



The Health & Well-being Lab

THE BENEFICIAL ROLE OF SELF-COMPASSION IN RESPONSE TO DIET FAILURES

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Who is most prone to diet failures?

Restrained eaters (i.e., dieters)

- Restrained eaters attempt to bring the regulation of their eating behaviors under “cognitive” rather than physiological control
- Restrained eaters are prone to “diet failures” across multiple situations (Hawks et al., 2008 for a review)
 - Emotional arousal (i.e., high negative affect, distress)
 - Unpleasant self-awareness
- But how do restrained eaters respond to their own failures?



Who is most prone to diet failures?

Those who regulate their eating behaviors for more “controlled” rather than “autonomous” reasons

- Controlled motivation: behaviors are performed to comply with external and/or internal pressures; lacks true self-endorsement
- Autonomous motivation: behaviors are performed for their own sake (i.e., inherent satisfaction, enjoyment, congruence with one’s deepest values); true self-endorsement

Autonomous vs controlled regulation of eating behaviors:

- Greater concerns for the quality vs quantity of food
- Healthier eating habits
- Greater weight-loss

Deci & Ryan, 1985; Mata et al., 2009; Mask & Blanchard, 2011; Otis & Pelletier, 2008; Pelletier et al., 2004; Williams et al., 1996



A healthier response to failures

Self-compassion (Neff, 2003)

- Mindfulness, self-kindness, common humanity
- Enhances one's psychological health and well-being
- Life satisfaction, personal initiative, happiness, optimism, emotional intelligence, etc. (Neff, 2009)
- Less depression, anxiety, and stress (MacBeth & Gumley, 2012)
- Facilitates the practice of health-promoting behaviors such as healthy eating, physical activity, getting enough sleep and managing stress effectively via more adaptive emotions (Sirois et al., 2014)



A healthier response to failures

Responding to self-regulation failures with self-compassion

- Smoking reduction (Kelly et al., 2010)
- Fewer binge eating episodes (Webb & Forman, 2013)
- More intuitive eating (Schoenefeld & Webb, 2013)
- Diminished negative affect and food intake following a diet failure among restrictive eaters (Adams & Leary, 2007)



Research questions and hypotheses

Research question

- Would self-compassion mitigate the emotional responses of those most prone to experiencing setbacks in their diet?

Hypotheses

- Restrained eaters (vs unrestrained) who regulate their eating behaviors for controlled reasons (vs autonomous) will report more negative emotions following a retrospectively recalled diet failure when they have little (vs high) self-compassion



Method

Participants

- 143 college and undergraduate students
 - 122 women vs 22 men
- 81% Caucasian
- Aged: 22.18 (6.58) years
- Participation was on a volunteer basis (\$50 incentive for a draw)
- *Inclusion criteria*: currently trying to change their diet
- *Exclusion criteria*: currently suffering or having ever suffered from an eating disorder



Method

Restraint status (RS; Polivy et al., 1978)

- “How often are you dieting?” ($\alpha = .74$)
 - Restrained eaters: $\text{sum} \geq 15$
 - Unrestrained eaters: $\text{sum} < 15$

Regulation of eating behaviors (REBS; Pelletier et al., 2004)

- “I regulate my eating behaviors because I would feel ashamed of myself if I was not eating healthy” (controlled; $\alpha = .78$)
- “I regulate my eating behaviors because eating healthy is an integral part of my lifestyle” (autonomous; $\alpha = .89$)

Self-compassion (SCS-SF; Raes et al., 2011)

- “When I’m going through a very hard time, I give myself the caring and tenderness I need” ($\alpha = .85$)



Method

Procedure & outcomes

- Reflect on a recent episode (within the past 2 months) where “they broke their diet but didn’t want to” (5 mins.) and describe it in as much detail as possible
- Complete a series of visual analogue scales (145mm) pre and post-recall ranging from “not at all” to “extremely”
 - NA: upset, guilty, angry, dissatisfied with self, ashamed
 - T1: baseline ($\alpha = .82$) T2: post-recall ($\alpha = .91$)
 - PA: determined, inspired, proud, thankful, hopeful
 - T1: baseline ($\alpha = .60$) T2: post-recall ($\alpha = .90$)



Table 1. Group differences in constructs

	Unrestrained eaters (n = 61)	Restrained eaters (n = 78)	
Autonomous REB	5.02 (1.15)	5.28 (1.11)	t(137) = -1.35
Controlled REB	2.06 (0.72)	2.63 (0.87)	t(137) = -4.15***
Self-compassion	3.19 (0.71)	2.93 (0.78)	t(138) = 2.04*
T1 Negative affect	29.78 (24.60)	37.72 (24.11)	t(139) = -1.93 ^t
T2 Negative affect	40.17 (28.60)	56.35 (32.84)	t(139) = -3.08**
T1 Positive affect	93.70 (23.43)	95.05 (25.88)	t(138) = -0.32
T2 Positive affect	91.95 (25.76)	84.03 (29.15)	t(139) = 69



Table 2. Inter-correlations between constructs

	Autonomous	Controlled	Self-compassion
Self-compassion	.04	-.38**	
T1 Negative affect	-.11	.34**	-.49**
T2 Negative affect	-.16	.37**	-.45**
T1 Positive affect	.17	-.15	.42**
T2 Positive affect	.11	-.26**	.47**

* $p < .05$, ** $p < .01$, *** $p < 0.05$



Table 3. Regression model predicting post-recall negative affect for restrained eaters who feel controlled

	B	95% LLCI	95% ULCI
Autonomous	-3.51 ^t	-7.02	0.01
Baseline negative affect	0.70***	0.52	0.88
Restraint status	3.41	-5.21	12.02
Controlled	4.05	-1.10	9.20
Self-compassion	-2.58	-8.81	3.65
Restraint x Controlled	10.62*	0.15	21.08
Restraint x Self-compassion	4.76	-6.83	16.36
Controlled x Self-compassion	-5.62	-12.14	0.90
Restraint x Controlled x Self-compassion	-20.95**	-34.32	-7.59

$$F(9, 128) = 17.49***, R^2 = .55$$

^tp = .05, * p < .05, ** p < .01, *** p < 0.05



Table 4. Regression model predicting post-recall negative affect for restrained eaters who feel autonomous

	B	95% LLCI	95% ULCI
Controlled	4.91	-.58	10.39
Baseline negative affect	.67***	.48	.87
Restraint status	6.48	-2.32	15.27
Autonomous	-2.36	-6.02	1.30
Self-compassion	-6.01 ^t	-12.37	.35
Restraint x Autonomous	-.23	-7.49	7.02
Restraint x Self-compassion	1.23	-10.50	12.95
Autonomous x Self-compassion	1.88	-3.56	7.31
Restraint x Autonomous x Self-compassion	7.34	-3.47	18.14

$$F(9, 128) = 13.96***, R^2 = .50$$

^t $p = .05$, * $p < .05$, ** $p < .01$, *** $p < 0.05$



Table 5. Regression model predicting post-recall positive affect for restrained eaters who feel controlled

	B	95% LLCI	95% ULCI
Autonomous	0.33	-2.37	3.04
Baseline positive affect	0.79***	0.66	0.92
Restraint status	-2.56	-9.18	4.07
Controlled	-2.26	-6.15	1.64
Self-compassion	3.72	-0.98	8.42
Restraint x Controlled	-1.80	-9.82	6.22
Restraint x Self-compassion	-1.87	-10.73	6.99
Controlled x Self-compassion	4.56	-0.47	9.60
Restraint x Controlled x Self-compassion	15.01**	4.75	25.28

$$F(9, 127) = 27.38***, R^2 = .66$$

[†] $p = .05$, * $p < .05$, ** $p < .01$, *** $p < 0.05$



Table 6. Regression model predicting post-recall positive affect for restrained eaters who feel autonomous

	B	95% LLCI	95% ULCI
Controlled	-2.65	-6.73	1.44
Baseline positive affect	0.78***	0.64	0.91
Restraint status	-5.14	-11.69	1.40
Autonomous	-0.51	-3.23	2.21
Self-compassion	6.19*	1.44	10.94
Restraint x Autonomous	2.29	-3.10	7.68
Restraint x Self-compassion	-1.85	-10.61	6.92
Autonomous x Self-compassion	-1.43	-5.52	2.66
Restraint x Autonomous x Self-compassion	-6.95	-14.96	1.06

$$F(9, 127) = 24.99***, R^2 = .64$$

^t $p = .05$, * $p < .05$, ** $p < .01$, *** $p < 0.05$



Figure 1. Self-compassion x controlled REB predicting post-recall negative affect for unrestrained eaters

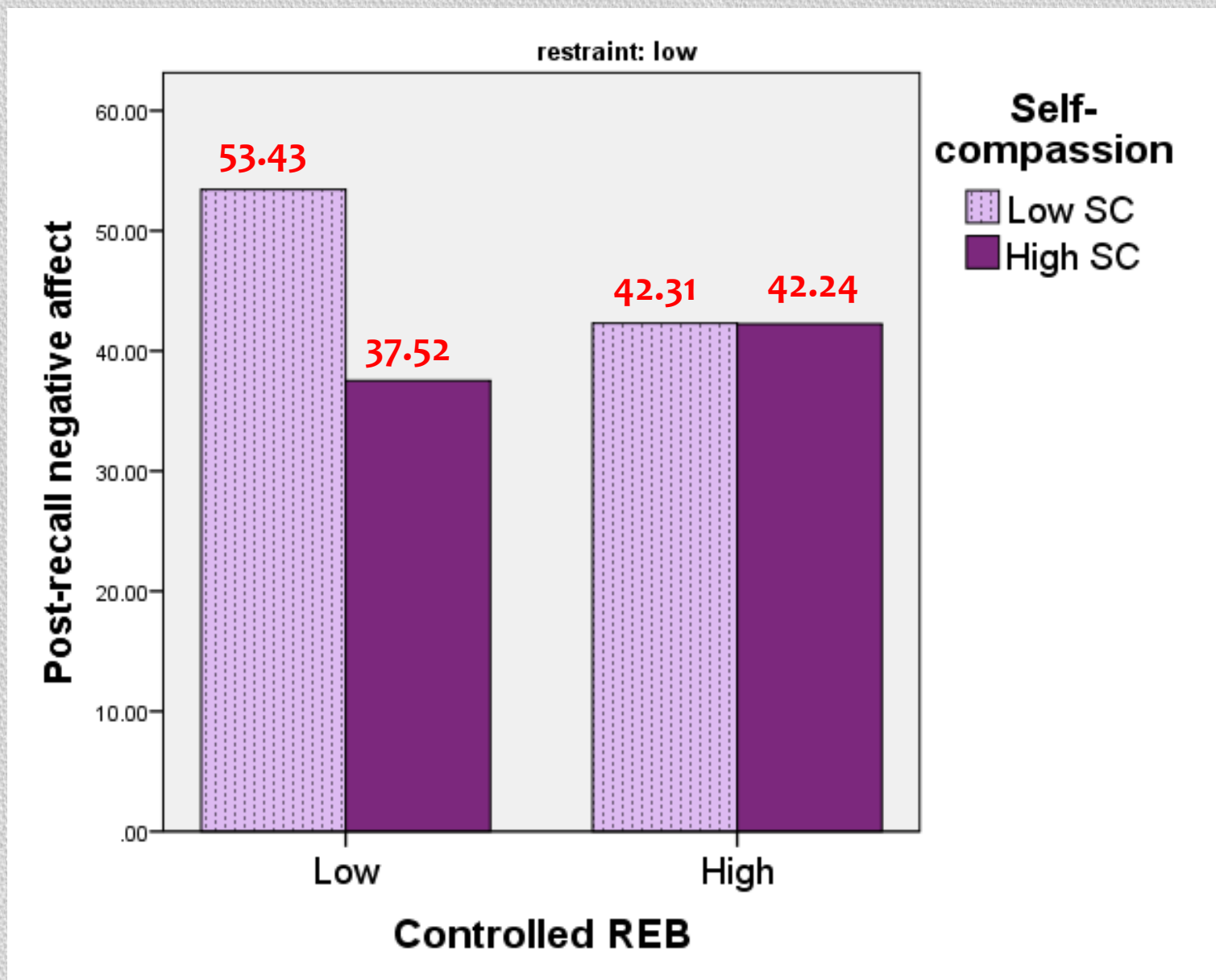


Figure 2. Self-compassion x controlled REB predicting post-recall negative affect for restrained eaters

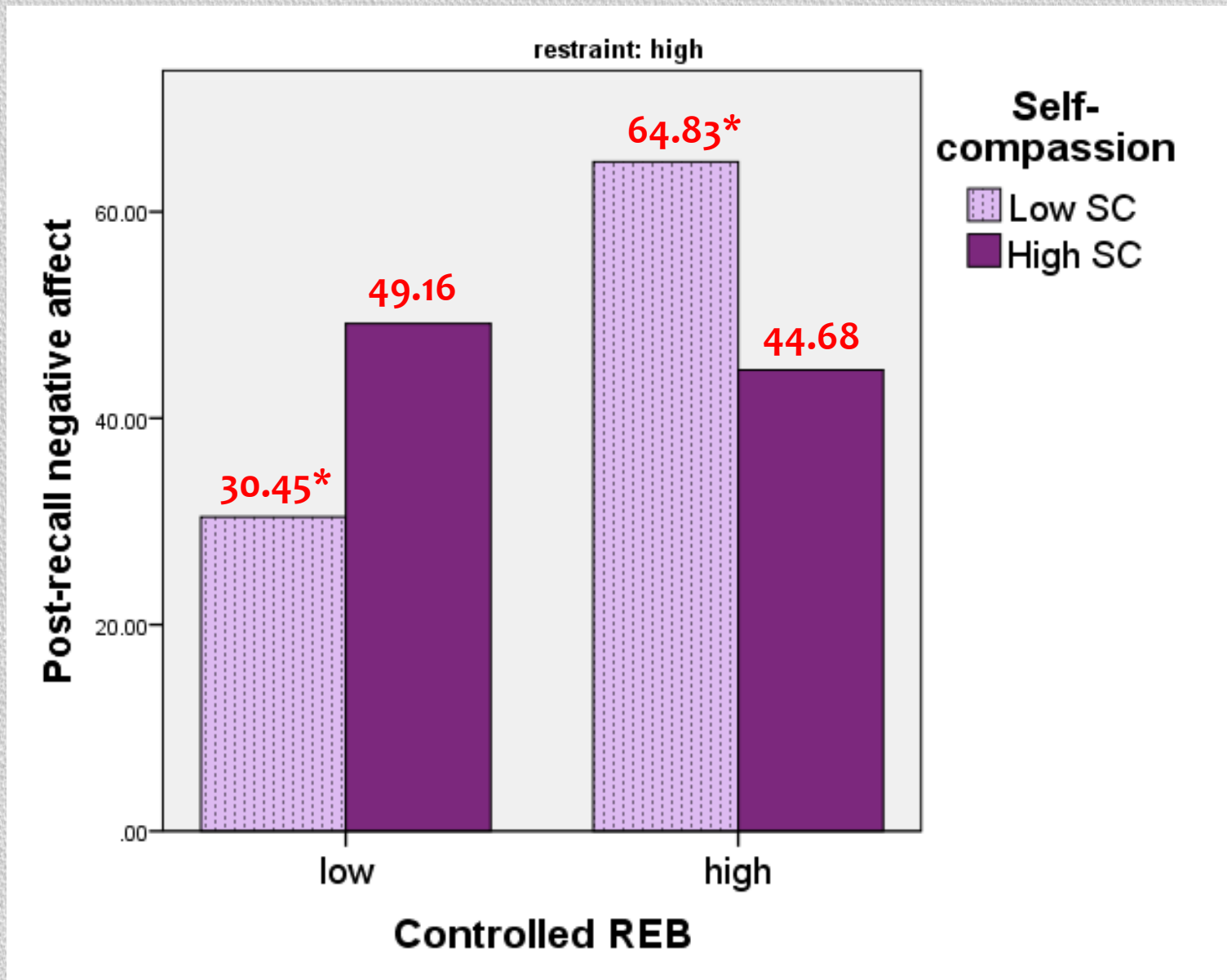


Figure 3. Self-compassion x controlled REB predicting post-recall positive affect for unrestrained eaters

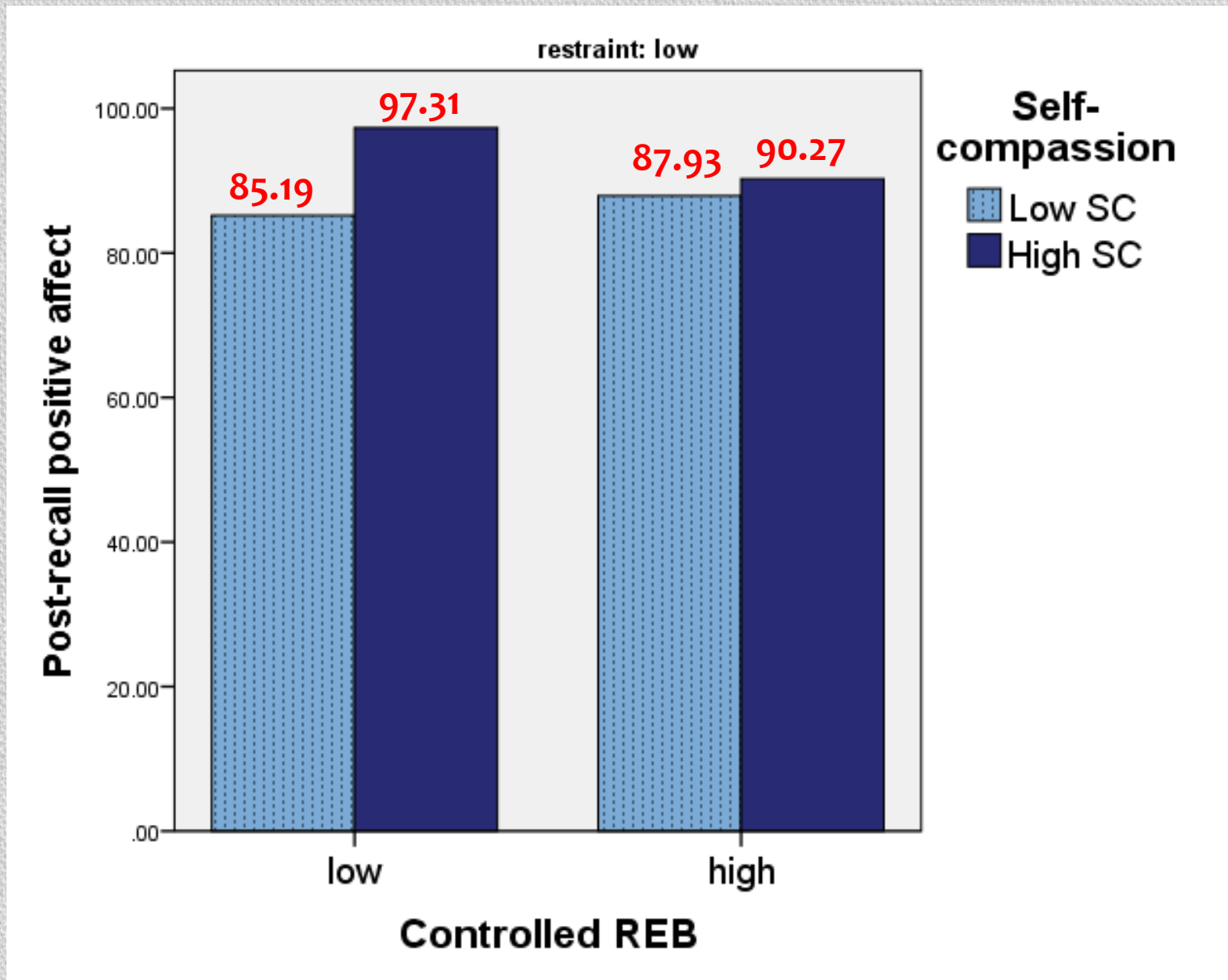
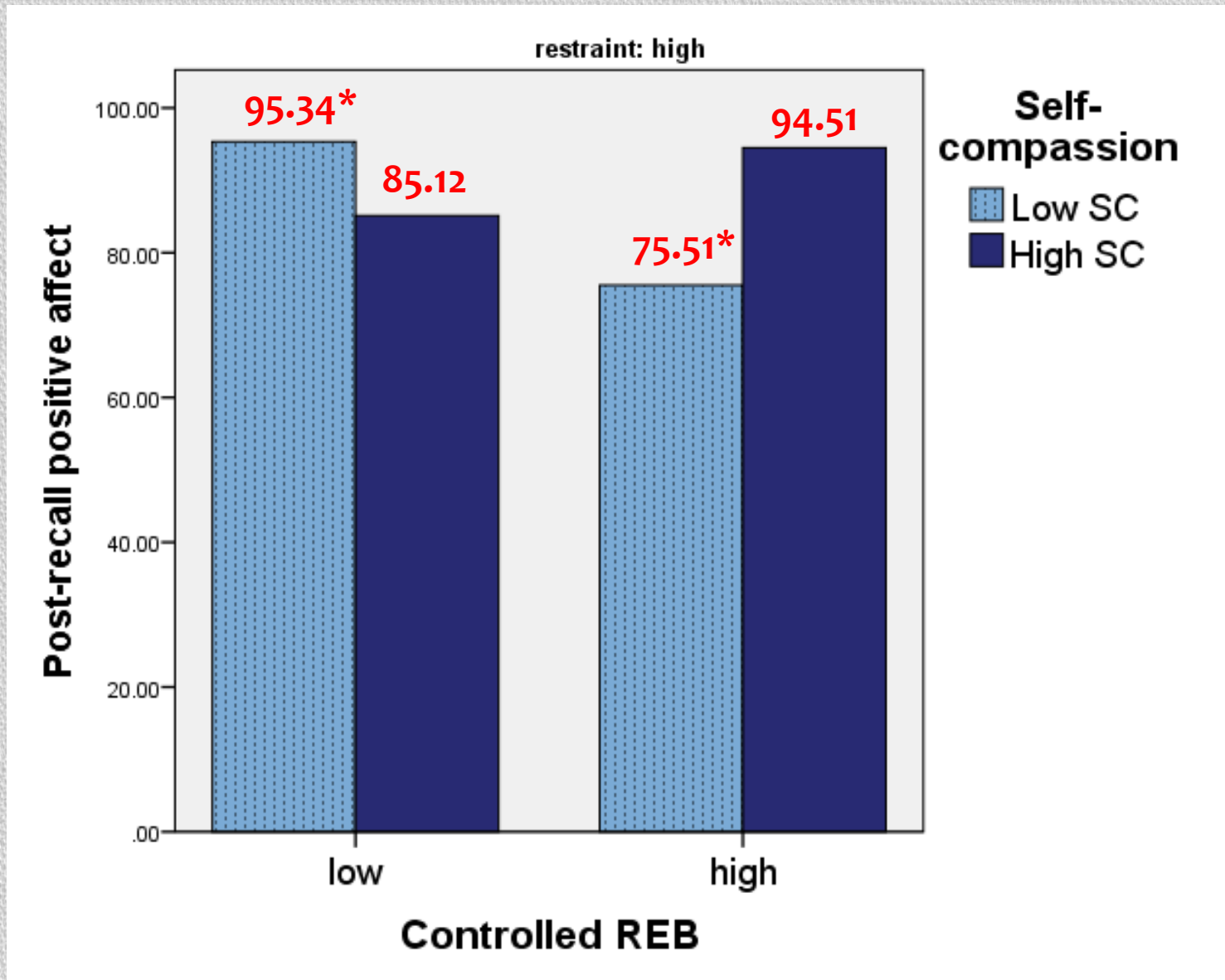


Figure 4. Self-compassion x controlled REB predicting post-recall positive affect for restrained eaters



Conclusion

Would self-compassion mitigate the emotional responses of those most prone to experiencing set-backs in their diet?

- Restrained eaters who lack self-compassion respond to diet failures with more agitation and upset, particularly when they feel a sense of pressure and obligation to regulate their eating behaviors
- Restrained eaters who adopt a self-compassionate stance respond to dietary set-backs with equanimity, irrespective of how “controlled” they feel in the regulation of their eating behaviors
- Self-compassion benefits those who are more likely to experience diet failures



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