

Cross-Racial Identification and the Influence of Person Descriptions

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Cross-Racial Identification

Cross-racial identification...

The cross-race effect (CRE) is the finding that other-race faces are more psychologically (and perceptually) confusable than own-race faces (Malpass & Kravitz, 1969)




Meta-analytic estimates of the CRE...



Outcome	k	g^U	95% CI
Hits (correct IDs)	74	0.24*	(0.21, 0.27)
False Alarms (false IDs)	53	-0.39*	(-0.42, -0.35)
Discrimination	56	0.82*	(0.78, 0.85)
Response Bias	49	0.30*	(0.26, 0.33)

Meissner & Brigham (2001) *PPP&L*

Moderators of the CRE...



Moderator	Outcome	Direction of Effect
Whites vs. Blacks	False Alarms Discrimination	Whites > Blacks
Eyewitness vs. Recognition Paradigm	<i>ns.</i>	<i>ns.</i>
Stimulus Variation	Hits Response Bias	Change > Same
Study Time	Discrimination	Shorter > Longer
Retention Interval	Response Bias	Longer > Shorter

Meissner & Brigham (2001) *PPP&L*

Moderators of the CRE...

Race	g^U on Discrimination
Whites	1.06
Blacks	0.66
Others	0.74

Meissner & Brigham (2001) *PPP&L*

When do we see the CRE?

- ü in both perceptual discrimination and memory tasks
- ü in both laboratory and field studies
- ü across a range of races/ethnicities, though the effect is larger with majority populations
- ü across children, adults, and the elderly
- ü system variables introduced at test generally fail to moderate the effect

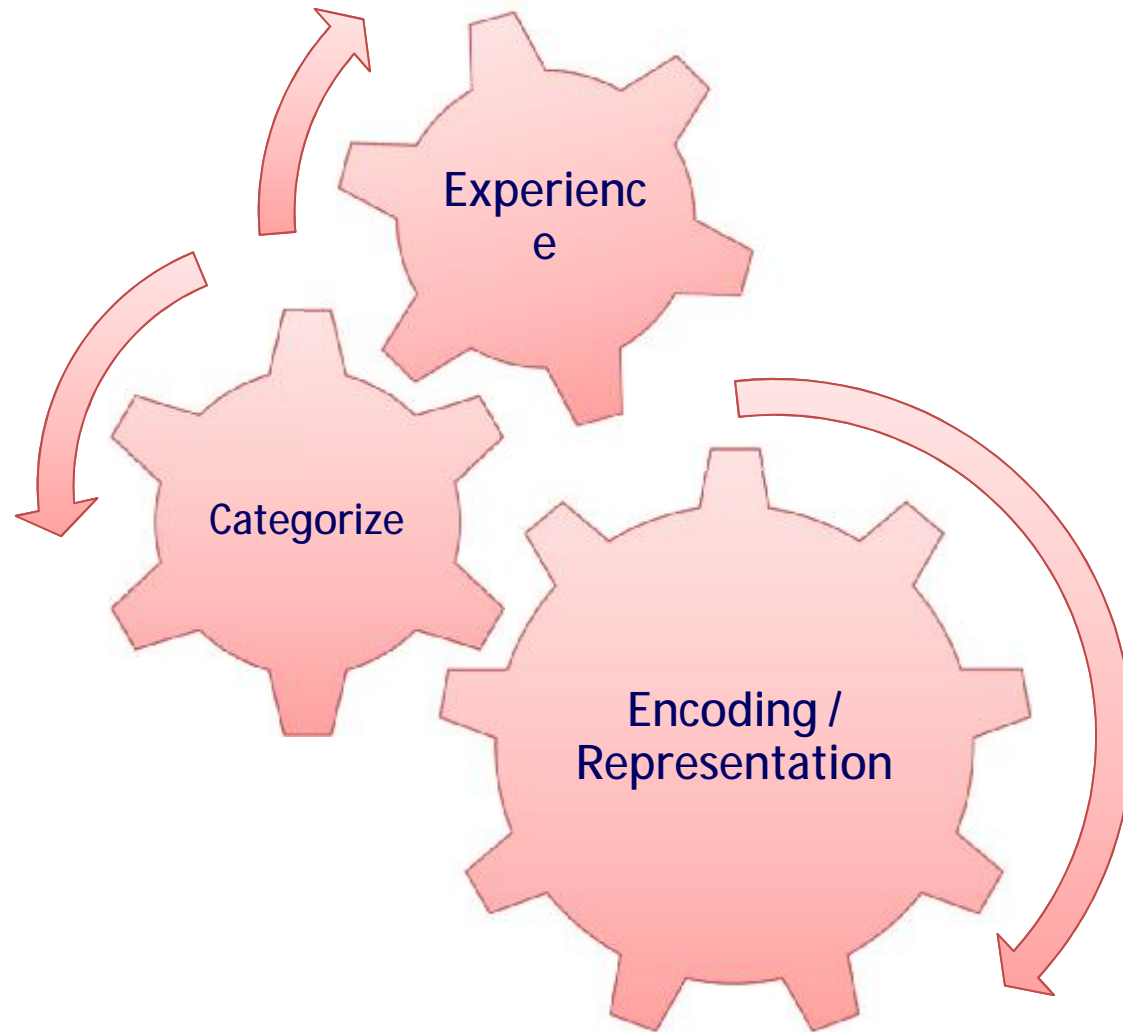
The criminal justice context...



An analysis of 216 wrongful conviction cases by Zeke Edwards (former Fellow at the Innocence Project) found that cross-racial (mis)identification was a factor in 66 of 162 eyewitness cases (41%), see <http://www.innocenceproject.org>.

Brandon Garrett's (2011) analysis of wrongful conviction cases suggested that 93 of 190 cases (49%) involved cross-racial identification.

Social-cognitive mechanisms of the CRE?



Forthcoming special issue on the CRE
in *Visual Cognition* (J. Tanaka, Ed.)

O'Toole & Natu	computational approaches
Natu & O'Toole	neuropsychological approaches
Tanaka, Heptonstalla, & Hagen	perceptual expertise and plasticity
Scott & Fava	developmental and comparative data
Meissner, Susa, & Ross	implications for security screening
Hugenberg, Wilson, See, & Young	review of social-cognitive mechanisms

Person Descriptions


Neil v. Biggers (1972)...



The Supreme Court outlined five factors that may be considered when assessing reliability of an identification:

1. Opportunity to view the criminal
2. Degree of attention during the crime
3. Confidence (certainty) expressed
4. Retention interval between the crime and identification
5. Accuracy of the prior description of the defendant

Meta-analytic estimates of the description-identification relationship...



Outcome	k	r	95% CI
Description Accuracy	32	0.14*	(0.11, 0.18)
Description Quantity	33	-0.04	(-0.08, 0.00)
# Correct Descriptors	22	-0.02	(-0.07, 0.02)
# Incorrect Descriptors	16	-0.18*	(-0.23, -0.13)
Congruence	5	0.12	(0.00, 0.24)


Meissner, Sporer, & Susa (2008) *EJCP*

The influence of a person description on subsequent identification...

The act of retrieving a memory can influence subsequent attempts at retrieval in both positive and negative directions.

Studies within the eyewitness memory and face recognition literatures have demonstrated both *verbal facilitation* (positive) and *verbal overshadowing* (negative) effects of describing a face on subsequent identification.

Meta-analytic estimates of the description-identification relationship...



Outcome	k	r	95% CI
Eyewitness Paradigms ("Verbal Overshadowing")	29	-0.12*	(-0.17, -0.08)
Face Recognition Paradigms ("Verbal Facilitation")	9	0.15*	(0.06, 0.23)
Composite Reproduction	8	0.21*	(0.07, 0.35)

Meissner & Brigham (2001) ACP

Conclusions



The cross-race effect is a robust and replicable phenomenon that is likely to influence eyewitness identification. The effect is generalizable across a wide array of races or ethnicities, and it appears to be unaffected by manipulations at test.

The accuracy of person descriptions is weakly, though significantly, associated with later identification accuracy (particularly the frequency of incorrect details).

Generation of a description can influence subsequent identification accuracy both positively and negatively, though this complex relationship continues to be investigated for key moderating factors.