

Patterns of Self-Other Overlap in Children

Delaney A. Collyer & Stuart Marcovitch
University of North Carolina Greensboro



Introduction

Self-Other Overlap

“Lessened self/other distinction” or confusion of self and other (Aron, Aron, Tudor, & Nelson, 1991; Batson et al., 1997)
“Shared or interconnected identities” (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997)

Study Rationale:

In adults, self-other overlap increases prosocial orientation (Laham, Tam, Lalljee, Hewstone, & Voci, 2009) and empathy. It also impacts learning by increasing neurological reactions to others’ learning experiences (Kang, Hirsh, & Chasteen, 2010; Meyer et al., 2013) and decreasing sense of threat from others’ success (Gardner, Gabriel, & Hochschild, 2002).

Social and learning experiences in early and middle childhood, which are a key part of children’s development, could be impacted by children’s experiences of self-other overlap.

However, little is known about self-other overlap in 5- to 8-year-olds. Changes in children’s cognitive abilities (Best & Miller, 2010) and their social environments (Eccles, 1999) could impact their ability to develop self-other overlap with peers.

Hypotheses

Perceived Closeness

Conscious reports of closeness or similarity with others (Myers & Hodges, 2012)
Hypothesis: Younger (ages 5-6) and older children (ages 7-8) will demonstrate target-specific Perceived Closeness (specifically, higher scores for a best friend than for an acquaintance)

Overlapping Representations

Merged or confused cognitive representations of self and other (Myers & Hodges, 2012)
Hypothesis: Only older children (ages 7-8) will demonstrate target-specific Overlapping Representations (higher scores for a best friend than an acquaintance)

Participants

Forty-five 5- to 6-year-olds (17 females, $M_{\text{age}} = 5.90$, $SD = .543$) and 45 7- to 8-year olds (21 females, $M_{\text{age}} = 8.03$, $SD = .570$).

Measures and Procedure

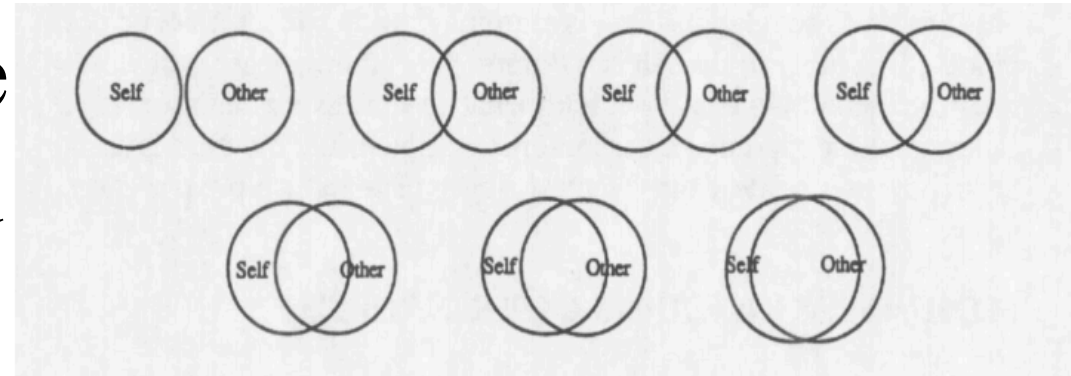
Perceived Closeness

z-scores summed to make a composite

Perceived similarity: How much do you think [target name] is like you? (*not at all* – *very much*)

We-ness: How much would you use the word ‘we’ to talk about you and [target name]? (*never* – *always*)

IOS: Point to the picture that best shows how you and [target name] are.



Overlapping Representations

Rate self, BF, and AQ each on unique set of 6 traits (3 positive, 3 negative), then perform distractor task

Trait misattribution: How about the word _____? Can you remember if I asked you that about [you, *BF’s name*, or *AQ’s name*]?

Absolute difference in trait ratings: *Rate self on traits previously rated for BF and AQ, find absolute difference between self and target others*

Results

Main Analyses

Perceived Closeness

2 X 2 (Age, between Ss X Target Relationship, within Ss) mixed ANOVA on Perceived Closeness composite z-score
Age: $F(1, 87) = .455, p = .502, \eta^2_p = .005$
Target Relationship: $F(1, 87) = 40.121, p < .001, \eta^2_p = .316$
Age X Target Relationship: $F(1, 87) = 3.410, p = .068, \eta^2_p = .038$

Did Perceived Closeness differ by target? - Yes
Was this difference the same for both age groups, as predicted? – NO

Overlapping Representations

2 X 2 (Age, between Ss X Target Relationship, within Ss) mixed ANOVA on Trait Misattribution (as a proportion of total errors)
2 X 2 (Age, between Ss X Target Relationship, within Ss) mixed ANOVA on Absolute Difference in Trait Ratings
Null effects

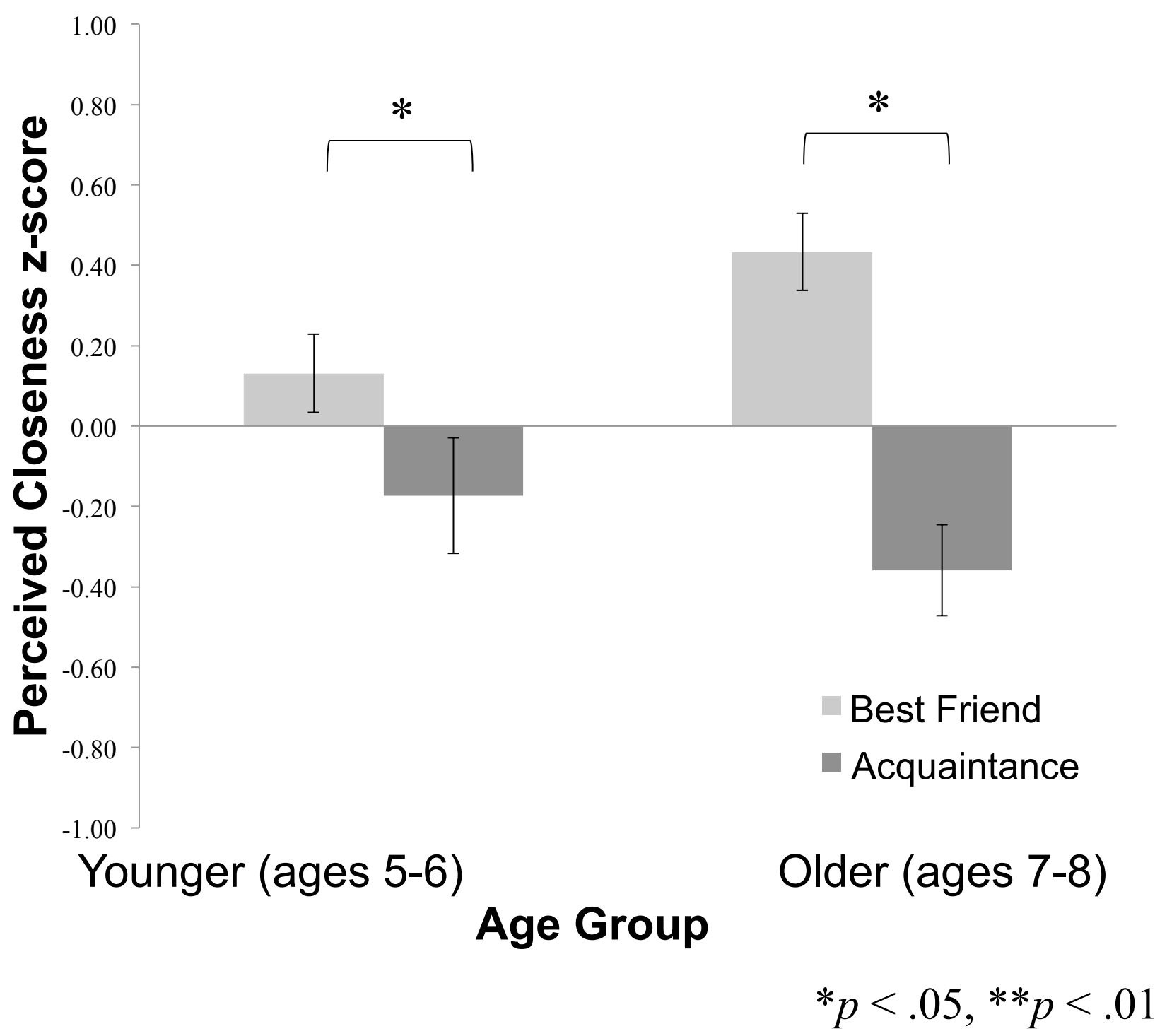
Did Overlapping Representations differ by target for older children only, as predicted? – NO

Exploratory Analyses

Overlapping Representations

2 X 2 X 2 X 2 (Age, between Ss X Target Relationship, within Ss X Misattribution Direction, within Ss X Word Valence, within Ss) ANOVA on Trait Misattribution (as a proportion of total errors)
Word Valence X Misattribution Direction X Age: $F(1, 87) = 5.557, p = .021, \eta^2_p = .060$
Younger children misattributed significantly more negative than positive words from self to others, and misattributed significantly more positive than negative words to the self from others.

2 X 2 (Age, between Ss X Target Relationship, within Ss) mixed ANOVA on differences between others and the self on ratings of negative trait adjectives
Age: $F(1, 88) = 4.832, p = .031, \eta^2_p = .052$
Younger children rated others less favorably than the self on negative traits, whereas older children rated others more favorably than the self on negative traits.



Discussion

Perceived Closeness

Both younger and older children expressed higher perceived closeness with a best friend than with an acquaintance, but the magnitude of this differentiation increased with age.

Findings fit with previous research demonstrating children’s ability to differentiate overt levels of closeness with others (Sturgess, Dunn, & Davies, 2001).

Increased differentiation in ratings with age may be related to an increase in awareness of the costs and benefits of affiliation (Bennett, Yuill, Banerjee, & Thomson, 1998).

Overlapping Representations

No effects were found, implying either lack of differentiation across age groups or insufficient ability to detect differences. However, some patterns did emerge in exploratory analyses.

Younger children rated and attributed traits in predominantly self-enhancing ways.

Older children were more willing to attribute negative attributes to the self, hinting that older children have incorporated both positive and negative traits into their self-views.

Older children also showed some enhancement of others. This may be a form of socially acceptable self-enhancement, a way of demonstrating humility while “basking in others’ glory” (Gardner et al., 2002).

References

Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60(2), 241-253. doi: 10.1037/0022-3514.60.2.241

Batson, C. D., Sager, K., Garst, E., Kang, M., Rubchinsky, K., & Dawson, K. (1997). Is empathy-induced helping due to self-other merging? *Journal of personality and social psychology*, 73(3), 495-509. doi: 10.1037/0022-3514.73.3.495

Bennett, M., Yuill, N., Banerjee, R., & Thomson, S. (1998). Children’s understanding of extended identity. *Developmental Psychology*, 34, 322-331. doi: 10.1037/0012-1649.34.2.322

Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child Development*, 81(6), 1641-1660. doi:10.1111/j.1467-8624.2010.01499.x

Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., Neuberg, S. L. (1997). Reinterpreting the empathy-altruism relationship: When one into one equals oneness. *Journal of Personality and Social Psychology*, 73(3), 481-494. doi: 10.1037/0022-3514.73.3.481

Eccles, J. S. (1999). The development of children ages 6 to 14. *The Future of Children*, 9(2), 30-44. doi: 10.2307/1602703

Gardner, W. L., Gabriel, S., & Hochschild, L. (2002). When you and I are “we,” you are not threatening: The role of self-expansion in social comparison. *Journal of Personality and Social Psychology*, 82, 239-251. doi: 10.1037/0022-3514.82.2.239

Kang, S. K., Hirsh, J. B., & Chasteen, A. L. (2010). Your mistakes are mine: Self-other overlap predicts neural response to observed errors. *Journal of Experimental Social Psychology*, 46(1), 229-232. doi: 10.1016/j.jesp.2009.09.012

Laham, S. M., Tam, T., Lalljee, M., Hewstone, M., & Voci, A. (2009). Respect for persons in the intergroup context: Self-other overlap and intergroup emotions as mediators of the impact of respect on action tendencies. *Group Processes and Intergroup Relations*, 13(3), 301-317. doi: 10.1177/1368430209344606

Meyer, M. L., Masten, C. L., Ma, Y., Wang, C., Shi, Z., Eisenberger, N. I., Han, S. (2013). Empathy for the social suffering of friends and strangers recruits distinct patterns of brain activation. *Social Cognitive and Affective Neuroscience*, 8(4), 446-454. doi: 10.1093/scn/wns019

Myers, M. W., & Hodges, S. D. (2012). The structure of self-other overlap and its relationship to perspective taking. *Personal Relationships*, 19, 663-679. doi: 10.1111/j.1475-6811.2011.01382.x

Sturgess, W., Dunn, J., & Davies, L. (2001). Young children’s perceptions of their relationships with family members: Links with family setting, friendships, and adjustment. *International Journal of Behavioral Development*, 25(6), 521-529. doi: 10.1080/01650250042000500