Play completion predicts fewer child psychological difficulties ; a longitudinal study of mentalizing processes

Lina Normandin[1] , Jordan Bate[2] , Michael Bégin[1], Peter Fonagy[3] & Karin Ensink[1]

[1]Université Laval, École de psychologie, Québec, Canada
[2]Yeshiva University, Ferkauf Graduate School of Psychology, New York, NY, United States
[3]University College London, London, United Kingdom

*Address correspondence to Karin Ensink, PhD at Pavillon Félix-Antoine-Savard, FAS-1426, Université Laval, École de psychologie, 2325 rue des Bibliothèques, Québec (QC), Canada G1V 0A6

Phone: +1 (418) 656-2131 #12493
Email: Karin.Ensink@psy.ulaval.ca

Abstract

Play therapy is widely used with children, including children who experienced sexual abuse. This longitudinal study examined whether more pretend play completion at Time 1 predicted fewer child difficulties when this was assessed three years later at Time 2. Participants were 91 children (aged 3-8 at Time 1), including 51 children who experienced sexual abuse (CSA). Play was coded with the Children's Play Therapy Instrument, and child psychological difficulties were assessed with the Child Behavior Checklist. More pretend play completion at Time 1 predicted fewer child psychological difficulties three years later at Time 2. This was the case in children who had experienced CSA as well as the comparison group, showing that pretend play completion is predicts better psychological adjustment in both abused and non-abused children. The study provides the first longitudinal evidence of the important role of pretend play narrative completion in predicting less internalizing and externalizing difficulties. The findings have important clinical implications for play therapists. It suggests that interventions that encourage children to elaborate and c*omplite* their play narratives could facilitate agency and psychological adjustment, as well as recovery after trauma. This is in line with the idea that through play children discover that they can "play with reality" and gain control over how they tell their stories.

Keywords : Pretend Play, Mentalizing, Sexual Abuse, Externalizing, Internalizing

Early intervention is essential to reduce harm in young children affected by trauma, as well as those suffering from emotional and behavioral difficulties. Play therapy has been shown to be an effective treatment modality for young children (see meta-analysis by Bratton et al., 2005; Decline et al., 2019) and is widely used (Benham & Slotnick, 2006) to facilitate recovery after trauma (Drewes & Schaefer, 2018; Diaz & Lieberman, 2010; Gil, 1991; Russ, 2004; Schaefer, 1994; Slade, 1994; Terr, 1990). Children who have experienced sexual abuse have been shown to benefit from play therapy as well as insight orientated and mixed psychotherapy approaches (see meta-analysis by Harvey & Taylor, 2010). However, some research supports the use of more structured approaches such as Trauma-Focused Cognitive Behavioral Therapy for children (Allen & Hoskowitz, 2017). One reason for this might be that despite research into how trauma presents in play therapy (Homeyer & Landreth, 1998) and evidence supporting the use of play therapy, little is known about the associations between pretend play and later child psychological adjustment in young children in the community, including those who have experienced trauma and those who have not. To our knowledge this question has never been examined longitudinally.

From both a clinical and developmental psychopathology perspective (Cicchetti, 2013), it is important to have longitudinal evidence to better understand how pretend play is associated with children's symptomatology and recovery after trauma in order to make unstructured, play therapy approaches more targeted. Furthermore, identifying positive aspects of development in play would help to address the paucity of meaningful and valid outcome measures for therapy with young children (Scott et al., 2003), and provide clinicians with guidelines for assessing change in play that may be associated with changes in symptomatology.

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There are multiple elements of play that may be clinically relevant, including the emotions and affects expressed, the narrative coherence, interruptions, and completion of the play narratives, referred to as pretend play completion (PPC). In a previous study, PPC was found to be particularly important in young children, as it predicted their mentalizing abilities three years later, and mediated the association between childhood sexual abuse and later mentalizing specifically regarding others (Tessier et al., 2016). Mentalizing refers to the capacity to consider internal mental states, such as thoughts feelings and intentions, and how they link with behavior. Mentalizing has been shown to be a core resilience capacity with implications for mental health and social adjustment in children, adolescents and adults (Berthelot et al., 2015; Borelli et al., 2018; Ensink et al., 2014, 2016, 2017; Venta et al., 2016). Furthermore, there is now converging evidence that mentalizing holds a particularly important role in recovery from trauma, mediating the relationship between trauma and psychological adaptation in older children (Ensink et al., 2016), as well as adolescents (Abate et al., 2017; Venta et al., 2016) and adults (Huang et al., 2020). Given that PPC is associated with later mentalizing, and mentalizing supports emotion regulation, we would expect that it would also facilitate later regulation. However, the link between PPC and later emotion regulation has not been examined.

The aim of this study was to address the gaps in the literature regarding the contribution of pretend play to children's later regulation of affect and behavior, particularly in the context of trauma. By examining whether young children's PPC predicts children's later psychological adjustment, we seek to provide empirical support for specific goals and processes in play therapy for children in the early school-age range.

Child sexual abuse psychopathology and mentalizing

Childhood sexual abuse (CSA) can result in cascading negative developmental impacts at both the internalizing and externalizing ends of the emotion regulation spectrum (Chaffin, Silovsky & Vaughn, 2005; Ensink et al., 2016; Hébert et al., 2006; Nalavany et al., 2009). While 50-60% of CSA victims are at increased risk of psychosocial difficulties and negative health impacts that may manifest across the lifecycle (Clark et al., 2010), it is equally important to consider that 40-50% of people who have experienced CSA do not report psycho-social difficulties. These data indicate that psychological processing of and responses to abuse follow different pathways, referred to as multi-finality by developmental psychopathologists. Recently, researchers have shifted their attention to understanding how trauma interacts with other risk and protective processes to account for this multi-finality in outcomes and resilience subsequent to abuse.

Both secure attachment and mentalization have been shown to be protective factors associated with lower distress and fewer behavioral difficulties among preschool children who have experienced sexual abuse, as well as school-aged children, adolescents and adults (Berthelot et al., 2015; Berthelot et al., 2021; Borelli et al., 2019; Ensink et al., 2014; Garon-Bissonnnette et al., 2021). Importantly, mentalizing tends to develop in the context of secure attachment relationships where the parents understand that their children's behavior is internally motivated. **Pretend play as an early manifestation of mentalizing**

Pretend play is considered especially important for children, offering a transitional space between internal reality and external reality (Winnicott,1971) where they can express their feelings and preoccupations. Pretend play is also considered a mental activity used by children to: 1.) represent external and internal conflict and make it meaningful and manageable; 2.) regulate intense negative affect; and 3.) "reflect" on their own and others' internal worlds,

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(Cohen, 2006; Fonagy & Target, 1996; Kavanaugh, 2006; Russ, 2004; McMahon, 2009). Pretend play facilitates the development of language, emotion-regulation and perspective-taking (see Lillard et al., 2013 for a review; Scarlett, 2005), as well as empathy and theory of mind (Niec & Russ, 2002; Smith, 2005). There is preliminary evidence that younger children's capacity to complete pretend play narratives may be of particular importance and associated with better emotion-regulation (Galyer & Evans, 2001; Mullin & Hinshaw, 2007; Tessier et al., 2016).

In their series of "Playing with Reality" papers (1996), Fonagy and Target describe how the presence of adults who interact with the child and engage in the pretend play alongside the child provides an opportunity for the child to see and discover that reality can be "played" with and represented in different ways.

Play therapy, pretend play and child trauma survivors

Pretend play is considered especially important for the recovery of young trauma survivors because it facilitates the integration of traumatic experiences and trauma related affect such as fear, anger and guilt (Axline, 1947, 1969; Gil, 1991; McMahon, 2009; Schaefer, 1994, Terr, 2004). Pretend play provides young children with a way of expressing and representing their concerns when they do not yet have the cognitive and verbal skills to put their feelings into words and think about them. Furthermore. the elaboration of pretend play narratives is theorized to facilitate integration of affect and experience in young trauma survivors (McMahon, 2009; Slade, 1994).

The impacts of trauma on child play have been widely documented (Findling et al., 2006; Gil, 1991; Homeyer & Landreth, 1998; Kernberg, 2005). Because pretend play implies a type of abandon where contact with reality is suspended, children who have experienced threats to their safety for extended periods may manifest "play inhibition" where they are unable to play because

they are hypervigilant and focused on detection of danger and are afraid to enter into the realm of play and represent their experience through pretend play as if this would be potentially dangerous. Alternatively, they may demonstrate an escape into fantasy. Furthermore, play themes and roles often involve playing out victim-aggressor patterns. Aggressive and sexual impulses may infiltrate the play and lead to a collapse of the transitional space of pretend play. Affect may be expressed in a primitive way and dealt with through projection and splitting (Verheught-Pleiter, Zevalkink & Schmeets, 2008).

In addition, "reenactment" or "repetition of the trauma in play" has been widely described (Cohen et al., 2010; Gaensbauer, 2011; Terr, 1991). When provided with the opportunity to play in the safety of the playroom where the therapist invites the child to play anything they want, children who experienced sexual abuse frequently engage in a reenactment of the trauma. This can be seen as the expression of a profound need to understand and master the traumatic representations that overwhelm him and threaten him, and to communicate with other people to obtain help in doing so.

Central to the therapeutic value of play is its role as a transitional space between fantasy and reality, where the play does not become too real, but also does not become disconnected from reality. The presence of an attachment figure or therapist helps to maintain this transitional space in the context of trauma. Without such a person to witness and provide safety and support, traumatic play fails to reduce the child's anxiety because of its closeness to the reality of the abuse (Schaefer, 1994; Terr, 1990; Fonagy et al., 2002). The literature is consistent in observing that children who have experienced sexual abuse manifest "play disruption" when affects expressed in the play become too frightening or when play themes or roles become too evocative of the abuse and of the individuals involved in the trauma, including victim and abuser. Play then

becomes confused and disorganized (for example, one child patient put the baby doll in the freezer).

Mentalization theory offers a way of understanding the breakdowns that may occur in play if the presence of an attachment figure is not felt. While repetitive play is an attempt to face and integrate experiences of trauma and abuse, if the reality overwhelms the fantasy it is likely to result in emotional dysregulation. Fonagy (1996) and others have referred to this state when the child's internal reality becomes too real and overwhelms the play and reality as a psychic equivalence mode of reflective functioning. In this mode, play is no longer representing the past experience, the child is reliving some aspect of the experience.

Repetition of trauma in play can also represent a pretend mode of reflective functioning, where play is used to avoid dealing with issues and the child escapes into fantasy that is disconnected from reality. A pretend mode in play may be noticeable to clinicians because it lacks the emotional quality of pretend play. That is, it is not real enough to support the child working through and integrating their emotional experiences. Both of these types of play – psychic equivalence and pretend mode - are considered to be associated with personality disorders (Kernberg et al., 2000).

Clinical experience and research suggest that a dimension of pretend play associated with mastery and coherence, is "completion" of pretend play narratives, which we hypothesized would be associated with better child outcomes. Pretend play completion (PPC) reveals that the play narrative is coherent, including a beginning, middle and an end, leaving the child with a sense of completeness and satisfaction. Clinically, we observe that play in psychic equivalence or pretend modes often does not come to completion or resolution.

The current study aimed to add to the existing research by investigating the associations between pretend play completion, specifically, and the internalizing and externalizing symptoms over time in both children who have experienced sexual trauma and those who have not. We hypothesized that 1) sexual abuse would be associated with greater internalizing and externalizing difficulties at baseline (Time 1; Hypothesis 1); 2) time will have an effect on internalizing (Hypothesis 2a) and externalizing symptoms (Hypothesis 2b), with both decreasing over time 3) the relationship between time and internalizing symptoms will be moderated by pretend play completion (PPC), with greater PPC at Time 1 predicting less internalizing difficulties three years later at Time 2 (Hypothesis 3); 4) the relationship between time and externalizing symptoms will be moderated by PPC, with greater PPC at Time 1 predicting less externalizing difficulties three years later at Time 2 (Hypothesis 4).

Method

The study protocol was approved by the university ethics committee prior to the inception of the study. Parents and children gave informed consent (and informed assent in the case of younger children). All participants were recruited as part of a larger longitudinal study examining risk and resilience factors as they relate to later psychosocial adjustment and psychosocial difficulties in the context of CSA.

Participants

Participants were 106 children (aged 3-9) including a sexually abused group of 57 children (20 boys and 37 girls, M_{age} = 69.9 months or 5.83 years, SD = 18.6 months) and a non-abused comparison group of 49 children (17 boys and 32 girls, M_{age} = 66.7 months or 5.56 years, SD = 19.5 months). The ethnic composition of the sample is broadly representative of the

demographic area where the study was conducted (92% French Canadian, 5% Other Caucasian and 3% First Nations).

Sexually abused children were referred by Youth Protection Services, family physicians or Community Health Services. The comparison group was recruited through advertisements in schools, day care centers or Community Health Services. In the majority of cases abuse was perpetrated by someone known to the child, such as fathers (22%), neighbours and friends of the family (22%), or the mother's partner or grandmother's partner (16%). In 59% of the cases, the abuse occurred before age five. In terms of the type and severity of the sexual abuse, 88% involved genital contact, and 27% involved penetration.

The sexually abused group and non-abused group did not differ in terms of gender composition (χ^2 (2, $N = 91$) = 3.03; ns) or mean age at any of the two assessments ($t(89) = -.80$; ns, and $t(65) = -1.23$; ns). However the differences in maternal education (used as an indicator of socioeconomic status (SES) were significant ($t(89) = 5.01$, $p < .001$, $\eta^2 = .21$), and for this reason maternal education was controlled for in subsequent analyses. Furthermore, there were significant age effects (meaning that age correlated with key variables such as internalizing and externalizing difficulties) and age was thus controlled for in further analyses.

The Time 2 assessment took place approximately three years later ($M = 40.0$ months, $SD = 22.9$). Only participants who had not received any therapeutic intervention were included. Sixty-seven children participated in this follow-up assessment, including 40 sexually abused children and 27 non-abused children. The average age of children was 111.3 months or 9.28 years ($SD = 16.2$ months). Rates of attrition did not significantly differ between the sexually abused and the non-abused group, (χ^2 (2, $N = 91$) = 1.38; ns). There were no differences in terms of maternal

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education, child gender, or any other key variables between the group who agreed to participate in the Time 2 assessment and those who did not.

Procedure

All assessments took place at the University Psychology Clinic. Upon arriving at the university clinic, parents provided informed consent and children provided informed assent before data was collected for this study; the consent/assent process involved informing participants that they could withdraw from study participation at any time or refuse to participate in any part of the study.

The Time 1 assessment took place in a play therapy room where children were shown the toys and invited to play for 45 minutes. A clinical research assistant accompanied the child and observed the child's play. The clinical research assistant was instructed only to participate in the play when the child requested this and not to introduce play themes. Mothers completed interviews and questionnaires while children participated in the play session. At the Time 2 assessment took place approximately three years later, mothers once again completed questionnaires. This paper will focus on the child's play at Time 1, in relation to the mother's report of the child's behaviors on the Child Behavior Checklist (CBCL) at Time 1 and Time 2.

Measures

Child Play Therapy Instrument (CPTI). The CPTI (Kernberg et al., 1998; Kernberg & Normandin, 2000) was developed to assess children's pretend play. The coding system can be used to rate the content of play, affect expressed in play, as well as the structure of play (including play completion, play fragmentation and play interruption). This paper focuses on Pretend Play Completion (PPC). Videos of play sessions are first segmented to indicate when children engage in preparation for play, pretend play, non-symbolic play and non-play. The second step involves

identifying the different narratives elaborated by the child in the pretend play segments. For completion, segments are assessed to determine whether pretend play narratives are completed. Completed narratives have a beginning, middle and end, whereas incomplete narratives lack such coherence and the child is unable to conclude the story. The percentage of pretend play narratives completed, over total number of pretend play segments, is used as an indicator of the capacity of the child to complete and resolve play.

Play was coded by two graduate students who received 30-hours of training. Inter-rater reliability was assessed based on coding 13 play sessions totaling 10 hours of play. Agreement on play coding was substantial to perfect, with Cohen's kappa ranging from .70 to 1.00, which is considered as moderate to excellent using the criteria of Landis and Koch (1977).

Child Behavior Checklist (CBCL). The CBCL (Achenbach, 1991; Achenbach & Edelbrock, 1983) was completed by mothers at both time points to assess child psychosocial functioning. The CBCL is widely used and has shown good reliability and validity (Achenbach & Rescorla, 2000; Crijnen et al., 1997). The CBCL provides standardized T scores for externalizing difficulties (including subscales of aggressive and delinquent behaviors) and internalizing difficulties (including subscales of anxiety, depression, somatization, withdrawal and attention). Parents rate the presence and frequency of a range of child difficulties in the last month using a 3 point Likert scale from 0 (never) to 2 (often). The CBCL for 2- to 3-year-old children was used to assess younger participants at Time 1 and the CBCL for 4- to 18-year-old children was used at Time 1 for older participants and Time 2 for all participants.

Data Analytic Plan

As part of preliminary analyses, a null multilevel model with random intercepts and no predictors were computed for both internalizing and externalizing difficulties. Regarding

internalizing difficulties, results of the null model showed a significant variation of internalizing

difficulties around the intercept (Wald's $Z = 4.95$, $p < .001$), and 55.5% of the variability was

associated with individual differences (ICC = .555). Results of the null model with externalizing

difficulties also revealed a significant variation around the intercept (Wald's $Z = 5.95$, $p < .001$)

with 72.1% of the variance attributable to individual differences (ICC = .721). In both cases, an

Multi Level Modeling (MLM) was advisable. In other words, the participants differed

significantly on their starting points for both internalizing and externalizing difficulties and thus,

a random intercept was used for the final model to test whether the predictors had a different

effect according to the level of difficulties at Time 1. This allowed a different curve for each

participant to be modelised with regression coefficients for each predictor which included some

interaction effects.

The hypothesised model was a two-level MLM with repeated measures with one level 1

predictor (time) and two level 2 predictors (sexual abuse and play completion) for both

internalizing and externalizing difficulties. Time was entered in the model as a separate predictor

to account for the repeated measures (nested within-subject predictor). It was thus possible to

examine the effect of time alone on the evolution of each participant in addition to the effects of

other variables. It was also hypothesised that the effect of sexual abuse may be moderated by

play. Thus, many interaction effects were entered in the model for a total of 12 parameters

including the interaction between play and time as well as the triple interaction between sexual

abuse, play and time. The other interaction effects were between sexual abuse and time, and play

and time. Descriptive analyses showed that both dependent variables were normally distributed,

no outliers were identified, and no normality problems were identified after the examination of

the residuals. A multiple linear regression analysis revealed no multicollinearity issues between the predictors, namely CSA, PPC or time.

Results

A summary of the descriptive statistics for the whole sample and by sexual abuse and play completion groups is provided in Table 1.

Relationship between sexual abuse and internalizing and externalizing symptoms

In terms of fixed effects, at baseline, children with a history of sexual abuse (SA) showed significantly higher internalizing and externalizing scores than children in the non-abused comparison group ($t(98.5) = -3.55$, $p = .001$), confirming Hypothesis 1.

Associations between internalizing symptoms, sexual abuse (SA) and pretend play completion (PPC) over time.

Results of the MLM with internalizing difficulties as the dependent variable are shown in Table 2. At Time 1 the association between play completion and internalizing difficulties was not significant ($t(88.4) = -1.59$, $p = .058$). Furthermore, no interactions between time and SA and between SA and play were found ($t(61.5) = 1.43$, $p = .158$ and $t(101.65) = 1.15$, $p = .253$ respectively).

Among all children, there was a significant decrease of internalizing symptoms over time ($t(55.7) = -2.31$, $p = .024$)), confirming Hypothesis 2a. However, children who manifested more PPC at baseline showed a steeper decrease in internalizing difficulties over time ($t(85.7) = 2.16$, $p = .034$), confirming Hypothesis 3. The effect of time on play was the same in both the SA group and the non-abused comparison group ($t(83.2) = -1.60$, $p = .113$).

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In addition, in terms of random effects, the variability around the mean score of internalizing difficulties at baseline was significant (Wald's Z = 3.73, p <.001) and the variability of the slopes of the trajectories of children around the mean slope was also significant (Wald's Z = 2.03, p <.043). Furthermore, 53% of the variance of internalizing difficulties was due to individual differences (Intraclass correlation; ICC = .53). In other words, the evolution of children's symptoms over time differed significantly from one another and this was due to individual factors including sexual abuse and play completion. The slopes of the trajectories did not depend on the children's internalizing scores at baseline (Wald's Z = -1.88, p = .060).

Associations between externalizing symptoms, sexual abuse (SA) and pretend play completion (PPC) over time.

Regarding externalizing difficulties, results of the MLM are presented in Table 3. At baseline, sexually abused children had significantly higher scores than the non-abused comparison group (t(102.6) = -2.57, p = .012). Moreover, there were no interaction effects between SA and play (t(116.5) = -.54, p = .585) nor between SA and time (t(73.3) = -.99, p = .330).

There was a significant effect of time, indicating that externalizing difficulties decreased significantly over time (t(51.8) = -2.88, p = .011), supporting Hypothesis 2b. This decrease was greater amongst children who showed more play completion (t(85.6) = 2.06, p = .043), confirming Hypothesis 4. The contribution of play completion to the reduction of externalizing symptoms over time was the same for CSA survivors and the non-abused control group (t(76.4) = -1.66, p = .100). The variability around the mean score of externalised behavior at baseline was significant (Wald's Z = 4.20, p <.001). However, the slopes of the trajectories of children did not vary significantly around the mean slope (Wald's Z = .26, p = .796), that is to say that children

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presented a similar evolution over time. Externalizing scores at Time 2 did not depend on their respective externalizing score at baseline (Wald's $Z = -1.09$, $p = .276$). 75% of the variance of externalizing was attributable to individual differences ($ICC = .75$) including sexual abuse and play completion.

Discussion

The aim of this study was to examine the relationship between child sexual abuse (CSA), pretend play completion (PPC), and children's internalizing and externalizing difficulties longitudinally over a three year time period. The main study finding was that more PPC at Time 1 was associated with less internalizing and externalizing difficulties three years later at Time 2 among both groups of children – those who had experienced sexual abuse and those who had not. We hypothesized that CSA, as well as psychological difficulties at Time 1 would predict psychological difficulties Time 2, but this was not the case. Child PPC at Time 1 was the only predictor of symptomatology at Time 2. Children with more PPC showed a greater reduction of internalizing difficulties and externalizing difficulties over the three following years. Given that PPC has been previously shown to predict later mentalizing (Tessier et al., 2016), these findings provide further support for the theory that early mentalizing that is developed through play may help children modulate distress and integrate affect over time, thus leading to a reduction of internalizing symptoms such as feelings of depression and unhappiness, as well as a reduction in externalizing symptoms such as aggression and oppositional behaviors. These findings are in line with and extend the previous findings showing that mentalizing is associated with better affect regulation and mediated the relationships between child sexual abuse and psychological difficulties in older children (Ensink et al., 2016), and between maltreatment and psychological difficulties in adolescents (Duval et al., 2018).

The findings have important clinical implications, suggesting that PPC may be associated with resilience and should be facilitated in play therapy with trauma survivors as well as children with internalizing and externalizing difficulties more broadly. The links observed suggest that the structure of play narratives, and particularly the child's capacity to complete their narratives, may facilitate integration of painful emotional experiences and foster internal awareness and emotion regulation.

Clinical Implications

Based on these findings, we make the following clinical recommendations. First, assessment of children in any type of therapy should include observation of children's play, with an eye for whether and how play narratives are completed. Whether or not a child has experienced a known trauma, a lack of completion of play narratives should be noted and addressed in treatment. Furthermore, tracking the quality of play in this regard can provide clinicians with a sense of treatment progress with young children.

Second, when children are observed to have deficits in pretend play completion, enhancing the child's ability to play and working to foster play where narratives are developed and completed should be a therapeutic target. A therapeutic focus on mentalization has been associated with increases in symbolic play and improvements in affect regulation (Halfon & Bulut, 2019). Mentalization-Based Treatment for Children (Midgley et al., 2017) is a treatment model that employs a scaffolding approach to build the capacities for attention control, emotion regulation and explicit mentalizing through play, in a way that may support increased completion of pretend play narratives. Attention control interventions include establishing joint attention and back-and-forth turn-taking rhythms of interaction, noticing and naming behaviors and physical states (e.g. "your body is moving really fast today") or describing play (e.g. "all of the people are piled into

the house"). Emotion regulation techniques involve playing with regulation through the play. The therapist might help the child practice watching emotions get bigger, for example, a lion's roaring getting bigger and bigger, and then bringing them down again. For children who present with flat affects, the therapist might support the child playing with and expanding their affects. Finally, in the context of joint attention and emotion regulation, play can be used to explore various feeling states, perspectives and interactions in the therapeutic setting, and thus support the development of more complex mentalization.

Our findings underscore the value of play as a vehicle for communication and emotional processing. A curious, playful, not-knowing stance creates a therapeutic space where children can explore and have their mind recognized and affirmed, as well as get distance from their overwhelming emotional experiences in order to observe them from different perspectives and contain them (Muller & Midgley, 2015; Halfon & Bulut, 2019). As suggested by Terr (1990), traumatized children may be more driven to engage in pretend, and use the opportunity to express and process affects through play. Gill (2011) has elaborated a process of play therapy that involves three components: reexperiencing, releasing, and reorganizing.

This study demonstrates the importance of narrative completion in play as a protective factor in longer-term internalizing and externalizing difficulties, providing support for this process and demonstrating how reorganizing may appear in play. It may be particularly important to provide opportunities for sexually abused children as well as children with internalizing and externalizing difficulties to engage in pretend play in a therapeutic context. Play constitutes a medium for expressing and mentalizing trauma related preoccupations and play therapy facilitates the development of coherent and meaningful play and verbal narratives, helping children to

achieve mastery and integrate trauma memories into the declarative memory and the auto-biographic narrative (McMahon, 2009; Slade, 1994).

Finally, pretend play provides an opportunity to observe and measure early mentalizing capacities in young children. These capacities may include the ability to develop narratives in play, elaborate thoughts and feelings that underlie behaviors of different characters, as well as the completion of play narratives. Reliable methods for assessing mentalizing in younger children have been challenging to develop because children's language abilities are not fully developed and their relative cognitive immaturity makes it difficult for them to express their thoughts and feelings in words.

Pretend Play Versus Pretend Mode and Psychic Equivalence

From the perspective of play therapy, mentalization and mentalization-based treatment, it is important to note a clear distinction that we are making in this paper and its conclusions, between pretend play that fosters mentalizing and the pre-mentalizing states of psychic equivalence and pretend mode, which we often see in therapy with children. Pretend play is in the transitional space where mentalizing can emerge, that is, where we can imagine, think different perspectives and make links, but in ways that have meaning and connection with the real world. Pretend play is characterized by a sense of aliveness and mutuality, with a child who is engaged in the exploration of internal experiences and their relation to behavior and relationships. In contrast, play that is in pretend mode, often observed as a flight into fantasy, is likely to feel empty, repetitive, boring or avoidant, games may be tonelessly repeated, or the child may engage in elementary play characteristic of much younger children (Bate et al., 2019; Muller & Midgley, 2020). Pretend mode is a signal to the clinician that an intervention is needed to restore a context in which a child can use the play therapeutically, to work through and process painful affects and experiences and bring

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them to a meaningful and coherent resolution. On the other end of the spectrum, play that is in psychic equivalence mode is experienced by the child as too real and may appear dysregulating (Bate et al., 2019). Psychic equivalence mode is an indicator the clinician that an intervention is needed as well to support the child in regulation and playing where thoughts, feelings and experiences do not become overwhelming and play can be completed. While the goal of therapy is to utilize play to help children mentalize and reorganize their experiences, these phenomenon of psychic equivalence and pretend mode are part of the therapeutic process, and the therapist's ability to help patients shift out of these modes and restore mentalizing may be critical to the process of change described by Gil (2011) and others.

The findings of the present study, taken together with the earlier findings that play completion is associated with later mentalizing (Tessier et al., 2016), highlight the importance of pretend play and suggest that play completion may be an indicator that play that is serving to facilitate mentalizing and affect regulation, in contrast to play that is being used in preoccupation or avoidance or becoming dysregulating.

Limitations

While the present study has many strengths, including its longitudinal design and the focus on a high priority population of children who have experienced sexual abuse, some limitations have to be considered in the interpretation of results. The findings are consistent with theoretical and clinical models of the impact of trauma on play and psychosocial adaptation, but they require replication. An important limitation of the study is that the sample was predominantly composed of White individuals so that replication in a more heterogeneous sample is needed before generalizing the findings. Additionally, even though our longitudinal data suggest that play may facilitate later self and behavioral regulation and recovery after trauma, we cannot necessarily

assume a causal role, because these phenomena could be co-occurring rather than causally linked. The reliance on parent report measures of children adaptive functioning is a further limitation, although widely relied upon in studies of younger children. We have focused on pretend play completion (PPC), given previous evidence of its importance, but future research should examine the play themes and affective content and adaptation after trauma.

Conclusion

This longitudinal study of children makes a small but important contribution by adding to a growing body of evidence that child mentalizing capacities have significant effects on self-regulation capacities over the lifespan. Sexually abused children as well as non-abused children who engaged in more pretend play completion at Time 1 manifested less psychological difficulties three years later at Time 2. The findings have important clinical implications and suggests that play therapy, where children are encouraged to express their preoccupations through pretend play and gain mastery through *completing* play narratives, may be of particular therapeutic value for young children who have been traumatized or who are at risk for internalizing and externalizing behavior difficulties due to other causes.

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Table 1. Means and standard deviations of internalizing and externalizing difficulties for the total sample and by sexual abuse and play completion groups.

		Internalizing		Externalizing	
		Mean	**Standard deviation**	**Mean**	**Standard deviation**
T1	Whole sample	59.3	10.6	61.1	13.1
	Sexual abuse	63.7	8.5	66.6	11.2
	No sexual abuse	54.3	10.6	54.7	12.2
	Play completion	59.9	11.5	60.2	13.1
	No play completion	56.0	10.1	59.7	13.7
T2	Whole sample	57.5	9.9	57.4	12.0
	Sexual abuse	62.4	8.0	63.1	10.1
	No sexual abuse	51.8	8.9	50.9	10.9
	Play completion	57.8	10.3	56.7	11.6
	No play completion	57.1	7.6	57.8	13.7

Note: Whole sample (N=106); Sexual abuse (N=57); No sexual abuse (N=106); Play completion (N=82); No play completion (N=24).

MENTALIZING IN PLAY

Table 2 : Fixed effects of MLM with one level 1 and two level 2 predictors on internalizing difficulties.

Parameter	Estimate	SE	df	t	p
Intercept	64.07	1.70	84.00	37.75	< .001
Play[1]	-7.37	3.51	88.4	-1.59	.058
SA[2]	-8.18	2.30	98.5	-3.55	.001
Time (centred)	-.16	.07	55.74	-2.31	.024
Play[1]*SA[2]	5.28	4.60	101.65	1.15	.253
Play[1]*Time (centred)	.40	.18	85.69	2.16	.034
SA[2]*Time (centred)	.13	.09	61.49	1.43	.158
Play[1]*SA[2]*Time(centred)	-.36	.23	83.18	-1.60	.113

[1] The reference category is children without play completion.
[2] The reference category is children without a history of sexual abuse.

MENTALIZING IN PLAY

Table 3 : Fixed effects of MLM with one level 1 and two level 2 predictors on externalizing difficulties.

Parameter	Estimate	SE	df	t	p
Intercept	63.64	2.00	92.28	31.75	< .001
Play[1]	-.90	4.29	95.71	-.21	.835
SA[2]	-6.55	2.55	102.64	-2.57	.012
Time (centred)	-.15	.05	15.78	-2.88	.011
Play[1]*SA[2]	-2.99	5.46	116.49	-.54	.585
Play[1]*Time (centred)	.39	.19	85.56	2.06	.043
SA[2]*Time (centred)	.08	.08	23.27	.99	.330
Play[1]*SA[2]*Time(centred)	-.36	.21	76.44	-1.66	.100

[1] The reference category is children without play completion.
[2] The reference category is children without a history of sexual abuse.