

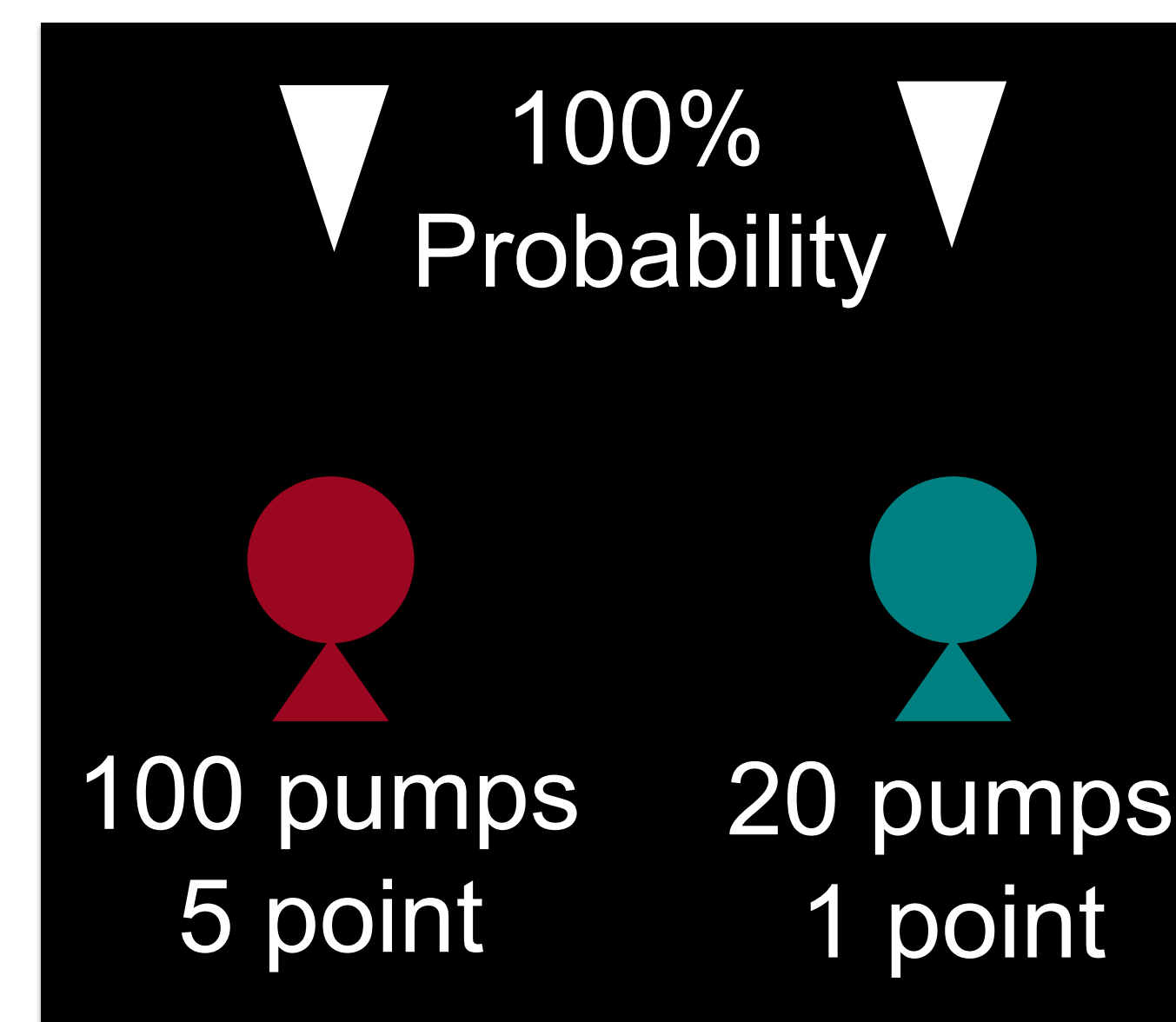
# Transdiagnostic Examination of Effort-Cost Decision-Making

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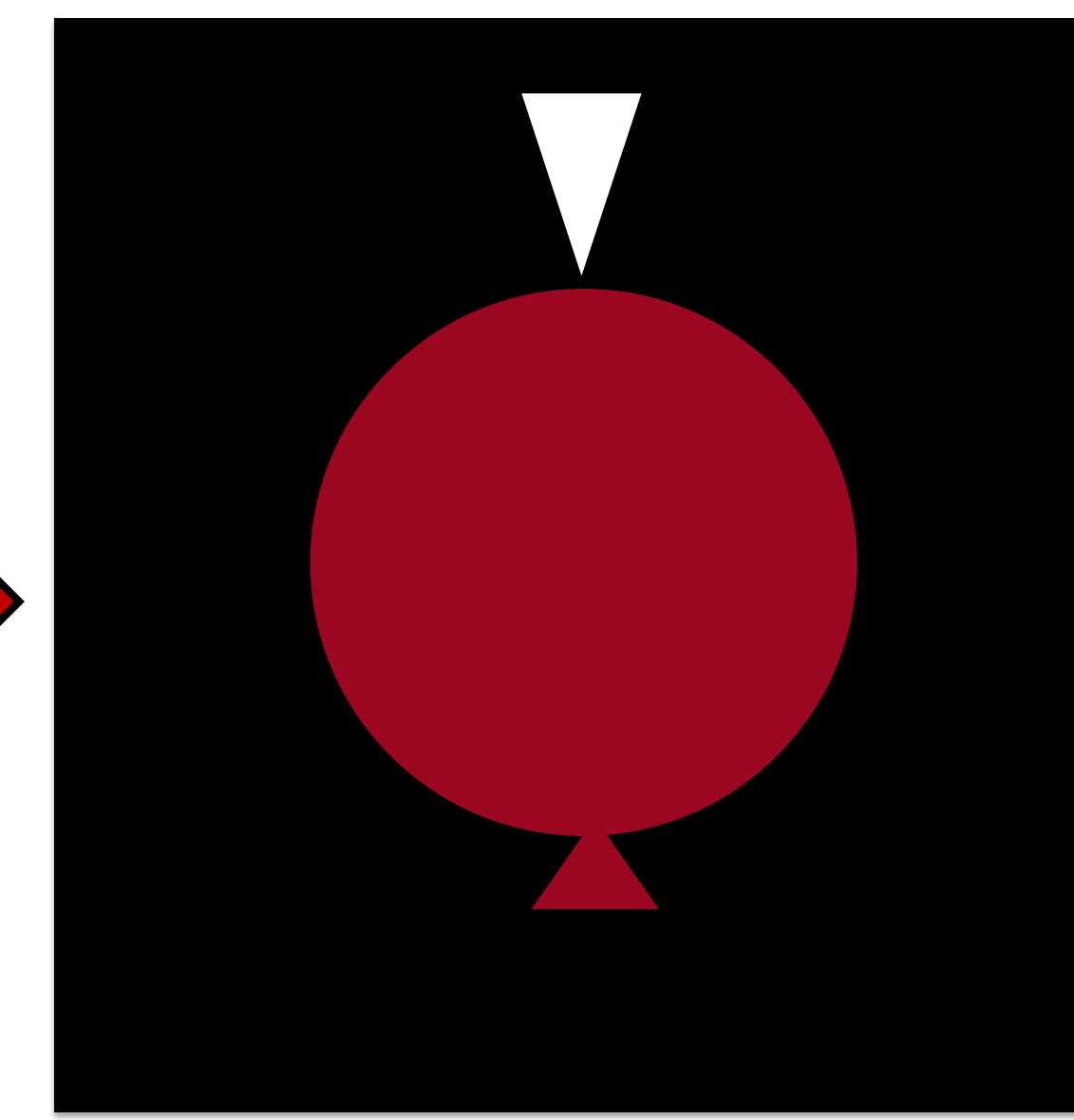
## INTRODUCTION

- Reduced motivation is a key feature of both psychotic and mood pathology.
- Research suggests that alterations in effort-cost decision-making (ECDM), estimation of the work required to obtain reward, contributes to motivation in psychotic and mood pathology (Treadway et al., 2012; Gold et al., 2012).
- People with psychotic and mood pathology are less willing to exert effort for rewards (Culbreth et al., 2017).
- This study examined whether ECDM is similar across psychiatric groups characterized by amotivation.

## HOW IS EFFORT-COST DECISION-MAKING ASSESSED?



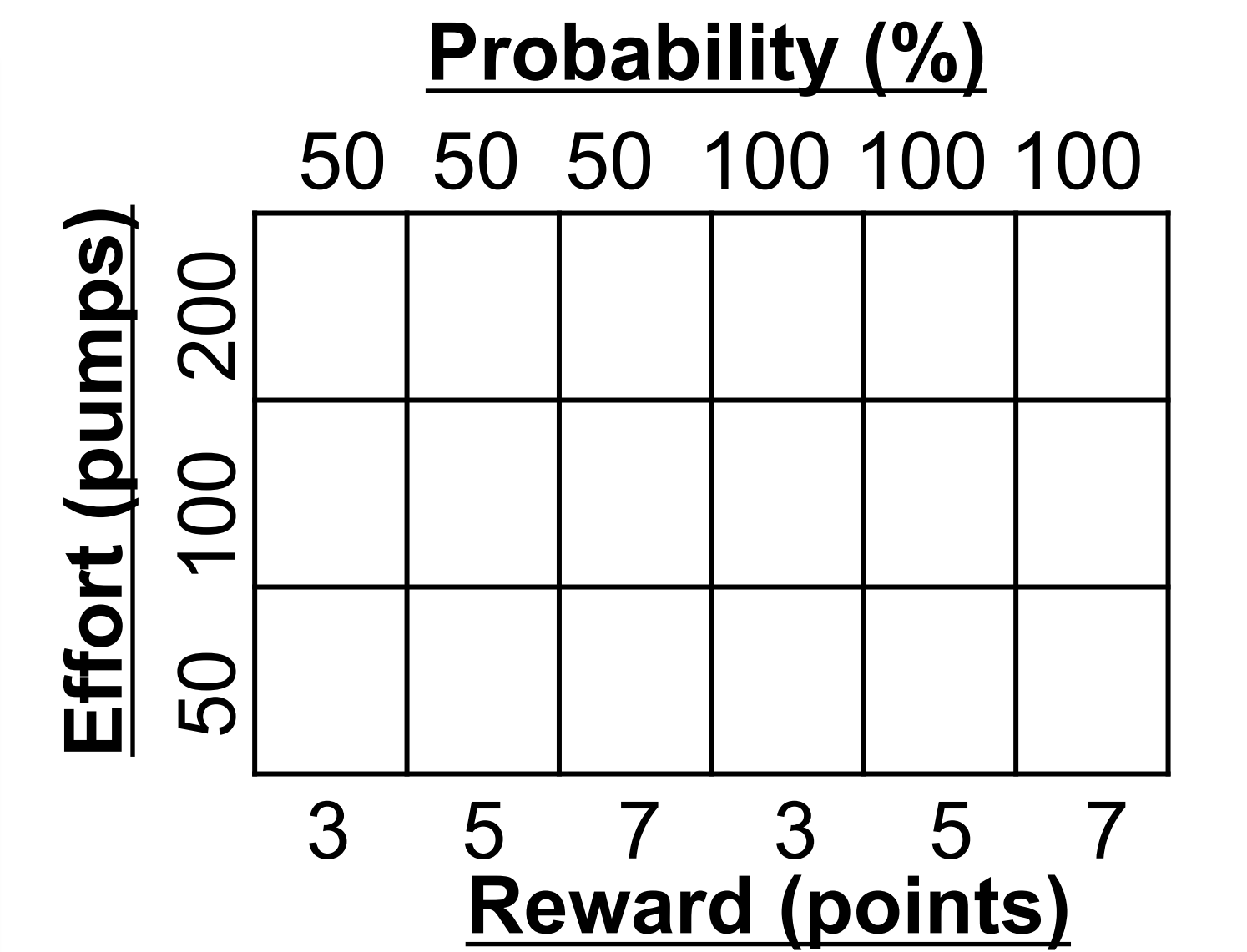
Subjects choose between a hard or an easy option.



Subjects complete the chosen effort



Feedback is given about points earned



Reward probability, hard reward, and hard effort vary across trials

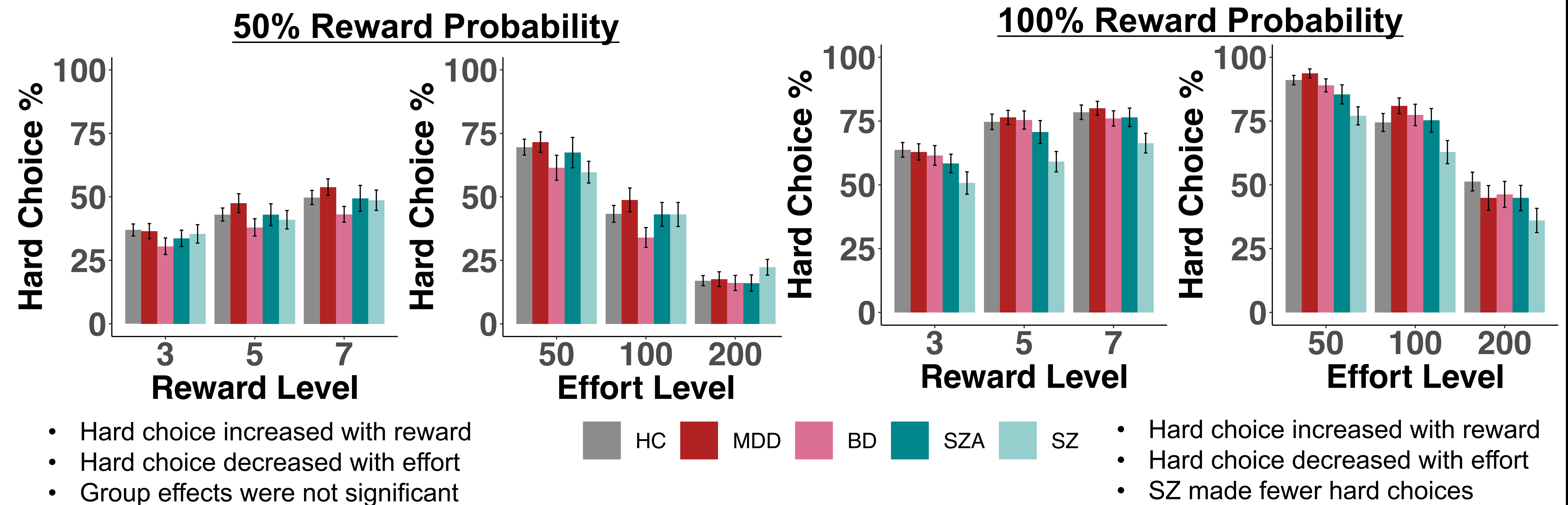
## STUDY DESIGN

- Participants with schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, and controls completed a physical ECDM task.
- **Question 1:** Is ECDM similar across psychiatric groups characterized by motivational impairment?
- **Question 2:** Is ECDM associated with symptoms within groups characterized by motivational impairment?

## SAMPLE CHARACTERISTICS

	HC	MDD	BD	SZA	SZ
Sample (N)	69	39	38	28	32
Age	34.8 (10.3)	34.0 (9.4)	37.6 (10.9)	36.4 (11.7)	38.8 (11.2)
Gender (N)					
Female	35	18	23	10	10
Male	33	20	35	16	22
Non-Binary	1	1	0	2	0
Race (N)					
White	33	27	25	17	13
Black	17	6	5	7	17
Asian	14	1	1	2	1
Multiple	5	2	4	1	0
Other	0	1	1	0	0
Unreported	0	2	2	1	1
Education					
Personal	16.4 (2.4)	16.4 (2.0)	15.2 (2.7)	14.0 (2.7)	14.5 (2.5)
Parental	14.0 (3.8)	17.0 (13.8)	15.2 (7.5)	15.2 (2.5)	14.3 (2.4)
CANS					
MAP		8.4 (4.4)	7.7 (5.5)	8.4 (3.9)	10.3 (7.6)
EXP		2.2 (2.1)	1.9 (2.5)	3.1 (2.9)	3.0 (2.6)
PHQ-9		8.1 (4.8)	5.9 (6.1)	7.9 (5.8)	4.9 (3.7)

## QUESTION 1: DO GROUPS DIFFER IN EFFORT-COST DECISION-MAKING?



## QUESTION 2: ARE SYMPTOMS RELATED TO EFFORT-COST DECISION-MAKING?

