

# Bridging Theory and Practice: Virtual Reality as a Tool for Enhanced De-escalation Training in Disability Support Settings

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## Supplementary Materials – Results of Stage 2

### Scenario 1

#### Scenario 1: Scenario Context. Client Information and Prompts

	Content
Scenario Context	"Your 17-year-old client, Joseph, has a curfew and is not allowed out of the house past 9:00pm. You overhear him speaking on the phone about meeting his friends outside at 10:00pm." This is the first time Joseph has planned to break curfew.
Client Information	"When Joseph gets annoyed, he has a tendency to display physical aggression."
Stage 1	<i>You notice that Joseph is getting ready to leave the house. How do you respond?</i>
Stage 2 (Positive)	Joseph: "Yes, my friends have asked me to go out with them. I know I have a curfew, but can't I go out past it this one time?"
Stage 3 (Positive)	Joseph: "Well, I do have a new game I can play, but I'd still rather hang out with my friends"
Stage 2 (Negative)	Joseph: "So what if I leave? It's my life and I will do what I want!"
Stage 3 (Negative)	Joseph: "I don't care what you say, I'm going out and you can't stop me"

Content Ratings	M	SD
Plausibility	6.5	0.5
Respectful/Non-Discriminating	5.5	1.12
Overall Suitability	6.0	1.22

#### Scenario 1: Response ratings for selected de-escalating (P1 and P2), and escalating (N1, N2, N3) responses

	Response Ratings	M	SD
	<i>You notice that Joseph is getting ready to leave the house. How do you respond?</i>		
P1	Hey Joseph, where are you going?	48.75	15.96
P2	Looks like you're getting ready to go somewhere Joseph. What's up?	47.5	10.9
N1	Joseph, I hope you don't think you are going out at this time.	12.5	2.5
N2	Where do you think you're going?	6.25	6.5
N3	Let me stop you right there mate, you're not going anywhere	3.75	6.5

Joseph: "Yes, my friends have asked me to go out with them. I know I have a curfew, but can't I go out past it this one time?"

P1	<i>I understand how important your friends are to you, but it's past your curfew, how about we play some games, and you can meet your friends tomorrow?</i>	81.25	11.39
P2	<i>I know curfews are annoying, but we have to follow the rules. Is there anything you would like to do this evening?</i>	61.5	11.26
N1	<i>The rules are the rules, Joseph. I could get in trouble if I let you out now.</i>	35.25	25.35
N2	<i>Looks like you know the rules well, which means you know that I can't let you leave.</i>	31.25	10.83
N3	<i>No means no. End of discussion.</i>	2.75	4.21
<b>Joseph: "Well, I do have a new game I can play, but I'd still rather hang out with my friends"</b>			
P1	<i>I know it's not quite the same as hanging out with your friends, but why don't we play the game together?</i>	93.75	8.2
P2	<i>Go and get that game then, that sounds like something I would like to see!</i>	87.5	12.99
N1	<i>Why don't you just do that then? You can see your friends any other time.</i>	43	20.9
N2	<i>Games are much better than friends, I think. You should have thought of this sooner!</i>	28.75	22.47
N3	<i>Yeah, whatever it is as long as you're staying home</i>	23.5	9.71
<b>Joseph: "So what if I leave? It's my life and I will do what I want!"</b>			
P1	<i>I know how important your plans are to you but it's past your curfew. How about we do something else, and you can go out tomorrow?</i>	76.5	17.87
P2	<i>I understand you want to go out but it's against the rules for you to be out past 9. Why not we give it a miss for tonight and I'll look into how we can set up a meeting with your friends next time.</i>	72.5	16.39
N1	<i>I need you to go and calm down. We can talk about this after.</i>	13.5	13.67
N2	<i>Woah Joseph, chill out. No need to get upset over little things like this.</i>	12.75	16.21
N3	<i>Rules are rules Joseph. You don't get a say in the matter. The rules keep you safe.</i>	8.75	2.17
<b>Joseph: "I don't care what you say, I'm going out and you can't stop me"</b>			
P1	<i>I hear that Joseph, and I'm sorry that's how things are. Let's try to work something out?</i>	73.75	10.23
P1	<i>I should have listened and considered your point of view, can we try and talk this through?</i>	68.75	28.8
N1	<i>Stop it! You can't just start breaking things when you don't get your way!</i>	16.5	16.1
N2	<i>Last time I am saying this mate - you cannot leave and that's that.</i>	16.5	8.62
N3	<i>You need to calm down, this isn't acceptable.</i>	9.25	12.32

## Scenario 2

### Scenario 2: Scenario Context. Client Information and Prompts

	Content Ratings (Plausibility)
Scenario Context	<i>Due to a scheduling issue. mandatory maintenance is occurring in Kevin's room when he is home. You are tasked with preparing lunch for tomorrow - ham and cheese sandwiches. Kevin wants and will only eat these</i>

<b>Client Information</b>	<i>Kevin usually spends this time relaxing in his room, listening to music with the lights down low. He dislikes loud noises.</i>
<b>Stage 1</b>	<i>"You notice that Kevin seems a little distressed and is fidgeting with his hands."</i>
<b>Stage 2 (Positive)</b>	<i>Kevin: "I should be in my room, but there's a stranger in there and there's lots of banging. I don't know what he's doing"</i>
<b>Stage 3 (Positive)</b>	<i>Kevin: "I don't want to meet him, I just want to relax in my room"</i>
<b>Stage 2 (Negative)</b>	<i>Kevin begins pulling his hair.</i>
<b>Stage 3 (Negative)</b>	<i>Kevin begins hitting himself in the head sporadically.</i>

<b>Content Ratings</b>	<b>M</b>	<b>SD</b>
Plausibility	4.0	2.24
Respectful/Non-Discriminating	6.0	0.71
Overall Suitability	4.75	1.30

*Scenario 2: Response ratings for selected de-escalating (P1 and P2), and escalating (N1, N2, N3) responses*

	<b>Response Ratings (De-escalating Effect)</b>	<b>M</b>	<b>SD</b>
	<b><i>You notice that Kevin seems a little distressed and is fidgeting with his hands.</i></b>		
<b>P1</b>	<i>Hey mate, looks like you're nervous about something. Wanna chat?</i>	71.25	24.31
<b>P2</b>	<i>Hey Kevin, are you feeling alright?</i>	65.5	26.28
<b>N1</b>	<i>Hey Kevin, calm down. Everything is okay</i>	32.5	10.69
<b>N2</b>	<i>Getting excited Kevin? Why don't you go to your room?</i>	26.75	16.39
<b>N3</b>	<i>Stop fidgeting, Kevin.</i>	10.5	7.09
	<b><i>Kevin: I should be in my room, but there's a stranger in there and there's lots of banging. I don't know what he's doing</i></b>		
<b>P1</b>	<i>I understand this isn't what we had planned for today and it can be scary having someone in your room. Why don't we go meet him and ask how long he will be?</i>	80	11.73
<b>P2</b>	<i>The stranger is Paul, the maintenance man. He's installing a new AC for you, so you don't get too hot. Should we go and say hello?</i>	70.5	18.73
<b>N1</b>	<i>Look mate, all I know is that he's fixing something, and he'll be gone soon</i>	8.75	2.77
<b>N2</b>	<i>Well mate, he's just doing his job. Not much we can do about it.</i>	8.25	4.21
<b>N3</b>	<i>I think you're overreacting a little. Just take a breath.</i>	7.5	3.77
	<b><i>Kevin: I don't want to meet him; I just want to relax in my room</i></b>		
<b>P1</b>	<i>I know you like animals, how about we go outside and feed the birds?</i>	80	7.28
<b>P2</b>	<i>What about we relax in the garden instead mate?</i>	64.75	22.75
<b>N1</b>	<i>Well, we can't do that cause he's in there now. think of somewhere else to do it.</i>	25.75	15.47
<b>N2</b>	<i>There's nothing stopping you from relaxing apart from the worries you're having in your head. Just take some deep breaths</i>	19.5	13.35
<b>N3</b>	<i>Alright then, he'll leave soon. Stop whining, Kevin.</i>	4.5	3.84
	<b><i>Kevin begins pulling his hair.</i></b>		
<b>P1</b>	<i>Kevin, what's on your mind? Let's take some deep breaths and talk about it</i>	81.75	10.92
<b>P2</b>	<i>Hey Kevin, talk to me. What's going on?</i>	75.5	14.86
<b>N1</b>	<i>Come on Kevin, we've talked about this. You can't go about hurting yourself.</i>	21.5	10.45

<b>N2</b>	<i>Kevin, you're going to be bald if you keep pulling you hair. Do you really want that?</i>	18.5	11.26
<b>N3</b>	<i>Kevin, that's enough. If you don't calm down, you won't have sandwiches for tomorrow.</i>	8.5	7.53
<b>Kevin begins hitting himself in the head sporadically.</b>			
<b>P1</b>	<i>*Ask the maintenance person to take a break while you talk to Kevin*</i>	79	12.37
<b>P1</b>	<i>Hey Kevin, it's okay you're safe. How about we go somewhere quiet and talk this over.</i>	75.25	15.61
<b>N1</b>	<i>If you don't stop now, we will have to call the ambulance.</i>	25.5	14.86
<b>N2</b>	<i>*Give him some space. He will calm down eventually. You need to prepare the sandwiches for tomorrow. *</i>	20.75	11.69
<b>N3</b>	<i>*Restrain Kevin so that he doesn't hurt or injure himself*</i>	18.75	19.49

### Scenario 3

#### Scenario 3: Scenario Context. Client Information and Prompts

	<b>Content Ratings</b>	<b>M</b>	<b>SD</b>
<b>Scenario Context</b>	<i>Nicole had a dentist appointment earlier in the day. Since then, she has been quite upset and has already broken some objects. She is already visibly agitated on your arrival to the house.</i>	6.25	0.43
<b>Client Information</b>	<i>Nicole has limited vocabulary and communicates mostly through pointing but has reasonable comprehension. She dislikes bright lights, morning talk shows and repetitive, high-pitch sounds.</i>	5.5	1.12
<b>Stage 1</b>	<i>Prompt: "When you arrive, Nicole is already pacing and showing signs of distress."</i>	6.5	0.5
<b>Stage 2 (Positive)</b>	<i>Nicole points to an image of her sensory room on her activity board.</i>	6.5	0.5
<b>Stage 3 (Positive)</b>	<i>Nicole covers her ears and says the word "lamp".</i>	4.5	1.66
<b>Stage 2 (Negative)</b>	<i>Nicole grabs an object and uses it to break a light.</i>	6.5	0.5
<b>Stage 3 (Negative)</b>	<i>Nicole breaks the television.</i>	7	0

<b>Content Ratings</b>	<b>M</b>	<b>SD</b>
Plausibility	6.11	0.84
Respectful/Non-Discriminating	5.0	0.71
Overall Suitability	6.25	0.83

#### Scenario 3: Response ratings for selected de-escalating (P1 and P2), and escalating (N1, N2, N3) responses

	<b>Response Ratings (De-escalating Effect)</b>	<b>M</b>	<b>SD</b>
<b>When you arrive, Nicole is already pacing and showing signs of distress. How do you respond?</b>			
<b>P1</b>	<i>Hey Nicole, I heard you've had a tough day today. Is there an activity you can show me that would help you feel better?</i>	84	12.47
<b>P2</b>	<i>Hey Nicole, I know you were at the dentist today. That must have been hard. Can you show me on the chart what you would like to do now?</i>	71.25	13.4
<b>N1</b>	<i>Hey Nicole, how did you get on the dentist?</i>	28.5	17.01
<b>N2</b>	<i>Nicole, stop. You cannot behave like this. Get a hold of yourself!</i>	6.75	10.54

N3	Nicole, what have you done? You've made a mess.	4.25	6.22
<b>Nicole points to an image of her sensory room on her activity board.</b>			
P1	The sensory room sounds like a good idea. Can you please show me what you want to use?	86.25	10.83
P2	Alright then! Lead the way.	81.25	7.4
N1	I'm not sure Nicole, I understand you want to but I'm a little worried that you'll break something.	18.75	2.17
N2	No, I don't think you can go there - you've been badly behaved today.	10.25	6.72
N3	Can you use your words please? I'm having trouble understanding	4.25	6.22
<b>Nicole covers her ears.</b>			
P1	Okay let's get something to block out the noise for you, and we can put on your lava lamp too.	68.5	16.56
P2	Would you like your headphones to block out the noise?	66.25	14.74
N1	*Wait for her to do something*	30	19.69
N2	Alright alright, just calm down, I'll turn on the lamp.	22.5	5.59
N3	Oh, you don't want the sensory room? Would you like it here when it is brighter instead?	21.5	14.29
<b>Nicole grabs an object and uses it to break a light.</b>			
P1	I understand you have a lot going on right now. Can you maybe show me what would make you feel a bit happier?	66.25	19.8
P2	Would you like to go somewhere else? Can you show me where?	62.5	10.31
N1	Nicole, how much longer will you keep doing this? Breaking things won't let me know what you want.	17	22.24
N2	Breaking things isn't going to get us anywhere. Please calm down	14.25	12.91
N3	Nicole, we aren't doing this. I can't help you unless you start calming down.	11.5	11.15
<b>Nicole breaks the television.</b>			
P1	Okay, I see you're unhappy in this room. Is there somewhere else you would rather go?	71.75	18.87
P1	I'm sorry if I misunderstood you. Sometimes I get things wrong. Can you please show me what you would like to do	69	14.25
N1	*Restrain Nicole before she breaks anything else or hurts herself or someone else	22.75	24.65
N2	Nicole, I need you to stop breaking things please. Try to communicate what you want	22.75	22.53
N3	Nicole, we aren't doing this. I'm going to leave the room. *Leave the room*	21.5	23.17