

Flex Service Introduction

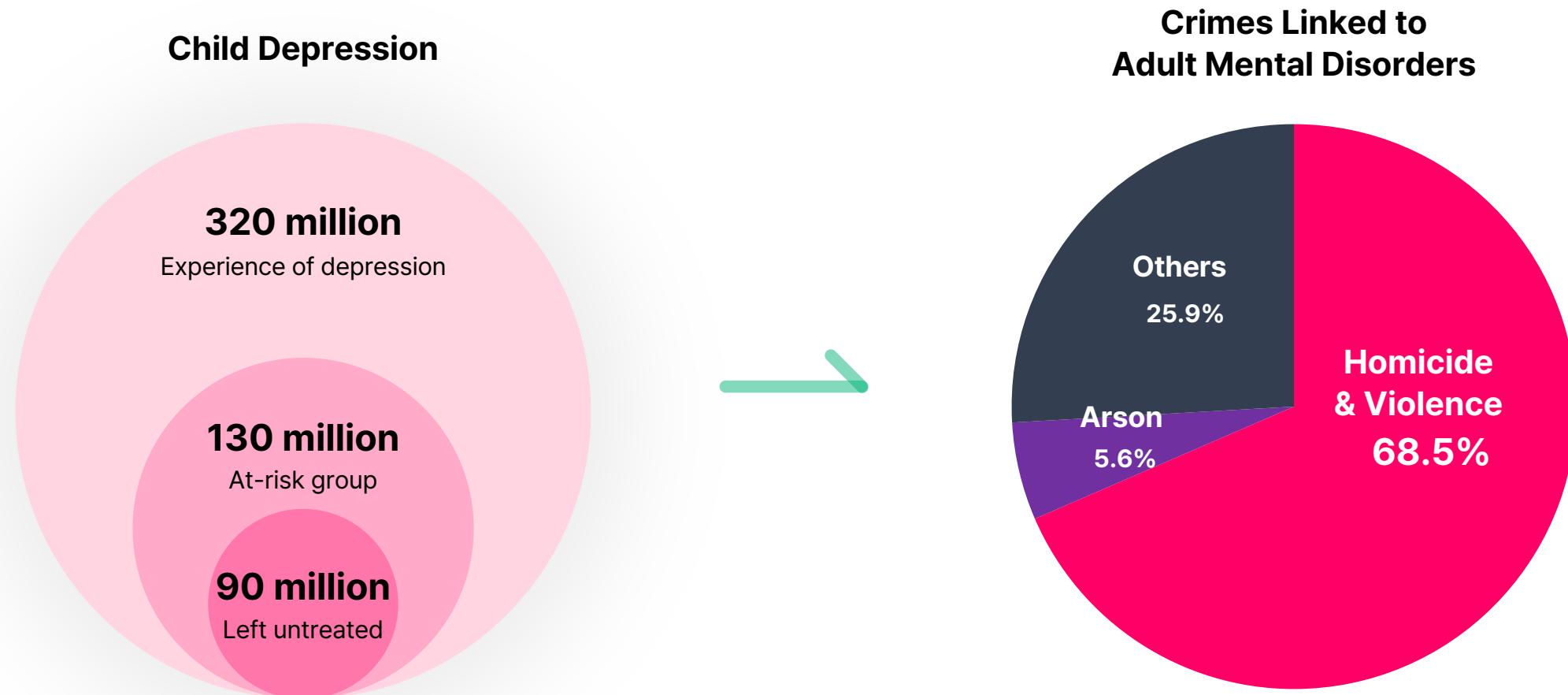
AI Mental Care Solution



Flex

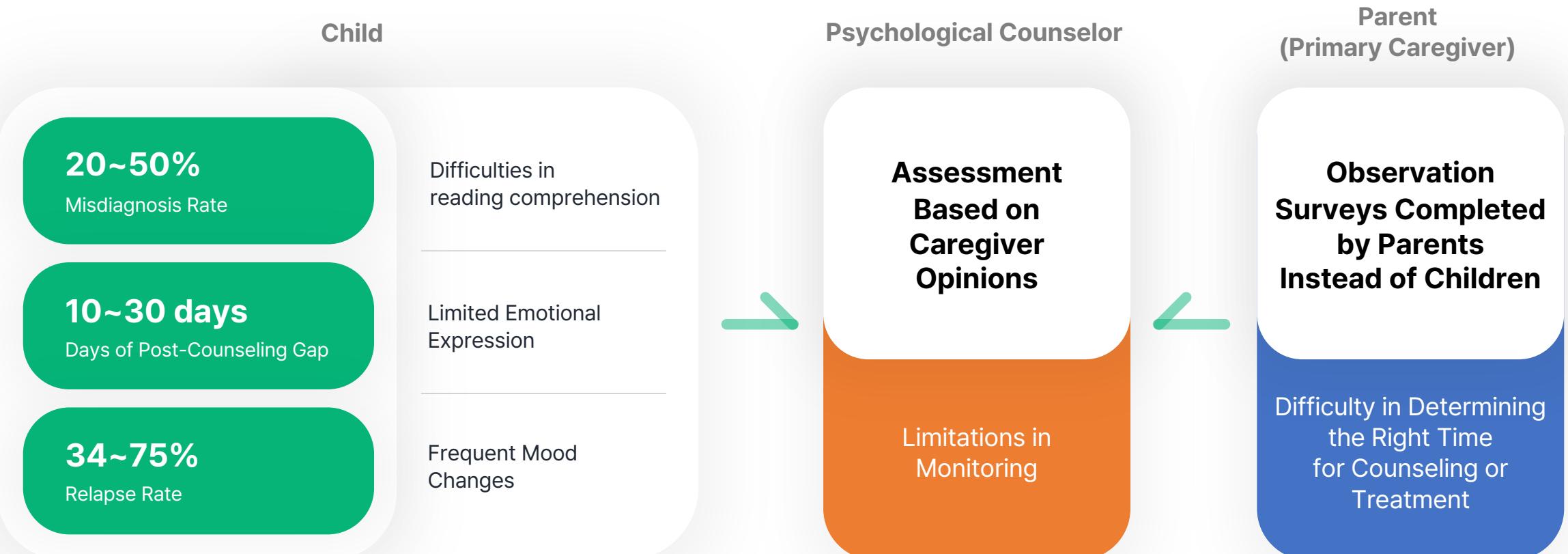
Children worldwide are often left out of mental health care, facing emotional neglect.

Globally, child psychological testing and counseling are often carried out through parents or main caregivers, rather than the children themselves.



- i. TM Capital, The Next Generation of Medicine : Artificial Intelligence and Machine Learning MARKETS AND MARKERS, Digital Therapeutic(DTX) Market by Application, Sales Channel-Global forecasts to 2025
ii. Fortune Business Insights, VR in Healthcare Market Size, Share & Industry Analysis

The mental health market continues to grow, yet there remains no screening system for depression and ADHD specifically designed for children aged 3 to 7.



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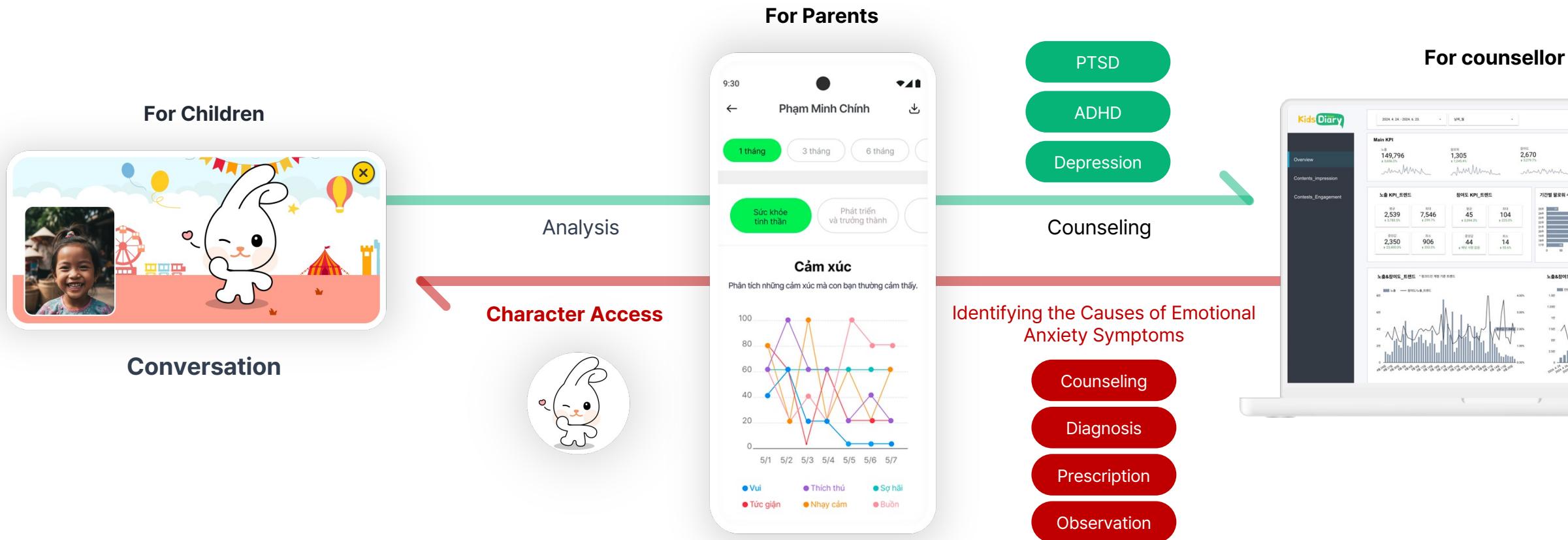
AI-Based Depression and ADHD Screening Where the Child Takes the Lead

An AI character engages children in interactive conversations based on items from child psychology and developmental assessments.



Early Detection of Depression and ADHD Through Child-Led Assessments

Psychological counselors or psychiatrists connect through an AI character to provide remote mental care — from initial assessment to in-depth sessions and mid-course interventions.



Writing a Diary with a Character While Undergoing Psychological Assessment and Emotional Analysis

Depending on the diary type, psychological test items are personalized and transformed into conversational topics, leading to 1–3 minutes of empathetic dialogue.



I feel sad because Mom only loves my little brother

Conversation Diary



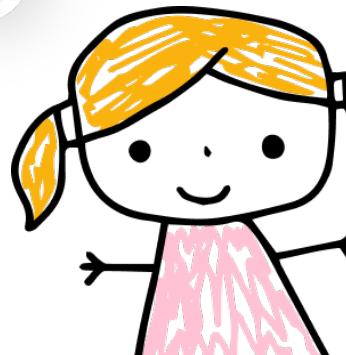
Drawing Diary



Story Diary



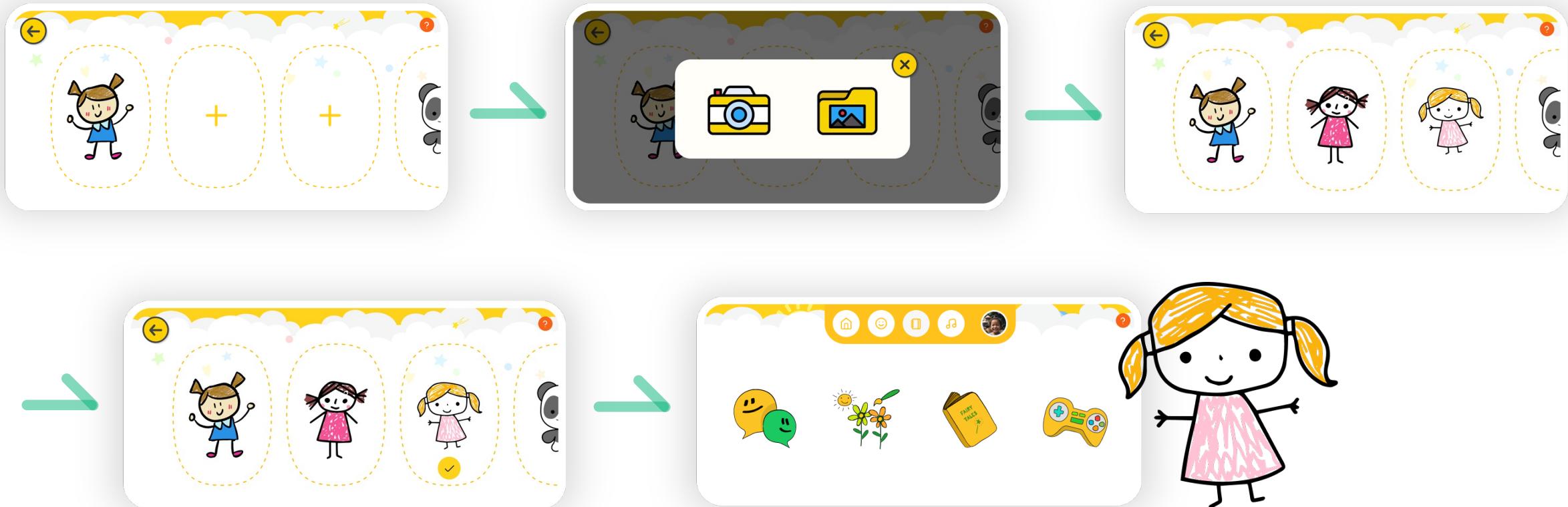
Why did you get angry with your mom today?



Character Creation

The child creates their own conversation friend.

AI-generated animated characters created through recognition of body structure — head, body, legs, and arms.

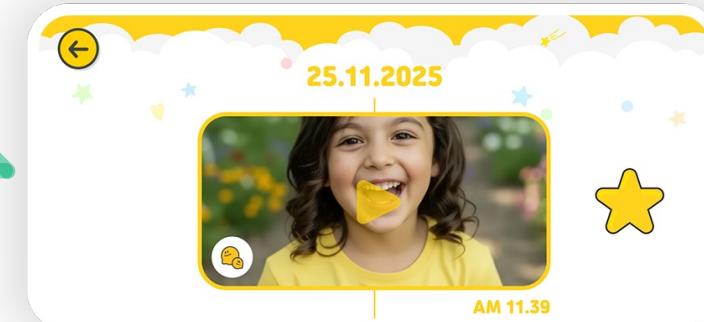
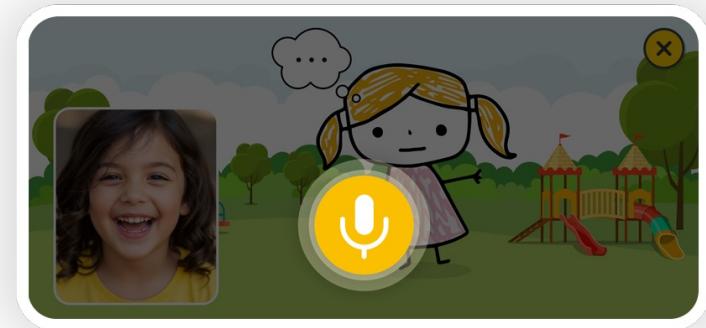
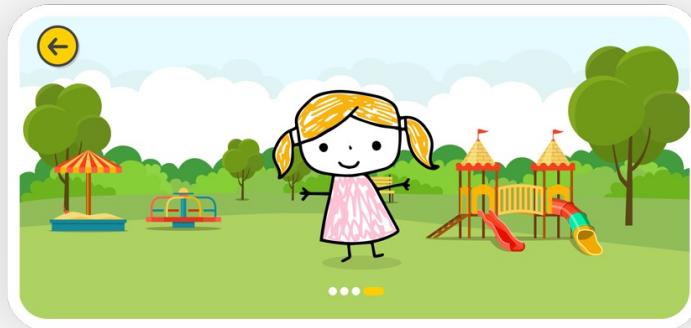
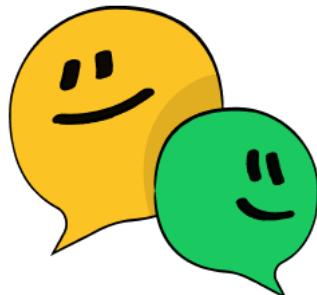


For Children

Conversation Diary

Writing a conversational diary on everyday life topics.

Empathetic conversations based on child psychology and developmental assessment items.



Drawing Diary

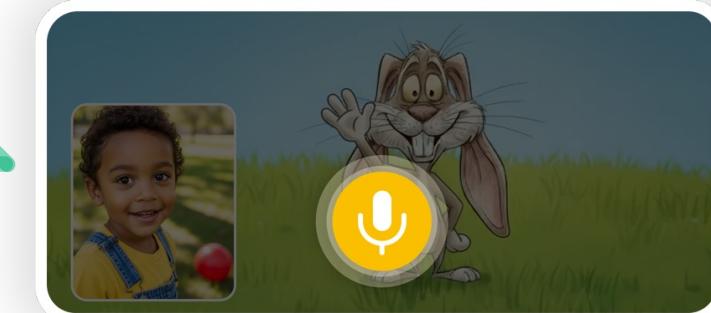
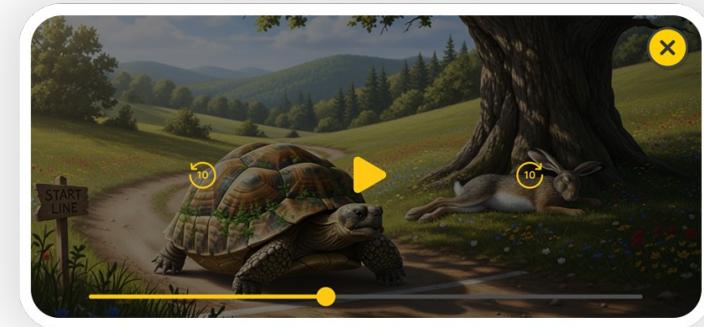
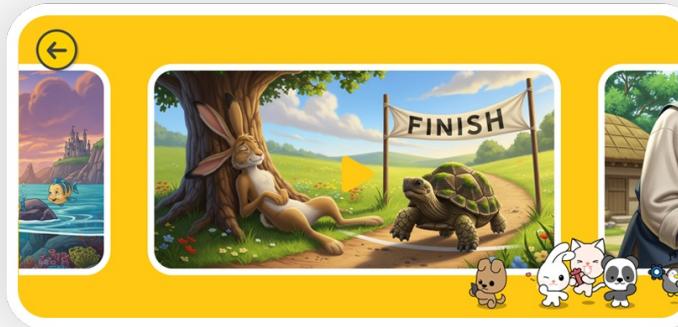
Art-based psychological assessment using the child's drawings of a house, a tree, and a person as conversation topics.



For Children

Story Diary

After watching a fairy tale animation, the child expresses emotions through a conversation with the story's main character about specific scenes.



Diary Analysis

AI analysis based on emotional expression and psychological assessment data.

Emotional and Behavioral Assessment	v	PEBL Battery	v	PHQ-9	v	Dynamic Emotion Wheel	v	SDQ	v
1 스스로를 좋은 점이 많은 사람이라고 생각한다.	1	1 걱정을 많이 한다.	1	1 기분이 가라앉거나, 우울하거나, 희망이 없다고 느꼈다.	1	1 스스로를 좋은 점이 많은 사람이라고 생각한다.	1	1 나는 다른 사람들을 한테 잘 하라고 노력한다. 나는 그들의 감정을 배려한다.	2
2 친구들과 세운 계획을 실행에 옮기기 위해 노력한다.	2	2 친구를 쉽게 사귄다.	3	2 평소 하던 일에 대한 즐미가 없어지거나 즐거움을 느끼지 못했다.	2	2 친구들과 세운 계획을 실행에 옮기기 위해 노력한다.	2	2 나는 안절부절 못 하고, 오래동안 기만하고 있지 못한다.	2
3 기발한 생각을 자주 떠올린다.	3	3 생생한 상상력을 가지고 있다.	3	3 잠들기 가 어렵거나 자주 깨어 / 혹은 날 많이 잤다.	3	3 기발한 생각을 자주 떠올린다.	3	3 나는 자주 머리나 뼈가 아프거나 몸이 아파다.	3
4 Listens attentively to others' opinions.	4	4 대화에서 다른 사람의 의견을 듣는다.	3	4 Eats noticeably more or less than usual.	3	4 Follows through well on plans made with friends.	3	4 나는 보통 다른 사람들과 물건을 함께 나눈다. (예. 음식, 게임 또는 연필 등)	3
5 반면에 아팠다고 마음속은 절로 고통까지 한다.	2	5 과자와 같은 간식을 좋아한다.	3	5 최근에 몇 번이나 식욕이 떨어졌다.	2	5 반면에 아팠다고 마음속은 절로 고통까지 한다.	2	5 나는 매우 화가 나고 자주 폭발이 된다.	2
6 공동으로 활동하는 것을 좋아한다.	1	6 Gets angry easily.	2	6 피곤하고 기운이 없었다.	2	6 공동의 문제를 해결하기 위해 친구들과 함께 적극적으로 나선다.	2	6 I want to play alone or be alone.	2
7 어떤 그림이나 글씨를 좋아한다.	2	7 그림이나 글씨를 좋아한다.	2	7 내가 즐모 없거나, 실패했다는 생각이 들 때마다 자신을 향했다.	2	7 어떤 활동을 할 때 경쟁의 감정을 고려하여 행동한다.	2	7 나는 경쟁을 좋아한다.	2
8 상상력이 풍부하다는 말을 듣는다.	1	8 예술의 중요성을 믿는다.	1	8 신문을 읽거나 TV를 보는 것과 같은 일상적인 일에도 집중할 수가 없었다.	2	8 상상력이 풍부하다는 말을 듣는다.	2	8 나는 기정이 많다.	2
9 해야 할 일에 끝까지 집중한다.	3	9 내 목적을 위해 다른 사람을 이용한다.	3	9 해야 할 일에 끝까지 집중한다.	3	9 해야 할 일에 끝까지 집중한다.	3	9 나는 꾸준히 일하고 있다.	3
10 자신의 속한 학급을 좋아한다.	3	10 정리정돈을 좋아한다.	3	10 자신의 속한 학급을 좋아한다.	3	10 자신의 속한 학급을 좋아한다.	3	10 나는 꾸준히 일하고 있다.	3
11 다른 사람들과 친하게 지내는 것이 중요하다는 것을 안다.	3	11 자주 우울함을 느낀다.	3	11 다른 사람들과 친하게 지내는 것이 중요하다는 것을 안다.	3	11 다른 사람들과 친하게 지내는 것이 중요하다는 것을 안다.	3	11 나는 적어도 한 명 이상의 좋은 친구가 있다.	3
12 신중히 생각한 뒤에 말하고 행동한다.	3	12 주도적으로 이끈다.	2	12 신중히 생각한 뒤에 말하고 행동한다.	2	12 신중히 생각한 뒤에 말하고 행동한다.	2	12 나는 많이 따룬다. 나는 내가 원하는 것을 다른 사람이 하게 만든 수 있다.	2
13 감정을 강렬하게 느낀다.	3	13 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	13 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	13 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	13 나는 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3
14 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	14 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	14 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	14 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3	14 나는 다른 사람을 돋우고 친밀하게 행동하는 것을 좋아한다.	3
15 악속을 자인다.	3	15 다른 사람의 이야기에 대해 확신한다.	3	15 다른 사람의 이야기에 대해 확신한다.	3	15 다른 사람의 이야기에 대해 확신한다.	3	15 다른 사람의 이야기에 대해 확신한다.	3

Diary Analysis

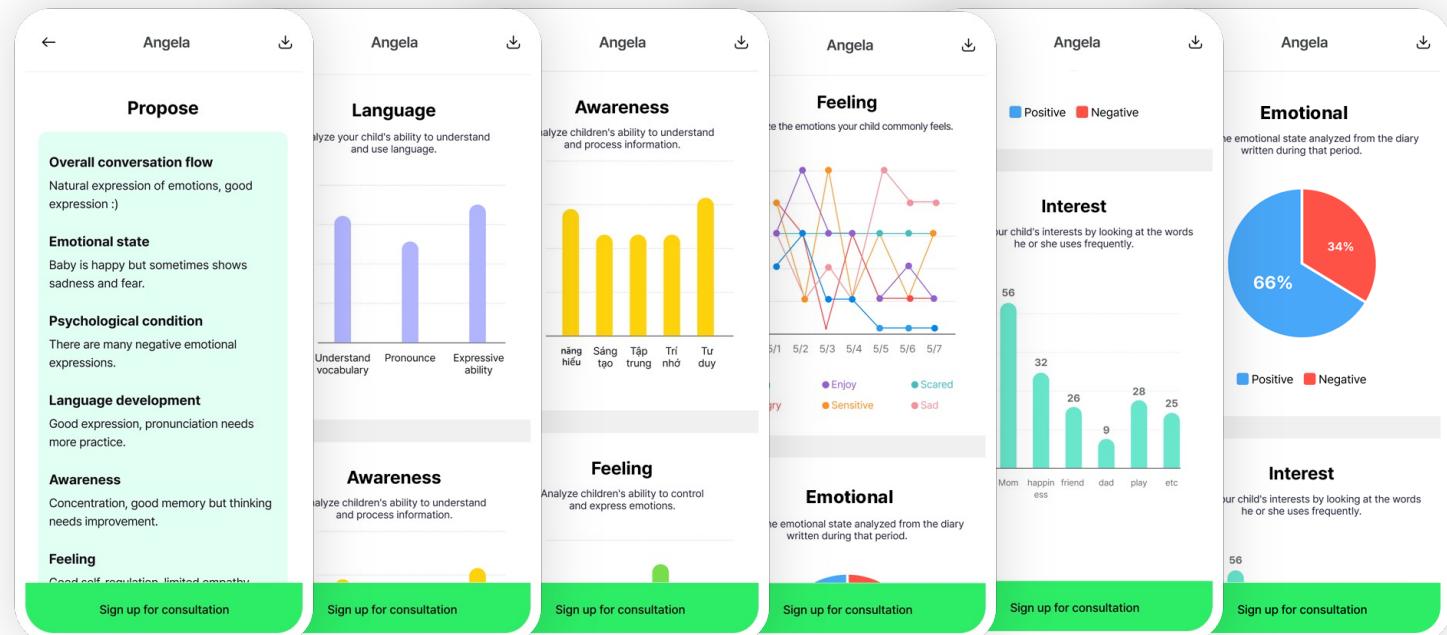
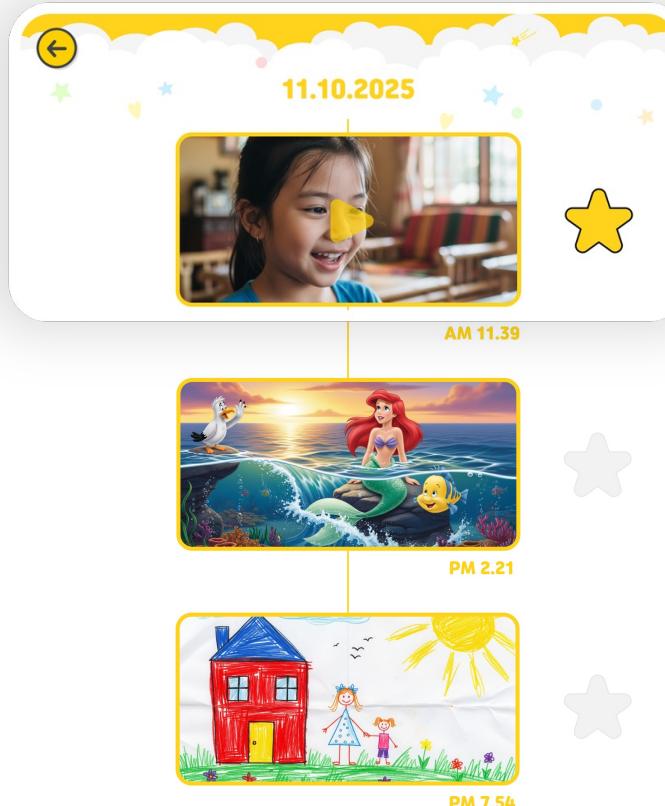
AI analysis based on emotional expression and psychological assessment data.

Emotional and Behavioral Assessment	PEBL Battery	PHQ-9	Dynamic Emotion Wheel	SDQ
<p>Angela</p> <p>1 month 3 month 6 month</p> <p>Mental Health Development and growth</p> <p>Feeling</p> <p>Analyze the emotions your child commonly feels.</p> <p>Report</p>	<p>Angela</p> <p>Language</p> <p>Analyze your child's ability to understand and use language.</p> <p>Awareness</p> <p>Analyze children's ability to understand and process information.</p> <p>Report</p>	<p>Propose</p> <p>Overall conversation flow</p> <p>Natural expression of emotions, good expression :)</p> <p>Emotional state</p> <p>Baby is happy but sometimes shows sadness and fear.</p> <p>Psychological condition</p> <p>There are many negative emotional expressions.</p> <p>Language development</p> <p>Good expression, pronunciation needs more practice.</p> <p>Awareness</p> <p>Concentration, good memory but thinking needs improvement.</p> <p>Feeling</p> <p>Overall emotional expression analysis.</p> <p>Report</p>	<p>29 / 03</p> <p>07:48 PM</p> <p>questions</p> <p>Diary Feeling Mentality Care about</p> <p>Hi son, what are you doing today?</p> <p>I have eaten. Why do you ask?</p> <p>I was just curious what you were doing today~ So what do you want to play now?</p> <p>I want to draw</p> <p>Report</p>	<p>29 / 03</p> <p>07:48 PM</p> <p>questions</p> <p>Diary Feeling Mentality Care about</p> <p>past Today</p> <p>Report</p>

Report

Provides emotional trend statistics based on accumulated diary entries.

[Growth & Development Report] Psychology, Emotion, Interests, Cognition, Emotional Well-being, Social Skills

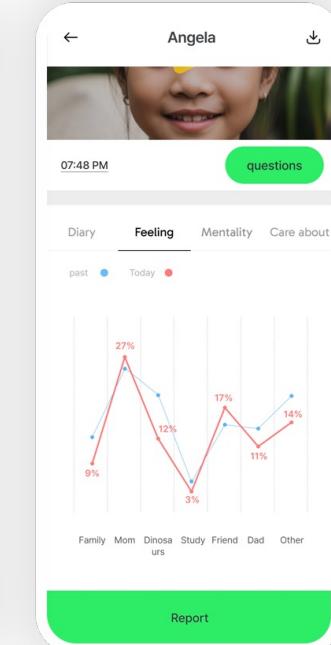
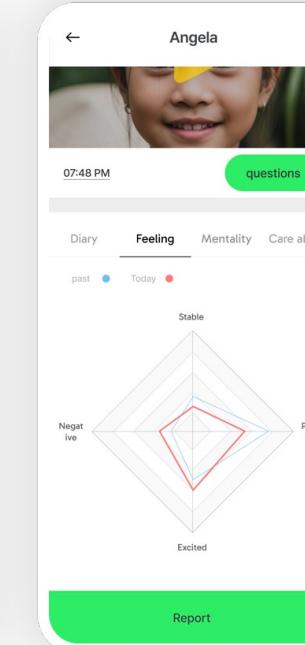
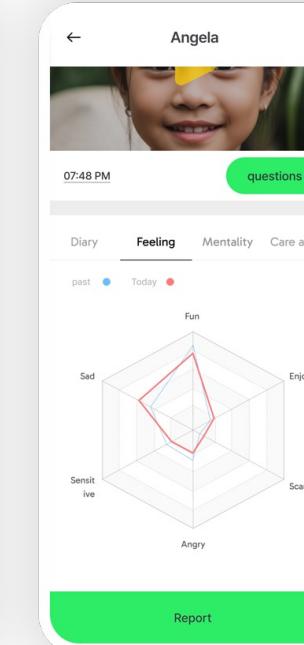
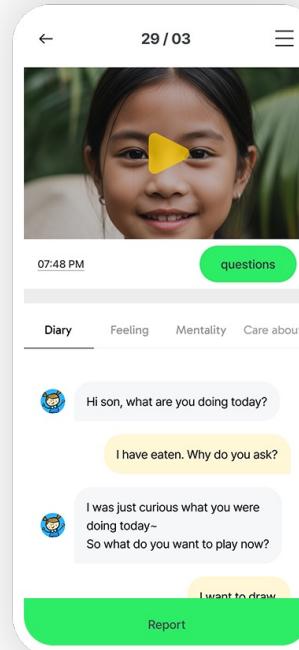
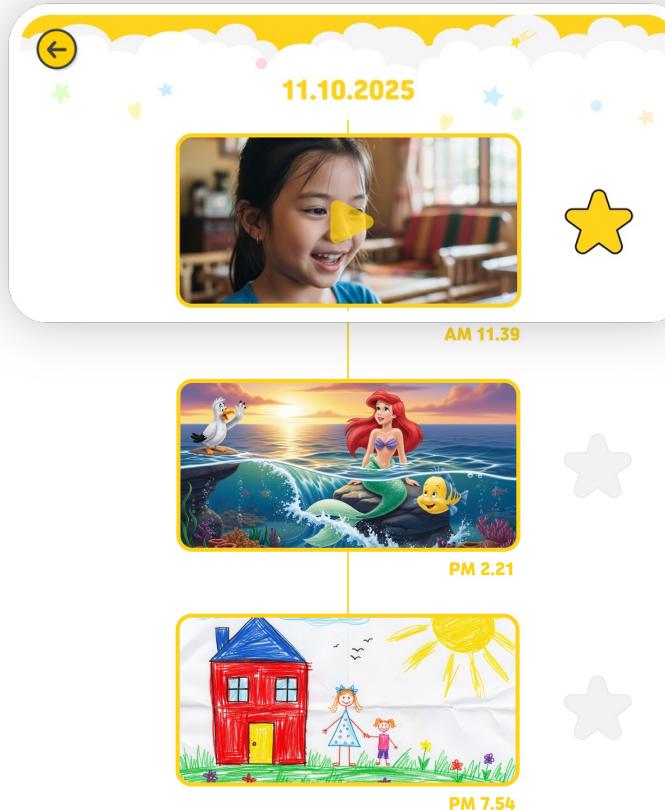


Comprehensively analyzes one month of diary entries to provide insights on psychology, emotions, interests, language (word comprehension, pronunciation, sentence formation, vocabulary size), cognition (understanding, creativity, concentration, memory, reasoning), emotionality (emotional expression, empathy, anxiety, self-regulation), and social skills (impulsivity, activity level, problem-solving, cooperation).

Report

Provides emotional trend statistics based on accumulated diary entries.

[Diary Analysis] Psychology / Emotion, Interests

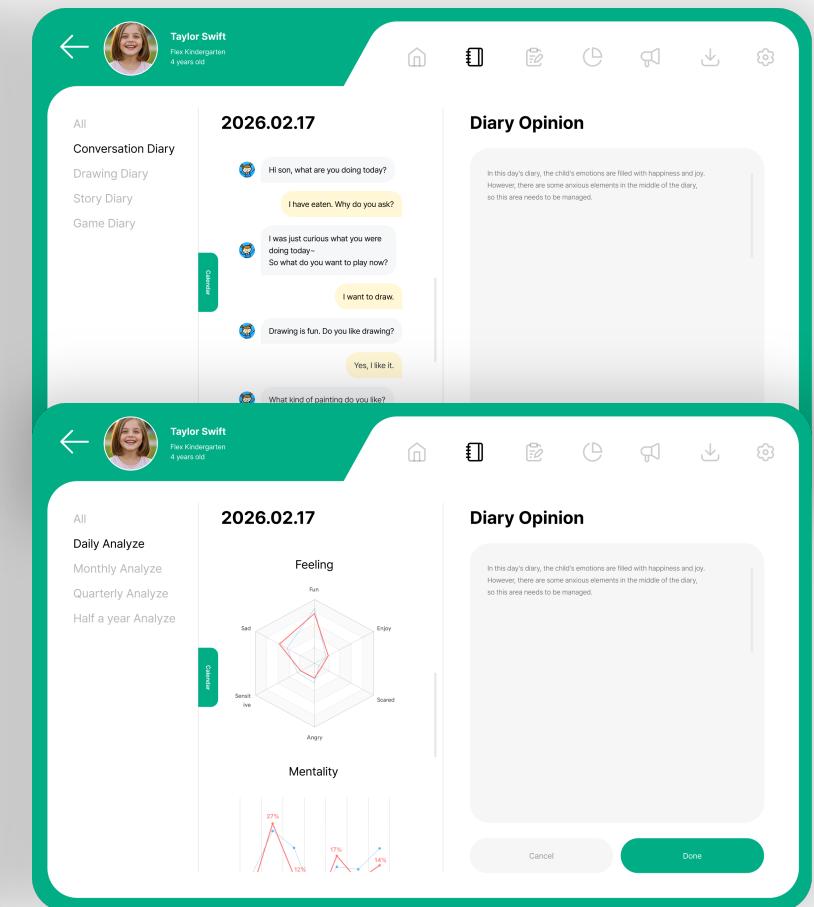
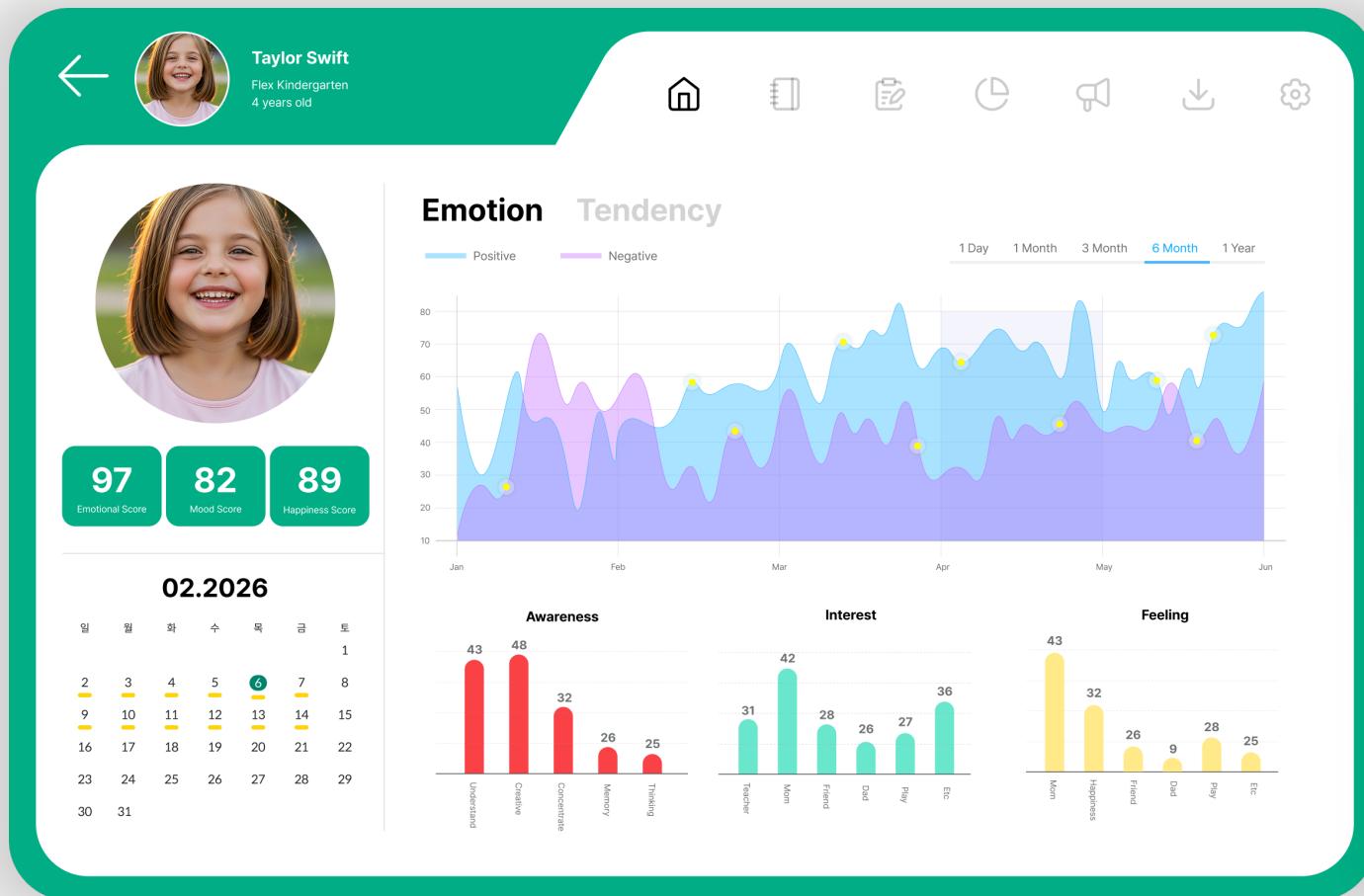


Provides real-time analysis of psychological state, emotional state, overall insights, and interests based on each diary type (conversation, drawing, and story).

For Professionals

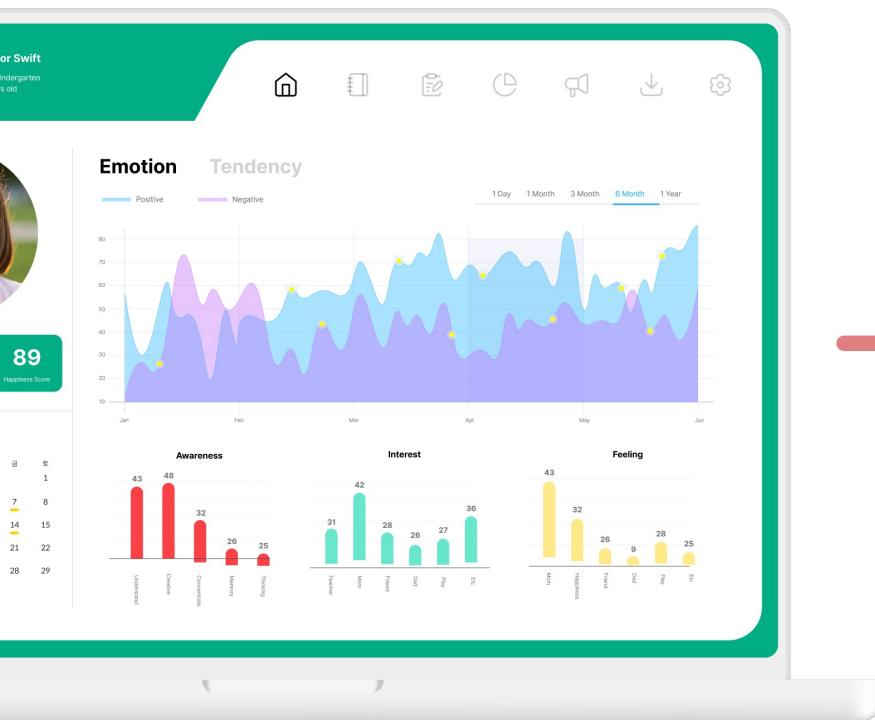
Dashboard

Integrated analysis of psychological assessment items and multimodal data.



Objective Analysis

AI-based matching analysis between test results and conversational context.



- Syntactic-Semantic Comprehension
- JTCI (Child temperament& character)
- K-CDI (Child development)
- SELSI (Infant language development)
- JTCI (Preschool temperament& character)
- K-ECI-4 (Preschool emotion / behavior)
- PRES (Receptive / Expressive language)
- SEBC (Student emotion / Social / behavior)
- KPRC (Korean personality rating for children)



■ Syntactic-Semantic Comprehension

Item	Category	Question	Relevance	Answer	Evidence	Risk Group
1	Semantic Understanding	Mom is knitting while watching TV	40%	No(60%)	Show dislike towards mother	Concern
2		Suyeoung gave her brother the rema	30%	No(70%)	No similar sharing actions	Normal
3		I was alone in the playground	50%	Yes(80%)	Likes to play swings alone or with friends	Normal
4		You are whispering with your eyes	30%	No(70%)	No positive interaction with mother	Normal
5		Suyeoung is in a hurry	40%	Yes(60%)	Have a clear plan before going to bed	Normal

■ SELSI (Infant language development)

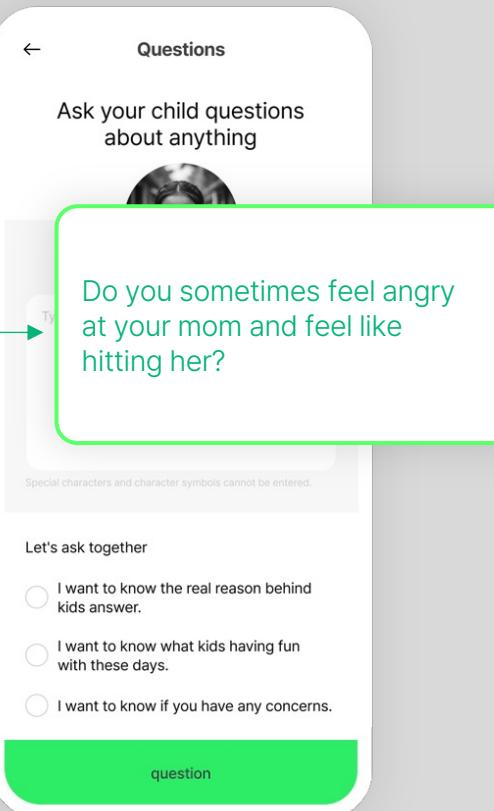
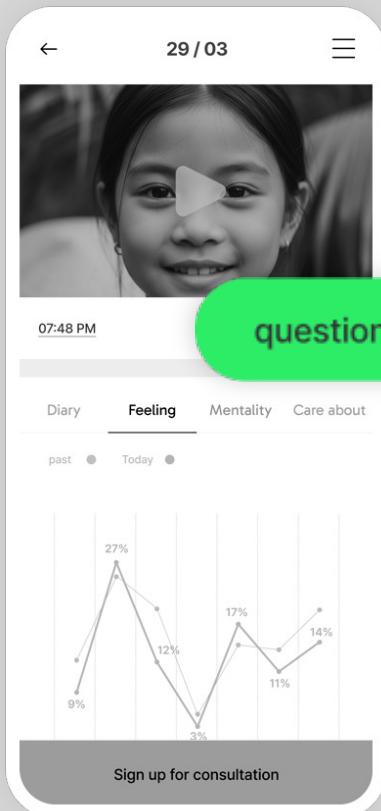
Item	Category	Question	Relevance	Answer	Evidence	Risk Group
1	Receptive language	Seems to understand the speaker's emotions ...	40%	Yes(80%)	Children can distinguish see their mother	Concern
2		React differently when others speak to other...	50%	Yes(80%)	Children show differences	Concern
3		Can focus on the story without getting dist...	30%	Yes(80%)	Children can chat and ans	Normal
4		Can understand different meanings of the...	30%	Yes(80%)	Children notice the differences	Normal

Mid-Stage Intervention

In-depth evaluation and monitoring through character-based interaction.

When a professional inputs an in-depth question, the AI character presents it to the child as a diary topic for mid-stage intervention.

Psychological Counselor / Child Psychiatrist



For Children

When you see your mom, **do you sometimes feel so angry that you want to hit her?**

Why do you think your mom only likes your little brother?

I see. What do you wish your mom would say to you?



Yeah... I don't like it because Mom only likes my little brother

Because Mom only carries my little brother (or sister) and gives him all the tasty things.

I wish Mom would tell me she loves me, too

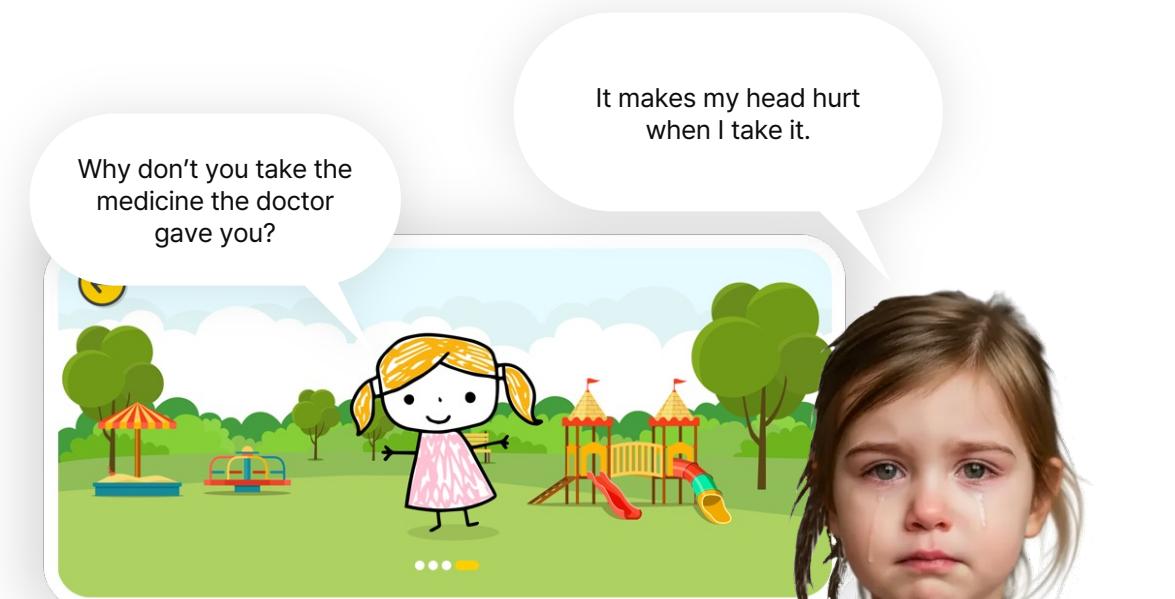
Monitoring

Regular observation of emotional changes through remote counseling sessions.

Regular character-based monitoring – observing improvement or deterioration in therapeutic symptoms.



In-depth Counseling



An emotional traffic light
that helps understand every child's feelings



Flex