



Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) Webinar Series

April 30, 2015, 1-2:30 p.m. (ET)

“Child Narcissism: Impact on Development and Implications for Clinical Practice”

Thank you very much. Good afternoon and thank you for joining us today for the DCoE Psychological Health April webinar. My name is Dr. Vladimir Nacev, and I am the Clinical Psychologist and Senior Program Manager for the Deployment Health Clinical Center. I will be your moderator for today's webinar.

Before we begin, let us review some webinar details. Live closed captioning is available through Federal Relay Conference captioning. Please see the pod beneath the presentation slides. Should you experience any technical difficulties, please visit dcoe.mil/webinars and click on the troubleshooting link under the Monthly Webinars heading. There may be an audio delay as we advance the slides in this presentation. Please be patient as the connection catches up with the speaker's comments.

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I will now move on to today's webinar topic, Child Narcissism: Impact and Development and Implications for Clinical Practice. Recent research studies indicate narcissism levels among children and adolescents are increasing. This presentation will describe the characteristics of narcissism and their associated features in children and adolescents. The description will include a review of recent studies on the behavioral and social correlates of adolescents such as aggression and antagonistic peer relationships. The session will conclude with a discussion of future research on adolescent narcissism and a spotlight of social media behavior including suggestions for providing feedback to use in ways that might limit the development of narcissism or its behavioral consequences.

During the webinar participants will learn to (1) identify core clinical dimensions of narcissism and their associations to child and adolescent adjustment, (2) describe research that influenced current investigations on youth narcissism, (3) discuss recent studies or correlates of youth narcissism and future

directions, and (4) distinguish between different dimensions of narcissism and their associations in youth behavior and social context.

I would like to take this opportunity to produce our presenter, Dr. Christopher Barry. Dr. Barry is an Associate Professor in the Department of Psychology at the University of Southern Mississippi. He is a Clinical Psychologist in the state of Mississippi. Dr. Barry received his doctorate Ph.D. in Clinical Psychology with a concentration in clinical trial psychology from the University of Alabama. He completed his pre-doctoral internship at the University of Louisville, School of Medicine, and was a post-doctoral Fellow at the Scott & White Clinic at Texas A&M School of Medicine in College Station, Texas.

His primary areas of research are in personality risk and protective factors related to child and adolescent behavioral problems. He has published over 30 peer-reviewed articles on this topic. His work has specifically focused on self-esteem and narcissism in adolescents. Dr. Barry has also published research on the evidence-based assessment of child and adolescent psychological difficulties. Currently he serves as an Assistant Editor for the Journal of Adolescence. Beginning in August 2015, he will join the faculty in the Department of Psychology at Washington State University in Pullman, Washington.

Welcome, Dr. Barry, and you have the floor.

Okay. Thank you very much. I'm really pleased and excited to be here to discuss a topic that is the focus of a lot of my research. Given that its focus is narcissism, I always like to start by thanking everyone by being here and listening to me, about me and my research, but I've also been told that it's poor form to not also appeal to the narcissism of my audience, so I can't see you all, but I'm sure you look great, I'm sure you're highly intelligent and lots of other desirable (inaudible) qualities.

So to start off with the necessary disclosures. The views that I will express in this presentation are those of myself and do not reflect the official policy of the Department of Defense or the U.S. government. I have no relevant financial relationships to disclose and do not intend to discuss off-label investigative or unapproved use of commercial products or devices.

The learning objectives were reviewed a moment ago, so this will reflect the order and the organization of my presentation today where we're going to talk about the core clinical dimensions of narcissism and how those core dimensions, those different characteristics, relate to different areas of child adjustment. And in particular we think of narcissism as being a risk factor for behavioral problems, and in particular aggression toward peers. So I'll talk probably most extensively about that.

I'll also describe, toward the beginning of the presentation, the research that influenced the current investigations on youth narcissism. That research started largely with adults, and so I'll review some of that. As well we'll discuss some of the recent studies that my students and I have conducted on the correlates of youth narcissism and some of the future directions that my work my take and other researchers in other labs and other universities across the country, and really across the world, are taking with their research.

And then also a really key focus of this presentation is to not think of narcissism as a unitary, singular construct or personality construct, but to realize that research has sort of teased out different dimensions of narcissism, and those different dimensions have different implications for youth behavioral and emotional function. And certainly they manifest differently in social situations, so we'll talk quite a bit about that.

So to start off there's a polling question for the audience. And I just wanted to know the professional disciplines represented by audience members just to sort of help me know how to tailor some of the examples and some illustrations that I might provide.

Hello?

Yes.

We're not hearing any audio.

Ah, yes. I'm waiting for the polling question.

Okay. Thank you.

Okay. Looks like a good array of professional disciplines represented by the audience and in particular social work, nursing, and psychology. So that's very useful as well. Also a quarter of participants from others that were not listed.

Okay. So we'll move forward from there.

And so I'm on slide 16 to get us started.

In terms of narcissism and trying to come up with the most simple, parsimonious description of the construct, it's really just the self-presentation of a confident and positive self view. And a key thing to think about there is the self-presentation of a confident or positive self view or even high self-esteem. It's been described in some of the research as a process of self-esteem regulation that's rather persistent. And so when an individual with narcissistic tendencies encounters social situations, he or she may respond to those social situations in a way that seeks to regulate self-esteem, that seeks to quell any emotional reactions to negative feedback in particular.

So one way that someone might regulate self-esteem is through ingratiation or being overly friendly, overly charming toward others so they gain favor from those people. If something negative happens in a social situation, especially an ambiguous social situation, it might suit the individual to externalize blame, blame others, or blame external factors for wrongdoing or for some negative outcome. And then aggression. So if someone has given negative feedback to an individual with narcissistic characteristics, one thing that we see is that their response is very aggressive in nature. So on the one hand we might have an individual who they're really friendly, and they're really charming, has really polished social skills, but is also quite aggressive in response to anything that's negative or threatening to self-esteem.

Another way to sort of think about this, to sort of add on to the descriptions that I just provided, is that there is a preoccupation with one's status relative to others and in the eyes of others. The social feedback becomes really important, particularly in regards to one's social status.

And so some core features of narcissism, and what we might see clinically, would be evidence of a tendency to exploit or manipulate others, a strong sense of entitlement, entitlement towards material things, but in particular entitlement towards social praise. A grandiose presentation, that confident presentation that I mentioned earlier. A sense of superiority, being quite effective or talented, especially relevant to others. And then traditionally we often think of narcissism as including a sense of vanity as well.

So in terms of this springboard to the recent research investigations on child narcissism, were the adult laboratory studies and the example I provided from Bushman and Baumeister in the late nineties where in a laboratory setting college students were given negative performance feedback about an essay that they had written about a particular topic, and then were given the opportunity, ostensibly in a separate experiment, to respond aggressively, presumably to the person who had provided the negative performance feedback.

So we saw from their results a real strong connection between higher levels of narcissism and higher levels of aggression, but only after negative feedback. We don't see any sort of an elevated aggressive response after positive feedback.

Some child research from that same time period linked a positive illusory bias, in other words having an elevated sense of self relative to how teachers or peers would rate that person, and aggression. So this was sort of a landmark study in the child literature that looked at how children might have perceptual biases about their capabilities and abilities relative to how others in the environment might rate them. People who had that positive bias tended to often exhibit aggression in day-to-day life in the classroom and at home.

There's a lot of theory that's been around regarding bullying and school shootings and how individuals who engage in bullying or those extreme instances of school shootings had self-esteem issues. We hear that all the time, and how narcissism might be a component of that, a desire to get back at others who have teased them or have slighted them.

The other part of this research has been trying to reconcile how if narcissism and things like positive illusory bias are a risk factor for aggression, how do we reconcile that with evidence that suggests that low self-esteem is actually a risk factor for child conduct problems with narcissism seems like extreme high self-esteem, on the one hand, and that's a risk factor, how do we reconcile that, again, with low self-esteem being a risk factor for child conduct problems. So a lot of different things were happening in the literature in the early to late nineties and the early 2000s that sort of got myself and other researchers curious about how do we assess the self and sense of self, and the narcissistic sense of self, in young people and reconcile whether low self-esteem or this sort of elevated sense of self-esteem would relate to things like aggression and conduct problems.

So another polling question would be, across different conceptualizations, which we haven't discussed yet, what the audience would guess is the feature that is consistent across those different conceptualizations. Would it be arrogance, entitlement or exploitativeness, fragile self-esteem and superiority, or vanity?

I'll take a moment and wait for the responses.

Okay. So we see almost a plurality in terms of entitlement and exploitativeness with perhaps the most common – well, definitely the most common – response being fragile self-esteem and superiority, so I'll speak to that in just a moment there.

In terms of assessment, there are different measures that are being used in the research on youth narcissism, the first being something that I collaborated with some of my colleagues on developing, directly from the Adult Narcissistic Personality Inventory. The NPI has been around for literally decades. It was first developed in 1979. And so toward the late nineties, early 2000s, we sought to develop a child version of that that was directly analogous, directly developed, from the NPI as a starting point.

And so what we have been able to further investigate in that research are what are considered adaptive narcissisms, composites, and maladaptive composites, and how different features of narcissism captured off of the NPI, and then the child version, the NPIC, sort of relate differently to constructs that we're interested in in terms of positive social adjustment, negative social adjustment. I'll speak more to that in a moment.

There's also a narcissism scale from the Antisocial Process Screening Device. So this (inaudible) psychopathy-linked narcissism, so if members of the audience are familiar with the concept of psychopathy, one of the core dimensions of psychopathy is thought to be narcissism. And so that subscale, seven items, taps into for narcissistic behaviors, bragging about accomplishments, over displays of superiority, and it does so in a way that captures probably more maladaptive forms of narcissism.

Also a Child Narcissism Scale. It's ten items. It's been developed from a group out of the Netherlands. And then we recently used a more recently-developed measure with adults the Pathological Narcissism

Inventory. We've had some good, interesting results that I'll share with older adolescents using the PNI. And that captures what are thought of as grandiose and vulnerable dimensioned narcissisms.

Another polling question, just to get us further into some of the data that are out there, is whether, in terms of true or false, high self-esteem is more of a clear risk factor for child and adolescent behavioral problems than low self-esteem. Is that true or false?

I'll wait for responses.

Okay. In this case, we'd say that the majority has it. Most of the actual empirical evidence suggests that low self-esteem is more of a clear risk factor for child behavioral problems, even longitudinally. So there's been some data that would suggest that low self-esteem, say pre-adolescence, early adolescence, is quite predictive of an escalation in conduct problems and delinquency. And escalation in conduct problems and delinquency during adolescence is quite normative, but low self-esteem seems to be a more clear risk factor for that escalation than high self-esteem does. But yet we still, with high self-esteem, have that sort of puzzle as to why narcissism, as a presentation of elevated self-esteem, would still relate to aggression and conduct problems.

In terms of the theory driving the assessment instruments I just mentioned and the research on youth narcissism, there's certain assumptions that sort of go along with that. One is that it's an individual difference variable that we can assess it and we can see meaningful individual differences in narcissism from a relatively young age. Now when I say relatively young age, the research that has been conducted with the measures that I've just mentioned, go as young as age nine. And that's pretty consistent in my field of clinical psychology in terms of when we think a child is able to provide a reasonably reliable and reasonably valid report of his or her personality, his or her behavioral function, etc. We still run into some of the problems that we would expect with self-report of any behavioral construct or psychological construct. But the work in and of itself is based on the assumption that we can assess these constructs among individuals and find meaningful individual differences.

The other sort of thing that we wrestle with is whether narcissism is fostered from overindulgence in one environment or neglect or inconsistency in one environment. And there are really different schools of thought in terms of how culture or things like parenting would foster narcissism. So on the one hand it would be overindulgence in the environment that would sort of foster that sense of entitlement, that sense of arrogance, that sense of deserving respect and admiration from the world, or neglect, so this sort of overbearing attempt to get praise and recognition from the world because of a neglectful environment.

So there's a lot of different developmental factors that we seem to think are at play here that are fairly complex. There are a lot of cultural factors that are probably at play as well, and we can probably readily identify what we think some of those might be.

One person commented a moment ago that they missed the age in terms of assessment. In terms of the empirical research to date, narcissism has been researched in samples of youth as young as age nine, and this would be self-report, to age nine. This would be self-report of narcissism. Most of my work that I'll focus on today focuses on older adolescents, ages 16 to 18 or 16 to 19.

And then another theoretical underpinning, and this is where we start to reconcile that high versus low self-esteem issue, is that we think of narcissism and perhaps a manifestation of high self-esteem, especially in older adolescents and adults. So those who endorse high self-esteem on a self-esteem questionnaire, for example, also tend to endorse narcissism, or the other way around, certainly. But that it's fragile. That it's contingent on feedback from one's environment. So that self-esteem might come across as high, but it's very volatile. It's very inconsistent. And so that helps us sort or have a framework to understand how these constructs that seem to be related are, but yet are distinct in how they play out in social situations.

The other aspect of this research that we'll focus on quite a bit in our time today are the multiple dimensions of narcissism. So going back two polling questions ago where we talked about or asked about the common characteristics across different conceptualizations of narcissism, the one that they all sort of have in common, regardless of which measure we're using, would be the sense of entitlement and the exploitativeness. So one of the choices was about fragile self-esteem. But not every measure of narcissism, and certainly not every conceptualization of narcissism, still account for that fragile self-esteem. Some of the measures and some of the writing about narcissism still talks quite a bit about the overt displays of arrogance, the overconfidence. Whereas a lot of researchers would argue those displays might be confidence, that there's sort of a fragile self-esteem underneath that, if you will.

So in terms of different dimensions of narcissism, we've looked at adaptive narcissism, which includes sort of authority, having a sense of leadership, self-sufficiency. An example of that would be wanting to take charge, wanting to be responsible for making decisions.

The maladaptive piece of that from the NPIC and the NPIC would be the three Es – exploitativeness, entitlement, and exhibitionism, wanting to be the center of attention.

In terms of the Pathological Narcissism Inventory, the PNI, it differentiates, as I mentioned earlier, grandiose and vulnerable. So grandiose would include things like exploitativeness again. Grandiose fantasies, so sort of seeing one's self as being more talented than is really warranted, or at least certainly trying to portray that image. And then self-sacrificing, self-enhancement, which is an interesting feature, which is being overly helpful toward others with the sort of expectation that one will be admired or approved of as a result of that. So that may be where the sort of the initial charming posture comes into play.

And then Vulnerable Narcissism, that contingent self-esteem that I mentioned. Sense of entitlement. Hiding one's self, so not putting one's self out there in every situation for fear that one's weaknesses will be pointed out or one's flaws will be pointed out. So someone with Vulnerable Narcissism might be real reticent to exude a lot of charm in situations where they're not clear what the outcomes might be. And along with that is that devaluing others or need for others. So one way to express superiority is to basically be dismissive of a need for closeness to others, or a need for a relationship with others. And so that may be one feature of narcissism that we don't readily think of.

So in terms of the earlier studies, one of the first studies that I conducted was published in 2003, was just a basic study in a community sample of youth from ages nine to 15 that found that narcissism was correlated with conduct problems. So that was just sort of the initial step, does this relation exist. And that maladaptive narcissism in particular was related to conduct problems as well as callous unemotional traits, so this would be a lack of empathy, lack of remorse, prolonged (inaudible), and low self-esteem, which was interesting. We didn't necessarily expect that. And that adaptive narcissism was positively correlated with self-esteem. So already we see the different features of narcissism might look different in terms of how they map on to self-esteem.

One of the findings, and I don't know how well that shows up for the audience, that we had in that sample was that a combination of self-reported narcissism in these kids and low self-esteem was tied to the highest levels of conduct problems in that sample. Which is not something that we have been able to replicate in older samples of youth for whatever reason, and if folks are interested in talking about that afterward, we certainly can.

Another study that we did with the same sample involved following those youth up to three years later. And so what we wanted to do is look at different risk factors for their later police contacts. So yes or no, they had police contacts at some level, some formal level. And so we considered in a regression model their conduct problems at that baseline assessment, their maladaptive narcissism at that baseline assessment, adaptive narcissism, those callous unemotional traits that I mentioned earlier, and symptoms of hyperactivity and impulsivity. So the literature in terms of conduct problems, CU traits, hyperactivity and impulsivity would clearly implicate those as risk factors for later delinquency and police contacts. And what we found is that in particular, maladaptive narcissism was actually a better predictor and more

consistent predictor of police contacts in this community sample of children up to three years later. So at that point they were 12 to 18 at that three-year follow up. So that was sort of interesting, too, to think about how a tendency toward wanting to be the center of attention, a desire and perceived effectiveness at exploiting or manipulating others, and a real sense of entitlement might be related to legal trouble even above and beyond some other risk factors that had been established in the research.

So most other earlier studies from our group and some other groups looked at how narcissism was related to aggression and particularly that exploitativeness factor was related to aggression. And also narcissism was related to internalizing symptoms, depression and anxiety. So if we rewind ten years ago in terms of empirical evidence, a lot of people didn't really think readily of narcissism as being tied to anxiety and depression. Certainly lay people didn't think of that. And I think the more that we sort of gathered evidence, we see that, yes, it really can be tied to not just behavioral problems like aggression and conduct problems, but certainly internalizing problems like depression and anxiety.

So we see some other evidence that I've cited there in terms of establishing that link between narcissism and aggression, so some other of those earlier studies that I mention there demonstrate that.

So in terms of expanding the scope of those earlier studies that really just establish connections between narcissism and different emotional and behavioral factors of clinical interest, most of my work, and most of the work that I'll talk about in the rest of our time, was conducted at a military-style residential program which is near the University at which I worked. It's actually located at Camp Shelby, Mississippi if any members of the audience are familiar with that location. This is a residential program that's 22 weeks for youth who dropped out of school. So they present an interesting opportunity to sort of consider adolescents who are at risk, they sort of call them "at risk," for a variety of negative outcomes just by virtue of having dropped out of school. They've dropped out of school for a variety of reasons, not just academic, not just behavioral. It could be financial, it could be family. So just that educational status sort of puts them at risk for things that would be a concern as they transition into adulthood.

The makeup of the program, as you can see, is predominantly male, predominantly Caucasian, and the research that I'll present today has 13 cohorts of approximately 200 participants in each cohort since 2005. Most of the data that I'll present are self-report data from those adolescents, but we do have some data on their disciplinary citations while in the program. We do have some parent report data. And we do have some peer report data, which is a really interesting source given that this are 16 to 18-year-olds who live together in a barracks-style situation for 22 weeks. So we can get some interesting peer information in regards to narcissism from peers.

A polling question in terms of the overall picture would be another true and false. When sampling distribution of narcissism in adolescents ages 16 to 19, it's skewed towards the high end. Another way of phrasing that is that adolescents 16 to 19 are basically narcissistic, across the board.

Okay. And in this case what's interesting is that the majority don't necessarily have this one based on the data that we've collected. When I first started doing the work at Camp Shelby, one of my colleagues accused me of basically studying something that is redundant. So when you're studying adolescent narcissism, all adolescents are narcissistic, you're just studying adolescents, you're not really doing anything that's beyond the adolescent experience. And I suppose in different moments, for sure, adolescents express that sense of superiority, ingradiosity (sp) and invulnerability. But in terms of their self-report, as we'll see in a second, distribution is not skewed.

Another polling question on top of that one is whether the audience would say, true or false, that narcissism among adolescents has increased significantly in the last ten years.

I'll wait for poll responses to that.

Okay. And the vast majority of the audience answered true to that one as well, so we'll take a look at what we see in our data from the residential program that I mentioned. It's an important caveat to that.

This is regarding the first question, whether adolescent narcissism rather is a redundant concept. This is from a sample of just over 1,900 of the adolescents attending the program. And what we see in terms of the distribution is a bell-shaped curve, if you will, a really normal distribution.

Now I will say that because of the specificity of this sample, it's a residential program for youth who have dropped out of school, we don't know how well this generalizes to the broader adolescent population so we may see some skew in one direction or the other in a broader community sample of adolescents. But one line of thought was well this is an at-risk sample, so they may be even higher than we would expect on this risk factor of narcissism, and what we see is it's certainly not redundant, that they're not all clustering toward the high end of distribution but that it is a meaningful, potentially individual difference variable. Some individuals rate themselves quite high on narcissism. Some individuals rate themselves low, and many sort of express a moderate level of those narcissistic tendencies.

The other thing that we've been able to look at from 2005 to 2014, I don't know how well it shows up for the audience, would be the mean level of narcissism scores on that 2005 cohort all the way through these different cohorts that we've studied through last year. And we see – and it's the middle line that I'm referring to – a rather flat average score on narcissism across those different cohorts that we've been able to do our research with since 2005.

So popular media would suggest that narcissism is on the rise, that it's rampant, and that it's particularly problematic in young people. With the advent of social media, we might think that we see evidence of that, certainly on a day-to-day basis. But in terms of their self-rating, and these are independent samples from 2005 to 2014, we do not see much change overall. But there are some societal things that we may still want to look at in regards to this influence of narcissism, or at least it's providing a platform for the expression of narcissism.

I don't know how well this will show up for you all, but it's available in the slide file. We've looked further into different correlates of narcissism across different measures. What we've seen, this is the first box I've highlighted, is that different measures of narcissism, and this is a bit of a problem if we're trying to get our ducks in a row with what we think narcissism is and how it expresses itself in adolescents, is that the different measures of narcissism are moderately correlated with each other. They do seem to tap a different sort of orientation for narcissism, or different features of narcissism. So we always have to keep that in mind when we're trying to interpret our results or make firm conclusions about how narcissism relates to psychological functioning.

One of the things that we see in terms of behavioral problems is that maladaptive narcissism that I've mentioned earlier, and psychopathy-linked narcissism that I mentioned earlier are significantly associated with both self-reported delinquency but also parent-reported conduct problems. And that's not terribly surprising.

We also see that there are some differences in terms of how different dimensions of narcissism relate to one's perceptions of interpersonal relationships in that the adaptive forms of narcissism are related to positive views of one's relationships, not surprisingly, and also positive self-esteem or high self-esteem. If it's a maladaptive dimension, it's not clearly linked to either of those sort of positive self-reports.

Another investigation that we've recently conducted, recently published, looks at non-pathological narcissism. This would be the NTIC, the measure born of that traditional NTI measure. We see that on the column on the right. And then pathological narcissism, the more recently-developed measure, (inaudible) as grandiose and vulnerable narcissism. And we see highlighted in red divergent relations with variables like self-esteem, anxiety, depression, social stress, and interpersonal relationships. So we see that pathological narcissism does show pretty remarkable correlations with internalizing symptoms. Depression, anxiety, social stress. Things that the lay public I don't think would readily connect with narcissism. Pathological narcissism, the sort of grandiose and vulnerable presentation, does connect to those self-reported symptoms pretty well.

And then we see at the top row there opposite associations with self-esteem depending on which measure, which conceptualization of narcissism we're using. It's really important to think about how do we conceptualize narcissism, and then that's going to have implications for what we think it relates to in an adolescent's behavioral function, social function, and their emotional presentation as well.

Another thing that we looked at in a recently-published study has to do with disciplinary citations in the residential unit. So the staff at Camp Shelby were quite interested in this study and what could we tell them about what factors would predict who gets in the most trouble in the residential setting.

So what we did was sort of separated out what we would consider behavioral predictors of disciplinary citations, so the adolescents' self-reported delinquency, their self-reported aggression. And this would be history of delinquency, history of aggression, not delinquency and aggression at the site, but coming into the program. Parent-reported aggression, parent-reported conduct problems, again, coming into the site, obviously. And then personality predictors. So we threw in those callous unemotional traits, different dimensions of that, and our adaptive and maladaptive narcissism measures. And what we find, just to sort of summarize it, is that the only unique predictor of disciplinary citations at the residential setting was maladaptive narcissism. Which is convenient for a narcissism researcher, I guess, but it really points to what kinds of things are the adolescents in a close, military-style structured environment with other adolescents getting in trouble for? Probably things like verbal altercations, some physical altercations. Certainly insubordination is a common disciplinary citation in that program. And to someone with sort of, for lack of a better term, a chip on their shoulder, sense of entitlement, wanting to be at the center of attention, that's a better predictor, out of their own perspective and their parents' perspective, of who's going to get citations in the residential program than their own behavioral history, which was pretty remarkable. I would have bet that if they got in trouble coming into the program, that would predict they got into more trouble in the program, and not so much. In fairness, there is a screening process for this residential program, so those with a current active legal history – I did not mention that before – are screened out of the program. So we're not dealing with adolescents who have a significant history of detention, or who are an adjudicated sample by any means. This is an at-risk sample. They're not a community sample. They're not a detained sample either. But it's still interesting that for that maladaptive narcissism would sort of reveal itself in terms of being cited for disciplinary infractions.

We've also looked at, in this sample, narcissism in relation to the adolescent's perception – this is important – perception of their parents' parenting. This is not the reality of their parents' parenting. This is their perception.

On the grandiose side in particular we see unique variance tied to their perception that their parents use a great deal of positive reinforcement, praise, and are highly involved. That makes them (inaudible) that this sort of higher level of involvement and praise is related to a sense of grandiosity, or the perception that their parents used praise and are highly involved.

On the flip side of that is the vulnerable narcissism. If you all remember, this was the contingent self-esteem, the real reticence to reveal one's self to others and establish relationships with others. That was uniquely associated with perceptions that parents were inconsistent. And I think that makes intuitive sense, too. We think of vulnerable narcissism and contingent self-esteem as being this sort of constant seeking of validation from the environment and also being tied to a perception that one's parents were inconsistent. We can sort of see how those things might go hand-in-hand developmentally.

What was interesting and important to note is that narcissism was not – this is self-reported narcissism from the adolescent – was not related to the parents' report of their own parenting. So it's a perceptual issue, at least on the part of the adolescents. We do not know how well that maps onto the parenting. And it's also reasonable to assume that parenting shifts with age, and these are adolescents 16 to 18 years of age, sort of reflecting back on their parents' parenting practices, too. But it gives us pause for thought in terms of how the adolescents report of their narcissism on the one hand relates to their perceptions of what their parents do or have done on the other hand.

Another study that we've conducted, and this is a fairly intuitive finding, I'll just mention it briefly, is that the combination of grandiosity in the form of narcissism and lack of empathy, lack of concern for others was particularly tied to high levels of aggression, self-reported aggression. So a finding that's been established in adults for quite a while hadn't been empirically demonstrated in adolescents, and so we were able to demonstrate that with this sample as well.

Another area that we've considered is how narcissism relates to peer processes, and even though it's an at-risk sample, it's not the general population. The fact that they're in a residential program for 22 weeks, as I mentioned earlier, provides, I think, some fertile ground for trying to understand how narcissism might shape peer perceptions in particular. So we've looked at that.

One of the things, and this figure may be a little busy but I'll just sort of highlight the main issue here. One of the things we looked at is not aggression in response to performance feedback as was done with adults and some other folks have done with children and adolescents, but we wanted to look at how narcissism maps onto shame in response – feelings of shame in response to performance feedback. And quite to our surprise, what we found in our adolescent samples is that shame increased in response to positive feedback, not negative feedback. And our interpretation of that, first of all it's a contrived study. It's feedback about something that was based on their performance on a general knowledge quiz. So we don't know that that was really salient or important to their day-to-day lives. But in that contrived, controlled situation, what we found was that shame increased, as I said, in response to positive feedback. And what we think about that is that perhaps someone narcissistic tendencies who gets positive feedback and they like it, but that there may be some process whereby they're thinking, can I continue to live up to that. So there's some pressure to live up to the praise or the positive feedback that they have just received. Certainly an unexpected finding, though.

We've also looked at narcissism in relation to peer nominations of relational aggression. Relational aggression, the easiest way to sort of explain that would be gossip, rumors, manipulation, sort of people think of the movie Mean Girls, with relational aggression. So what we did with this study is looked at self-reported narcissism and then went back at the end of the program, 20 weeks, rather, into the 22-week program, and gathered peer nominations from members of the platoon. The programs organized into seven platoons. So among members of the platoon, the platoons have 25 to 35 people, they nominated members of their platoon on various attributes, is a leader, is sad, is happy, helps others, and also aggression. And in particular, relational aggression. And what we see is that narcissism, in combination with high self-esteem this time, is related to peer perceptions of relational aggression. So we sort of think about the narcissism and relational aggression as pretty intuitive. But in combination with high self-esteem might be it's those adolescents in a residential, tight-quarter setting who come across as not only narcissistic, but quite self-assured, quite arrogant, having sort of a high self-esteem presentation, really are the ones who are perceived to engage in a lot of manipulative, gossipy-type of behavior in that milieu.

We've also conducted a social relations model study that looked at how each individual member of a platoon rated each other individual member of the platoon. So they rated themselves on various attributes and every single member of the platoon, and every single member of the platoon rated them as well. So in terms of the – when all the dust was settled with the analyses, what we looked at was how the self-reported narcissism related to how peers, each individual peer in that platoon, rates the individual. And to highlight the findings, we see that, first of all, self-reported narcissism maps really well onto peer-rated narcissism. So peers rate each other on narcissism consistently with how individuals rate themselves on narcissism.

We also see that 32 self-reported narcissism were rated by fellow platoon members as particularly, what we called, antagonistic. Competitive, hostile towards others. And then also those who self-reported narcissism were rated by platoon members as being particularly likely to engage in delinquency in the future. So we asked them to rate each other, in a round-robin design, on how likely it was that that individual would get in trouble with the law in the future. And not a positive perception on the part of peers for those who are higher in narcissism.

I also have a student who's really interested in how narcissism might relate to positive behavior, or pro-social behavior, and so what we found in her initial work is that narcissism is tied to most aggression. We continue to find that correlation. And also pro-social behavior, too. But self-reported pro-social behaviors. So that makes intuitive sense, too, when we think about it in terms of I'm rating myself as narcissistic and I'm also rating myself as helpful toward others. That's sort of that positive self-presentation. But I'm also not shy about rating myself as aggressive toward others as well.

Narcissism did not relate to parent-reported pro-social or helpful behavior or peer-reported pro-social behavior. In particular, the mention of narcissism tied to self-reported pro-social behavior with that self-sacrificing self-enhancement, which makes perfect sense. This is the sort of martyrdom. I'm going to be helpful toward others in the hopes that it will sort of enhance my social status.

And then more recently we've looked at narcissism in social media, but this is not with adolescents. The couple of studies that I'll walk us through had to do with college undergraduates, which is actually a really good population to examine narcissism in social media in.

One of our last polling questions is true or false as well. Narcissism is perceived negatively on social media independent of gender.

Okay. So here's a situation where's is sort of one of those questions and a lot of (inaudible) academic (inaudible) where the answer is probably it depends. And so we see a little bit of a split in terms of the audience, and I'll walk through sort of how it depends based on some of the data that we collected.

So for this particular study, we wanted to look at hypothetical Facebook status updates. And, again, these are college students who were our participants. And we wanted them to rate how likeable the person who presumably published the status was. How successful they thought that person was. And whether they were what we call friend-worthy, what kind of friend would they be. So we developed narcissistic and neutral status updates. And the narcissistic status updates were pulled from my graduate students' friends lists, at least that's what they told me, and they were rated in a pilot study as more narcissistic, significantly more narcissistic than the neutral statements.

So we went with these targets, these stimuli, and had participants rate them. We counterbalanced the presentation so that the narcissistic statements were presented equally by males and females, presenting targets, which will make more sense in just a second. This is a sample 312 undergraduates.

So, for example, this is what they would see on the screen. They'd see Nicholas. Sort of a fake Facebook page, obviously. And Nicholas has updated his status to say, It irritates me when people don't notice how good a person I am. We have Jessica with a neutral statement. Finished all my reading and work. Now cooking dinner. Ahead for the next week. And then Samantha with my personal favorite, and this is actually the title of our paper related to this study, Purging my friends list, good luck making the cut.

So they see a series of 20 of these statements, ten neutral, ten narcissistic, and then they're rating these. And so what we see in general in terms of successfulness is that the neutral statements were rated more favorably regardless of the gender of the participants. That's what this first graph shows.

The neutral statements were also reflective of higher friend-worthiness on the part of the participants, and higher likeability.

So at first blush the narcissistic statements were rated less favorably regardless of whether the target was a male or female or the gender of the male or female.

But we wanted to dive into that a little bit more specifically. And what we found was that self-reported narcissism on the part of the college-student participants translated to liking the narcissistic statements more. So if one was narcissistic, they liked those narcissistic statements more than someone who was

low in narcissism. They also rated the narcissistic status updaters as more friend-worthy than the participants who were lower on narcissism.

And then here's where the gender thing gets a little bit more complicated, is that a higher female narcissism was tied to higher success ratings of narcissistic status updates. So female participants who were narcissistic did tend to rate narcissistic statements as indicative of success more than their male counterparts did. And so at first blush, again, narcissism was perceived less favorably, but the narcissism of the perceiver, as well as the gender of the perceiver, seemed to play into the results to some degree.

I've got two polling questions here tied to selfies because we conducted a selfies study. The first is true or false. Posts of selfies on social media are correlated with narcissism. True or false. And then within different categories of a selfie, which type of selfie might be negatively correlated with narcissism, if any.

Like the previous polling question is up. There we go.

Okay. So we see the majority of the audience answering true to the posts of selfies on social media are correlated with narcissism. And then for the second question, which type of selfie might be negatively correlated with narcissism. So that would be the higher proportion of those would translate to lower narcissism. It's the negative correlation.

And we see quite a split there, so we'll talk about some of the findings that we've had with our college student participants as we go forward.

So with our selfie study, and this is – it says under review. We just got the reviews back today and we'll revise and resubmit to the Journal. So we've had some really good feedback on this study. This was 103 undergraduates, the vast majority of which were female. And I'm not sure what to make of that. Most of the students in our psychology department are female, so there's that. I don't know if somehow advertising a study on personality Instagram seems to be more appealing to females than males, so a vast majority of females in our sample here. They completed self-reported measures of narcissism and self-esteem. They had to have an active Instagram account, which we then followed as a lab page for 30 days. Our students coded and worked really hard on this. Every post on Instagram for these participants, as a selfie or not a selfie, the number of posts that they had so we could have a proportion of posts that were selfies. The number of posts within 30 days, and then they tried to categorize those. And had high reliability amongst the four of them in terms of whether a picture was a selfie or not a selfie, and then which category they would code it as.

So we looked at first of all just basic statistics on this selfie phenomenon. We saw on our sample that the number of selfies ranged anywhere from zero to up to 513. The proportion of posts on Instagram that were selfies for individuals ranged – and let me say, the mean number of selfies for any person was 63. The proportion ranged anywhere from zero percent to 100%. We had a participant who every single post on Instagram was a selfie.

The number of selfies posted per week was right about one on average, but it ranged from zero up to close to 18 a week.

And what we see in general, just to summarize this table, is that narcissism in general was not correlating with selfies in terms of the number of selfies, the proportion of posts that were selfies, or the frequency of selfies and selfies per week. In general, it was not correlated. So our interpretation of that finding is that maybe this is just something that kids these days, if you will, are doing regardless of the sense of narcissism or at least certain dimensions of narcissism.

So we looked at the categories. Physical appearance was clearly correlated with both grandiose and vulnerable narcissism, and really independent of how we indexed selfies. We looked at physical appearance selfies as a percentage of their selfies overall, as a percentage of their total posts, and their frequency. And we see a pretty clear pattern of moderate correlations between physical appearance

selfies, the selfies that were clearly oriented to showing off one's physical appearance, and self-reported narcissism.

Affiliation. This was going back to the polling question. Selfies with friends were negatively correlated with narcissism. Our interpretation of this is that someone who's lower on narcissism, if they're posting selfies, is most likely to be apt to post those with other people involved. So somebody who's lower in narcissism, if you will, is not afraid to share the limelight, whereas someone higher in narcissism is more apt to post those physical appearance selfies.

The negative correlations with self-esteem and events and activities. So lower self-esteem translated to higher proportions of selfies that were showing off an event or an activity. That's sort of an interesting correlation, too.

And then collages. These are the selfies with multiple selfies within a post that you may have seen. These are tied to different dimensions of narcissism, too. The one that I think makes perfect sense is vanity.

So in summary in terms of our overall findings as we start to wrap up, we see a consistent correlation between the (inaudible) narcissism and aggression. We see positive appraisals of relationships on the part of people who self-report narcissism that are not reflected in peer ratings of them. And that's important – that discrepancy is important. Because I think that discrepancy is going to continue to contribute to impersonal or social strength. But we see that regardless of sort of developmental factors that are at play and that are important, narcissism seems to be a meaningful individual difference variable so that a lot of the effects that we see are relatively small. That narcissism is one piece of the puzzle in terms of trying to understand adolescent psychological development.

In terms of remaining issues and future direction, things for us to consider, as professionals working with young people and as researchers, is really to think about how stable is this construct? Can we really attach this sort of personality construct to individuals in a way that's going to be stable, that's going to be predictive of how they're going to function as adults. Is it fair, is it reasonable to use that label, narcissism, for someone who's not yet an adult. I think it helps in terms of communication. I think it certainly bears out that these things develop pretty early in life. That I'm apt to use the label, but I'm not completely sold on that either.

Another thing to consider longitudinally is do those associations between narcissism and aggression manifest early in development versus later in development? Do those hold throughout childhood and adolescence? And what are some socialization factors? These are sort of the clinical implications, the prevention and intervention implications. What are the socialization factors that might diminish narcissism? How can we target this? Is that a future direction?

What are the interpersonal processes, both in terms of peers, in terms of media, in terms of parenting that contribute to youth narcissism and its (inaudible)? How do self-perceptions manifest in adolescent social media behavior? The social media studies that I mentioned were with adults, so we need to extend this research to adolescents.

And I think we have a framework for potentially targeting the aggression in response to negative social feedback is connected to narcissism, for example, prove coping skills based interventions that are already out there. So John Lochman and Karen Wells have developed the Coping Power program which has seen extensive validation for use with kids with anger and aggression. Can these sort of coping skills that involve relaxation, cognitive restructuring, cognitive reappraisal about the situation, be used for individuals who have sort of narcissistic tendencies who get teased by peers, or who have a threatening social situation happening. A group out of the Netherlands, they're excited there as well, has also looked at ways to sort of support self-esteem but not overtly go out of our way to (inaudible) self-esteem and the idea that supporting self-esteem through controllable factors like one's effort would be much more advantageous than providing praise regardless of one's behavior, regardless of one's efforts. Praising kids for things like saying you're the best ever, you're the best at everything, when that's really not

accurate. The idea is for supporting self-esteem in reasonable, measured ways might be a way that helps people learn to develop coping strategies in the face of negative events and negative feedback from others.

So some practical considerations for taking these a step at a time. One thing we need to think about in how we view narcissism would be what we would consider generational effects, the idea is that generations differ in their narcissistic presentations. Cultural effects in terms of collectivistic versus individual societies. And then also understanding that individuals probably do differ in how they advocate a sense of self and to the extent that they exhibit a narcissistic sense of self.

Much of the research to date suggests that this is an individual issue, but the research is still pretty new. So we don't know the answers to broad questions like generational changes, cultural differences as it applies to youth narcissism.

Another thing to think about practically and clinically is that we're probably not treating the narcissism. This really bears out with adults who might have narcissistic personality disorder. They don't necessarily present for treatment for narcissistic personality disorder. They don't want their narcissism treated, it's sort of the external factors that they tend to blame, or that are sort of bringing them down, that might be the target of treatment. So relationship problems would be the thing that most readily comes to mind. So what we want to sort of target wouldn't be changing that person's sense of self directly, because that could be a little threatening message, but trying to reasonably address the behavioral and social fallout that does often accompany narcissistic presentation.

Self appraisals that are tied to external validation may be one of these prevention targets. So the idea is that we want to have individuals engage in self-appraisal that's not tied to how they compare to other people, and is not tied to messages from other people, but tied to sort of their own sense of improvement, or worthiness, or success, or lack thereof.

So along with that we have some data (inaudible) 2006 that suggests that that narcissism-aggression relation is most pronounced if the negative feedback is based on social comparison. So, for example, you did much worse on that task than other people. That heightens the risk for aggression for individuals with narcissistic tendencies. So can we provide performance feedback to individuals who struggle with reacting to negative performance feedback in ways that are not so social comparison based, that are based on things that are tied to improvement, or tied to reaching individual goals. That are not tied to things that narcissists tend to be preoccupied with. Status compared to others, for example.

So along with that we want to promote a sense of feedback that is tied to behaviors or factors under a young person's control. So the thing that I hone in on the most with that would be effort. And effort is under a child or adolescent or adult's control. The eventual outcome, especially, perhaps, in a competitive situation, is not under the individual's control. So we don't want to provide feedback like – that's real global, and it's real nonspecific, that you're special. Or on the other hand, you're a disappointment. Maybe their effort is a disappointment. Or their effort wasn't good enough. Or that their effort was good. Focus on things that are under their control.

This is also not meant to diminish the learning that a young person could undertake through competitive situations but that we don't want their whole sense of self to be tied to social status and competition. And then if a competitive outcome is unfavorable, that they can handle it or cope with it adaptively. And so that's that last point there, that failure would be a learning experience. And so we published some data on the combination of narcissism and self-compassion so those who view failure as a learning experience, as not necessarily a threat to their work relative to others in their general environment tend to respond less aggressively than those who do exhibit low self-compassion or a real negativistic attitude in response to failure.

A summary slide real quickly. Another for a sending forth message is that we've got non-pathological and pathological dimensions of narcissism. They relate differently to psychological function. That's a real key

point to remember. But that they can apparently be assessed in a reliable and valid manner prior to adulthood.

The definition of narcissism, though, is key in how we're going to convey that it relates to behavioral problems or it doesn't. That it relates to emotional problems, or it doesn't. We do know it relates to aggression across different dimensions of narcissism, but its relation to things like anxiety and depression, and the quality of social relationships is mixed depending on the dimension of narcissism that we look at.

We also know that narcissism is not simply extreme high self-esteem. Some ways we measure it seem to suggest that that's what we're getting at, but if we really consider narcissism as a whole and the different complex ways that it can manifest itself in complex relationships, it's not simply extreme high self-esteem. So the simplest way to sort of capture, I think, going back to the beginning, is that it's a presentation of high self-esteem but one that's really fragile, that's really contingent on feedback. And we need more research, particularly with younger samples, as most of the research I highlighted, again, was with older adolescents.

And so at this point I will stop talking. There's some references at the end of the presentation that may be useful to the audience. And I'll (inaudible) questions. I do want to acknowledge the staff and cadets at Mississippi Challenge Academy at Camp Shelby, Mississippi, and my numerous students over the years at the University of Southern Mississippi. And this was mentioned at the very beginning of the presentation. If anyone feels the need or would like to get in touch about our research or clinical practical issues, I'll be at University of Southern Mississippi through the summer but will be taking a new position at Washington State beginning in August.

Thank you very much for a great presentation, Dr. Barry.

Thank you.

It is now time to answer questions from the audience. If you have not already done so, please submit questions via the question pod located on the screen. We will respond to as many questions as time permits.

Is there a first question?

Okay. Let's start off with defense mechanisms. Can you describe or discuss some of the defense mechanisms associated with narcissism?

In terms of empirical evidence, there's not really a lot that would tie narcissism in youth to defense mechanisms in terms of being able to reliably measure those. There's plenty of theory in terms of how narcissism would relate to defense mechanisms, and so the one that most readily comes to mind to me would be for the projection. So if one is insecure in one's social status, one way to sort of achieve this desired dominance or social regulation is to highlight things about other people in the environment that they are less secure about in themselves. And so it sort of, in the eyes of the beholder, might be viewed as sort of a (inaudible) superiority. If I'm a terrible athlete – I feel like I'm a terrible athlete, but I make fun of someone else's athletic ability, maybe that exudes, at least on a temporary basis, to another person that, well, he must be pretty secure, he must be a pretty good athlete because he made fun of someone else.

There's certainly some longstanding theories from Kohut and Kernberg dating back to the 1970s about – and this is more from an object relations perspective, sort of more on the (inaudible) realm of things – in terms of those early socialization experiences and in terms of that parental non-involvement and inconsistency and sort of how there's sort of this desire to reduce anxiety through defense mechanisms such as narcissism to seek validation from the environment because of that inconsistent presence of parenting parents from a very early age.

But in terms of an empirical connection, I'm not aware of anything that's demonstrated that clearly to date. I do think that there's something quite evident in narcissism that is quite (inaudible) in its presentation.

Very well. Another question that came to us, are you aware of any scientific methods which have shown to improve how a person can show or give empathy?

That's a great question. Some of the work – and that does tie to narcissism as we talked about – some of the work that's being done at this point is focusing on very, very basic processes that the majority of the population would take for granted. So accurate facial emotion recognition as being a very basic process that's probably developed in most people before we can even remember, being able to identify emotions in others.

Individuals with lower empathy, so we're talking school-age children on up to adults, at times lack that very basic emotional encoding process. And so some of the work that's starting to be done on a piloting type of basis is walking through very basic emotional encoding exercises. So facial emotion recognition.

And in another approach along with that is somewhat to relax core empathy, so experiencing distress at another person's distress. One way that we might try to tackle that is through more of a cognitive or intellectual approach which is perspective taking. So it's not so much that they emotionally identify with that person's experience, but that they are apt to at least identify why they feel that way. I don't think they should feel that way, but I identify why they feel that way. And so that's one step closer to empathy even though it doesn't quite engender empathy in a way that we would think would be adaptive.

That work's really just being done. When I was in my graduate training, sort of the school of thought was that can't be trained. Someone with callous unemotional traits or lack of empathy, they're just always going to be that way, and the field's not really buying that right now. We're just starting with really basic interventions now.

Okay. Another question is, are there any environmental variables that contribute to the development of narcissism?

We don't know in terms of the development because it's hard to pinpoint the timing of things. So what we have right now are not longitudinal studies that follow risk factors over time and then the eventual development of narcissism. What we have are correlational studies that we try to make some inferences about how narcissism might have developed given a set of risk factors. And so the one that I would want to focus on the most in terms of development of narcissism, if I had to pick one, would be inconsistent discipline on the part of parents. If I had to pick one. And I could be wrong about that, but I think it bodes well in terms of understanding how a young person can develop a real fragile, volatile sense of self that is highly contingent on feedback. If there's consistency in the environment, in the parenting environment, there's predictability. And predictability is comforting whether the feedback from parents is positive or negative, that predictability, I think, is very comforting. And so a sense of self from that should be pretty stable. So inconsistent discipline would be the one that I would be on the lookout for in terms of research pinpointing its role in the development of narcissism.

Okay. Another question, great question. Listener asked, some years ago we distinguished between the obvious and the hypervigilant narcissist.

Ah.

Has this distinction been found to be useful? And second, how has it held up empirically?

Yes. So that's a great question. And I didn't really speak to that explicitly. The way that we sort of think about those at this point is mapping onto to the grandiose and the vulnerable narcissism. So the hypervigilant idea of narcissism, it's sort of been translated into what more recently has been termed vulnerable narcissism. We'll also see in some of the literature, and one of the studies I published with

one of my students, our reference is to overt narcissism and covert narcissism with covert narcissism being that hypersensitive narcissism.

Some of it is a bit of a semantic thing, and it depends on editors and reviewers in terms of what they find favor with. But the current thinking is that grandiose and vulnerable really are the labels that best capture the array of approaches or avoidances of social interactions that we would see with someone with narcissism. The hypersensitivity, in the case of vulnerable narcissism, is one piece of that.

Very good. Another question for us. There is a trend to shy away from labeling adolescents because providers don't want a diagnosis to stick. Would say there is a success rate of adolescents of growing out of narcissistic traits?

There's no real evidence of that. I think that it would be highly premature of me to say that, for me, on the one hand, to say it's an individual difference variable and we need to pay attention to it, and to say that that's the case for everyone. I think that there's going to be a proportion of the population of adolescents who might exhibit narcissism in a particular period of time, or in a particular social context that wouldn't go on to develop what we would consider a personality disorder. So that's another area that we need to research, and I didn't really think to highlight, not only in terms of stability, but what factors promote if it's unstable, and unstable in a remitting kind of way, what factors promote that. I showed the normal distribution for adolescents. Maybe for people my age, maybe it's skewed in the low end. Maybe we do age out of it to some extent. And so what factors promote that aging out of it, or for some individuals, what factors really prevent them from aging out of it. And I think that's a really important question.

Okay. One last question for us.

Perfect.

Do you think it's possible that while the residential population has not appeared to increase in narcissism in the past ten years, the general population may well be increasing in narcissism?

I sure do. I don't know that for sure. I'm going off the data that we have, and the data that we have says it's pretty stable. There are two caveats to that. One is that given that it's a risk sample and a residential sample, it's safe to say that socioeconomically they're less advantaged than their peers not in a residential setting. So if I want to take the stance that more affluent individuals, more affluent youth are higher in narcissism, then we would expect higher, or maybe even increasing, let's just say, in terms of the recent trend, increasing narcissism in the general population, especially those who are affluent, who have access to lots of different things, material things. So I could see that that could be the case in the general population, on the one hand.

The other caveat, the other sort of hesitation, to draw a firm conclusion about this ability is, in terms of a ten-year period, good data to put out there, I think, but it's also a really limited timeframe. A lot of the generational looks at narcissism in adults span 30 years. And I'm talking about a relatively short period of time in relation to that. So it would be interesting to see not only in a broader population, but in terms of what it would look like, but also over a larger period of time what the trend in narcissism is going to look like. But the data we have right now so far suggests certainly not uniform increases in all adolescents. At least in our subset of adolescents, it's pretty stable.

Very well. All right. Thank you again, Dr. Barry, for your presentation. Today's presentation will be archived in the monthly webinar section of DCoE website.

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To access the presentation and the resource list for this webinar, visit the DCoE website at dcoe.mil/webinars. A downloadable audio podcast and edited transcript of the closed captioned text will be posted to that link as well.

The Chat function will remain open for an additional ten minutes after the conclusion of the webinar to permit attendees to continue to network with each other.

The DCoE Traumatic Brain Injury webinar topic Clinicians Guide Assisting Family Members Coping With Traumatic Brain Injury is scheduled for May 14, 2015, from 1:00 to 2:30 p.m. Eastern time. The next DCoE Psychological Health webinar topic, Application of Behavioral Health Technical Tools in the Clinical Care of PTSD is scheduled for May 28, 2015, again from 1:00 to 2:30 p.m.

Thank you again for attending. Have a great day.

That does conclude today's conference call. We thank you all for participating. You may now disconnect, and have a great rest of your day.