

## INTRODUCTION

- Atopic dermatitis (AD) is a pruritic chronic disease associated with significant sleep disturbance, inattention, and sometimes behavioral problems<sup>1</sup>.
- Enhancing resiliency in children with atopic dermatitis via positive psychology may promote coping strategies to improve itch, attention, and behavioral problems<sup>2</sup>.
- Positive psychology looks at how to enhance wellbeing and help humans flourish. Martin Seligman, one of the founding fathers of positive psychology, proposed the PERMA model to describe the five core elements of wellbeing: Positive emotion, Engagement, Relationships, Meaning, and Achievement<sup>3</sup>.

## OBJECTIVE

- To analyze interview transcripts of children with AD and their parent to determine which positive psychology themes using the PERMA model were mentioned without prompting, and whether there were potential areas of improvement using a positive psychology approach.

## METHODS

- Twenty patient-parent dyads of children (8-17 years-old) with AD were interviewed to provide feedback on a novel brief cognitive behavioral therapy intervention for itch rumination.
- These participants were a convenience sample recruited from dermatology or allergy clinic at Ann & Robert H. Lurie Children's Hospital.
- Qualitative data was analyzed by trained coders using a coding dictionary developed based on Seligman's PERMA model of positive psychology.

TABLE I. PARTICIPANT CHARACTERISTICS

Characteristic	Number
Average age	12 ± 1.9
Sex	
Male	9
Female	11
Race	
White/Caucasian	7
Hispanic	3
Black/African American	7
Asian	3
Average clinician-reported disease severity	
Mild	2
Mild-to-moderate	1
Moderate	7
Moderate-to-severe	1
Severe	7
Unspecified	2



Photos courtesy of the National Eczema Association

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TABLE II. POSITIVE PSYCHOLOGY (PERMA MODEL) AND NEGATIVE CORRELATES MENTIONED IN INTERVIEWS

PERMA category	Number of participants that mention the concept: n(%)		Example
	Parent	Child	
Positive emotion	3 (15%)	9 (45%)	"So it's actually comforting...to be at home"
Negative emotion	17 (85%)	19 (95%)	"[the itching] is frustrating for him that he can't stop"
Engagement	10 (50%)	18 (90%)	"I don't want to let [the itch] keep me from the stuff so I keep doing the things"
Lack of engagement	9 (45%)	17 (85%)	"If I'm trying to do something and I feel itchy, it's hard to do that thing 'cause it's distracting."
Unhindered relationships	11 (55%)	15 (75%)	
Adults	9 (45%)	12 (60%)	"I: How do you talk about [your eczema] with adults? P: As if I'm talking to my friends, it's not that big of a deal."
Peers	5 (25%)	13 (65%)	"If somebody new that doesn't know her would ask her about her eczema 'what is that?'... her friends will say something 'it's eczema.' So she's got a good support group."
Other	2 (10%)	11 (55%)	"Most people aren't going to say anything [about your eczema] but if they do, just ignore them. It doesn't matter what they say."
Hindered relationships	11 (55%)	16 (80%)	
Adults	5 (25%)	8 (40%)	"I: Do you ever avoid meeting new adults because of your itching? P: If they ask too many questions, then yeah."
Peers	5 (25%)	10 (50%)	"She's gotten made fun of [because of her eczema]"
Other	3 (15%)	7 (35%)	"I just try to avoid the subject [of my eczema]...I don't think they understand"
Meaning	4 (20%)	6 (30%)	"I'm not really scared of having to itch...it doesn't matter whether it's here or not"
Lack of meaning	4 (20%)	2 (10%)	"She'll scream and say why do I have to be born this way, I hate my skin"
Accomplishment	8 (40%)	7 (35%)	"he handles [the itch] all by himself. I actually didn't realize it gave him a lot of trouble...[he takes] care of it himself"
Lack of accomplishment	4 (20%)	5 (25%)	"I can't really do anything about [my frustration due to eczema]."
General positive psychology	17 (85%)	20 (100%)	
General lack of positive psychology	19 (95%)	20 (100%)	

## REFERENCES

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- Kim DH, Im YJ. Resilience as a protective factor for the behavioral problems in school-aged children with atopic dermatitis. *J Child Health Care.* 2014;18:47-56.
- Seligman MEP. *Flourish: A Visionary New Understanding of Happiness and Well-being*: Atria Books; 2011.

## RESULTS

- Engagement and relationships were the most common unprompted PERMA themes mentioned by children (70%) and parents (65%).
- Children and parents equally brought up positive and negative aspects of engagement and relationships due to AD.
- Emotion elicited the most negative comments from children (95%) and parents (85%).
- Transcripts were also analyzed for resiliency, the ultimate goal of positive psychology. 8 participants had at least one resiliency code. A sample of resiliency quotes are summarized in Table III.
- On average, a participant with a resiliency code mentioned  $9.1 \pm 4.7$  positive psychology concepts throughout their interview while participants without a resiliency code mentioned  $5.9 \pm 4.6$  positive psychology concepts ( $p=0.14$ ).

TABLE III. SAMPLE RESILIENCY QUOTES FROM INTERVIEW TRANSCRIPTS

Parent	Child
"They're not self-conscious about [their eczema]...I believe that's because there are other children in the school system that have eczema."	"If someone's making fun of your skin just don't be friends with them." "Especially the kids who I talk to, they get it because they, everybody has a problem, nobody is perfect so when I talk about it I just say...I have eczema blah blah and then they don't care that much afterwards."
"She's becoming independent, which is good, she likes to do [her eczema care regimen] herself...she does a great job."	"[I] think about like long-term effects, just thinking about like oh, right now it would be best if I just don't itch. Like it's great if my skin looks clean now just focus on it right now, don't like worry about how it'll look like a month from now."
"I try to tell her...[child], I think that overall life is gonna be somewhat easier for you because you've had to learn how to deal with this, so I think some things are gonna come a lot easier to you."	"I've had eczema severely my whole life so like just if you do it in front of people nobody really cares that much because eczema is the thing that tons of people have so...I just tell them that it's a normal thing." "We do all this stuff to help [my eczema], I know it's not going to stay bad forever"
	"I know [the itch] it's gonna to come back but it doesn't worry me too much." "I would tell [people who ask about my itching] that it gets better as life goes on if you just find the right thing."

- When participants were stratified by disease severity, positive psychology concepts were mentioned more by mild patients vs moderate patients vs severe patients,  $13 \pm 3.0$  vs  $6.2 \pm 4.9$  vs  $6.13 \pm 4.0$ , respectively ( $p = 0.034$ ).

## CONCLUSIONS & DISCUSSION

- Among the PERMA themes, engagement and relationships are two commonly mentioned categories for children with AD.
- Although all PERMA categories are valuable to cultivate in patients with AD, negative emotions related to AD should be a target area to further address.
- Strategies targeting PERMA such as affirmations and positive reframing may improve psychosocial wellbeing in pediatric AD.
- Future directions of this work will look at incorporating "positive medicine" in AD treatment to not only relieve symptoms but also strengthen positive aspects of life.