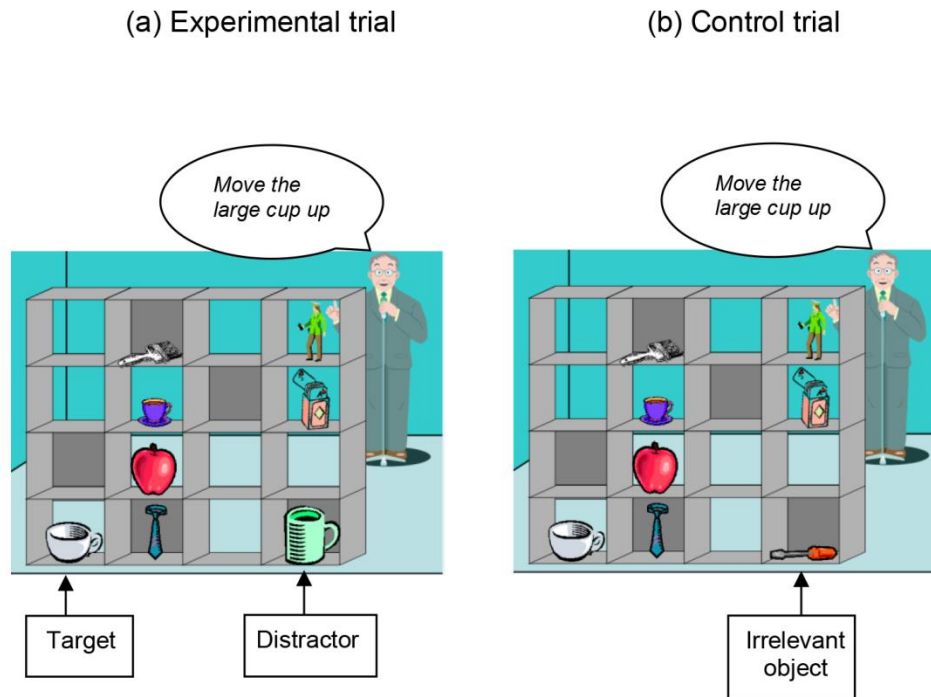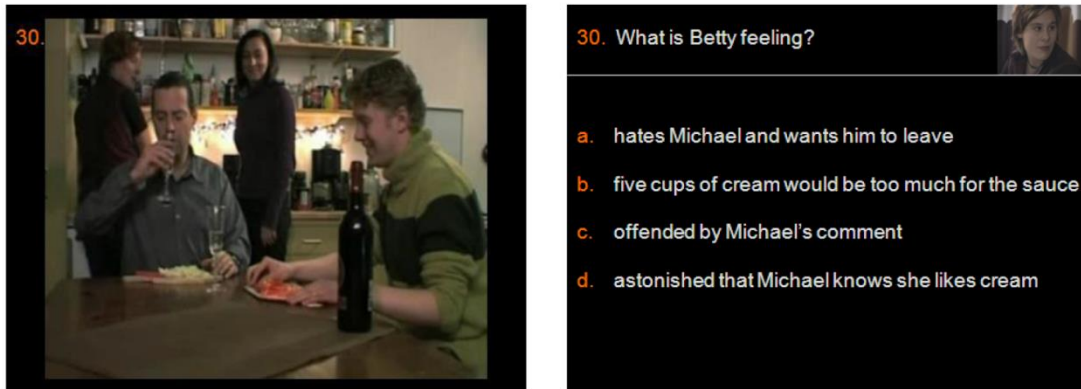**Figure 1.**

Illustration of the Perspectives Task (Director condition), showing an example of an experimental trial (a) and a control trial (b).

The participant hears the verbal instruction "Move the large cup up" from the director. In the experimental trial, if the participant ignored the director's perspective, he would choose the distractor item (large mug), which is the largest cup on the shelves but which cannot be seen by the director, instead of the large cup shared by both the participant's and the director's perspective (Target). In the control trial (b), an irrelevant object (screwdriver) replaces the distractor item.

Figure 2.

An example of a multiple choice question in the Movie for the Assessment of Social Cognition (MASC).
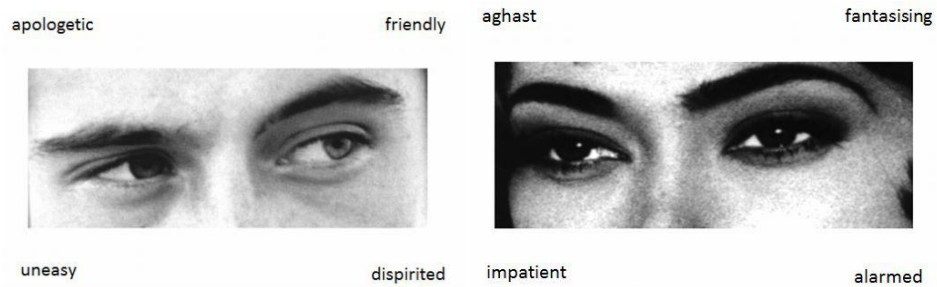

Michael has said to Betty (photo inset on answer slide), "*I bet if it was left to you, you'd go for five cups of cream, right?*" (Sandra has said that the recipe requires two cups). The four possible answers represent different degrees of mentalization: (a) excessive mentalization; (b) no mentalization; (c) accurate mentalization; (d) less mentalization.

Figure 3.

Reading the Mind in the Eyes Test (RMET)

Examples of two of the 36 questions in the Reading the Mind in the Eyes Test,

illustrating the presentation and multiple choice question format. In these examples,

the answers are (a) uneasy, male; (b) fantasizing, female.

Figure 4.

The Perspective Taking Error Rate (outcome variable), illustrating more errors in the

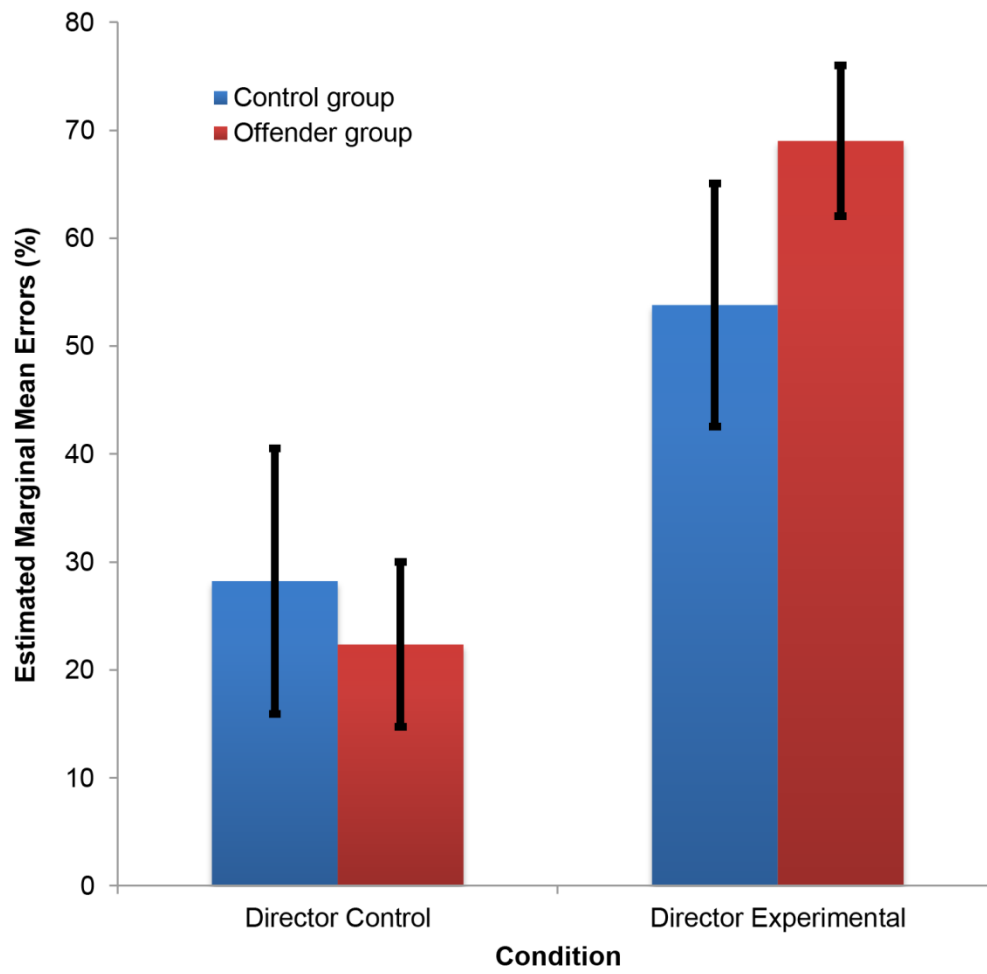offender group than in the control group.

Table 1

Differences in Demographic and Clinical Characteristics Between the Offender Groups and

Controls (*N* = 125)

Variable	Offenders (*n* = 83) Mean (*SD*)	Offenders ASPD (*n* = 54) Mean (*SD*)	Offenders Non-ASPD (*n* = 29) Mean (*SD*)	Control (*n* = 42) Mean (*SD*)
Age (years)	33.2 (10.9)	31.7 (10.4)	36.1 (11.4)	37.5 (15.9)
Education (years after age 7)	9.7 (2.5) [a]	9.5 (2.0) [a]	10.1 (3.2)	10.8 (2.4)
IQ (WTAR)	91.5 (17.4) [b]	89 (17.1) [b]	96.2 (17.3)	101.0 (15.0)
Mental Health Severity Index (GSI) (T-score)	59.3 (14.7)	64 (13.5) [b]	51 (13)	61.5 (11.4)
PAI ASPD	85.0 (9.9) [c]	90.6 (7.5) [c d]	74.6 (2.5) [a]	61.2 (11.8)
PAI Borderline	62.8 (13.7)	68.9 (11.7) [b d]	51.6 (9.5) [a]	58.6 (11.3)

Note. WTAR = Wechsler Test of Adult Reading; GSI = Global Severity Index; PAI = Personality Assessment Inventory; ASPD = Antisocial Personality Disorder.

Mean differences: [a] contrast: significantly different from non-offender, *p* < .05; [b] contrast: significantly different from non-offender, *p* < .01; [c] contrast: significantly different from non-offender, *p* < .001; [d] contrast: significantly different from non-ASPD offender, *p* < .001. All 2-tailed.

Table 2

Comparison of Probation Assessed Risk and Violent Crime Between Sample and London

Offenders[1]

Risk Tier	This Study			London-wide
	Whole sample	ASPD	Non-ASPD	
	($n = 81^{a}$)	($n = 53$)	($n = 28$)	(n=18,110)
Level 1 – low risk	0%	0%	0%	2%
Level 2 – low/medium	16%	17%	15%	22%
Level 3 – medium/high	42%	43%	39%	59%
Level 4 – high/very high	42%	40%	46%	14%
Violent crime	51%	51%	52%	43%

Note. [1] Source: London Probation Offender Assessment System (OASYS)

[a] This information was not available for two of the participants.

Table 3

Mean (*SE*) Performance Scores of the Offender Groups and the Controls on the Three

Mentalization Tasks

Mentalization Task	Subscale	Offenders (*n* = 83) Mean (*SE*)	Offenders ASPD (*n* = 54) Mean (*SE*)	Offenders Non-ASPD (*n* = 29) Mean (*SE*)	Control (*n* = 42) [d] Mean (*SE*)
Perspectives (Errors, %)	Director Control	8.3 (1.3)	10.1 (1.6)	6.1 (2.2)	9.3 (1.9)
	Director Experimental	76.9 (2.4) [b]	79.7 (2.7)	72.0 (4.8)	66.2 (4.6)
	No-Director Control	8.6 (1.9)	10.8 (2.7)	4.7 (2.0)	8.7 (2.3)
	No-Director Experimental	29.7 (3.4)	32.11 (4.5)	25.4 (5.0)	41.9 (6.5)
	Perspective-taking Error rate	69.5 (2.6) [b]	68.2 (2.3) [a]	71.7 (4.3) [a]	57.1 (3.8)
MASC (Correct, %)	Correct MZ answers	62,4 (1.4) [b]	61.3 (1.8) [b]	64.3 (2.3)	69.0 (2.0)
	NonMZ answers	70.1 (2.2) [b]	69.8 (2.8)	70.8 (3.6)	66.1 (3.1)
	Ratio of MZ to total correct	47.7 (0.9) [a]	47.1 (1.2) [a]	48.5 (1.6)	51.9 (1.3)
	Feelings	60.8 (1.5) [c]	59.6 (2.0) [b]	62.7 (2.5)	68.8 (2.2)
	Intentions	63.6 (1.9)	62.9 (2.4)	64.8 (3.0)	69.2 (2.6)
	Thinking	64.3 (2.2)	62.7 (2.9)	67.0 (3.7)	70.7 (3.2)
	Excessive MZ	15.5 (0.9)	15.3 (1.1)	15.9 (1.4)	15.3 (1.2)
	Less MZ	14.5 (0.8)	14.7 (1.0) [b]	14.2 (1.3) [a]	9.9 (1.1)
	No MZ	7.5 (0.6)	8.7 (0.7) [a]	5.6 (1.0)	5.8 (0.9)
RMET (Correct, scale)	Correct answers	22.0 (0.59) [b]	21.3 (0.7) [c]	23.1 (1.0) [a]	25.7 (0.8)
	Gender of eyes	34.4 (0.3)	34.7 (0.4)	34.0 (0.5)	34.7 (0.6)

Note. MASC = Movie for the Assessment of Social Cognition; MZ = Mentalizing; RMET = Reading the Mind in the Eyes Test.

Covariates in model: Education Years; WTAR, PAI Borderline, Mental Health Severity

[a] contrast: significantly different from non-offender, *p* < .05; [b] contrast: significantly different from non-offender, *p* < .01; [c] contrast: significantly different from non-offender, *p* < .001.

[d] Two members of the study control group (*n* = 43) did not complete the Perspectives task, and two others did not complete the RMET.

Table 4

Multinomial Logistic Regression Predicting Likelihood of Offender Groups according to

Covariates[a] and Mentalization Measures

	B	z	SE	p	Change in odds for a SD increase in Controls	95% Confidence
1: All Offenders						
MASC Correct	-.061	-1.91	.030	.057	.613	.884
RMET Correct	-.175	-3.01	.049	.003**	.368	.749
Perspectives Correct	-.026	-2.55	.010	.011*	.535	.955
Constant	11.110	3.81	194,926	.000		221
2: Offenders Non-ASPD						
MASC Correct	-.055	-1.39	.038	.166	.639	.875
RMET Correct	-.158	-2.33	.058	.020*	.406	.748
Perspectives Correct	-.031	-2.41	.012	.016*	.481	.946
Constant		3.69	4,030,394	.000		672
3: Offenders ASPD						
MASC Correct	-.070	-1.99	.033	.046*	.570	.871
RMET Correct	-.192	-3.05	.052	.002**	.335	.730
Perspectives Correct	-.024	-1.99	.012	.047*	.563	.953
Constant		2.69	12,982	.007		9.60

Note. MASC = Movie for the Assessment of Social Cognition; RMET = Reading the Mind in the Eyes Test; WTAR = Wechsler Test of Adult Reading.

[a] Covariates used: Age, WTAR, PAI Borderline, Mental Health Severity.