



Weight stigma and well-being among college students with overweight and obesity: Fusion as a moderator

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Fusion and defusion moderated the relationship between experienced weight stigma and well-being among college students

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INTRODUCTION

- Overweight and obesity among college students is associated with lower levels of well-being (Powell, 2006).
- Experienced weight stigma is associated with lower levels of wellbeing among overweight and obese college students (Phelan et al., 2015).
- There must be moderators involved in this relationship – two of these may be fusion and defusion.

METHOD

- Cross-sectional online survey of 366 college students with overweight and obesity
- Tested with moderation analyses

RESULTS

Correlations

Table 1

Correlations, means, and standard deviations among constructs

Variables	1	2	3	4	5
1. Well-being	—				
2. Experienced Stigma	.52**	—			
3. Fusion	.51**	-.52**	—		
4. Defusion	-.38**	.51**	-.25**	—	
Mean	43.78	43.82	14.05	16.65	16.54
SD	31.94	7.73	12.54	7.48	6.52

Note. **p < 0.01, two-tailed

- Fusion was positively correlated with experienced stigma and negatively correlated with well-being.
- Defusion was negatively correlated with experienced stigma and positively linked with well-being.

Moderation Analysis for Fusion and Well-being

- The conditional effect of experienced stigma did not significantly predict well-being.
- The conditional effect of fusion significantly predicted wellbeing
- The interaction between fusion and experienced stigma significantly predicted well-being (see Table 2).

Table 2

Overall models, conditional effects, and interaction effects using experienced stigma as the predictor

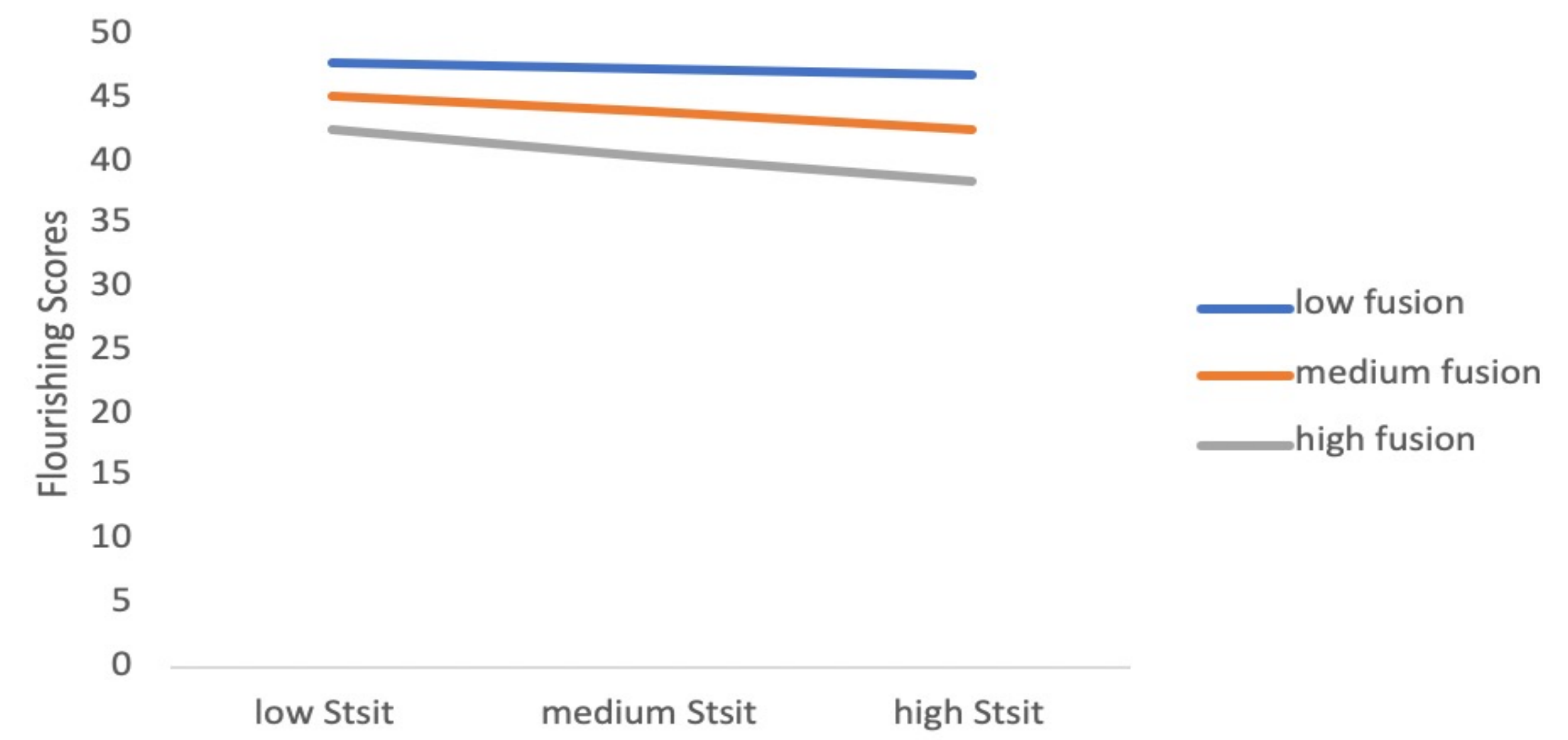
	b	SE	t	p	95% CI
Overall model					
F(4, 360) = 68.74, p < .001, R ² = .43					
Intercept	-12.35	8.78	-1.41	0.16	[-29.61, 4.91]
StigSitT	0.35	0.26	1.37	0.17	[-.15, .86]
Fusion	1.21	0.25	4.77	<.001	[.71, 1.71]
StigSitT x Fusion	0.03	0.01	2.54	0.01	[.01, .06]
BMI	0.73	0.26	2.78	0.01	[.21, 1.25]

Note: fusion = fusion sub-scale from the Multidimensional Psychological Flexibility Inventory; StigSitT = Stigmatizing

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Figure 1

Interaction effect of fusion and well-being on weight stigma experiences



Moderation Analysis for Defusion and Well-being

- The conditional effect of defusion significantly predicted well-being.
- The conditional effect of experienced weight-stigma significantly predicted well-being.
- The interaction between defusion and weight-related stigma significantly predicted well-being (see Table 3).
 - The Johnson-Neyman analysis of the interaction showed that weight related stigma significantly and negatively predicted well-being when defusion scores were less than or equal to 1.47 standard deviations above the mean.
 - The pick-a-point analysis indicated there were significant conditional relationships between weight-related stigma and wellbeing at one standard deviation above the defusion mean, at the mean, and one standard deviation below the mean (See Figure 2).

Table 3

Overall models, conditional effects, and interaction effects using experienced stigma as the predictor

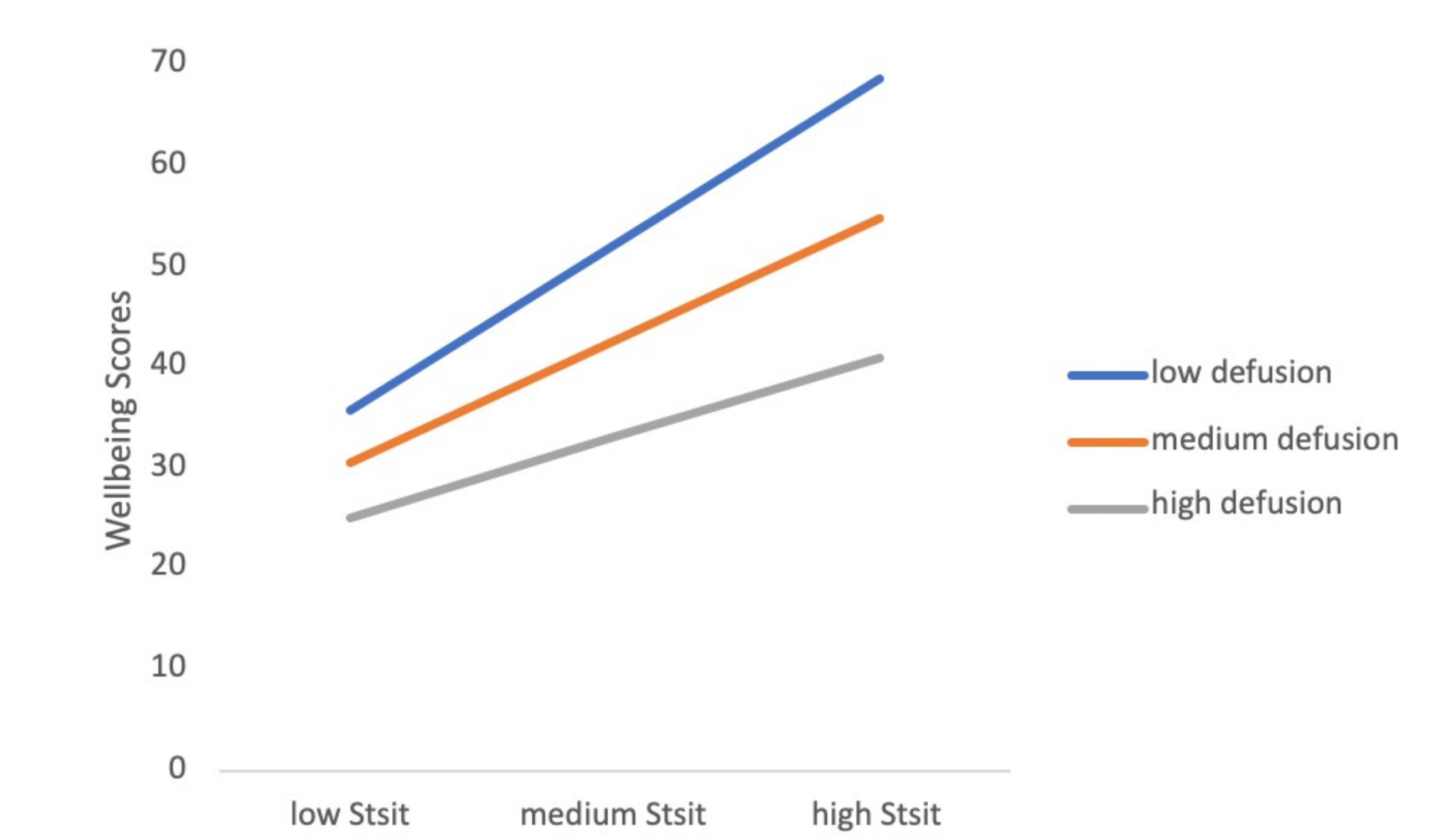
variable	b	SE	t	p	95% CI
Overall model					
F(4, 360) = 50.69, p < .001, R ² = .36					
Intercept	22.75	9.86	2.31	.02	[3.36, 42.14]
StigSitT	1.83	.30	6.04	<.001	[1.24, 2.43]
Defusion	-.74	.30	-2.50	.01	[-1.32, -.16]
StigSitT x Fusion	-.05	.02	-2.78	.01	[-.09, -.02]
BMI	.59	.28	2.12	.03	[.04, 1.14]

Note: fusion = fusion sub-scale from the Multidimensional Psychological Flexibility Inventory; StigSitT = Stigmatizing

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Figure 2

Interaction effect of defusion and well-being on weight stigma experiences



DISCUSSION

- Both fusion and defusion moderated the relationship between experienced weight-related stigma and well-being.
- Future studies could examine the impact of interventions targeting fusion and defusion among this population to see they positively impact overall well-being.
- Future studies could also examine other possible moderators that may influence this deleterious relationship.