their pretend play in childhood is that of not knowing. Many participants said that they did not know what motivated their behaviors as children. This could be due to the difficulty of remembering that far back into one's past, but not knowing one's Motivation for certain pretend play behaviors in childhood is also a repetition of one of the primary findings from Chapter 3. In Chapter 3's interviews with children in the Wonderground, most children could not give a clear answer as to what Motivated their play that day. This uncertainty is echoed in our young adult sample: many participants reported that they did not know why they engaged in pretend play in childhood. In contrast, when sharing episodes of pretend play from their adolescence or from their current lives, "I don't know" was never a response given in relation to Motivation. Young adults can identify Motivations for their pretend play, but sometimes cannot name Motivations for that same type of play in childhood. This calls back to the Moe the Troll studies described in Chapter 2. In a summary of the research stemming from the Moe the Troll paradigm, Lillard concludes that—across all of these variations—"children's responses to questions regarding what aspects of self—body or mind—are needed to pretend suggests that they are not generally privy to their own mental involvement during pretense" (Lillard, 2001, p. 514). Perhaps humans are not yet able to undertake the metacognitive work of understanding their own Motivations for pretend play in childhood.

The Settings and Relationships for pretend play in childhood were very different than those in adolescence and young adulthood. Pretend play in childhood was never covert, it was never hidden. It happened at home, in classrooms, at recess, and outside. Outside, in fact, emerged as a distinct theme in childhood pretend play Settings. A number of participants described the importance of backyards, neighborhoods, and nature as a Setting for pretend play. Outside and nature were important for pretend play because they were spaces without grown-up oversight, wherein participants could fully engage in extensive World Building and Role Play.

Pretend play was occasionally reported on as occurring alone, but it primarily happened in relation with peers – either with friends and neighbors or with siblings and cousins. Adults occasionally made an appearance in stories of childhood pretend play, but peers were the most common pretend play partners. The final important Setting in reports of childhood pretend play was temporal rather than physical. Participants described the luxury of empty time as a pivotal element of the Setting that enabled them to play pretend.

IV. Limitations and Future Directions

As only the third existing study on the topic of pretend play beyond childhood, this broad design has a number of limitations that offer exciting future research directions. First is the obvious limitation in demographics: this study reports on a sample of majority female, WEIRD[38], culturally homogenous undergraduates. Future work examining if and how pretend play persists beyond its well-documented presence in early childhood should use this study as justification for continued research and engage in more purposeful and diverse sampling across genders, languages, regions, and cultures.

[38] W.E.I.R.D. – Western, Educated, Industrialized, Rich, Democratic (Henrich, Heine & Norenzayan, 2010).

A second limitation in this study is that – across this chapter and the previous Wonderground chapter – adolescence is only ever reported on retrospectively. Young adulthood and childhood both receive the benefit of contemporary reporting; the adolescence assertions are constructed entirely from the memories of participants. Based on this study – Chapter 4 – adolescence appears to be an important and distinct phase of pretend play development. Future studies focusing specifically on better understanding if, how, and why teenagers engage in pretend play will be invaluable in building ever-better lifelong developmental models. This ties to a third limitation: this interview asked about middle and high school in one question. Humans undergo significant developmental changes across these few years. Future work specifying ages in the design – rather than retroactively in analysis – will help us better understand how puberty and identity development may intertwine with pretend play.

Another limitation is the single data-source of this study. Diversifying methodological approaches in future research – incorporating observation, survey, experiment, etc. – will enable the continued refinement of understanding and theory.

These limitations, however, do not negate the primary finding of this study: pretend play changes in frequency at different ages, but – based on participant reporting – is robustly present in young adulthood for this sample of primarily female undergraduates. The different Actions and Motivations present at different ages present exciting opportunities for future research not only on pretend play, but also on relationships and identity development. For example, Bits emerged as a strong theme of Action in how undergraduates play pretend, with a consistent Motivation of playful Bonding with friends and romantic partners. The concept of Bits outside of formal comedy performance appears to be deeply under-researched and under-theorized. Baby-talk and couple-speak in romantic relationships has received some scholarly attention (i.e. Bruese

& Pearson, 1997; Van Vleet & Feeney, 2015), yet the seemingly not uncommon practice of relating to friends and partners specifically through playful pretense has not been acknowledged in the social sciences. Regarding identity development, connecting adolescent and young adult pretend play to theories of Possible Selves has the potential to improve interventions that help people take action to move towards their ideal selves. Opening the study of pretend play to different age groups than early childhood may prompt many such observations and new perspectives on a multitude of human behaviors.

V. Significance

This is, to my knowledge, the first study to ever ask young adults to report directly about the possibility of current pretend play. 80% of this sample of 35 young adult participants self-reported current examples of pretend play. Decades of pretend play research has focused on the phenomenon exclusively in early childhood. This study, therefore, joins Smith & Lillard (2012) and Perone & Göncü (2014) to build a growing case for expanding our research focus on pretend play to encompass the lifespan. The early childhood assumption has informed educational policy for decades (see the Introduction and Chapter 1 for review). Pretend play's possible persistence into young adulthood not only invites new perspectives on the purpose of this phenomenon, but also may shed new light on other developmental processes. Chapters 3 and 4 have examined if, how, where, with whom, and why people at different ages engage in pretend play. Chapter 5 will read across the data to examine the changes and variations within and between age-groups.

Chapter 5: Constructing a Model of Pretend Play Development from Early Childhood through Young Adulthood

I. Introduction

Human developmental models of pretend play tend to describe its developmental trajectory as an inverted-U, emerging in early childhood and fading in frequency into middle childhood (e.g. Berk & Meyers, 2015; Piaget, 1962; Smith, 2010; Vygotsky, 1967; Wah, 2020). One of the primary pieces of evidence used to support the assumption that pretend play is localized in early childhood is the fact that it is not easily observed outside of early childhood (Eifermann, 1971; Piaget, 1962; Smilansky, 1968). Assuming, however, that an absence of observable pretend play implies that there is an absence of pretend play is an inferential leap unsupported by data. The studies shared in Chapters 3 and 4 suggest that this deeply embedded assumption is deeply wrong.

If the dominantly held inverted-U description of pretend play development is incorrect, then researchers must attend to exciting new questions such as—to paraphrase this dissertation's title—where pretend play goes if not away. The absence of substantial research on pretend play beyond the early childhood years precluded specific hypothesis generation and testing. In Chapters 3 and 4 phenomenology served to describe hitherto undescribed participant self-reports of pretend play. Following the analysis of data within age-groups, in Chapter 5 I shift my lens to

analyze across age-groups in order to develop a new model of pretend play development from early childhood through young adulthood.

Deep immersion in the literature inspired my proposed bi-directional internalization model of pretend play based on private speech and gesture (presented in Chapter 1, Section VII). The fact that I drew on analogous developmental processes, rather than from within the pretend play research field, further highlights the paucity of pretend play research across the lifespan. Chapters 3 and 4 help us phenomenologically understand people's own understanding of their behaviors. The strong "Yes" from participants to the foundational research question of each of those two chapters – Do people report pretend play behaviors? – motivates and justifies the model-building goal of Chapter 5. The following section introduces the grounded theory methods of this chapter. Section III.1 presents a model of pretend play development constructed from the data gathered across Chapters 3 and 4. In Section III.2, I compare the model constructed from the data to the existing literature reported on in Chapter 1. I close the dissertation with Sections IV and V imagining future directions, naming significance, and sharing concluding thoughts.

II. Methods and Analysis

The goal of grounded theory is to develop a theory inductively through data: to find and name patterns that emerge in interviews and construct a theory that offers an abstract understanding of the studied phenomenon (Birks & Mills, 2015; Charmaz & Thornberg, 2021; Thomas, 2011; Tie, Birks, Francis, 2019). There have been several waves and philosophical approaches to grounded theory since its emergence in the 1960s, including traditional, evolved, and constructivist grounded theory (e.g. Charmaz, 2007; Glaser & Strauss, 1967; Strauss &

Corbin, 1990). Maintaining epistemological congruence with Chapters 3 and 4, I focus on Charmaz's approach to *constructivist* grounded theory: "a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data" (Charmaz, 2007, p. 187). The constructivist approach sees both data and analysis as being generated through shared experiences and relationships with participants (Charmaz, 2001; Charmaz & Mitchel, 1996).

Birk & Mills point out that nothing is *discovered* in constructivist grounded theory. Discovery implies an objective reality to be found. In grounded theory, theory and conceptual frameworks are constructed by a subjective researcher situated in a specific time and place (Birk & Mills, 2015). The groundedness of the method emerges in its approach to sampling and how the approach differs from quantitative sampling. In statistical research, the assumption of randomness is essential to generalization to the larger population; in grounded theory, the generalizability of findings exists within the geographic/cultural situatedness of the sample, but not beyond (Thomas, 2011).

Central to grounded theory is the concurrent collection and analysis of data (Charmz, 2014; Tie, Birks, Francis, 2019). Conducting these two aspects of research concurrently enables enhanced reflexivity throughout the process, and – as happened through the piloting process of Chapters 3 and 4 – allows for the researcher to adjust interview scripts based on early emerging themes. Memoing occurs throughout the entire process. In this dissertation, the dramaturgical codes that were developed in the intermediate coding phase were fleshed out as standalone chapters by interpreting them phenomenologically. Finally, all stages of the process were woven together and the fractured descriptive dramaturgical codes of Chapters 3 and 4 passed forward into a unified descriptive storyline.

The analysis of Chapters 3 and 4 culminated in a phenomenological interpretation of dramaturgical codes in order to describe if, how, where, with whom, and why participants engaged in pretend play. Since one of my primary goals in describing a new trajectory of pretend play development is to account for its enormous variability across participants and across age-groups, in Chapter 5 I use a conceptually clustered matrix to analyze the core concepts from Chapters 3 and 4 (i.e. Miles, Huberman & Saldaña, 2014). The matrix structured the relevant age groups as rows and the research questions as columns. By reading down the columns – rather than across the rows – I am able to bring together the data and assertions across all age groups to analyze for relationships, variability, and trends (Miles, Huberman & Saldaña, 2014). The cells of the matrix were filled with the primary assertions and illustrative quotes. Finally, I built a model to convey the core developmental processes observed in the data (Birks, et al., 2009; Corbin & Strauss, 1990). In addition to the column headings connected to the research questions, I added one additional dramaturgical code as a column heading: Obstacles. Obstacles emerged as a theme in analysis of the undergraduate interviews. However, Obstacles to pretend play was not one of the research questions on which that chapter focused. To stay narrowly focused on the chapter's research questions, I did not report on this emergent category in Chapter 4. As a conceptual category, however, it offers meaningful insight into variability across age-groups. An empty example of the matrix structure is included below as Table 5.1:

	RQ0: If	RQ1: What	RQ2: Where & With Whom	RQ3: Why	Obstacles to play
Childhood – current reporting					
Childhood – retrospective reporting					
Middle School					
High School					
Young Adulthood					

Table 5.1: A model of how the conceptually clustered matrix was structured for the grounded theory analysis of this chapter.

II.1 Grounded Theory to Generic Inductive Analysis

There are two important ways in which the methods of this dissertation have varied from a true constructivist grounded theory approach. The first is an absence of theoretical sampling. In both the Wonderground and undergraduate interviews I sought to invite a sufficient[39] number of participants in each age-group of interest to interview. Purposive age sampling was successful. I also, however, sought a balance/diversity of genders in order to account for potential gender-related differences in pretend play behaviors. Research on gendered differences in children's play (e.g. Davis & Hines, 2020; Honig, 2015) and indications that pretend play was tied to identity development in adolescence (see Chapter 4, Section III.4.iii) informed my interest in recruiting participants of different genders. When I observed that a greater sample of male participants was needed in Chapter 4, I changed the title of the study and reached out specifically

[39] "Sufficient" was determined by identifying frequent reemergent themes as opposed to significant new information in each interview within an age category. I use the term "sufficiency" rather than "saturation" to indicate the infinite variability in humans; the data is not saturated (implying completion) but rather sufficient for this study (i.e. LaDonna, Artino & Balmer, 2021; Charmaz & Thornberg, 2021; Glaser & Strauss, 1967).

to instructors of the courses connected to the SONA system. Despite these efforts, I was unable to interview additional male participants. When I reached theoretical sufficiency with the female participants (and reaching the limits of my capacity within this specific project), I chose to close the interviews rather than continue the theoretical sampling. With only one male participant in the sample, I cannot make any observations on potential differences based on gender in pretend play behaviors beyond childhood.

The second piece of this project that varies from constructivist grounded theory is the end-point of data collection. In order to focus on the phenomenological interpretation of Chapters 3 and 4, Chapter 5 was written after the end of the data collection phase. Moreover, Chapter 5 was written after a cross-country move, making it immensely challenging to return to data collection for further theoretical sampling. These two interruptions to concurrent analysis and data collection meant that – as new themes emerged in the advanced coding round of grounded theory analysis that invited further questions or would have benefited from additional interviews – I did not conduct those interviews in this project.

The absence of extended theoretical sampling means that, rather than constructing a substantive grounded theory, this chapter uses a grounded theory framework to generate a Generic Inductive Model of pretend play development. Generic Inductive Modeling mirrors grounded theory methodology up unto to the point of theoretical sampling and theory generation, and instead constructs a descriptive model of the topic (Hood, 2016; Liu, 2016). By following grounded theory guidelines of purposive sampling, iterative data collection, and inductive analysis I have successfully centered the voices of participants on a topic about which little is known. In Box 5.1 in Section III, I present an inductively-developed model of pretend play development from early childhood through young adulthood. Models are an intermediary step

between data and theory. An important aspect of future research will be extended theoretical sampling in order to better understand the relationships between the concepts presented the description in Box 5.1, with the goal of moving from model towards theory.

III. A Model of Pretend Play Development: early childhood to young adulthood

Interviews with 185 participants living in the Midwest, ranging in age from 3 to 23-years, suggest the following model of pretend play development from early childhood to young adulthood:

(1) Pretend play is a nearly universal activity from early childhood through the end of elementary school for this sample of Midwestern participants. (2) In this data, pretend play underwent a significant transformation in frequency, content, context, and motivation at the advent of middle school, then increased in frequency and variety in young adulthood. (3) This variability across ages appears to be driven by a combination of five primary factors: Social Pressure, Available Time, Changing Interests, Shifting Sense of Reality/Identity, and "Growing Up."

Box 5.1: A model of pretend play development from early childhood to young adulthood for the participants of Chapters 3 and 4.

III.1 Unpacking the Model

Let us unpack this model sentence by sentence. **(1) Pretend play is a nearly universal activity from early childhood through the end of elementary school.** Sentence (1) describes a new trajectory for the "high season of pretend play." Singer & Singer's 1992 description of 3 – 5-years as the "high season" of imaginative play (pg. 64) – a discrete developmental window based on the Piagetian framework (further explored in Chapter 5, Section III.2.i) which continues to be frequently cited by pretend play scholars in justifying a continued focus on early childhood

in both research and educational intervention (e.g. Berk, 2018; Carlson & White, 2013; Jaggy, et al., 2023; Kalkusch, et al., 2022; Taggert, Heise & Lillard, 2017; and many more). In a novel insight to pretend play development, I assert that the "high season" of pretend play should be further considered in future research as spanning from 3-years to the transition to middle school.

This sentence is built upon evidence from all 185 interviews, including both current and retrospective childhood reporting. These interviews show that pretend play remains consistent in its frequency, content, context, and motivation from the youngest participants (3-years-old) through the transition to middle school. In the Wonderground interviews, approximately one third of children in early and middle childhood reported that they had been engaged in As If/Pretend Play activities just before coming to speak to the research team. This rate was consistent across early and middle childhood, and – in fact – demonstrated a dual peak at the ages of both 5 and 8-years, and then declined in the 9 to 11-year-old group.

The sliver of time represented by the Wonderground interviews provides specific insight into consistent rates of pretend play across childhood; conversely, the retrospective responses in the undergraduate interviews offer a broad overview of the presence or absence of pretend play. Retrospective reporting from undergraduate participants reported nearly[40] universal pretend play in elementary school, and consistently reported the transition to middle school as the time when their pretend play decreased in frequency and/or significantly changed in quality. Both current pretend play reports from children and retrospective pretend play reports from undergraduates name the end of elementary school/transition to middle school as the age when pretend play transforms in content and decreases in frequency.

[40] See Chapter 4, Section III.4 for review. 34 of the 35 participants enthusiastically shared stories of pretend play in elementary school. One participant shared that she did engage in pretend play, but that she did not particularly enjoy it and only did so when others initiated the play.

This elongated trajectory of the "high season" of pretend play is a replication of Smith & Lillard's 2012 retrospective survey findings, in which they identified the cessation of pretend play at 11 years and 3 months. The two studies presented in Chapters 3 and 4 counter Smith & Lillard's description of a "cessation" of pretend play but replicate that age as a turning point in the frequency and quality of pretend play. Smith & Lillard offer a specific age in years; I, however, present the turning point as the "transition to middle school" because participants consistently generated grade-related descriptions, rather than age-related descriptions of this transition. The transition to middle school happens at different chronological ages and grade-levels depending on the district and school structure.[41] This enormous sociocultural transition also roughly coincides with the onset of puberty. This study did not gather sufficient data with an early-adolescent age group to disambiguate possible causal factors for the transformation in pretend play. According to participants, the sociocultural transition of starting a new school is the most salient element of that moment in development. The concurrent neurocognitive and biologic changes of that transition deserve further attention to understand the role, value, and purpose of pretend play up until and through this moment in development.

(2) In this data, pretend play underwent a significant transformation in frequency, content, context, and motivation at the advent of middle school, then increases in frequency and variety in young adulthood. Unlike previous research that proposes a fading or cessation of pretend play, this data suggests that pretend play undergoes a change in frequency and quality but does not cease at the end of the elementary school years. Pretend play reduces in frequency at

[41] And some districts do not have middle school at all, but rather move directly from an elementary school to high school. The frequent references to "middle school" is a reflection of the largely shared geographic and cultural background of these majority rural and suburban Midwest participants (see Chapter 4, Section III.2 for review). Including participants who have experienced different school structures could be a way to start disambiguating causal factors for the transformation in pretend play behaviors around this age-range.

the transition to middle school. Types of play change from World Building and varied Role Play to interactions with Imaginary Audiences and specific future-self-based Role Play. There is also a significant change in the context of pretend play – when it emerges in adolescence it is always a private behavior, whereas in childhood pretend play is often public. Some participants described play becoming so covert that it internalized and became imagination and daydreaming rather than an external action. Finally, Motivations change in adolescence. Childhood interviews presented diverse Motivations for pretend play; adolescent pretend play was always Motivated by the goal of eventually manifesting the pretense into reality (see Chapter 4, Section III.4.iii).

Were this decrease in frequency to continue, then the inverted-U trajectory of pretend play development so dominant in the literature might remain true, if more expansive. An uptick in frequency of pretend play in young adulthood, however, breaks the inverted-U model of infancy to middle childhood. Here, again, is Figure 4.8 as first presented in Chapter 4:

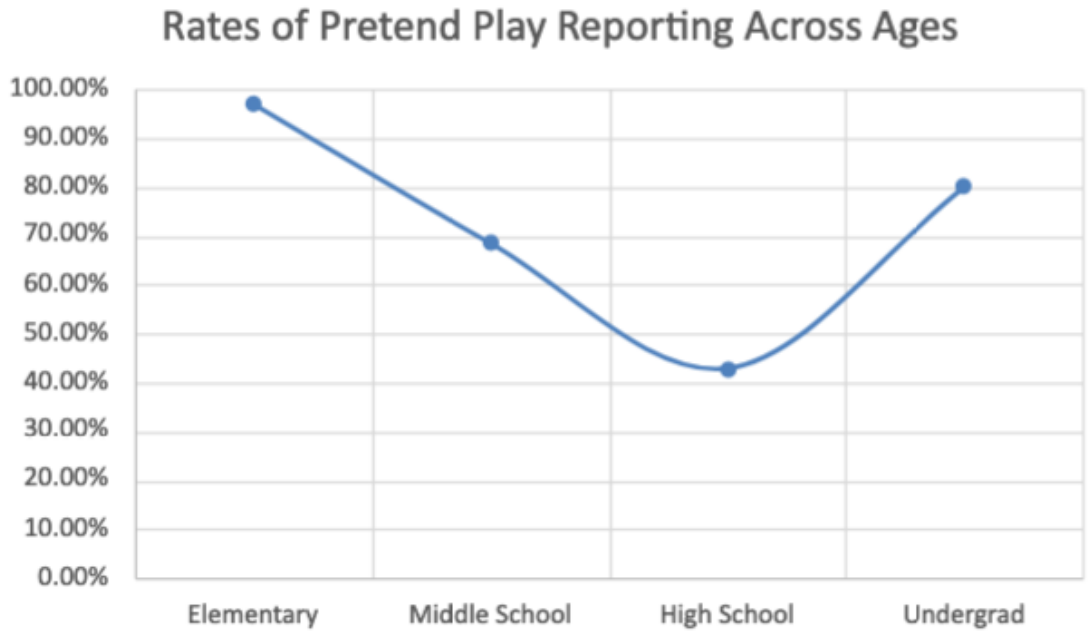


Fig 4.8: A repetition of the visualization of the percentage of participants who provides a confident "yes" that they played pretend at various ages first presented in Chapter 4.

Undergraduate students reported more pretend play at their current age than in high school. Sentence (2) of the model builds on sentence (1) to further describe pretend play development from early childhood to young adulthood in this specific sample of participants.

The descriptive goals of sentences (1) and (2) then transition to the explanatory power of sentence (3). Sentence (3) explains that, **This variability across ages appears to be driven by a combination of five primary factors: Social Pressure, Available Time, Changing Interests, Shifting Sense of Reality/Identity, and "Growing Up."** These five factors emerged from across all 185 interviews but were most prevalent in the undergraduate retrospective reporting. They are presented in order from most to least prevalent.

Social Pressure

Participants described Social Pressure as the most common reason for why their pretend play reduced in frequency or became covert at the transition to middle school. Explicit pressure from parents, a desire to be "cool," worries about being perceived as "weird," and conforming to expectations were all offered as Obstacles to pretend play in early adolescence. For some participants this social pressure was not attached to emotion; for others, there was a distinct sadness in feeling social pressure to stop playing pretend. Two examples of this sadness include:

> In seventh grade, we wrote a letter to ourselves, and my teacher gave them to us senior year. And in the letter, I wrote 'I hope you find better friends. They're making fun of you for still playing with your baby dolls.' ... Other people were like, Yeah, you're getting a little too old for this, like, stop. And I like, as a seventh grader, can't care for a baby doll. I'd be a little odd.

> I definitely remember wanting to play more Barbies in middle school. I definitely remember being a little sad when I had to, like, put away playing with dolls in middle school. I think it was just like the social pressure that you know, nobody was really like playing pretend anymore in that scenario, like you know, when you go to middle school you don't want to be made fun of so you don't do things that seem more childish because you're in that like, time where you're supposed to transition into being you know, like a young woman in my case. So yeah, it was definitely just like pressure from society to not be a kid anymore even though I was very much so still a child.

Another participant described how social pressure did not stop her pretend play, but it did change her play into a private activity:

> Growing up, we get the sense of – especially in the transition to middle school – now I'm becoming an adult, I shouldn't be doing these things. But I still enjoy doing these things. So I will do it alone instead of with other people.

Half of the undergraduate participants described some form of social pressure impacting their engagement in pretend play around the transition to middle school.

Available Time

The next most prevalent Obstacle to pretend play in adolescence was the loss of free and unstructured time that occurred when participants entered middle school. Empty time and space emerged as important enabling ingredients for childhood pretend play. Middle school saw the arrival of sports, homework, and extracurriculars, all of which prevented the "boredom" and "staring at the clouds" that had spurred earlier play. A clear description of this common theme came from a participant who shared that her pretend play decreased in frequency in middle school because, "I guess I just got busier, more involved in extracurricular activities and less free time." The Obstacle of absent unstructured time[42] persisted into young adulthood, though with diminished impact as young adults gained more control over their —still busy – schedules.

Changing Interests

Connected to the sports and extracurriculars that ate into unstructured time, changing interests was described by a number of participants as an Obstacle to the frequency and quality of their pretend play in adolescence. New interests included activities such as video games,

[42] The impact of structured vs. unstructured time resonates with Munakata's line of research on the impact of structured vs. unstructured time on children's neurodevelopment and executive functioning, and may be a fruitful line of further inquiry (e.g. Munakata & Michaelson, 2021; Barker, Munakata, et al., 2014).

sports, clubs, and arts. New interests co-emerged with changing values. Caring about certain play scenarios, for example, gave way to caring about grades:

> When I was younger, I was like really obsessed with playing pretend hospital. And then I kind of got a little older where I couldn't quite like imagine playing with dolls and it being fun. So that just kind of switched to something I thought about my mind. But then as I got into high school, I'm like, yeah, I need to care more about like, grades than I do about this, like fake stuff.

This quote describing changing interests and values also captures the shift from externalized pretend play to internalized imagination for this participant.[43]

Shifting Sense of Reality/Self

In Chapter 3, I reported on an unexpected discovery in the Wonderground: the participants were inconsistent in their use of disclaiming language to describe non-literal behaviors. As reported in Chapter 3, in the Wonderground interviews age had no impact on the rates of disclaiming language used in descriptions of play.[44] Chapter 3 asserts that, for childhood participants in the Wonderground, the occasional absence of disclaiming language does not indicate confusion between pretense and reality but rather highlights the porous nature of the pretend frame (Weisberg, 2015; Harris, 2021) and the blurry boundaries between "pretending" and "reality." The porous nature of that boundary between "real" and "not real" in children's self-reporting provides further reason for thinking of pretend play as a spectrum of behaviors (as discussed in Chapter 2, Section IV), rather than a dichotomous either/or.

The porous nature of reality emerged again in the undergraduate interviews as an Obstacle to pretend play, and a factor that influenced both pretend play's decrease in frequency

[43] Further described in Section III.2.iii.

[44] Participants consistently used disclaiming language in Chapter 4's undergraduate interviews. This difference suggests that when the interviews took place within a play space the responses were given from within the play-frame, and therefore did not always require disclaiming language. When interviews were conducted via zoom, we were outside an explicit play-frame and therefore disclaiming language was necessary.

and its change in quality at the transition to middle school. Undergraduate participants described changing perceptions of reality and/or changing perceptions of self as a reason why their pretend play changed in adolescence. It is difficult to play pretend if there is not a clear distinction between reality and pretense. A strong body of research indicates that children are not confused about the difference between pretense and reality (for review see Harris, 2021; 2000). Children's perceptions of reality may, however, permit more magic than that of most adults.[45] In the Introduction of the dissertation, I shared an anecdote of my own firm childhood belief in the existence of fairies. A similar genuine belief in the fantastical, and a shift away from that belief around middle school, emerged in several undergraduate interviews:

> Every time we went swimming I would pretend to be mermaids with my friends. …We would pretend to be werewolves, vampires. And I even like, at a certain age, I was convinced I was actually a mermaid or a werewolf. ... I would even do spells with my friend. And like, I was fully convinced that I was these mythical creatures. … My parents, they didn't really like that. I was like, fully convinced and I think they kept telling me like, no, that's not real. It's all fake. And I think that kind of just eventually stuck with me like, okay, you know, it's not real. Probably around middle school I stopped pretending at all.

Pretending/believing to be mermaids was shared by a second participant as well:

> We played this game called mermaids, like when me and my friends would go swimming. … [In middle school] I started to realize like, first of all, it's not real. I think I'm like old enough to see, like, what is real.

Reality in childhood may admit more magic than adults acknowledge.[46] There can, however, be a great deal of individual difference in the distance between "reality" and "pretense" for participants. One participant described the nuance of this distance in narrating how she has played pretend across her life:

---

[45] Embracing the multiple realities of participant perspectives aligns with the relative ontology demanded of constructivism (i.e. Denzin & Lincoln, 2005; Lee, 2012).

[46] There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy.

> I think when we're small, like the difference between me and pretending to be Barbie is so clear. But as we get older, the difference between me and me pretending to be an idealized, slightly different version of me, like, they're so similar, it's hard to know like, when does it count as pretend play, or differentiate if it's pretend play or just me kind of figuring out what my future self is going to be? ... Putting on those scrubs or putting on that lab coat or a professional looking outfit is definitely what I see mostly as pretend play for people my age right now.

In this example, the participant likens pretending to be Barbie to putting on a lab coat as an undergraduate. They are both, in her eyes, pretending to be someone she is not, but one identity (Barbie) is clearly fictional, whereas the lab coat could just be a slightly fictional future version of herself that will one day be true.

The grey area of pretending to be one's future self was repeated by another participant in describing pretend play for fun as opposed to pretend play as a tool towards realizing goals:

> It's not that you stop pretending. But instead of pretending to be a wilderness person in the wilderness, I was pretending to be a professional athlete. I think there's kind of a shift from that, like fifth grade to middle school where you kind of start to change your playful imagination into a new futuristic imagination and goals. So it kind of transitions from like a playful escape to, you kind of put that pressure on yourself to, like, meet that scenario you imagine. So the scenarios you imagine, aren't just like, it's fun to pretend I'm in the woods and now I'm done. It's like the scenario you imagined is now a goal for me to make happen for real.

Participants reported that pretending not only allowed them to imagine goals, but also enabled physical practice and habit building that led towards manifesting goals. This emergent theme in the interviews resonates with a robust existing body of literature on exploring possible selves in adolescence; this connection was explored in Chapter 4, Sections III.4.iii and IV. A fictional character that starts as Role Play can become reality through practice and habit building. This transformation from pretense to reality is presented with great clarity in this description of a participant's love of Anne of Green Gables:

> I pretended I was [Anne of Green Gables] when I was younger, but then she just kind of became me. … like, when you do like certain things like just over and over again, they start to become habits. ... basically what I'm trying to say is like making it habit because I do it over and over again as a kid. The habits are hard to break. And then it just kind of, it kept going.

The potential of pretend Role Play becoming real had a different salience for different ages. A number of participants described their growing self-awareness as an Obstacle to pretend play at the transition to middle school. For example, a participant offered "self-awareness" as a reason for why her pretend play decreased in frequency in middle school, "realizing like, this is who I am. I'm not a parent or a teacher or anything." When one's sense of self is "wishy-washy," the stakes are higher in pretending to be someone else because the frame between pretense and reality is unclear. In describing why her pretend play re-emerged in college after not engaging at all in pretend play in high school, a participant described:

> I feel like it's just like a, like a cognitive like, like your identity just becoming more secure [in college]. Like I feel like in high school everybody has such like a wishy washy perception of their identity. And then I think that like, once everybody is like coming to college, then they become like a lot more secure in the fact that they don't need to fit like a certain like, a certain like idea or like type of person.

A confident sense of self appears to be an important affordance that enables pretend play. These interviews provide further evidence supporting my Chapter 2 proposal of thinking of pretense and reality as a spectrum rather than dichotomy. The complexity of reality vs. pretense also harkens back to the behaviorist vs. mentalistic debate explored in Chapters 1 and 2.

The foundations of pretend play research were laid within the legacy of behaviorism and behavioral definitions of pretend play. A simple, generalized definition of pretend play was frequently offered as behavior in a symbolic frame, imaginary situation, or "as if" mode (Piaget, 1962; Reynolds, 1976; Rubin, et al., 1983; Vygotsky, 1933/1967). The inclusion of "behavior" within the definition implied pretend play would contain clearly observable contrasts between

real-world behavior and behavior generated in the symbolic mode: “an easy contrast for even naïve adult observers to make” (Matthews & Matthews, 1979). This project’s constructivist, phenomenological, and grounded theory approach to pretend play has robustly contradicted any assumption of “ease” in identifying pretend play behaviors through observation alone. Constructing an understanding of the phenomenon through participant self-report invites a vastly more complex and rich spectrum of experience into the field of study than the behaviorist approach on which so much research is based.

“Growing Up”

The final factor that influences the frequency and quality of pretend play at different ages is participants’ retrospective concept of “growing up.” Several participants reported that they “just grew up” as a reason for reducing, transforming, or ceasing their pretend play. This could indicate a lack of self-awareness about their own mental processes or contextual experiences, developing cognitive capacities that they did not have the language to identify, individual differences, and more. Clarifying the meaning of this phrase merits further exploration through additional research.

III.2 Comparison to Prior Literature

In the following three sections I will briefly compare the model of pretend play development presented in Box 5.1 with both the foundational Piagetian and Vygotskian theories introduced in Chapter 1, and with Chapter 1’s proposed internalization model through analogies of private speech and gesture.

III.2.i The Piagetian Perspective

As presented in Chapter 1, Piaget described pretend play as emerging at 12-18 months, peaking at 4 to 5-years of age, and then declining into middle childhood (Fein, 1981; Piaget,

1962; Sutton-Smith, 1966). This inverted-U of development is shaped as pretend play arises from and then fades into other forms of play. Piaget proposed that the onset of pretend play follows the decline of sensorimotor play, and that it is later offset by the appearance of games with rules (Piaget, 1962). Piaget's perception of pretend play fits within his overarching Stage Theory of development, in which all developmental "stages" are reached in a step-like process as each stage builds toward and then gives ways to the next (i.e. Piaget, 1965). Pretend play is one of the defining markers of Piaget's preoperational stage of development (Piaget, 1965). In the Piagetian framework, it thus followed that as children move into the operational stage their symbolic imaginative play fades away.

The model of pretend play development presented in Box 5.1 firmly contradicts Piaget's Stage Theory of pretend play development. Across all interviews conducted for Chapters 3 and 4, pretend play co-existed with games with rules in middle and late childhood and was robustly present until the transition to middle school. Piaget's concrete operational stage of development begins at around 7-years-old (i.e., Oogarah-Pratap, et al., 2020). The data generated in this dissertation indicates that – on average – pretend play persists in its childhood frequency and quality until the transition to middle school. This trajectory indicates that a strict Piagetian stage theory neither accurately describe nor sufficiently explains pretend play development.

III.2.ii The Vygotskian Perspective

Vygotsky offered a strikingly different perspective on the development of pretend play than Piaget. Whereas Piaget's description of pretend play was rooted in his cognitive developmental theoretical framework, Vygotsky's approach was rooted in his sociocultural theory of development. Three aspects of Vygotsky's sociocultural theory of pretend play invite salient comparisons to the description in Box 5.1. First, Vygotsky's sociocultural theory viewed

child development as a socially mediated process. Centering the sociocultural factors that inform development better matches the transition points described in Box 5.1 than do Piaget's cognitive stage theory stepping stones.

Second, Vygotsky described pretend play as generating a Zone of Proximal Development (ZPD), and asserts that "in play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself. …play is itself a major source of development" (Vygotsky, 1978, p. 102). For Vygotsky, play creates a Zone of Proximal Development wherein the "more knowledgeable other" is the child themself within the rules of the imaginary situation (Vygotsky, 1933/1967). Vygotsky's idea of pretend play as a major source of development aligns with the dominant Motivation reported in adolescent and young adulthood pretend play in Chapter 4: Manifesting Goals and Exploring/Expanding the Self. In their current and retrospective reporting, the undergraduate participants often described using Role Play or Imaginary Audiences to generate a ZPD for themselves in order to move towards their goals. Conceptualizing pretend play as creating a ZPD is supported by the data of this dissertation.

Third, Vygotsky diverged from Piaget's cognitive developmental theory of pretense in describing of pretend play's development trajectory: rather than fading away into middle childhood—as with Piaget's inverted-U—Vygotsky proposed that the practice "converted to internal processes at [primary] school age, going over to internal speech and abstract thought" (Vygotsky, 1933/1967, p. 882). Vygotsky's suggestion of play converting to internal processes leads to the final literature comparison: internalization.

III.2.iii Internalization Model

Vygotsky theorized that internalization could explain why pretend play fades from view at school age. In 1992's *The House of Make-Believe,* Singer & Singer echo Vygotsky and offer internalization as the mechanism that could explain the apparent disappearance of pretend play around the start of formal schooling. In Chapter 1, Section VII, I identified an absence of empirical work examining this possibility, and so offered private speech and gesture as useful analogies.[47]

The re-emergence of private speech in adulthood appears to be driven by three primary factors: task difficulty, sociocultural context and expectations, and individual differences (Alderson-Day & Fernyhough, 2015). The presence and frequency of gesture is governed by similar factors, including sociocultural context and expectations, individual differences, task difficulty, and task type (Nathan, 2017; Nathan & Martinez, 2015). These factors—task demand/type, situational context, and individual differences—are the dominant variables that influence the threshold for externalizing cognition into either vocalized private speech or as physical gesture. Since the biology of our psychology tends to recycle things, in Chapter 1, I suggested that pretend play might function in a similar way. The description of pretend play development presented in Box 5.1 has some similarity to both private speech development and gesture enactment, but is unique in a key way.

Based on the participants reports and analyses of Chapters 3, 4, and 5, pretend play undergoes a significant transformation at the advent of middle school. Based on this data, however, it does not appear to universally internalize. In their oft-cited 1992 book, Singer & Singer propose:

---

[47] For a full reviews of these topics, see Chapter 1 Sections VII.1 & VII.2.

> One of the mysteries of human development involves the transformation of children's play from a behavior expressed in overt speech and action into one that flowers and expands privately ... We will propose here that, for better or worse, our impulse for make-believe and pretending, for role-enactment and fantasy, scarcely fades away at all. The constraints imposed by society, along with increasing brain complexity and cognitive abilities, make it possible to miniaturize our floor games into images, silent self-talk, and, gradually, an elaborate stream of consciousness that meanders along with an inner "voice-over" (1992, p. 232).

Singer & Singer's description of internalization assumes that the Actions of pretend play persist and internalize to become "silent self-talk" and a "stream of consciousness." My data complicates that proposal by suggesting that pretend is more transformed than internalized. Some participants described their play internalizing into an entirely cognitive activity around the beginning of middle school, using phrases such as "I imagined it" or "I just played it out in my head." Other participants continued externalized play but did so exclusively alone and in private. For some participants, pretend play ceased during adolescence. These different experiences of pretend play at the onset of adolescence were distinct to participants: each participant fell into one of the above categories, rather than describing – for example – both internalized imagination and externalized pretend play. My interviews with undergraduates focused on pretend play and did not ask specific follow-up questions on daydreaming or imagination. In order to more fully the possibility of internalization, as described by scholars such as Vygotsky and Singer & Singer, further research focused specifically on that moment of transformation will be needed.

For all participants who described pretend play in adolescence, the content and context of their play changed from that of their childhood. In childhood, some participants – both currently and retrospectively – could not describe clear Motivations for their Actions. This is in line with Lillard's conclusion from the Moe the Troll paradigm,[48] that "children's responses … suggest that they are not generally privy to their own mental involvement during pretense" (Lillard,

[48] For the full description of the Moe the Troll paradigm, review Chapter 2, Section I.

2001, p. 514). In adolescence, participants described one unifying Motivation for pretend play Actions: Goal Manifestation. Participants described adolescent pretend play as a way to be "a head taller than [themselves]" (Vygotsky, 1978, p. 102). Participants did not describe current or retrospective childhood play in this way.

The interviews in Chapters 3 and 4 indicate that the frequency and quality of pretend play persists from early childhood through the transition to middle school, at which point it transforms in frequency, quality, and motivation. A transformed version of pretend play then emerges with more frequency and variety in young adulthood for some, but not all, participants. Internalization is still a useful guiding theory to frame future research; it should, however, be balanced with the nuance and variety of experience evident from this dissertation research.

III.3 Assessing for Quality

I assert that the model of pretend play development as constructed through a grounded theory/Generic Inductive Model approach meets Charmaz's four criteria for quality as described in the Introduction of this dissertation: Credibility, Originality, Resonance, and Usefulness (Charmaz, 2006; 2014).

Credibility: gathering sufficient relevant data to conduct thorough analysis

- Through the process of concurrent primary coding and memoing, we continued data collection until I observed the frequent reemergence of themes across each age-group of interest: early, middle, and late childhood, and young adulthood.

Originality: offering new insights, providing a fresh perspective on an established phenomenon

- The description of development presented in Box 5.1 offers a significantly new perspective on pretend play development from early childhood through young adulthood.

Resonance: constructing concepts that not only represent the data, but also provide insight to others

- The concepts described in Box 5.1 not only represent the specific data generated with the participants specific to these studies, but also provide a baseline of generalizable insights for human development researchers interested in pretend play at different ages.

Usefulness: contributing to new lines of research, revealing pervasive processes, informing policy and practice

- The developmental model in Box 5.1 suggests numerous new lines of research which have the potential to eventually inform policy and practice.

IV. Significance & Future Directions

The model presented in Box 5.1 suggests that – rather than fading, ceasing, or internalizing at the start of formal schooling – pretend play may instead persist while transforming in frequency, quality, and motivation at the transition to middle school. This novel description of the phenomenon introduces five immediate implications for research and – eventually – both policy and practice:

1) Reconceptualizing the "high season" of pretend play to extend through elementary school in order to motivate replication and expansion through further research.

2) Examining the social, biological, and neurocognitive changes at the transition to middle school in order to disambiguate potential causal factors in pretend play's transformation.

3) Reconsidering the cultural and historical factors that influence the potential presence and qualities of pretend play at different ages.

4) Exploring not only the content, frequency, and motivations of adolescent and adult pretend play, but also its potential impact on learning, mental health, identity development, and relationships.

The wealth of research on the ways in which pretend play interventions and curricula inform early childhood development is built upon mid-twentieth century research anchoring the height of pretend play within that discrete age-group. I argue that the data collected in this dissertation provides a first step towards reconceptualizing the "high season" of pretend play to include its emergence in early childhood through the transition to middle school. While further replication research is needed to clarify the trajectory of pretend play, this reconceptualization invites many avenues of further research and has implications for policy and practice.

Since the 1990s, pretend play has been studied mostly through an instrumentalist perspective. Scholarship has focused on how pretend play may support the acquisition of cognitive skills such as Theory of Mind, Executive Functioning/Self-Regulation, counterfactual reasoning, and symbolic referencing—rather than on the development of pretending itself.[49] Importantly, research on the relationship between pretend play and all of these topics is shaped by the same predominantly unchallenged assumption present since the 1960s: that pretend play is a distinct and temporary phase of development. If, however, childhood pretend play extends further into development than has been accepted, then the conclusions reached by this research deserve reexamination.

Reconceptualizing the "high season" of pretend play to extend through elementary school also has implications for future policy and practice. Pretend play is a valued pedagogy and performance standard across preschool and kindergarten, where it is linked to a host of positive

[49] For review of the developmental domains that pretend play with which pretend play has been linked, see Chapter 1, Section V.

developmental outcomes (Pyle, et al., 2017; Yogman, et al., 2018). Children who demonstrate higher rates of pretend play display enhanced correlational competencies in varied domains including emotional-regulation, collaboration, social skills, empathy, executive functioning, self-regulation, autonomy, and creativity (for review, see Lillard, et al., 2013; Samuelsson, 2023; Smith, 2017; Weisberg, 2015). Despite the great value pretend play holds in the early childhood years, the practice vanishes from US school curricula across demographics as soon as students enter first grade. For example, following its presence in national and state-level guidelines for preschool and kindergarten learning outcomes, pretend and/or make-believe is absent from Common Core Standards as soon as formal schooling begins (*Common Core Standards,* 2016; Spirakus, 2018; WI Early Learning Standards, 2017). Embracing pretend play throughout elementary school invites new opportunities to incorporate the practice in interventions, curricula, and the design of learning spaces.

Reconceptualizing our perception of pretend play's developmental trajectory and freeing it from the assumption of childhood and childishness could also help destigmatize the practice for other age groups. Pretend play, for some participants, remained an enjoyable or helpful activity into young adulthood, but they felt the need to hide those behaviors from others. Embracing the narrative that pretend play is not uncommon in young adulthood could help some people feel less alone, or less "weird" in their own play.

Moreover, reconsidering pretend play's locus in early childhood also invites a reconsideration of the stubborn theorizing of pretend play within a stage theory perspective of development. The strictly demarcated stages of Piagetian theory have been built upon and moved beyond in most developmental research (e.g. Barrouillet, 2015; Martí, 2020; Miller, 2002); in pretend play studies, the stage framing lingers. Expanding our perception of pretend play

development also invites and expansion of how the phenomenon is situated in theory. What, for example, might taking an ecological systems or dynamic systems theory influence the way we think about and study pretend play?

In addition to expanding our perception of pretend play's persistence in frequency and quality through elementary school, the novel developmental model presented in Box 5.1 invites an examination of the social, biological, and neurocognitive changes the occur around the transition to middle school in order to disambiguate potential causal factors in pretend play's transformation. Undergraduate participants in Chapter 4 consistently described a transformation in their pretend play at the transition to middle school. Participants ascribed this transformation to factors such as social pressure and growing self-awareness. It is possible that the primary reason for a decline in pretend play is sociocultural; a reduction in available time and space combined with social pressure may cause the phenomenon to decrease. The sociocultural changes that accompany changing schools, however, align with a significant biological and neurocognitive change: puberty. One justification offered for focusing pretend play interventions on early childhood is that early childhood is a sensitive period of development for many of the cognitive factors associated with pretend play (e.g., see Jaggy, et al., 2023; Thibodeau-Nielson, et al. 2020; Weisberg, 2015). Puberty[50] into adolescence is another sensitive period for neurocognitive development associated with many of the same cognitive domains (e.g. Furhman, Knoll, & Blakemore, 2015; Kilford, Garrett, & Blakemore, 2016; Thompson & Steinbeis, 2020; Weil, et al., 2013), and with identity development (e.g. Blakemore, 2017; Sebastian, 2008).

[50] Another possible causal factor specific to this dissertation's almost entirely female group of undergraduate participants is the neurocognitive changes and sensitive period of development that accompany adrenarche and menarche (e.g. Byrne, et al., 2017; Pfeifer & Allen, 2021).

The dominance of identity-related pretend play reported by participants invites further research into how pretend play and identity development may interact in puberty and adolescence. As we continue to pursue increased understandings of both what pretend play is and what it does, it will be important to untangle potential causal factors responsible for its transformation at the start of adolescence and its uptick in frequency in young adulthood. Diverse methodological approaches will support that goal. Methodologically, this dissertation has leaned intentionally into participant self-report and constructivism in order to counter decades of positivist approaches and observation-based methods. Moving forward, mixed methods and varied approaches to data collection will be important to both specify pretend play's developmental trajectory and to untangle the factors that influence its change over time.

One potentially useful framing in identifying what factors motivate the presence, absence, or transformation of pretend play at different ages is a framing of affordances and constraints. The ways that participants of all ages reported on their pretend play was dependent on their environments: the giant polka dot slide became a dragon's tail, time alone at home enabled private role play, etc. Affordances are possibilities for action determined by the interaction of an individual's body and the objects in their environment (e.g., Gibson, 1979; Glenberg, et al., 2004). Constraints shape action, and can include organismic, environmental, and task based constraints (Abrahamson & Sánchez-García, 2016). The participant reported Obstacle of "growing up" could be considered an organismic constraint, whereas the specific affordances of the cabin in the Wonderground might motivate actions that lead to pretend play. Focusing future pretend play research in ecological dynamics or embodied cognition, and taking the affordances and constraints of the environment more fully into account as we try to better understand the action of pretend play, could be a fruitful line of thought. Based on the ways

participants talked about their pretend play behaviors in this research, the setting for the action deserves further attention in research.

The studies presented in this dissertation are situated exclusively in their time, place, and participants, and their conclusions should not be interpreted as universally applicable. The conclusions proposed in this project are specific to the museum-attendees and undergraduate student participants of a small Midwestern city. Therefore, further research considering the cultural and historical factors that influence the potential presence and qualities of pretend play at different ages is needed. Conducting similar self-report methodologies with participants across diverse geographic locations, languages, cultures, racial and ethnic backgrounds, socioeconomic status, and genders will be necessary to deepen and expand our understanding of the phenomena. Further research in this vein will also enable scholars to build a more widely applicable theory of pretend play development.

In addition to further research with diverse contemporary participants, the studies of this dissertation also invite the possibility of productive historical research to examine ways culture impacts development. For example, my data indicates that pretend play is present throughout elementary school. This contradicts both Piaget's description of pretend play's development and the findings reported in Eifermann's foundational and oft-cited 1971 study. Is that difference in findings due to our different methodologies (Piaget and Eifermann's observational methods vs. my self-report interviews), to changing trends across decades, to changing available technologies, or due to different cultures and children's play styles between Piaget's observations in Europe, Eifermann's observations in Israel, and my interviews in America? Research on what pretend play is necessitates acknowledging the time, geography, and culture in which the research is conducted.

The model presented in Box 5.1 offers a foundation for extensive further research. The final direction I will propose in this chapter is the invitation to explore not only the content, frequency, and motivations of adult pretend play, but also to examine its potential impact on learning, mental health, identity development, and relationships. These themes merit additional attention not only due to the paucity of existing research on the topic of the instrumentality of adult pretend play, but also its potential value to wellbeing. In early childhood, pretend play is associated with outcomes such as executive function, self-regulation, positive relationships and social skills, creativity, and more. Undergraduate participants described gaining things like focus, confidence, connection, and comfort from their pretend play. Further research with college students – just as has been done with preschoolers – could suggest practical interventions to support learning, mental health, and positive relationships.

Finally, taking a lifespan developmental perspective on pretend play invites research with participants at stages of life beyond those considered in this dissertation. Perone & Göncü's 2014 retrospective survey with graduate students revealed pretend play behaviors with participants whose average age was 30-years. No study, to my knowledge, has examined the phenomenon with participants older than 30-years. Also unexamined is the potential impact on adults of playing pretend with children. There is a line of research on the impact of guided play for children (e.g. Hassinger-Das, et al., 2017; Pyle & Danniels, 2017; Zosh, et al., 2018), but no commensurate work on the impact on adults of engaging in pretend play with children. Conducting pretend play research across the lifespan will shed light on the transformative qualities, possible persistence, and varying values of the phenomenon throughout our lives.

V. Concluding Thoughts

In the introduction to this project, I shared a few personal anecdotes about experiences with pretend play that did not fit within the dominant developmental model that I had encountered in the research literature. In the intervening pages, I have conducted a loosely historiographical review of pretend play research (Chapter 1), proposed situating pretend play along a spectrum of diverse pretense behaviors and offered a working definition for the complex phenomenon (Chapter 2), and reported on the first qualitative studies on pretend play that ask children and college students to directly self-report about their experience of play (Chapters 3 & 4). Through the stories shared by participants in these studies, I have constructed a preliminary developmental model that proposes pretend play's consistent presence through the end of elementary school, a transformation in its frequency and quality at the advent of middle school, and its persistence into young adulthood. This trajectory builds upon the two other extant studies on pretend play outside of early childhood – Smith & Lillard, 2012; Perone & Göncü, 2014.

Pretend play is a rich source of learning in early childhood. It has been linked to the acquisition of foundational academic and cognitive skills that enable success in future educational settings. Decades of research have constrained our conceptions of pretend play—and its myriad positive outcomes—to early childhood. A dichotomous view of pretense vs. reality, rooted in behaviorism, has likewise informed decades of methodological approaches to the subject. These constraints have limited what types of research, practice, and policies have been conducted and enacted, and may, in doing so, have deprived older students and people of powerful practices that support learning, growth, and positive experience.

I conclude with four major takeaways that I hope will guide future research. First: inviting children into the research process and asking them directly about their experience

provides a rich source of data about play. Second: the data across the 185 interviews conducted within this dissertation suggests that pretend play has a robust presence beyond early childhood and merits much further research. Third: a dichotomous view of pretense vs reality is over-simplistic, and a spectrum view of pretending may better support learning and mental health and may improve our understanding of identity and relationship development. Fourth and finally, I close with the words of two participants:

> I think sometimes we make believe or we pretend ourselves and act as if, and we're doing it to become better, or better versions of ourselves.

> I just feel like [pretend play] was a really, you know, an important part of my childhood and I hope that people are still, you know, engaging in pretend play and using their imagination. That's kind of just one of my hopes for the world.

If pretend play has any power to help us become better versions of ourselves, then I too hope for its increased visibility in research and practice for all ages.

Works Cited

Abrahamson, D., & Sánchez-García, R. (2016). Learning is moving in new ways: The ecological dynamics of mathematics education. *Journal of the Learning Sciences*, *25*(2), 203-239.

Alderson-Day, B. & Fernyhough, C. (2015). Inner speech: development, cognitive functions, phenomenology, and neurobiology. *Psychological Bulletin*, *141*(5), 931-965.

Almonacid-Fierro, A., De Carvalho, R. S., Vargas-Vitoria, R. & Fierro, M. A. (2022). School Recess in Primary School: Rescuing the Meaning of Play in Education. *International Journal of Instruction*, *15*(3), 543-560.

Anderson, T. & Shattuck, J. (2012). Design-based research: A decade of progress in education research?. *Educational researcher*, *41*(1), 16-25.

Ariel, S. (2002). *Children's imaginative play: A visit to wonderland*. Greenwood Publishing.

Baker, S. E., Edwards, R. & Doidge, M. (2012). How many interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research. National Centre for Research Methods, 1-43.

Barker, J. E., Semenov, A. D., Michaelson, L., Provan, L. S., Snyder, H. R. & Munakata, Y. (2014). Less-structured time in children's daily lives predicts self-directed executive functioning. *Frontiers in psychology*, *5*, 593.

Barros, R. M., Silver, E. J. & Stein, R. E. (2009). School recess and group classroom behavior. *Pediatrics*, *123*(2), 431-436.

Barrouillet, P. (2015). Theories of cognitive development: From Piaget to today. *Developmental Review*, *38*, 1-12.

Bateson, G. A. (1955/1972). A theory of play and fantasy. In G. A. Bateson (Ed.), *Steps to an ecology of mind* (Reprinted from American Psychiatric Association Research Reports, 1955, II, 1939–1951). Chandler.

Baum, F., MacDougall, C., & Smith, D. (2006). Participatory action research. *Journal of epidemiology and community health*, *60*(10), 854.

Berk, L.E. (1999). Children's private speech: An overview of theory and the status of research. *Lev Vygotsky: Critical assessments: Thought and language*, *2*, 33-70.

Berk, L.E., Mann, T.D. & Ogan, A.T. (2006). Make-believe play: Wellspring for development of self-regulation. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social-emotional growth* (p. 74–100). Oxford University Press.

Berk, L.E. & Meyers, A.B (2015) *Infants, Children, and Adolescents*, Pearson Education.

Berk, L. E. (2018). The role of make-believe play in development of self-regulation. *Encyclopedia on Early Childhood Development*

Birks, M. & Mills, J. (2015). *Grounded theory: A practical guide*. Sage.

Birks, M., Mills, J., Francis, K. & Chapman, Y. (2009). A thousand words paint a picture: The use of storyline in grounded theory research. *Journal of research in nursing*, *14*(5).

Blakemore, S. J. (2008). Development of the social brain during adolescence. *Quarterly journal of experimental psychology*, *61*(1), 40-49.

Blakemore, S. J. (2017). Social-cognitive development during adolescence. *Child psychology and psychiatry: Frameworks for clinical training and practice*, 91-95.

Boland, G. (2013). Role and Role Distance: The Heathcote/Carroll Collaboration that reframed the social context for drama-based learning and teaching. *NJ: Drama Australia Journal*.

Booth, D. (2003). Towards an Understanding of Theatre for Education. In D.W. Booth, D. Booth, & K. Gallagher (eds.), *How Theatre Educates: Convergences and Counterpoints with Artists, Scholars and Advocates*, University of Toronto Press, 14-22.

Braat, M., Engelen, J., van Gemert, T. & Verhaegh, S. (2020). The rise and fall of behaviorism: The narrative and the numbers. *History of Psychology*, *23*(3), 252.

Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The journal of the learning sciences*, *2*(2).

Bruess, C. J. & Pearson, J. C. (1997). Interpersonal rituals in marriage and adult friendship. *Communications Monographs*, *64*(1), 25-46.

Burghardt, G.M. (2005). *The genesis of animal play*. MIT Press.

Burghardt, G. M. (2011). Defining and recognizing play. *The Oxford handbook of the development of play*. Oxford University Press.

Byrne, M. L., Whittle, S., Vijayakumar, N., Dennison, M., Simmons, J. G. & Allen, N. B. (2017). A systematic review of adrenarche as a sensitive period in neurobiological development and mental health. *Developmental cognitive neuroscience*, *25*, 12-28.

Carlson, S. M. & White, R. E. (2013). Executive function, pretend play, and imagination. *The Oxford handbook of the development of imagination*, 161-174.

Caronia, L. (2015). Totem and taboo: The embarrassing epistemic work of things in the research setting. *Qualitative Research*, *15*(2), 141-165.

Cattaneo, A. (2021). *The Art of Dramaturgy*. Yale University Press.

Carr, M., Lee, W., Jones, C., Smith, A., Marshall, K. & Duncan, J. (2010). Provoking Imagination: Exploring Possible Worlds. In *Learning in the Making* (pp. 143-170). Brill.

Carrillo, A., Rubio-Aparicio, M., Molinari, G., Enrique, A., Sanchez-Meca, J. & Banos, R. M. (2019). Effects of the best possible self intervention: A systematic review and meta-analysis. *PloS one*, *14*(9), e0222386.

Carroll, J. (1986). Framing Drama: Some Classroom Strategies. *NADIE Journal*, 10:2, 5–7.

Carroll, J. & Cameron, D. (2005). Playing the Game, Role Distance and Digital Performance. *Applied Theatre Researcher*, 6(11), 1-11.

Centers for Disease Control and Prevention (2016). School health policies and practices study (SHPPS). http://hdl.handle.net/20.500.11990/1444

Charmaz, K. & Mitchell, R. G. (1996). The myth of silent authorship: Self, substance, and style in ethnographic writing. *Symbolic interaction*, *19*(4), 285-302.

Charmaz, K. & Mitchell, R. G. (2001). Grounded theory in ethnography. *Handbook of ethnography*, *160*, 174.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Chudacoff, H. (2007). *Children at Play: An American History*. NYU Press.

Clandinin, D. J. (2016). *Engaging in narrative inquiry*. Routledge.

Clandinin, D. J. & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. John Wiley & Sons.

Collins, A. (1992). *Toward a design science of education* (pp. 15-22). Springer Berlin Heidelberg.

Collins, A. (2010). Design experiments. *International encyclopedia of education.* Evanston, IL,

Copple, C. & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8.* Washington, DC: NAEYC

Cornish, F., Breton, N., Moreno-Tabarez, U., Delgado, J., Rua, M., de-Graft Aikins, A., & Hodgetts, D. (2023). Participatory action research. *Nature Reviews Methods Primers*, *3*(1), 34.

Creswell, J.W. & Clark, V.L.P. (2017). *Designing and conducting mixed methods research*. Sage

Creswell, J. W. & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Crotty, M. J. (1998). The foundations of social research: Meaning and perspective in the research process. *The foundations of social research*, 1-256.

Csikszentmihalyi, M. & Larson, R. (2014). Validity and reliability of the experience-sampling method. In *Flow and the foundations of positive psychology* (pp. 35-54). Springer.

Davis, J. T. & Hines, M. (2020). How large are gender differences in toy preferences? A systematic review and meta-analysis of toy preference research. *Archives of Sexual Behavior*, *49*(2), 373-394.

Demir, Ö. E., Levine, S. C. & Goldin-Meadow, S. (2015). A tale of two hands: children's early gesture use in narrative production predicts later narrative structure in speech. *Journal of child language*, *42*(3), 662-681.

Demopoulos, Alaina. (2023, May 15). Why are so many young Americans adopting fake British accents? *The Guardian*. https://www.theguardian.com/lifeandstyle/2023/may/14/fake-british-accents-americans-gen-z

Denzin, N. K. (2017). Critical qualitative inquiry. *Qualitative inquiry*, *23*(1), 8-16.

Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational researcher*, *32*(1), 5-8.

Denzin, N. K. & Lincoln, Y. S. (2005a) Introduction: The discipline and practice of qualitative research, in: N. K. Denzin & Y. S. Lincoln (eds), The Sage Handbook of Qualitative Research,3 rd edn. (Thousand Oaks, CA, Sage Publications), pp. 1–32.

Dimotakis, N., Ilies, R. & Judge, T. A. (2013). Experience sampling methodology. In *Modern research methods for the study of behavior in organizations* (pp. 345-374). Routledge.

Dissanayake, E. (2017). From play and ritualisation to ritual and its arts. *Ritual, play and belief in early human societies*, 87-98.

Duncan, R. & Cheyne, J. A. (2001). Private speech in young adults: Task difficulty, self-regulation, and psychological predication. *Cognitive Development*, 16(4), 889-906.

Duncan, R. & Tarulli, D. (2009). *On the persistence of private speech: Empirical and theoretical considerations.* In A. Winsler, C. Fernyhough, & I. Montero (Eds.), *Private speech, executive functioning, and the development of verbal self-regulation* Cambridge University Press.

Dunkel, C. S. (2000). Possible selves as a mechanism for identity exploration. *Journal of adolescence*, *23*(5), 519-529.

Dunkel, C. & Kerpelman, J. (2006). *Possible selves: Theory, research and applications*. Nova Publishers.

Edmiston, B. (2007). *Forming ethical identities in early childhood play*. Routledge.

Eifermann, R. R. (1971). Social play in childhood. In R. E. Herron & B. Sutton-Smith (Eds.), *Child's Play* (pp. 270–297). Wiley.

Elpus, K. (2020). Access to arts education in America: The availability of visual art, music, dance, and theater courses in US high schools. *Arts Education Policy Review*, 1-20.

Emunah, R. (2019). *Acting for real: Drama therapy process, technique, and performance*. Routledge.

Erickson, F. (1986). Qualitative methods in research on teaching. InM. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 119-161).

Feniger-Schaal, R. & Orkibi, H. (2020). Integrative systematic review of drama therapy intervention research. *Psychology of Aesthetics, Creativity, and the Arts*, *14*(1), 68-80.

Fernyhough, C. (2004). Alien voices and inner dialogue: towards a developmental account of auditory verbal hallucinations. *New Ideas in Psychology*, *22*(1), 49-68.

Fernyhough, C. & Alderson-Day, B. (2016). Descriptive experience sampling as a psychological method. In *The Restless Compendium* (pp. 43-50). Palgrave Macmillan.

Fein, G. (1981). Pretend play in childhood: An integrative review. *Child Development*, 52(4).

Fuhrmann, D., Knoll, L. J. & Blakemore, S. J. (2015). Adolescence as a sensitive period of brain development. *Trends in cognitive sciences*, *19*(10), 558-566.

Garvey, C. (1977). *Play*. Harvard University Press.

Gibson, J. J. (1979). The theory of affordances. In *The people, place, and space reader* (pp. 56-60). Routledge.

Ginsburg, H. (1997). *Entering the child's mind: The clinical interview in psychological research and practice*. Cambridge University Press.

Girbau, D. (2007). A neurocognitive approach to the study of private speech. *The Spanish Journal of Psychology*, 10(1), 41-51.

Geva, S. & Fernyhough, C. (2019). A penny for your thoughts: children's inner speech and its neuro-development. *Frontiers in Psychology*, 10(1708), 1-11.

Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.

Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Routledge.

Glenberg, A. M., Gutierrez, T., Levin, J. R., Japuntich, S., & Kaschak, M. P. (2004). Activity and imagined activity can enhance young children's reading comprehension. *Journal of educational psychology*, *96*(3), 424.

Gnambs, T. & Kaspar, K. (2015). Disclosure of sensitive behaviors across self-administered survey modes: a meta-analysis. *Behavior research methods*, *47*(4), 1237-1259.

Goffman, E. (1959). The presentation of self in everyday life.

Goffman, E. (1986). *Frame Analysis: An Essay on the Organization of Experience*. Northeastern University Press.

Göncü, A. & Perone, A. (2005). Pretend play as a life-span activity. *Topoi*, *24*(2), 137-147.

Göncü, A. & Vadeboncoeur, J. A. (2017). Expanding the definitional criteria for imaginative play: Contributions of sociocultural perspectives. *Learning & behavior*, *45*(4), 422-431.

Halverson, E. R. (2021). *How the Arts Can Save Education*. Teacher College Press.

Harris, P. L. (2000). *The work of the imagination*. Blackwell Publishing.

Harris, P. L. (2021). Early constraints on the imagination: The realism of young children. *Child Development*, *92*(2), 466-483.

Hassinger-Das, B., Toub, T. S., Zosh, J. M., Michnick, J., Golinkoff, R. & Hirsh-Pasek, K. (2017). More than just fun: a place for games in playful learning / Más que diversión: el lugar de los juegos reglados en el aprendizaje lúdico. *Infancia y Aprendizaje*, *40*(2).

Heathcote, D. (1985). Collected Writings. In L. Johnson & C. O'Neill (eds.), *Dorothy Heathcote: Collected Writings on Education and Drama.* Hutchinson and Co.

Heavey, C.L. & Hurlburt, R.T. (2008). The phenomena of inner experience. *Consciousness and cognition*, *17*(3), 798-810.

Heekerens, J. B. & Eid, M. (2021). Inducing positive affect and positive future expectations using the best-possible-self intervention: A systematic review and meta-analysis. *The Journal of Positive Psychology*, *16*(3), 322-347.

Henrich, J., Heine, S. J. & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and brain sciences*, *33*(2-3), 61-83.

Highlen, P.S. & Bennett, B.B. (1983). Elite divers and wrestlers: A comparison between open- and closed-skill athletes. *Journal of Sport and Exercise Psychology*, *5*(4), 390-409.

Honig, A. S. (2015). Sociocultural influences on gender-role behaviors in children's play. In *Play from birth to twelve* (pp. 387-398). Routledge.

Howe, N., & Hogan, C. (2001). Do props matter in the dramatic play center? The effects of prop realism on children's play. *The Canadian Journal of Infancy and Early Childhood*, *8*(4).

Huizinga, J. (1955). Nature and significance of play as a cultural phenomenon. *Huizinga, J.: Homo Ludens–A Study of the Play-Element in Culture, Boston (Beacon Press*), 1-27.

Hurlburt, R. T. & Akhter, S. A. (2006). The descriptive experience sampling method. *Phenomenology and the Cognitive Sciences*, *5*(3-4), 271-301.

Jack, A. & Roepstorff, A. (2003). Why trust the subject? *Journal of consciousness studies*, *10* (9-10), v-xx.

Jaggy, A. K., Kalkusch, I., Bossi, C. B., Weiss, B., Sticca, F. & Perren, S. (2023). The impact of social pretend play on preschoolers' social development: Results of an experimental study. *Early Childhood Research Quarterly*, *64*, 13-25.

Jeannerod, M. (2001) Neural simulation of action: a unifying mechanism for motor cognition. *Neuroimage*, 14(1), 103–109.

John-Steiner, V. (1992). Private speech among adults. *Private speech: From social interaction to self-regulation*, 285-296.

Johnston, D. (2006). Private speech in ballet. *Research in Dance Education*, *7*(1), 3-14.

Joseph, A. (2022). Arts Education in Jeopardy: Research Reveals the Challenges and Resilience of Arts Education and Arts Educators During and Following the Pandemic. *International Dialogues on Education Journal*, *8*(1/2), 51-83.

Kalkusch, I., Jaggy, A. K., Burkhardt Bossi, C., Weiss, B., Sticca, F. & Perren, S. (2022). Fostering children's social pretend play competence and social skills through play tutoring: What is the mechanism of change?. *International Journal of Behavioral Development*, *46*(5), 461-471.

Kilford, E. J., Garrett, E. & Blakemore, S. J. (2016). The development of social cognition in adolescence: An integrated perspective. *Neuroscience & Biobehavioral Reviews*, *70*.

Kindon, S., Pain, R., & Kesby, M. (2007). Participatory action research: Origins, approaches and methods. In *Participatory action research approaches and methods* (pp. 35-44). Routledge.

Knowles, R. (2004). *Reading the Material Theatre*. Cambridge University Press.

Krasnor, L.R. & Pepler, D.J. (1980). The study of children's play: Some suggested future directions. *New Directions for Child and Adolescent Development*, 9, 85-95.

Kronk, C.M. (1994). Private speech in adolescents. *Adolescence*, 29(116), 781.

Kyratzis, A. (1999). Narrative identity: Preschoolers' self-construction through narrative in same-sex friendship group dramatic play. *Narrative Inquiry*, *9*(2), 427-455.

LaDonna, K. A., Artino Jr, A. R. & Balmer, D. F. (2021). Beyond the guise of saturation: rigor and qualitative interview data. *Journal of Graduate Medical Education*, *13*(5), 607-611.

Lane, J. D., Ronfard, S., Francioli, S. P. & Harris, P. L. (2016). Children's imagination and belief: Prone to flights of fancy or grounded in reality?. *Cognition*, *152*, 127-140.

Lankoski, P. & Järvelä, S. (2012). An embodied cognition approach for understanding role-playing. *International Journal of Role-Playing*, 3, 18-32.

Larson, R. & Csikszentmihalyi, M. (1983). The Experience Sampling Method. *New Directions for Methodology of Social & Behavioral Science*, 15*,* 41–56.

Leavy, P. (2017). Introduction to arts-based research. *Handbook of arts-based research*, 3-21.

Lee, C. J. G. (2012). Reconsidering constructivism in qualitative research. *Educational Philosophy and theory*, *44*(4), 403-412.

Lee, R. M. (2004). Recording technologies and the interview in sociology, 1920–2000. *Sociology*, *38*(5), 869-889.

Leslie, A.M. (1987). Pretense and representation: the origins of "Theory of Mind." *Psychological Review*, 94, 412–422.

Lidstone, J., Meins, E. & Fernyhough, C. (2011). Individual differences in children's private speech: Consistency across tasks, timepoints, and contexts. *Cognitive Development*, 26(3), 203-213.

Lillard, A. (1993). Young children's conceptualization of pretense: Action or mental representational state? *Child Development,* 64, 372–386.

Lillard, A. (2001). Pretend Play as Twin Earth: A Social-Cognitive Analysis. *Developmental Review.* 21(4), 459-531.

Lillard, A. (2017). Why do the children (pretend) play?. *Trends in Cognitive Sciences*, *21*(11).

Lillard, A. S., Lerner, M. D., Hopkins, E. J., Dore, R. A., Smith, E. D. & Palmquist, C. M. (2013). The impact of pretend play on children's development: a review of the evidence. *Psych bull*, *139*(1), 1-34.

Lillard, A., Pinkham, A. M. & Smith, E. (2011). Pretend play and cognitive development. In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development* (p. 285–311).

Liu, L. (2016). Using generic inductive approach in qualitative educational research: A case study analysis. *Journal of Education and Learning*, *5*(2), 129-135.

London, R. A. (2019). The right to play: Eliminating the opportunity gap in elementary school recess. *Phi Delta Kappan*, *101*(3), 48-52.

Loveday, P. M., Lovell, G. P. & Jones, C. M. (2018). The best possible selves intervention: A review of the literature to evaluate efficacy and guide future research. *Journal of Happiness Studies*, *19*, 607-628.

MacDonald, C. (2012). Understanding participatory action research: A qualitative research methodology option. *The Canadian Journal of Action Research*, *13*(2), 34-50.

Madison Children's Museum (2021). Wonderground. https://madisonchildrensmuseum.org

Markus, H. & Nurius, P. (1986). Possible selves. *American Psychologist, 41*(9), 954–969.

Martí, E. (2020). Post-Piagetian Perspectives of Cognitive Development. In *Oxford Research Encyclopedia of Education*.

Mattaini, M. (2020). Creating autistic space in ability-inclusive sensory theatre. *Youth Theatre Journal*, *34*(1), 42-54.

Matthews, R.J. & Matthews, W.S. (1979). A paradigm case approach to the study of fantasy. Paper presented at the meeting of the Society for Research in Child Development, San Francisco.

McCandliss, B.D., Weisberg, D.S., Golinkoff, R.M. & Hirsch-Pasek, K. (2014). Mise en place: Setting the stage for thought and action. *Trends in Cognitive Sciences*, 18(6), 276-278.

McKenney, S. & Reeves, T. C. (2018). *Conducting educational design research*. Routledge.

Merton, R. K. (1949). *On sociological theories of the middle range [1949]*. na.

Miles, M. B., Huberman, A. M. & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook*. Sage publications.

Miller, P. H. (2002). *Theories of developmental psychology*. Macmillan.

Mills, Jane. "Methodology and methods." Sage, 2014. 31-47.

Mitchell, R. W. (2007). Pretense in animals: The continuing relevance of children's pretense. In *Play and development* (pp. 60-84). Psychology Press., 51-75.

Mueller, R. A. (2019). Episodic narrative interview: Capturing stories of experience with a methods fusion. *International Journal of Qualitative Methods,* 18, 1-11.

Munakata, Y. & Michaelson, L. E. (2021). Executive functions in social context: Implications for conceptualizing, measuring, and supporting developmental trajectories. *Annual Review of Developmental Psychology*, *3*, 139-163.

National Governors Association Center for Best Practices, Council of Chief State School Officers. (2016). *Common Core State Standards.* Washington D.C. http://corestandards.org/

Nathan, M.J. & Martinez, C.V.J. (2015) Gesture as model enactment: the role of gesture in mental model construction and inference making when learning from text, *Learning: Research and Practice*, 1:1, 4-37.

Nielsen, J. M. (Ed.). (2019). *Feminist research methods: Exemplary readings in the social sciences*. Routledge.

Nieveen, N. & Folmer, E. (2013). Formative evaluation in educational design research. *Design Research*, *153*(1), 152-169.

Nisbett, R. E. & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological review*, *84*(3), 231.

Nordstrom, S. N. (2015). Not so innocent anymore: Making recording devices matter in qualitative interviews. *Qualitative Inquiry*, *21*(4), 388-401.

Omasta, M. (2012). A Survey of School Theatre: A Landscape Survey of Theatre Education in United States High Schools. *Teaching Theatre*, *24*(1), 8-29.

Omasta, M. & Landroche, A. (2020). Pedagogical Discoveries through Participation in a Devised Ethnodrama about Depression. *Journal for Learning through the Arts*, *16*(1).

Oogarah-Pratap, B., Bholoa, A., & Ramma, Y. (2020). Stage theory of cognitive development—Jean Piaget. *Science Education in Theory and Practice: An Introductory Guide to Learning Theory*, 133-148.

Østern, A. L. (2021). Dramaturgical strategies. In *Teaching and Learning through Dramaturgy* (pp. 23-45). Routledge.

Oyserman, D. & James, L. (2011). Possible identities. *Handbook of identity theory and research*, 117-145.

Oyserman, D. & Saltz, E. (1993). Competence, delinquency, and attempts to attain possible selves. *Journal of Personality and Social Psychology, 65*(2), 360–374.

Oyserman, D., Terry, K. & Bybee, D. (2002). A possible selves intervention to enhance school involvement. *Journal of adolescence*, *25*(3), 313-326.

Perone, A. & Göncü, A. (2014). Life-span pretend play in two communities. *Mind, Culture, and Activity*, *21*(3), 200-220.

Perone, S., Simmering, V. R. & Buss, A. T. (2021). A dynamical reconceptualization of executive-function development. *Perspectives on Psychological Science*, *16*(6).

Perrone-Bertolotti, M., Rapin, L., Lachaux, J. P., Baciu, M. & Loevenbruck, H. (2014). What is that little voice inside my head? Inner speech phenomenology, its role in cognitive performance, and its relation to self-monitoring. *Behavioural brain research*, *261*.

Peterson, C. (2020). Remembering earliest childhood memories. *Autobiographical memory development: Theoretical and methodological approaches*, 119-135.

Pfeifer, J. H. & Allen, N. B. (2021). Puberty initiates cascading relationships between neurodevelopmental, social, and internalizing processes across adolescence. *Biological Psychiatry*, *89*(2), 99-108.

Piaget, J. (1962). Play, dreams, and imitation in childhood (Gattegno & Hodgson, Trans.) Norton.

Piaget, J. (1965). The stages of the intellectual development of the child. *Educational psychology in context: Readings for future teachers*, *63*(4), 98-106.

Picciuto, E. & Carruthers, P. (2016). *Imagination and pretense.* In A. Kind (Ed.), *Routledge handbooks in philosophy. The Routledge handbook of philosophy of imagination* (p. 314–325). Routledge/Taylor & Francis Group.

Pulvermüller, F. (2005). Brain mechanisms linking language and action. *Nature reviews neuroscience*, *6*(7), 576-582.

Pyle, A. & Danniels, E. (2017). A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. *Early education and development*, *28*(3), 274-289.

Pyle, A., DeLuca, C. & Danniels, E. (2017). A scoping review of research on play-based pedagogies in kindergarten education. *Review of Education*, *5*(3), 311-351.

Ritzer, G. & Goodman, D.J. (2004). *Classical Sociological Theory* (4th ed.) McGraw Hill.

Rognli, E. (2008). We are the great pretenders: Larp is adult pretend play. In M. Montola & J. Stenros, eds. *Playground worlds … role-playing games*. (pp. 199–205). Ropeconry.

Rubin, K. H., Fein, G. G. & Vandenberg, B. (1983). Play. In E. M. Hetherington (Ed.) & P. H. Mussen (General Ed.), Handbook of child psychology: Socialization, personality, and social development (Vol. 4, 4th ed., pp. 693–774). Wiley.

Rubin, H. J. & Rubin, I. S. (2012). The responsive interview as an extended conversation. *Qualitative interviewing: The art of hearing data*, 108-128.

Russ, S.W. (2020). *Pretend play in childhood: Foundation of adult creativity*. APA.

Rutakumwa, R., Mugisha, J. O., Bernays, S., Kabunga, E., Tumwekwase, G., Mbonye, M. & Seeley, J. (2020). Conducting in-depth interviews with and without voice recorders: a comparative analysis. *Qualitative Research*, *20*(5), 565-581.

Sabol, F. R. (2022). Art education during the COVID-19 pandemic: The journey across a changing landscape. *Arts Education Policy Review*, *123*(3), 127-134.

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Sage.

Saldaña, J. & Omasta, M. (2016). *Qualitative research: Analyzing life*. Sage Publications.

Samuelsson, R. (2023). Leveraging Play for Learning and Development: Incorporating Cultural-Evolutionary Insights into Early Educational Practices. *Mind, Brain, and Education*, *17*(2), 75-85.

Schousboe, I. (2013). The structure of fantasy play and its implications for good and evil games. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development: Cultural-historical perspectives* (pp. 13–27). Springer.

Schwandt, T. A. (2014). *The Sage dictionary of qualitative inquiry*. Sage publications.

Seale, C. & Silverman, D. (1997). Ensuring rigour in qualitative research. *The European journal of public health*, *7*(4), 379-384.

Sebastian, C., Burnett, S. & Blakemore, S. J. (2008). Development of the self-concept during adolescence. *Trends in cognitive sciences*, *12*(11), 441-446.

Shibasaki, H. (2012). Cortical activities associated with voluntary movements and involuntary movements. Clinical Neurophysiology, 123, 229–43.

Shkedi, A. (2004). Narrative survey: A methodology for studying multiple populations. *Narrative Inquiry*, 14(1), 87-111.

Singer, D.G. & Singer, J.L. (1992). *The house of make-believe: Children's play and the developing imagination*. Harvard University Press.

Smilansky, S. (1968). *The effects of sociodramatic play on disadvantaged preschool children*. Wiley.

Smith, E. D. & Lillard, A. S. (2012). Play on: Retrospective reports of the persistence of pretend play into middle childhood. *Journal of Cognition and Development*, 13(4), 524-549.

Smith, P. K. (2017). Pretend play and children's cognitive and literacy development: sources of evidence. *Play and Literacy in Early Childhood Research From Multiple Perspectives*.

Smith, G. (2013). The dramaturgical legacy of Erving Goffman. *The Drama of Social Life: A Dramaturgical Handbook*, 57-72.

Smolucha, L. & Smolucha, F. (1986). Vygotsky's theory in play. *Early Child Dev and Care*, 1041-1055.

Spirakus, M. (2018). *A Comparative Document Analysis on Early Childhood Teacher State Requirements, NAEYC Standards and Developmental Theories* (Doctoral dissertation, Northern Arizona University).

Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge university press.

Sutton-Smith, B. & Kelly-Byrne, D. (1984). *The Masks of Play*, Leisure Press.

Sutton-Smith, B. (2003). Play as a parody of emotional vulnerability. *Play and culture studies*, *5*.

Szatkowski, J. (2019). *A theory of dramaturgy*. Routledge.

Taggart, J., Heise, M. J. & Lillard, A. S. (2018). The real thing: Preschoolers prefer actual activities to pretend ones. *Developmental Science*, *21*(3), e12582.

Thibodeau-Nielsen, R. B., Gilpin, A. T., Palermo, F., Nancarrow, A. F., Farrell, C. B., Turley, D., DeCaro, J.E., Lochman, J.E. & Boxmeyer, C. L. (2020). Pretend play as a protective factor for developing executive functions among children living in poverty. *Cognitive Development*, *56*, 100964.

Thomas, M. K. (2011). The utility and efficacy of qualitative research software in grounded theory research. *Grounded theory: The philosophy, method and work of Barney Glaser*.

Thompson, A. & Steinbeis, N. (2020). Sensitive periods in executive function development. *Current Opinion in Behavioral Sciences*, *36*, 98-105.

Thompson, B. N. & Goldstein, T. R. (2019). Disentangling pretend play measurement: Defining the essential elements and developmental progression of pretense. *Developmental Review*, 52, 24-41.

Tie, Y., Birks, M. & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE open medicine*, *7*.

Trammell, A. (2023). *Repairing Play: A Black Phenomenology*. MIT Press.

Tuckett, A. G. (2005). Applying thematic analysis theory to practice: A researcher's experience. *Contemporary nurse*, *19*(1-2), 75-87.

Utah Education Network (UEN). "Utah Core Standards, 2023." www.uen.org/core

Utah State Board of Education (USBE), (2020). "Utah Core State Standards for Early Learning."

Uttl, B., Morin, A., Faulds, T., Hall, T. & Wilson, J. (2012). Sampling inner speech using text messaging. *Proceedings of the Canadian Society for Brain, Behavior, and Cognitive Science*, 287-90.

Vagle, M. D. (2018). *Crafting phenomenological research*. Routledge.

van de Water, M., McAvoy, M. & Hunt, K. (2015). *Drama and Education: Performance Methodologies for Teaching and Learning*. Routledge.

van Gog, T., Paas, F., van Merriënboer, J. J. G. & Witte, P. (2005). Uncovering the Problem-Solving Process: Cued Retrospective Reporting Versus Concurrent and Retrospective Reporting. *Journal of Experimental Psychology: Applied, 11*(4), 237–244.

Van Vleet, M. & Feeney, B. C. (2015). Play behavior and playfulness in adulthood. *Social and Personality Psychology Compass*, *9*(11), 630-643.

Veraksa, N., Veresov, N., Veraksa, A. & Sukhikh, V. (2020). Modern Problems of Children's Play: Cultural-Historical Context. *Cultural-Historical Psychology*, *16*(3), 60- 70.

Vygotsky, L.S. (1933/1967). Play and its role in the mental development of the child. In J.S Bruner, A. Jolly & K. Sylva (Eds.), *Play: Its Role in Development and Evolution* (p. 863-895). Penguin.

Vygotsky, L.S. (1978). *Mind in society*. Harvard University Press.

Wah, A. (2020). Cognitive Processes Underlying Play and Pretend Play: A Comparative Cross-Species Study on Degrees of Memory, Perception, Imagination, and Consciousness. *American Journal of Play*, *12*(2), 156-177.

Walsh, A. (2019). Giving permission for adults to play. *Journal of Play in Adulthood*, *1*(1), 1-14.

Walton, K.L. (1990). *Mimesis as Make-Believe*. Harvard University Press.

Wang, Q. & Gülgöz, S. (2019). New perspectives on childhood memory: introduction to the special issue. *Memory*, *27*(1), 1-5.

Weil, L. G., Fleming, S. M., Dumontheil, I., Kilford, E. J., Weil, R. S., Rees, G., ... & Blakemore, S. J. (2013). The development of metacognitive ability in adolescence. *Consciousness and cognition*, *22*(1), 264-271.

Weisberg, D.S. (2015). Pretend play. *Wiley Interdisciplinary Reviews: Cognitive Science*, *6*(3), 249-261.

Weisberg, D.S., Hirsh-Pasek, K. & Golinkoff, R.M. (2013). Guided Play: Where Curricular Goals Meet a Playful Pedagogy. *International Mind, Brain, and Education Society and Blackwell Publishing, Inc.* 7(2), 104-112.

Wellman, H.M. (2011). Developing a Theory of Mind. In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development* (p. 258–284). Wiley-Blackwell.

Wigginton, B. & Lafrance, M. N. (2019). Learning critical feminist research: A brief introduction to feminist epistemologies and methodologies. *Feminism & Psychology*,

Wisconsin Model Early Learning Standards Steering Committee. (2017). Wisconsin Model Early Learning Standards.

Wood, L. (2019). *Participatory action learning and action research: Theory, practice and process*. Routledge.

Yasnitsky, A. (Ed.). (2018). *Questioning Vygotsky's legacy: Scientific psychology or heroic cult*. Routledge.

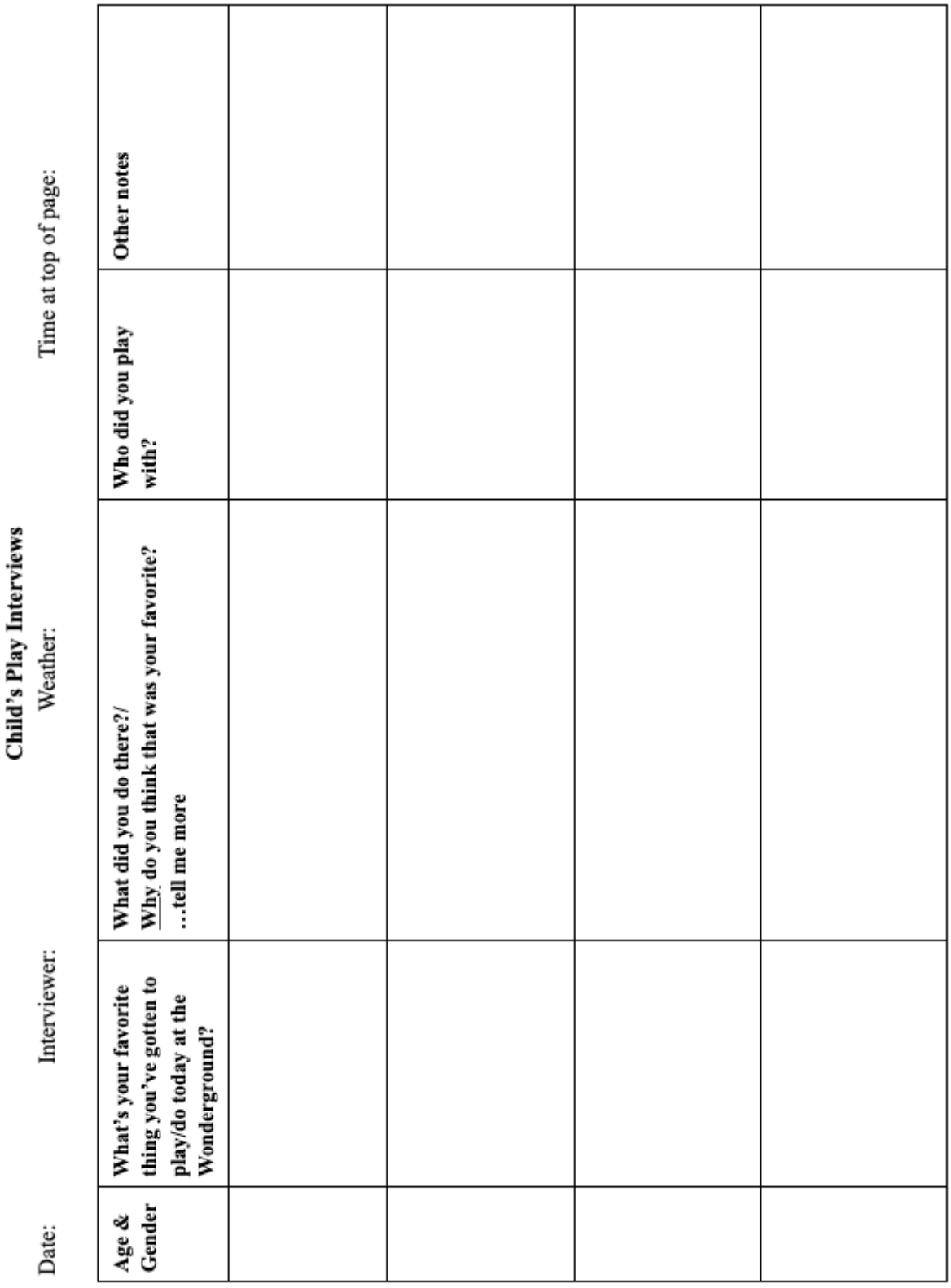
Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., Golinkoff, R. M. & Committee on Psychosocial Aspects of Child and Family Health. (2018). The power of play: A pediatric role in enhancing development in young children. *Pediatrics*, *142*(3).

Yu, Y., Shafto, P., Bonawitz, E., Yang, S. C.-H., Golinkoff, R. M., Corriveau, K. H., ... Xu, F. (2018). The Theoretical and Methodological Opportunities Afforded by Guided Play With Young Children. *Frontiers in Psychology*, 9, 1-8.

Zosh, J.M., Hirsh-Pasek, K., Hopkins, E.J., Jensen, H., Liu, C., Neale, D., Whitebread, D. (2018). Accessing the Inaccessible: Redefining Play as a Spectrum. *Frontiers in Psychology*, 9, 1-12.

Appendix

Chapter 3 – Wonderground data collection sheets Example



Child's Play Interviews

Date: Interviewer: Weather: Time at top of page:

Age & Gender	What's your favorite thing you've gotten to play/do today at the Wonderground?	What did you do there?/ Why do you think that was your favorite? …tell me more	Who did you play with?	Other notes

Chapter 3 – Wonderground data collection protocol and notation system

Wonderground Interviews - Detailed Protocol

Arrival:

-Say hello to the front desk, so they know you're here

In the Wonderground

-take a loop around the space, look for any new exhibits or features, note if any activities are happening, etc.

Setting up:

-Go to storage (code 0000)
-Get self ready: apron on, clipboard ready, etc.
-Get chalkboard ready
    -Help Us Do PLAY Science!
-Set up at the picnic table
    *If there's an activity, set up at the large logs next to the picnic table
-Sign should be facing the playground
-Start notes doc with your name, the time, the weather, and any additional notes

Inviting Participants:

-Stay open and available - stay off phones as much as possible
-Allow children to approach you
-Say hello/smile as they walk past, but allow them to initiate a visit to your table
-If they stop or seem curious, you can invite them with
    "Hi! I'm trying to learn about how kids are playing in the Wonderground! Would you like to tell me about your play here today?"

If grown-ups are interested:

-Totally share what you're doing, that your an undergrad at the UW, that you're interested in play, etc. An easy answer is:
    "I work with the museum, and we're trying to learn more about how children play!"
-People will be interested!

Once a child approaches, follow interview script

Note-taking:

-**Take verbatim notes as much as possible, catching direct quotes from children**
-Use their first-person "I"
    Ex: I like the swings
-Gender: we are making assumptions for the gender column. If the child is traditionally:
    -Female presenting: FP

-Male presenting: MP
-Neither traditionally female or male presenting: NB (non-binary)
-Use your notes to specify actions and who is talking:
-For anything *you* say, put it in quotes
Ex: “What did you do there?” I ran around
-If the child does any meaningful gestures or acts things out, put the action in parentheses
Ex: the little house (points to the cabin)
-If there are interjections that feel important in your notes, differentiate them from the child’s words with brackets
Ex: “What did you do there?” [Mom prompts her - you liked the swings, right?] (child nods)
-Record each new favorite thing in a new row
-At the top of each page include the time it is when you start that page

Other Notes column:
-This column is for any extra information that strikes you as important
-Are participants siblings?
-Do participants respond as a group?
-Is their grown-up prompting their answers?
-Do they tell you things that don’t fit in the other columns? (ex: the Wonderground should have more dinosaurs)
-etc

After your visit:
-By the end of the day type your notes
-First, review your own notes and observations, and expand upon those in the typed Interview Notes doc
-Then transfer your notes from the interviews into the green columns in the excel spreadsheet, using the above punctuation conventions
-Keep the notes papers in a safe place for Katherine to later collect
-email Katherine a quick update

Chapter 4 – Pilot study interview protocol

Interview Protocol for Survey Creation

Notes and set-up

- Bulleted questions are priority/essential; others are prompts or follow-ups depending on the response and time
- At the beginning of the interview do introductions, ask for permission to record, start the recording, then start the intro script below

Introducing Interview: Script

Thanks so much for agreeing to participate in this interview, I'm excited to talk with you. The purpose of this interview is learn about how people respond to these questions in order to design an online survey version. Overall, I expect this interview to take about half an hour to 45-minutes. We'll start with some basic getting-to-know-you questions, and then talk about pretend play! There's no right or wrong way to answer any of the questions, and you are always free to "pass" any questions you don't want to answer.

- Any questions before we get started?
  -[Answer]
  -Great! Let's start with those getting-to-know-you questions

Getting to know you

- What is your gender?
- How old are you?
- Year in school, and major?
- Would you tell me about any hobbies you like to do? Things like playing sports, or video games, art-making or crafting, baking, hiking, anything!
  -How often do you get to engage in that?
  -What do you think draws you to that activity?

Introducing Pretend Play: Script

Thanks for all those answers! Now, we're going to shift to talking about pretend play. Broadly, we all know what pretend play is – we can recognize it in kids playing house or putting on a cape and pretending to be a superhero. To offer a more formal definition:

By pretend play, I mean "*acting as-if*," or including your body and physical actions in your imagination.

Pretend play behaviors might look like:

> [Possible examples]
> -Talking to an imaginary audience as you do your make-up in the morning, as-if you were recording a youtube tutorial
> -Playing a role-play game and acting as-if you were your character while in the game, even if only for a moment

-Having characters and silly voices that you enact with certain very close friends
-And many more!

I'm interested in learning about the variation in if or how often people engage in pretend play behaviors, so there are no wrong answers!

- Any questions?
  -[Answer]

Pretend Play Questions

- Think about your life now. Do you think you ever engage in pretend play, not including play with young children, at your current age? Even very briefly?

- [If yes] Can you give me one recent example of playing pretend? Include as much detail as you can.
  -Who were you with?
  -Where were you?
  -Do you think you would [do X] in a different setting?
  -Why/why not?
  -Why do you think you engaged in that behavior? What do you get out of it?
- Tell me about another example of pretend play
  -[Repeat above prompt cycle]
- Last round: any other recent examples of pretend play?
  -[Repeat above prompt cycle]
- How often do you think you engage in pretend play? Daily, weekly, monthly?
  -Are there circumstances that lead you to doing it more or less frequently?
  -What are they?

- [If no] Why do you think you don't engage in pretend play anymore?
  -Can you remember playing pretend in the past?
  -When do you think you stopped?
  -Why did you stop?
  -Are there any contexts where you could see yourself playing pretend now?

- [For both] Is there anything else you'd like to share about pretend play?

Survey Creation Questions

Thanks so much for sharing your stories! I just have a few more questions. So as I said at the start, the goal of these in-person interviews are to learn about how people are responding in order to potentially design an online version of these questions. Talking about pretend play has the potential to be a little embarrassing, since it's something we typically associate with childishness.

- Do you think your answers would have been at all different if you were typing them in an a anonymous survey, vs. talking with me face-to-face?

-[If yes] If you're comfortable sharing, what about your answers might have been different? (Remember, you're always free to pass on a question!)
-[If no] Why not?
-[For both] Do you think that people would be more willing to share stories of pretend play in an anonymous survey? Or do you think people would prefer an interview like this?
-Why?

- Are there ways that we could phrase the definition of pretend play, or phrase the questions, that would make more sense or help you answer more fully?
  -[Follow-up]

Closing

Thanks so much for your engagement in this conversation!

- Is there anything else you'd like to share about pretend play or about the structure of the interview before we say goodbye?
- Are there any questions you have for me?

Thanks again for sharing your time and your experiences!