

Supplemental Materials

Detecting Criminal Intent in Social Interactions: The Influence of Autism and Theory of Mind

Supplemental Materials S1

Transcripts of the crime (Aaron, Andy, Amy, Jia) and non-crime (Derek, Casey, Charlie) scenarios

Crime Scenario 1 (Aaron)

Segment 1:

One afternoon, Aaron is working his casual job in retail when his boss posts the roster for the coming fortnight. He sees that he has not been allocated many shifts and goes to speak to his manager.

Manager: Sorry Aaron, I really don't have anything available for you at the moment because of the COVID pandemic. Everyone's hours are being cut.

Segment 2:

Aaron arrives home and looks at the unpaid bills piling up in his kitchen. He heads to his room to play video games, but the internet is running slowly because it hasn't been paid for. He becomes frustrated and starts looking for a second job on SEEK. As he is searching, Aaron's friend Jim comes over and sees that he is on SEEK.

Jim: Hey, are you looking for another job?

Aaron: Yeah, shifts have been cut back at work so I'm struggling to get money together for rent and bills. The internet has slowed because I'm late with a payment so I can't play Fortnite either.

Jim: Well, if you keep some files on your computer for me, I'll give you some cash to help with internet and electricity, so you can still game. I've run out of space on my hard drive, so if you store some of my files it'll free up my computer without me needing to purchase more storage.

Segment 3:

Aaron: Sure, thanks so much. That will really help me out.

Jim: No problem, you're doing me a favor. The only thing is that you can't open my files, share them, or tell anyone anything about them.

Segment 4:

The next day, Jim brings over a USB with the files he wants stored and Aaron begins transferring the files to his computer. He saves them to cloud storage because he has plenty available, and it will keep the space on his own computer free. While the images are transferring, the image thumbnails show photos of young children.

Segment 5:

Jim notices Aaron looking at the thumbnails.

Jim: Oh, don't worry about those, I've been studying photography and they are models for an assignment. It's all a surprise for my wife so please don't tell her about the course either.

Segment 6:

Aaron continues saving the images. Once finished, Jim thanks him and leaves.

One week later, Aaron hears a knock on the door while he is gaming. He is annoyed he has been interrupted but goes to answer the door. When the door opens, he sees two police officers.

Crime Scenario 2 (Andy)

Segment 1:

Andy is dropping his little brother off at football training. He is standing by his car talking to another boy's father, Carl, whom he has known for a number of years.

Carl: Andy, how have you been?

Andy: Oh you know, It's been tough getting work. I've had a few applications knocked back and there's not much else going around at the moment.

Carl: Yeah, I get you. I have some work you could help me out with. It involves driving some people around. You'd get paid by the hour and petrol costs will all be covered. What do you reckon?

Segment 2:

Andy: Yeah mate, that sounds really good.

Carl: Alright well I'll give you a call soon when I've got a job for you.

The next day, Andy is at home when he receives a call. It's from Carl.

Carl: Hey mate, got a pickup for you. I'll give you a cash payment when you're out at footy next.

Segment 3:

Andy: Alright, message me the address.

Andy pulls up at the address Carl gave him. The suburb seems seedy and the house he pulls up in front of is run down with peeling paint. Andy pulls out his phone to call Carl and double check the address when a woman leaves the house and hastily walks toward the car. She's wearing a backpack, untidy hair and ripped jeans.

Segment 4:

The woman jumps into the back of Andy's car. He leans into the back to sweep away some bottles and a jumper.

Andy: Ahh sorry about the mess... Where do you want to go?

Girl: Westfield shopping centre, it's about 10 minutes away.

Andy drives and the woman doesn't say a thing. Andy doesn't know what to say either, so they ride in silence. They arrive at the shopping centre carpark. The woman leans forward and says quietly

Girl: Can you drop me off by the bank?

Segment 5:

Andy drives to the bank. She thanks him and gets out. When he waits and watches for a moment she turns around and glances at him, so he drives off.

Carl calls Andy again in a couple of days. The new address is again in a run-down suburb and a person comes straight out to the car. He has a gym bag and asks to be taken to a liquor store. He doesn't want to talk so they ride in silence.

A week later, the person Andy has to pick up asks to be dropped at the courthouse. At the next football training, Carl pays Andy in cash as promised.

Carl: Here you go mate. I'll have another pickup for you in the next couple of days so keep your phone handy.

Segment 6:

Carl texts Andy a couple of nights later. It's 11pm and he needs a boy to be picked up from a shopping centre. When Andy arrives, everything is closed but a teenager is waiting. As the boy gets in the car, Andy can tell he has a blood nose.

Andy: Are you ok?

Boy: Yeah, don't worry about it.

The requested drop off spot is a dark, glass building close to the city centre. As Andy drops the boy off, he asks:

Boy: Would you mind waiting around for a minute?

Segment 7:

Andy watches him walk toward the building and duck around a corner into the darkness. All of a sudden, an alarm sounds, and the boy comes sprinting back towards the car. A security guard exits the building, shouting, with a phone in one hand. As the boy jumps back in Andy's car, sirens can be heard approaching.

Crime Scenario 3 (Amy)

Segment 1

Amy is chatting with her friends Em and Jake about their plans to move out together in the new year, once they finish year 12. She tells them she will need to get a job before she can afford any of the living expenses. A few days later, while shopping with her dad, Amy sees a request for staff at the local Coles. She walks in and submits an application to the manager. She soon hears she has been hired and begins her training as a check-out-chick.

Amy's Boss: You'll need to hold polite, repetitive conversation with every customer that comes through. Some customers will be pretty chatty and some won't, so you might hear all about a customer's hip surgery one minute and then serve a customer that barely grunts hello.

Amy: No problem, I can manage that.

A few months later, Amy is working an afternoon shift when an extremely chatty man comes through the checkout.

Man: You look familiar, young lady. Did you go to a school around here?

Segment 2

Conversation continues while Amy puts the man's items through the checkout. He is buying tinned soups and vegetables, discounted meat and other discounted products.

Amy: I went to St Mark's. Just finished year 12.

Man: Ahhh yes, my grandson went to your school in a lower grade. What subjects did you choose? And what are you hoping to do at University?

Amy: I did Chemistry, Biology, Physics, English and Maths. I'd really like to do physio, but I don't know which Uni or whether I'll get in. Your total is \$28.60 please. They exchange money and Amy gives change of \$1.40. The man looks confused.

Man: I thought I just gave you \$40. My change should be more than that.

Segment 3

Amy looks confused.

Amy: I'm so sorry, I thought you'd given me a twenty and a ten.

Man: No, it was definitely \$40. I only ever take out \$60 on grocery day and I have just \$20 left.

The man opens his wallet and Amy sees there is nothing but a \$20 note remaining.

Segment 4

Amy: I'm sorry, I mustn't have been paying attention.

Amy issues a refund and gives the man \$11.40.

Next week, Amy arrives to work the same shift. As she is about to begin serving someone, Amy sees her friend Lyla clock-on at the checkout behind her.

Amy: Let's catch up during lunch break!

Lyla: Sounds good!

Lyla starts working at her station. Amy has just finished giving change and receipt to the woman she is serving when she looks up and sees the man from last week next in line. His

eyes widen and he hesitates, then walks to the next checkout over. Amy's checkout is now empty, and he has lined up behind an elderly lady.

Segment 5

Amy shrugs it off. She begins serving her next customer, but he isn't up for a chat, so she works in silence. Amy can overhear conversation between the man and Lyla behind her.

Man: That's great. So, are you planning to do any travelling any time soon?

Lyla: Yep, I have tickets booked for South America at the end of the year. Here's your change.

Man: No... that can't be my change. I gave you two twenties, not a twenty and a ten. Amy looks over her shoulder to see the man showing the separate compartments in his wallet, just as he had the week before.

Lyla: Oh, I'm so sorry, here you go.

Lyla gives the man an extra \$10.

Segment 6

Amy approaches Lyla when the man has left.

Amy: Lyla, that exact same thing happened when I served that man last week. I think we need to report him to management.

Lyla: Really? I knew I had given him the correct change! Hmm. You're right. Let's go find a supervisor.

Crime Scenario 4 (Jia)

Segment 1

Jia is in a university club meeting for international students. They are discussing their plans for after they finish their final year.

Friend: Jia, what are you thinking about doing next year? Your student visa expires soon, right?

Jia: Yeah, I have no idea at the moment. My job applications haven't gone too well so I haven't been able to get hold of a work visa. I love being in Australia though, I really don't want to have to leave.

A month later, Jia and her friends are out celebrating because she has just handed in her Honours thesis. During the night, she is anxiously chatting with her friend Samantha about what might come next.

Jia: I don't know what to do about this visa situation. Time's running out and I'm getting really stressed.

Samantha: Well, my cousin recently enrolled in an online, part-time graduate diploma program at a Uni in Sydney. It's meant he can stay in Australia on a study visa while he searches for jobs.

Jia: Oh, that sounds so good, what's it called?

Samantha: Not too sure, I'll give you my cousin's email so he can give you all the details

Segment 2

After receiving an email reply from Samantha's cousin, Jia starts searching the web. The search shows a website that claims the university offers "exceptional education for students around the world wanting to study in Australia". It lists an address in Sydney, but courses were all online anyway. The website lists seven undergraduate programs and nine graduate programs. Jia spots a practical-based business diploma that seems to fit her needs. The course page says that the first semester only involves work experience at a business. If you have prior business experience, then it's possible that no class time is necessary.

Segment 3

Jia emails the course adviser listed on the page, and he responds the next day to reassure her and explain the course in more detail. He also tells her the first semester costs \$3450 and needs to be paid upfront in full. Jia speaks to her parents and shows them the course website. They agree to pay half.

Segment 4

Jia enrolls in the diploma, pays the fees, and submits the forms to extend her student visa. She is also working around 20 hours per week at a cafe, and soon gets promoted to manager. She keeps up her course work which is to keep a weekly journal of her work and responsibilities. She receives an email once a month from her course instructor reminding her to submit journal entries. Jia emails her coordinator asking about enrolment for the following semester. He never replies.

Segment 5

Towards the end of the semester, Jia finds out she has been selected for an amazing volunteer position at the Red Cross where she is trained in disaster counselling. Jia completed a double degree in business and psychology, so the position utilises the skills she learned. That night, she tells her parents she's finally found something she'd like to do for a career.

Jia meets Sally at her Red Cross training and they soon become friends. She is in the same position Jia was last year.

Sally: I'm so worried about what I'll do next year when my visa is up.

Jia: Oh, I just submitted my final business report for an online course I've been doing! It's meant that I can stay on a student visa while I look for work. I'll send you the website link.

Sally: Oh thanks! That'd be great.

When they see each other again the next week, Sally seems worried.

Sally: Jia, about that course you told me to look at... I couldn't find any information about actual online lectures or classes on the website... Have you been doing any? I couldn't find any staff profiles either... Or a Facebook or Twitter account.

Segment 6

Jia receives an email from her course coordinator with instructions about how to enrol for next semester. She leaves it for now, because what Sally had told her has her concerned. After all, she hasn't attended a single class.

A week later, the police show up at Jia's doorstep and ask her to come in for questioning.

Non-Crime Scenario (Derek)

Segment 1:

Derek is studying human movement at university. After submitting an assignment, Derek and his friends are having some drinks at one of their share-houses. During the night, one of the newer girls to the group, Nicole, approaches Derek for a chat.

Nicole: hey Derek, can I ask you a favour?

Derek: Yeah sure, what's up?

Nicole: I'm heading interstate for a while and don't really feel comfortable leaving some of my valuables at home while I'm gone. My area has a pretty high rate of home break-ins and my room-mates are kind of dodgy so I don't really trust them. You live pretty close, so how would you feel about holding onto some stuff for me while I'm gone? It'll only be for a couple of weeks.

Segment 2:

Derek: Yeah, I can do that for you.

Nicole: Thanks, I know that I can trust you. I'll bring the stuff over tomorrow afternoon.

Derek: Sure.

The next day, Nicole arrives at Derek's house with her belongings.

Nicole: There's a few boxes for you to hold onto, is that ok?

Segment 3:

Derek: All good, I have enough room in my garage.

Nicole: Thanks so much for doing this for me. I'll message you when my holiday is over.

Derek takes the boxes to his garage for storage. They are all taped up so he can't see what's inside.

Segment 4:

A couple of weeks pass, and Derek notices it's now the date Nicole was due to be back from her holiday. He waits for her message but a few days later he still hasn't heard from her.

Segment 5:

Derek messages Nicole and waits for a response. A few minutes later, she texts back.

Nicole: I'm so sorry Derek, I *completely* forgot about leaving my things at your place!

I'll come over right away to pick them up.

Within 20 minutes Nicole is at Derek's house, packing her belongs in her car and giving him some travel souvenirs for his trouble.

Non-Crime Scenario (Casey)

Segment 1:

Casey has been working the same office job for five years. One day, she catches up with her old friend, Teresa, and they discuss how their lives have changed since university.

Casey: I can't stand this job. I hate being in the city every day, working under artificial lighting, staring at a screen for hours, barely exercising... I feel so unhealthy.

Teresa: You need to get outside more. Come and join my cycling group on weekends. It's so fun and it'll be really good for you.

Casey: You know what, why not? Sounds interesting.

Casey starts going along to the cycling events on weekends, and soon begins making friends. One of the guys in the group, Ian, is a cycling coach and lends Casey a bike to use. She learns several new routes around the city and begins to really enjoy riding.

Soon, Casey is cycling every weekend and starts to look for a bike of her own. Ian gives her some tips on what to buy.

Ian: You want to look for a road-specific bike but try to avoid the ones with fixed gears. Good road bikes can be pretty expensive, so look out for dodgy deals. A second-hand one should do the trick while you're starting out though.

Casey spends her lunch breaks at work reading cycling forums and scrolling through buy-and-sell websites. Finally, one Friday, she finds a bike that looks perfect — it's a recent model, used but still in very good condition.

She messages the seller, and they agree to meet on Sunday. On Saturday she goes cycling as usual. She brings the borrowed bike and is dismounting at the meeting spot when Ian arrives, in a furious mood.

Segment 2:

Casey: You OK Ian?

Ian: Someone broke into my shed at home last Thursday night and stole my bike. I've reported it to the police but there were no witnesses and no real leads, so they aren't hopeful of recovering it. I just can't believe it.

Segment 3:

Casey: Oh man, I'm so sorry to hear that. I know you really love that bike.

On Sunday, Casey drives to pick up the bike. The seller is two suburbs over from where she lives. He is a tall, lean middle-aged man who takes her through the house to the back veranda where the bike is propped up against a chair.

Seller: She's in great condition. I bought it for my girlfriend recently but after a few rides she decided she didn't like it anymore. Now I need the money, so I'm selling.

Segment 4:

Casey looks again at the bike — it looks great and is reasonably priced, so she buys it. The next Saturday she hauls her new bike up onto her roof racks, along with the bike borrowed from Ian, and drives to the meeting spot. She's excited to show it off to her fellow club members, and as she walks it over to the group, a few of them come up to admire it and congratulate her on her first bike. One of them says that it looks weirdly familiar but can't

place why.

Segment 5:

Ian turns up a few minutes late with one of his old bikes. When he sees Casey's new bike his jaw drops. He starts shouting and begins to run towards her. Others in the club tell him to quiet down since it's still early morning, so Casey can't hear what he is trying to say until he gets closer.

Ian: That's my bike! Look at the paint near the front wheel. There'll be a big scratch from where I fell off crossing some tram tracks.

Segment 6:

Casey is still shocked about the whole situation but shifts the bike so that they can both see the front wheel. There is no scratch.

Ian: Oh... Oh no. I'm so sorry. It must just be the same model. I assumed it must have been mine, I'm sorry, I was too quick to judge.

Casey lets out a big sigh of relief. She feels sorry for Ian but is happy her bike isn't stolen property.

Non-crime scenario (Charlie)

Segment 1:

Charlie is working as a receptionist at a grand old hotel. His co-worker, Eleanor, makes a mistake and asks for his help.

Eleanor: Ahh Charlie, I've accidentally made a double booking for a room for this weekend. Can you fix it for me? I can't figure out how...

Charlie sighs.

Charlie: Sure. Where's the booking? I'll have to log into the system under my name to fix it up. You need to be more careful though, the guests receive notifications as soon as you make a booking so it's a bit of a process to fix it.

A guest approaches the counter. Over his shoulder, Charlie spots a young woman who doesn't look like the regular clientele.

Segment 2:

Rich guest: Excuse me I'd like to check in.

While he would prefer to check the guest in himself, Charlie thinks he should leave this job to Eleanor so that he can quickly fix her previous mistake.

Charlie: No problem sir, Eleanor here will help you out.

Eleanor begins to help the man and Charlie looks again at the young woman. She is dressed in jeans and a black t-shirt and her hair is pulled into a messy ponytail. She doesn't approach the front desk but walks around the foyer looking at various paintings. Charlie doesn't take much more notice as she might just be visiting a guest.

The young woman admires a painting on the wall and moves around to look at the lift and nearby brochures. Charlie glances up briefly before returning to fixing Eleanor's mistake. Charlie finally finishes on the computer. He sighs and looks up. The woman is still there, peeking into the hotel's bar and restaurant. She pulls out a small notebook from her jeans pocket and starts taking notes.

Segment 3:

Charlie frowns, straightens his tie and walks over to the woman. He politely asks:

Charlie: Sorry Miss, can I help you with something?

The woman is startled and quickly tucks away her notepad.

Charlie: You don't look like our regular kind of guest.

Young woman: Ah... I'm sorry... What are your guests usually like?

Charlie: Well, for the most part, they're incredibly wealthy. Often highly regarded or influential in their field of work. They come from all over the globe.

Young woman: How long has the hotel been open? What's it like to work here? And what are the regular dinner hours of the bar?

Segment 4:

Charlie: The hotel opened in 1880 and has since been one of the premier accommodation destinations in Australia. I love working here. The clientele can be

demanding but that's what comes with status, I guess... Oh and dinner is generally served between 5 and 10pm.

Young woman: Ok, interesting... What are staff shift changes like? And your managers, how often are they around?

Segment 5:

Charlie looks concerned. The young woman notices.

Young woman: Oh, I'm not a criminal I promise... next week I have an interview to become a chef in the kitchens but I'm really nervous about it, so I wanted to find out more.

Segment 6:

Charlie goes back to work. Next week he sees the girl walk past with the head chef to begin her interview. He later hears she's been hired.

Supplemental Materials S2

Study 1: Frequencies of adaptive and maladaptive behavior responses and missing data from the SAP development samples B and C combined

Aaron Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing ¹
Segment 1	236	155	81	15
Segment 2	237	117	120	14
Segment 3	236	89	147	15
Segment 4	240	14	226	11
Segment 5	242	50	192	9

Andy Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing
Segment 1	241	96	145	10
Segment 2	243	135	108	8
Segment 3	236	85	151	15
Segment 4	244	194	50	7
Segment 5	239	110	129	12
Segment 6	246	136	110	5

Amy Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing
Segment 1	249	184	65	2
Segment 2	244	8	236	7
Segment 3	241	48	193	10
Segment 4	228	72	156	23
Segment 5	243	4	239	8

Jia Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing
Segment 1	236	213	23	15
Segment 2	241	108	133	10
Segment 3	242	195	47	9
Segment 4	234	14	220	17
Segment 5	221	86	135	30

Casey Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing
Segment 1	221	219	2	30
Segment 2	239	160	79	12
Segment 3	244	138	106	7
Segment 4	200	62	138	51
Segment 5	244	21	223	7

Derek Behavior	Valid <i>n</i>	Maladaptive	Adaptive	Missing
Segment 1	248	142	106	3

¹ Missing = 'non-behavioral', 'other' or missing due to audio failure.

Segment 2	250	166	84	1
Segment 3	245	189	56	6
Segment 4	249	51	198	2

Aaron Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing ²
Segment 1	251	241	10	0
Segment 2	246	129	117	5
Segment 3	245	72	173	6
Segment 4	250	12	238	1
Segment 5	251	32	219	0

Andy Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing
Segment 1	246	189	57	5
Segment 2	247	162	85	4
Segment 3	249	120	129	2
Segment 4	248	164	84	3
Segment 5	251	98	153	0
Segment 6	250	96	154	1

Amy Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing
Segment 1	250	159	91	1
Segment 2	248	184	64	3
Segment 3	249	159	90	2
Segment 4	247	101	146	4
Segment 5	249	3	246	2

Jia Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing
Segment 1	242	223	19	9
Segment 2	242	191	51	9
Segment 3	250	204	46	1
Segment 4	248	178	70	3
Segment 5	248	68	180	3

Casey Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing
Segment 1	237	228	9	14
Segment 2	250	186	64	1
Segment 3	249	154	95	2
Segment 4	250	99	151	1
Segment 5	250	10	240	1

Derek Suspicion	Valid <i>n</i>	Not suspicious	Suspicious	Missing
Segment 1	250	181	69	1
Segment 2	251	193	58	0
Segment 3	249	179	70	2

² Missing = ‘non-behavioral’, ‘other’ or missing due to audio failure.

Segment 4	251	207	44	0
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Supplemental Materials S3

Study 1: Chi-square goodness of fit tests for SAP responses from the SAP development

samples B and C combined

Aaron Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	236	$\chi^2(1) = 23.20, p < .001$	.31
Segment 2	237	$\chi^2(1) = 0.04, p = .845$	.01
Segment 3	236	$\chi^2(1) = 14.25, p < .001$	.25
Segment 4	240	$\chi^2(1) = 187.27, p < .001$	.88
Segment 5	242	$\chi^2(1) = 83.32, p < .001$	.59
Suspicion			
Segment 1	251	$\chi^2(1) = 212.59, p < .001$	.92
Segment 2	246	$\chi^2(1) = 0.59, p = .444$	.05
Segment 3	245	$\chi^2(1) = 41.64, p < .001$	.41
Segment 4	250	$\chi^2(1) = 204.30, p < .001$	.90
Segment 5	251	$\chi^2(1) = 139.32, p < .001$	.75

Andy Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	241	$\chi^2(1) = 9.96, p = .002$	.20
Segment 2	243	$\chi^2(1) = 3.00, p = .083$	.11
Segment 3	236	$\chi^2(1) = 18.46, p < .001$	.28
Segment 4	244	$\chi^2(1) = 84.98, p < .001$	.59
Segment 5	239	$\chi^2(1) = 1.51, p = .219$	.08
Segment 6	246	$\chi^2(1) = 2.75, p = .097$	.11
Suspicion			
Segment 1	246	$\chi^2(1) = 70.83, p < .001$	.53
Segment 2	247	$\chi^2(1) = 24.00, p < .001$	.31
Segment 3	249	$\chi^2(1) = 0.33, p = .568$	.04
Segment 4	248	$\chi^2(1) = 25.81, p < .001$	.32
Segment 5	251	$\chi^2(1) = 12.05, p < .001$	.22
Segment 6	250	$\chi^2(1) = 13.46, p < .001$	.23

Amy Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	249	$\chi^2(1) = 56.87, p < .001$	.48
Segment 2	244	$\chi^2(1) = 213.05, p < .001$	.93
Segment 3	241	$\chi^2(1) = 87.24, p < .001$	.60
Segment 4	228	$\chi^2(1) = 30.95, p < .001$	.37
Segment 5	243	$\chi^2(1) = 227.26, p < .001$	.97
Suspicion			
Segment 1	250	$\chi^2(1) = 18.50, p < .001$	.27
Segment 2	248	$\chi^2(1) = 58.07, p < .001$	.48
Segment 3	249	$\chi^2(1) = 19.12, p < .001$	.28

Segment 4	247	$\chi^2(1) = 8.20, p < .001$	.18
Segment 5	249	$\chi^2(1) = 237.15, p < .001$	.98

Jia Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	236	$\chi^2(1) = 152.97, p < .001$	.81
Segment 2	241	$\chi^2(1) = 2.59, p < .001$	.10
Segment 3	242	$\chi^2(1) = 90.51, p < .001$	.61
Segment 4	234	$\chi^2(1) = 181.35, p < .001$	.88
Segment 5	221	$\chi^2(1) = 10.86, p < .001$	.22
Suspicion			
Segment 1	242	$\chi^2(1) = 171.97, p < .001$	.84
Segment 2	242	$\chi^2(1) = 80.99, p < .001$	.58
Segment 3	250	$\chi^2(1) = 99.86, p < .001$	.63
Segment 4	248	$\chi^2(1) = 47.03, p < .001$	.44
Segment 5	248	$\chi^2(1) = 237.15, p < .001$	.45

Casey Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	221	$\chi^2(1) = 213.07, p < .001$	.98
Segment 2	239	$\chi^2(1) = 27.45, p < .001$	.34
Segment 3	244	$\chi^2(1) = 4.20, p < .001$	.13
Segment 4	200	$\chi^2(1) = 28.88, p < .001$	.38
Segment 5	244	$\chi^2(1) = 167.23, p < .001$	.83
Suspicion			
Segment 1	237	$\chi^2(1) = 202.37, p < .001$	.92
Segment 2	250	$\chi^2(1) = 59.54, p < .001$	.49
Segment 3	249	$\chi^2(1) = 13.98, p < .001$	.24
Segment 4	250	$\chi^2(1) = 10.82, p < .001$	.21
Segment 5	250	$\chi^2(1) = 211.60, p < .001$	.92

Derek Scenario	N	One Sample Chi Square	Cramer's <i>V</i>
Behavior			
Segment 1	248	$\chi^2(1) = 5.23, p = .022$	.15
Segment 2	250	$\chi^2(1) = 26.90, p < .001$	.33
Segment 3	245	$\chi^2(1) = 72.20, p < .001$	.54
Segment 4	249	$\chi^2(1) = 86.78, p < .001$	.59
Suspicion			
Segment 1	250	$\chi^2(1) = 50.18, p < .001$	.44
Segment 2	251	$\chi^2(1) = 72.61, p < .001$	.54
Segment 3	249	$\chi^2(1) = 47.72, p < .001$	.44
Segment 4	251	$\chi^2(1) = 105.85, p < .001$	.65

Supplemental Materials S4

The Prolific Platform

Prolific is a UK-based crowdsourcing platform, at the time of conducting the study with around 120,000 participant users (i.e., accounts active in the past 90 days) aged 18+ years from most OECD countries. It uses the following measures to promote high quality data:

- Participants who register on the site must provide an email address, phone number, photo ID and PayPal address (which are verified)
- Prolific screens the internet service provider (ISP) being used (some—associated with high-risk of VPN and proxy usage—are not allowed), IP address, device and browser information, as well as VPN and proxy usage
- Participants must participate in an eligibility study (in which they have to write a short story about a superhero; if it makes sense they gain access)
- Ongoing checks include tracking how often researchers reject participant submissions (i.e., there are specific criteria when researchers are allowed to refuse to pay a participant) and reviewing any reports submitted by researchers of data that look suspicious
- A few studies have been conducted suggesting that data from Prolific are of higher quality than from other platforms (e.g., Albert & Smilek, 2023; Peer et al., 2017).

Albert, D. A., & Smilek, D. (2023). Comparing attentional disengagement between Prolific and MTurk samples. *Scientific Reports*, 13(1), 20574. <https://doi.org/10.1038/s41598-023-46048-5>

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, 70, 153-163. <https://doi.org/10.1016/j.jesp.2017.01.006>

Researchers can:

- Include certain types of attention check questions and refuse to pay participants who fail these
- Include any type of engagement/attention check questions and choose to only make use of data from participants who pass these
- In our experience across many studies very few participants fail these checks whereas our exclusion rates from MTurk studies have often been high.

Establishing an Autism Diagnosis

All Prolific participants are required to state their age and country of residence; they are also invited to complete a comprehensive checklist of other information for which researchers may wish to ‘pre-screen’ their participants. The incentive for completing this checklist is that participants are more likely to be eligible to participate in studies, as any study that has pre-screeners will only be available to people who have answered the relevant question(s). One of the pre-screening questions focuses on autism diagnosis (see below); we pair this pre-screener with open-ended probes about the source of the diagnosis and asking participants to complete a version of the AQ. In this regard:

- A small percentage of all participants are registered as autistic on Prolific (around 2,200 when the study was conducted).

- Lying about this will restrict the range of studies for which individuals will be eligible.
- Researchers are encouraged to verify their pre-screening questions in the study (i.e., ask the exact question that's in the pre-screening questionnaire and exclude anyone who provides an inconsistent response.
- Participants usually report being diagnosed by a psychiatrist or psychologist (as in the current study); or they may report a team, in which case we code the highest level of qualification mentioned.
- Individuals who self-identified as autistic or those seeking a diagnosis were not eligible to participate.

Supplemental Materials S5

Study 1: Inter-rater reliability for coding of SAP adaptive behavior and suspicion response data

Scenario	Behavior		Suspicion	
	% Agreement	Kappa	% Agreement	Kappa
Aaron	85.0	.83	87.5	.80
Andy	88.9	.83	83.3	.73
Amy	84.7	.81	80.6	.70
Jia	88.1	.83	86.9	.73
Casey	83.6	.80	80.3	.69
Derek	94.8	.92	83.3	.60

Study 2: Inter-rater reliability for coding of SAP adaptive behavior and suspicion response data

Scenario	Behavior		Suspicion	
	% Agreement	Kappa	% Agreement	Kappa
Aaron	86.9	.85	91.1	.85
Andy	89.3	.85	84.1	.75
Amy	86.7	.84	82.7	.74
Jia	88.3	.83	88.7	.81
Derek	90.8	.87	85.9	.72

Supplemental Materials S6

Study 2: Spearman correlation coefficients (Rho) for the SAP and A-ToM-Q for the crime and non-crime scenarios

Segment	Behavior			Suspicion		
	Rho	<i>p</i>	95% CI	Rho	<i>p</i>	95% CI
Aaron (crime)						
Segment 1	-.17	.022	-.31, -.02	.06	.392	-.08, .21
Segment 2	.09	.243	-.06, .23	.18	.013	.04, .32
Segment 3	.20	.006	.05, .34	.15	.042	.00, .29
Segment 4	-.13	.072	-.28, .02	-.07	.308	-.22, .07
Segment 5	.05	.461	-.09, .20	.04	.611	-.11, .18
Andy (crime)						
Segment 1	.13	.091	-.02, .27	.06	.418	-.09, .21
Segment 2	.15	.046	.00, .29	.14	.057	.01, .28
Segment 3	.18	.014	.03, .33	.13	.072	.01, .28
Segment 4	-.01	.929	-.15, .14	.09	.214	-.06, .27
Segment 5	.28	< .001	.14, .42	.25	< .001	.10, .38
Segment 6	.18	.015	.03, .32	.06	.437	-.09, .20
Amy (crime)						
Segment 1	.03	.725	-.12, .17	.06	.411	-.09, .20
Segment 2	-.05	.486	-.20, .10	-.08	.279	-.22, .07
Segment 3	-.04	.570	-.19, .11	.00	.994	-.15, .15
Segment 4	.00	.979	-.15, .15	.02	.803	-.13, .16
Segment 5	.05	.472	-.09, .20	-.01	.904	-.15, .14
Jia (crime)						
Segment 1	.04	.553	-.11, .19	.17	.017	.03, .31
Segment 2	.07	.311	-.07, .22	.12	.112	-.03, .26
Segment 3	.09	.232	-.06, .23	.09	.219	-.06, .23
Segment 4	-.01	.874	-.16, .14	.07	.311	-.07, .22
Segment 5	-.02	.764	-.18, .14	.09	.225	-.06, .23
Derek (non-crime)						
Segment 1	.10	.159	-.04, .25	-.02	.753	-.17, .12
Segment 2	-.01	.941	-.15, .14	.02	.832	-.13, .16
Segment 3	-.08	.262	-.23, .07	.01	.914	-.14, .15
Segment 4	.05	.519	-.10, .19	.07	.305	-.07, .22

Note: Applying Bonferroni corrections for the five correlations at the level of each scenario (i.e., $\alpha = .01$) results in significant correlations remaining in only the Aaron and Andy scenarios.

Supplemental Materials S7

Study 2: Point biserial Pearson correlation coefficients for the SAP and Proxy VCI for the crime and non-crime scenarios

Segment	Behavior			Suspicion		
	<i>r</i>	<i>p</i>	95% CI	<i>r</i>	<i>p</i>	95% CI
Aaron						
Segment 1	-.16	.029	-.30, -.02	.06	.424	-0.08, .20
Segment 2	.39	<.001	.26, .50	.36	<.001	0.23, .48
Segment 3	.25	.001	.11, .37	.28	<.001	0.14, .40
Segment 4	.12	.104	-.02, .26	.07	.317	-0.07, .21
Segment 5	.18	.014	.04, .31	.03	.697	-0.11, .17
Andy						
Segment 1	.24	.001	.09, .37	.18	.015	.03, .31
Segment 2	.25	<.001	.12, .38	.21	.003	.07, .34
Segment 3	-.07	.366	-.21, .08	.06	.400	-.08, .20
Segment 4	-.01	.893	-.15, .13	.05	.477	-.09, .19
Segment 5	.25	<.001	.11, .38	.26	<.001	.12, .38
Segment 6	.07	.315	-.07, .21	-.05	.512	-.19, .09
Amy						
Segment 1	-.02	.746	-.17, .12	-.04	.613	-.18, .10
Segment 2	.05	.465	-.09, .19	-.07	.362	-.20, .08
Segment 3	.05	.519	-.10, .19	.05	.508	-.09, .19
Segment 4	.01	.930	-.14, .15	.00	.978	-.14, .14
Segment 5	-.07	.326	-.21, .07	.03	.629	-.11, .17
Jia						
Segment 1	.14	.054	.00, .28	.24	.001	.10, .37
Segment 2	.31	<.001	.18, .43	.31	<.001	.17, .43
Segment 3	.30	<.001	.16, .42	.33	<.001	.19, .45
Segment 4	.11	.150	-.04, .25	.32	<.001	.19, .44
Segment 5	-.11	.170	-.26, .05	.10	.171	-.04, .24
Derek						
Segment 1	.28	<.001	.14, .40	.20	.005	.06, .33
Segment 2	.06	.433	-.09, .20	.17	.015	.03, .31
Segment 3	.09	.193	-.05, .23	.11	.122	-.03, .25
Segment 4	-.04	.565	-.18, .10	.18	.011	.04, .31

Supplemental Materials S8

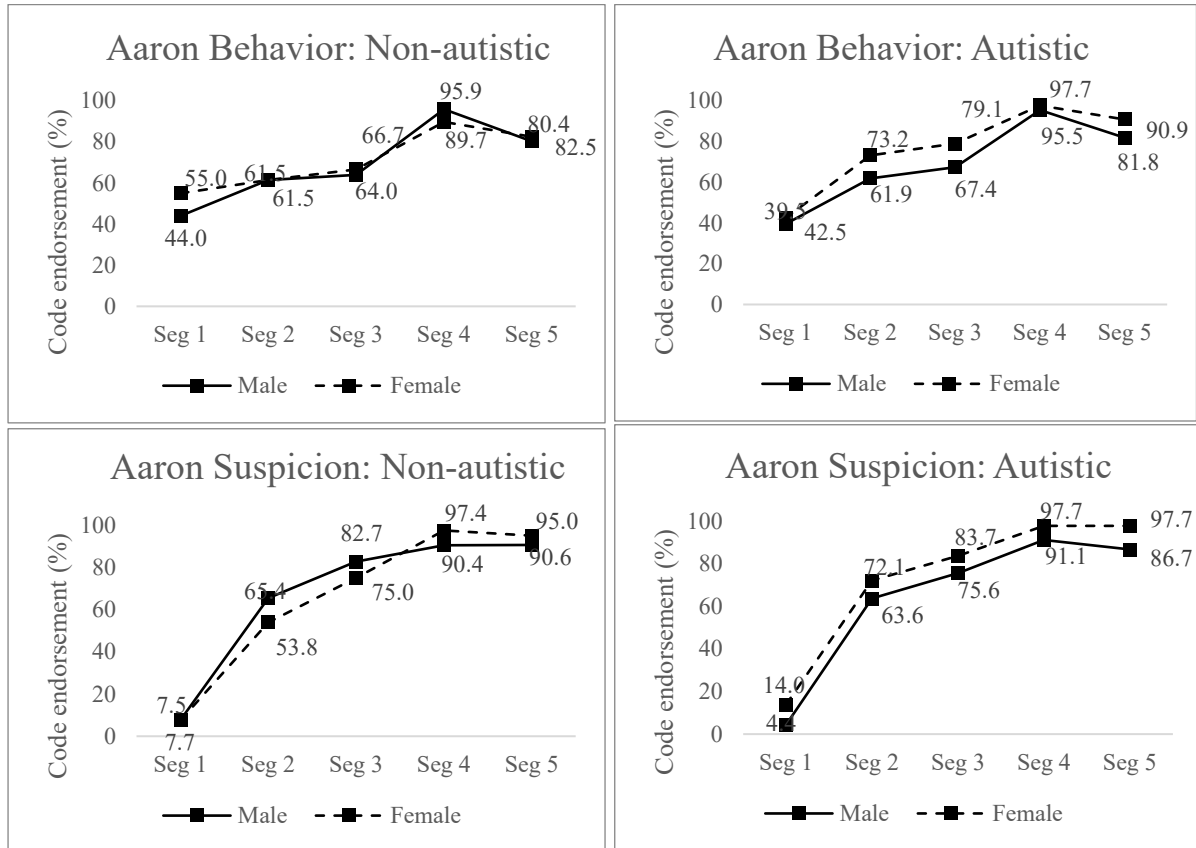
Study 2: Spearman correlation coefficients (Rho) for the SAP and AQ-12 for the crime and non-crime scenarios

Segment	Behavior			Suspicion		
	Rho	<i>p</i>	95% CI	Rho	<i>p</i>	95% CI
Aaron						
Segment 1	-.10	.165	-.25, .05	.02	.737	-.12, 0.17
Segment 2	.26	<.001	.12, .39	.21	.003	.07, 0.35
Segment 3	.09	.239	-.06, .23	.13	.076	-.02, 0.27
Segment 4	.10	.172	-.05, .24	.09	.200	-.05, 0.23
Segment 5	.15	.044	.00, .29	.09	.201	-.05, 0.23
Andy						
Segment 1	.11	.134	-.04, .25	.14	.053	-.01, 0.28
Segment 2	.08	.252	-.06, .23	.15	.035	.01, 0.29
Segment 3	-.07	.337	-.22, .08	.06	.398	-.09, 0.21
Segment 4	.06	.425	-.09, .20	.05	.476	-.09, 0.19
Segment 5	.04	.596	-.11, .18	.10	.163	-.04, 0.24
Segment 6	.06	.426	-.09, .20	.05	.450	-.09, 0.20
Amy						
Segment 1	.00	.985	-.15, .15	-.08	.287	-.22, 0.07
Segment 2	.02	.757	-.12, .17	.04	.578	-.10, 0.18
Segment 3	-.08	.269	-.22, .07	.12	.099	-.03, 0.26
Segment 4	.06	.386	-.09, .21	.02	.739	-.12, 0.17
Segment 5	-.09	.200	-.23, .05	.06	.407	-.09, 0.20
Jia						
Segment 1	.09	.205	-.06, .24	.10	.149	-.04, 0.25
Segment 2	.20	.006	.05, .33	.18	.013	.03, 0.32
Segment 3	.22	.003	.07, .35	.14	.059	-.01, 0.28
Segment 4	.01	.940	-.14, .15	.12	.085	-.02, 0.27
Segment 5	-.06	.421	-.22, .10	-.03	.680	-.18, 0.12
Derek						
Segment 1	.01	.914	-.14, .15	.14	.057	-.01, 0.27
Segment 2	.03	.676	-.12, .17	.03	.665	-.11, 0.18
Segment 3	.05	.464	-.09, .20	.07	.307	-.07, 0.22
Segment 4	-.03	.637	-.18, .11	.00	.983	-.14, .15

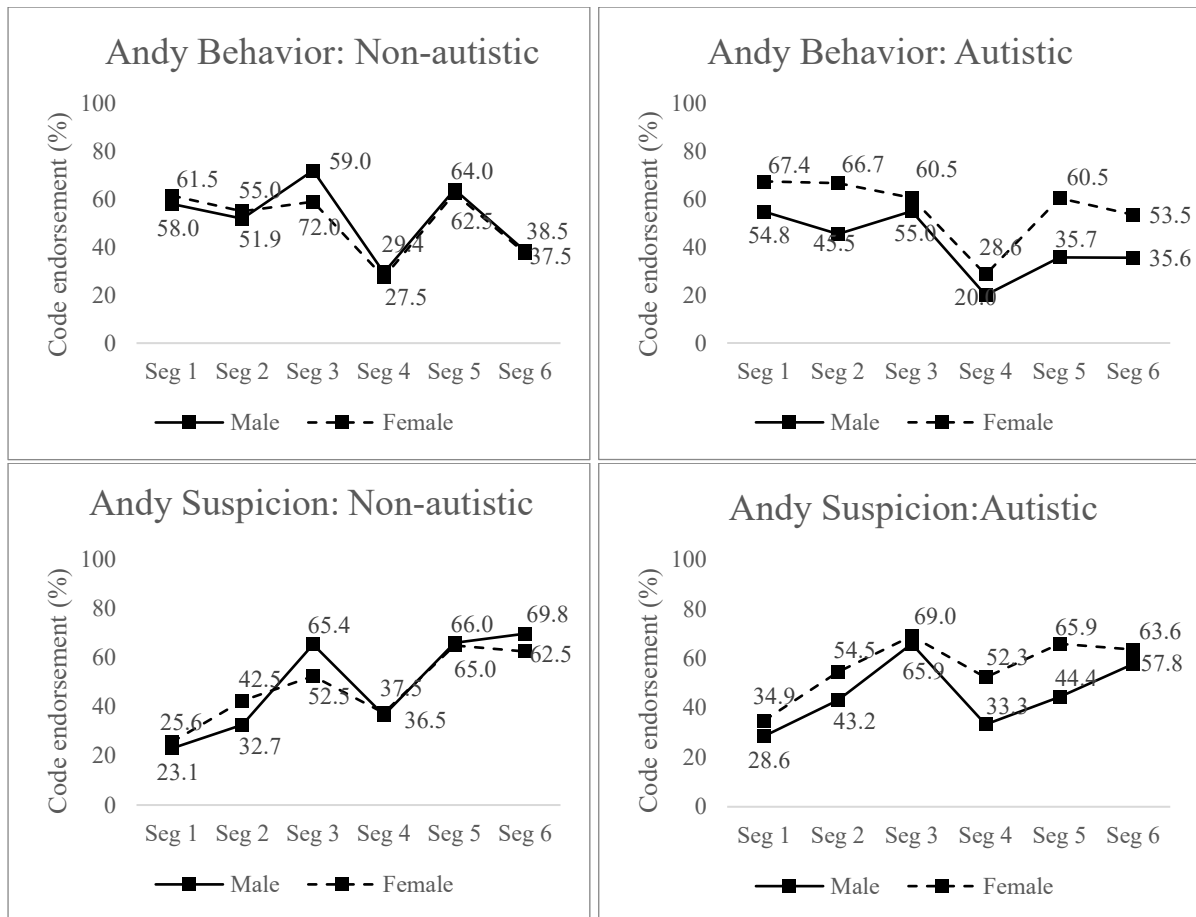
Note: after applying a Bonferroni correction for the five correlations at the level of each scenario (i.e., $\alpha = .01$), significant correlations between the AQ-12 and reports of adaptive behavior remained by the end of the second scenario segment for two of the four crime scenarios.

Supplemental Materials S9

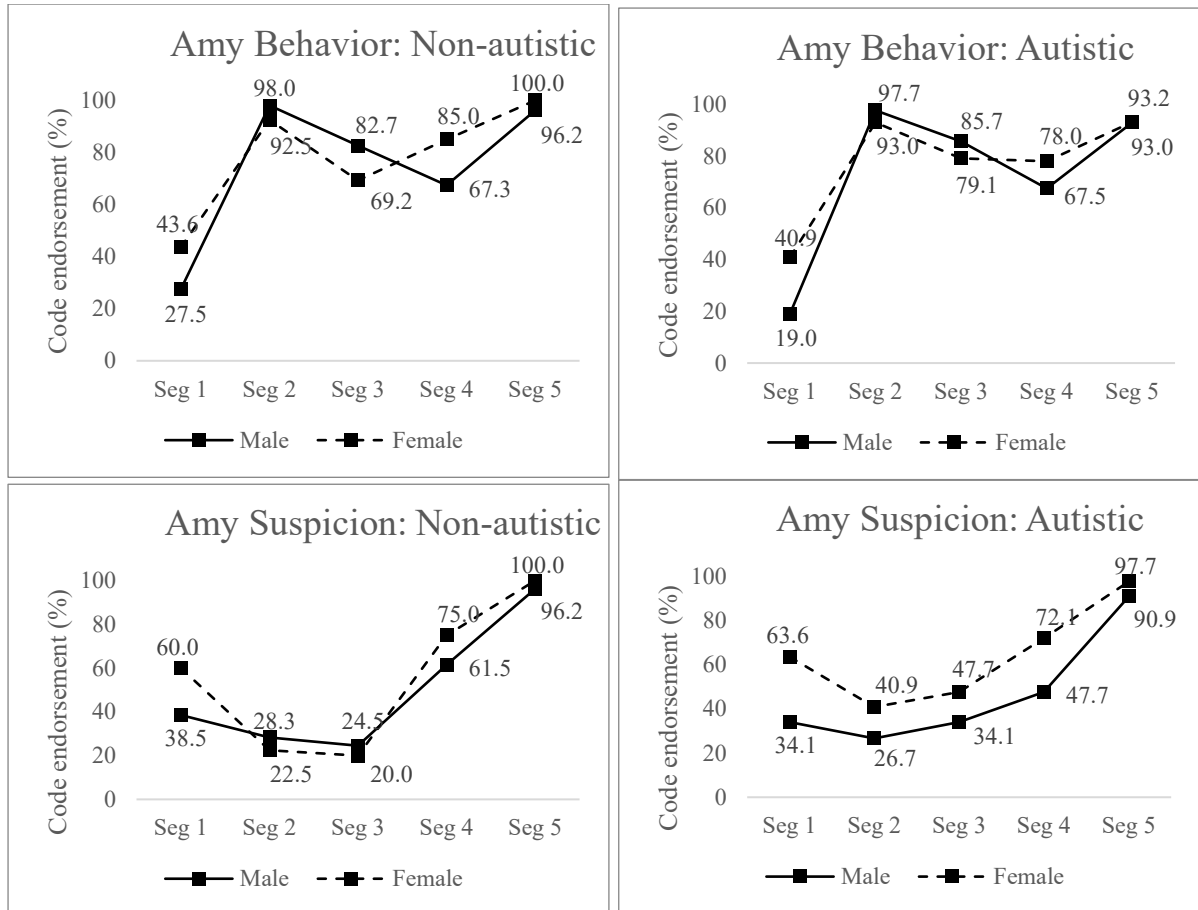
Study 2: Frequency data and chi-square (or Fisher-Freeman-Halton exact tests where cell count <5 violated chi-square assumptions) for gender comparisons in autistic and non-autistic samples



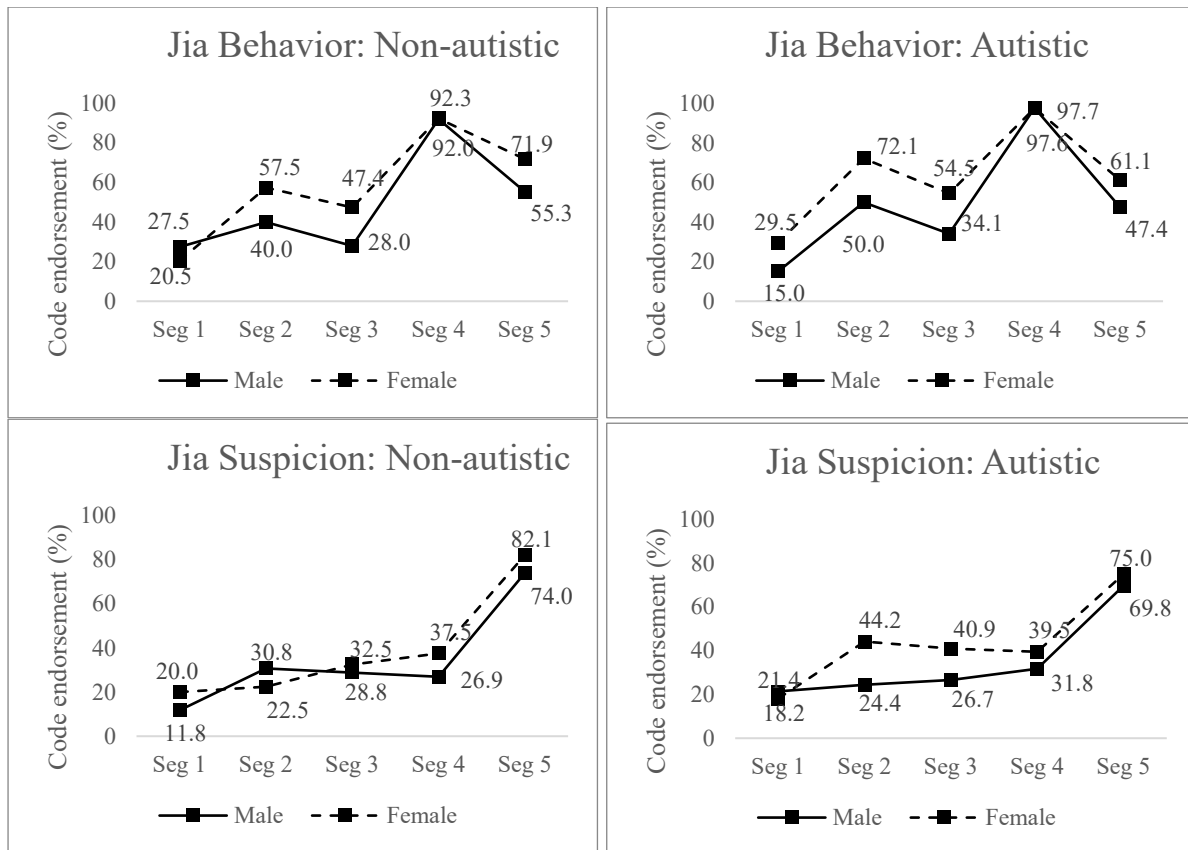
Aaron Scenario	Non-autistic			Autistic		
	N	Chi Square	Phi	N	Chi-Square	Phi
Behavior						
Segment 1	90	$\chi^2(1) = 0.01, p = .924$	.01	83	$\chi^2(1) = 0.08, p = .784$	.03
Segment 2	91	$\chi^2(1) = 0.00, p = 1.000$	.00	83	$\chi^2(1) = 1.20, p = .273$	.12
Segment 3	89	$\chi^2(1) = 0.07, p = .793$	.03	86	$\chi^2(1) = 1.48, p = .223$	.13
Segment 4	88	$\chi^2(1) = 1.30, p = .254$	-.12	88	$\chi^2(1) = 0.35, p = .557$	.06
Segment 5	91	$\chi^2(1) = 0.07, p = .798$	.03	88	$\chi^2(1) = 1.54, p = .214$	.13
Suspicion						
Segment 1	92	$\chi^2(1) = 0.00, p = .972$	-.00	88	$\chi^2(1) = 2.41, p = .121$	.17
Segment 2	91	$\chi^2(1) = 1.24, p = .265$	-.18	87	$\chi^2(1) = 0.71, p = .399$	.09
Segment 3	92	$\chi^2(1) = 0.82, p = .366$	.01	88	$\chi^2(1) = 0.90, p = .343$	.10
Segment 4	91	$\chi^2(1) = 1.80, p = .180$	.14	89	$\chi^2(1) = 1.84, p = .175$	.14
Segment 5	93	$\chi^2(1) = 0.64, p = .422$	.08	89	$\chi^2(1) = 3.76, p = .053$	.21



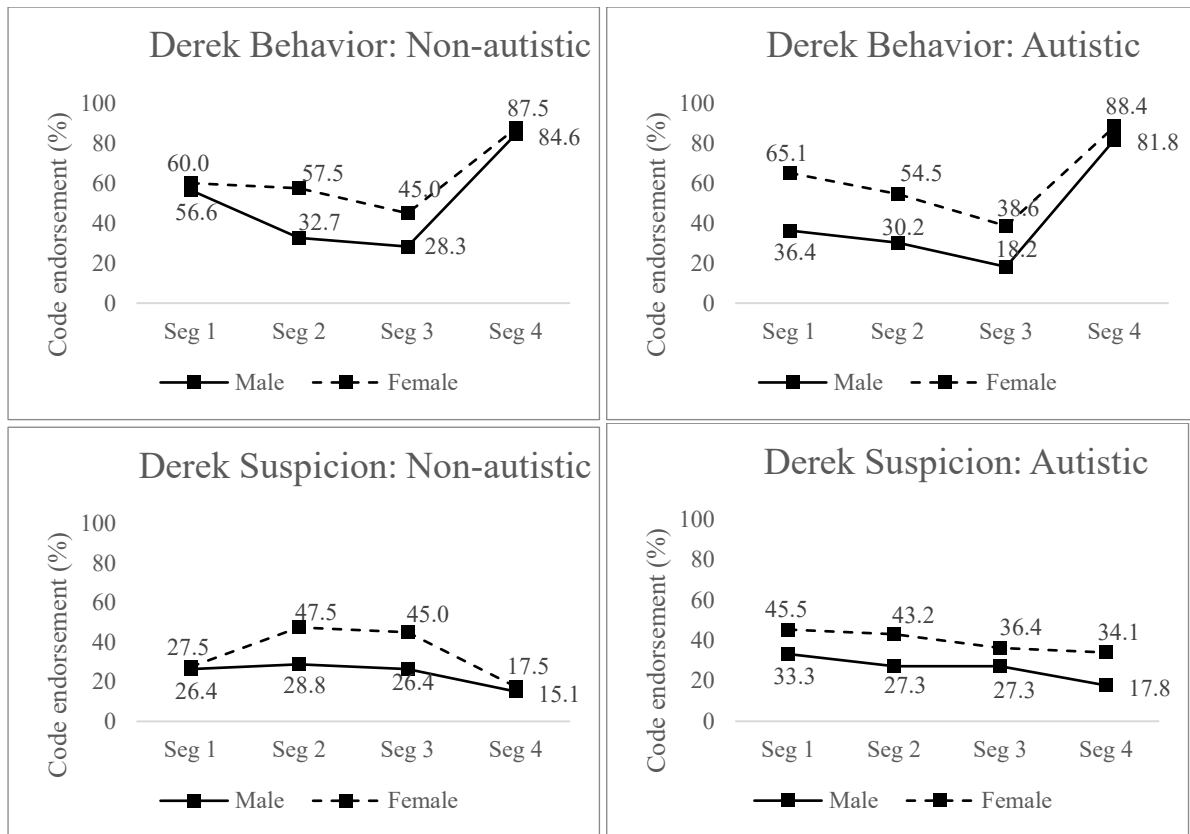
Andy Scenario	Non-autistic			Autistic		
	N	Chi Square	Phi	N	Chi-Square	Phi
Behavior						
Segment 1	89	$\chi^2(1) = 0.11, p = .736$	.04	85	$\chi^2(1) = 1.44, p = .230$	.13
Segment 2	92	$\chi^2(1) = 0.09, p = .769$	.03	86	$\chi^2(1) = 3.92, p = .048$	.21
Segment 3	89	$\chi^2(1) = 1.66, p = .197$	-.14	78	$\chi^2(1) = 0.24, p = .621$	.06
Segment 4	91	$\chi^2(1) = 0.04, p = .841$	-.02	87	$\chi^2(1) = 0.87, p = .351$	.10
Segment 5	90	$\chi^2(1) = 0.02, p = .883$	-.02	85	$\chi^2(1) = 5.21, p = .022$	.25
Segment 6	92	$\chi^2(1) = 0.01, p = .925$	-.01	88	$\chi^2(1) = 2.87, p = .090$	.18
Suspicion						
Segment 1	91	$\chi^2(1) = 0.08, p = .777$	.03	85	$\chi^2(1) = 0.39, p = .532$	.07
Segment 2	92	$\chi^2(1) = 0.93, p = .334$	.10	88	$\chi^2(1) = 1.14, p = .286$	.11
Segment 3	92	$\chi^2(1) = 1.56, p = .212$	-.13	86	$\chi^2(1) = 0.10, p = .756$	.03
Segment 4	92	$\chi^2(1) = 0.01, p = .925$	.01	89	$\chi^2(1) = 3.26, p = .071$	.19
Segment 5	93	$\chi^2(1) = 0.01, p = .917$	-.01	89	$\chi^2(1) = 4.14, p = .042$	.22
Segment 6	93	$\chi^2(1) = 0.55, p = .459$	-.08	89	$\chi^2(1) = 0.32, p = .572$	.06



Amy Scenario	Non-autistic			Autistic		
	N	Chi Square/Fisher	Phi	N	Chi-Square/Fisher	Phi
Behavior						
Segment 1	90	$\chi^2(1) = 2.55, p = .110$	.17	86	$\chi^2(1) = 4.87, p = .027$	.24
Segment 2	91	$p = .316$	-.13	86	$p = .616$	-.11
Segment 3	91	$\chi^2(1) = 2.28, p = .131$	-.16	85	$\chi^2(1) = 0.65, p = .422$	-.09
Segment 4	89	$\chi^2(1) = 3.69, p = .055$	.20	81	$\chi^2(1) = 1.14, p = .286$	.12
Segment 5	92	$p = .503$	.13	87	$p = 1.000$	.00
Suspicion						
Segment 1	92	$\chi^2(1) = 4.20, p = .040$	.21	88	$\chi^2(1) = 7.69, p = .006$	.30
Segment 2	93	$\chi^2(1) = 0.40, p = .527$	-.07	89	$\chi^2(1) = 2.02, p = .155$	.15
Segment 3	93	$\chi^2(1) = 0.27, p = .605$	-.05	88	$\chi^2(1) = 1.69, p = .193$	.14
Segment 4	92	$\chi^2(1) = 1.86, p = .172$	.14	87	$\chi^2(1) = 5.37, p = .020$	.25
Segment 5	93	$p = .504$	.13	88	$p = .360$	.15



Jia Scenario	Non-autistic			Autistic		
	N	Chi Square/Fisher	Phi	N	Chi-Square/Fisher	Phi
Behavior						
Segment 1	90	$\chi^2(1) = 0.58, p = .448$	-.08	84	$\chi^2(1) = 2.53, p = .112$	.17
Segment 2	90	$\chi^2(1) = 2.73, p = .099$	.17	87	$\chi^2(1) = 4.46, p = .035$	.23
Segment 3	88	$\chi^2(1) = 3.50, p = .061$	.20	88	$\chi^2(1) = 3.73, p = .053$	.21
Segment 4	89	$p = 1.000$	.01	84	$p = 1.000$	.00
Segment 5	79	$\chi^2(1) = 2.22, p = .137$	.17	74	$\chi^2(1) = 1.41, p = .236$	.14
Suspicion						
Segment 1	91	$\chi^2(1) = 1.17, p = .280$	.11	86	$\chi^2(1) = 0.14, p = .705$	-.04
Segment 2	92	$\chi^2(1) = 0.78, p = .377$	-.09	88	$\chi^2(1) = 3.81, p = .051$	.21
Segment 3	92	$\chi^2(1) = 0.14, p = .706$	.04	89	$\chi^2(1) = 2.02, p = .155$	.15
Segment 4	92	$\chi^2(1) = 1.17, p = .279$	.11	87	$\chi^2(1) = 0.57, p = .452$	.08
Segment 5	89	$\chi^2(1) = 0.82, p = .367$	.10	87	$\chi^2(1) = 0.30, p = .585$	.06



Derek Scenario		Non-ASD			ASD		
		N	Chi Square/Fisher	Phi	N	Chi-Square/Fisher	Phi
Behavior							
	Segment 1	93	$\chi^2(1) = 0.11, p = .742$	.03	87	$\chi^2(1) = 7.19, p = .007$	.29
	Segment 2	92	$\chi^2(1) = 5.66, p = .017$	.25	87	$\chi^2(1) = 5.26, p = .022$	.25
	Segment 3	93	$\chi^2(1) = 2.78, p = .096$	.17	88	$\chi^2(1) = 4.53, p = .033$	.23
	Segment 4	92	$\chi^2(1) = 0.16, p = .694$	.04	87	$\chi^2(1) = 0.74, p = .391$	.09
Suspicion							
	Segment 1	93	$\chi^2(1) = 0.01, p = .907$	.01	89	$\chi^2(1) = 1.37, p = .242$	.12
	Segment 2	92	$\chi^2(1) = 3.38, p = .066$	.19	88	$\chi^2(1) = 2.44, p = .118$	.17
	Segment 3	93	$\chi^2(1) = 3.49, p = .062$	.19	88	$\chi^2(1) = 0.84, p = .360$	.10
	Segment 4	93	$\chi^2(1) = 0.10, p = .755$	.03	89	$\chi^2(1) = 3.09, p = .079$	.19

Note: After applying a Bonferroni correction for the five correlations at the level of each scenario (i.e., $\alpha = .01$), only two significant correlations remained.