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# Romantic Resilience: Fractal Conflict Dynamics and Dating Satisfaction

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# Romantic Resilience: Fractal Conflict Dynamics and Dating Satisfaction

Melanie Reilly and David Pincus, PhD

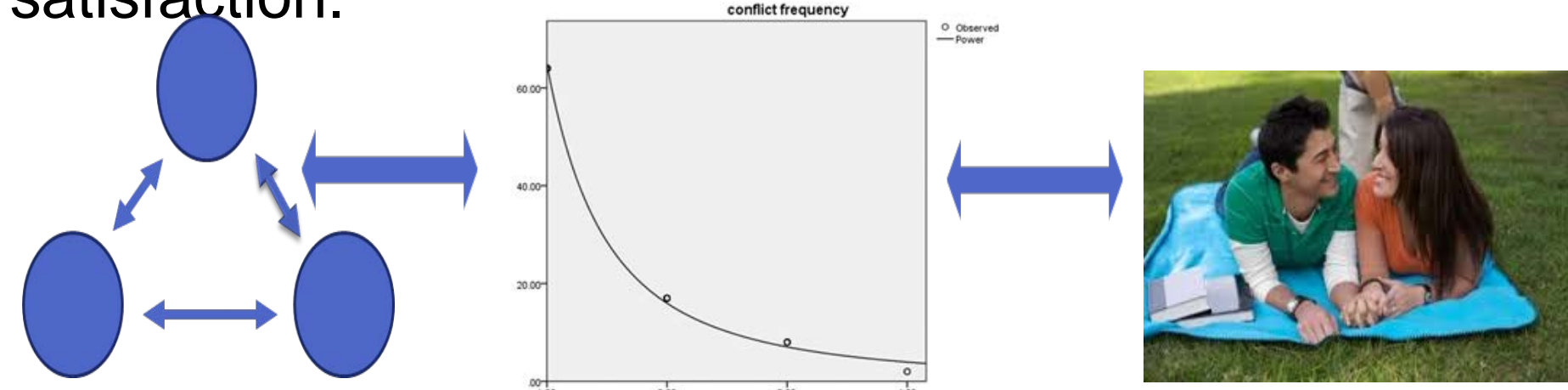
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## Introduction

The present study looks into how fractal structures provide resilience in romantic relationships. Fractal structures are branchlike patterns that are self-similar and have exponentially more small events than large. Fractal dynamics allow systems to adjust on both a large or small scale without becoming stuck or falling apart. The present study aims to extend this line of research to examine conflict dynamics over time in dating relationships

## Hypothesis

1. Conflict dynamics will fit Inverse Power Law (IPL) distributions.
2. Reactivity (i.e., bivariate correlations) among conflict, satisfaction, and commitment will predict: a) mean dating satisfaction, b) mean conflict, and c) IPL fit (R2)\*.
3. IPL fit (i.e., R2) will predict dating resilience: a) mean satisfaction, and b) interaction effect with conflict on mean satisfaction.



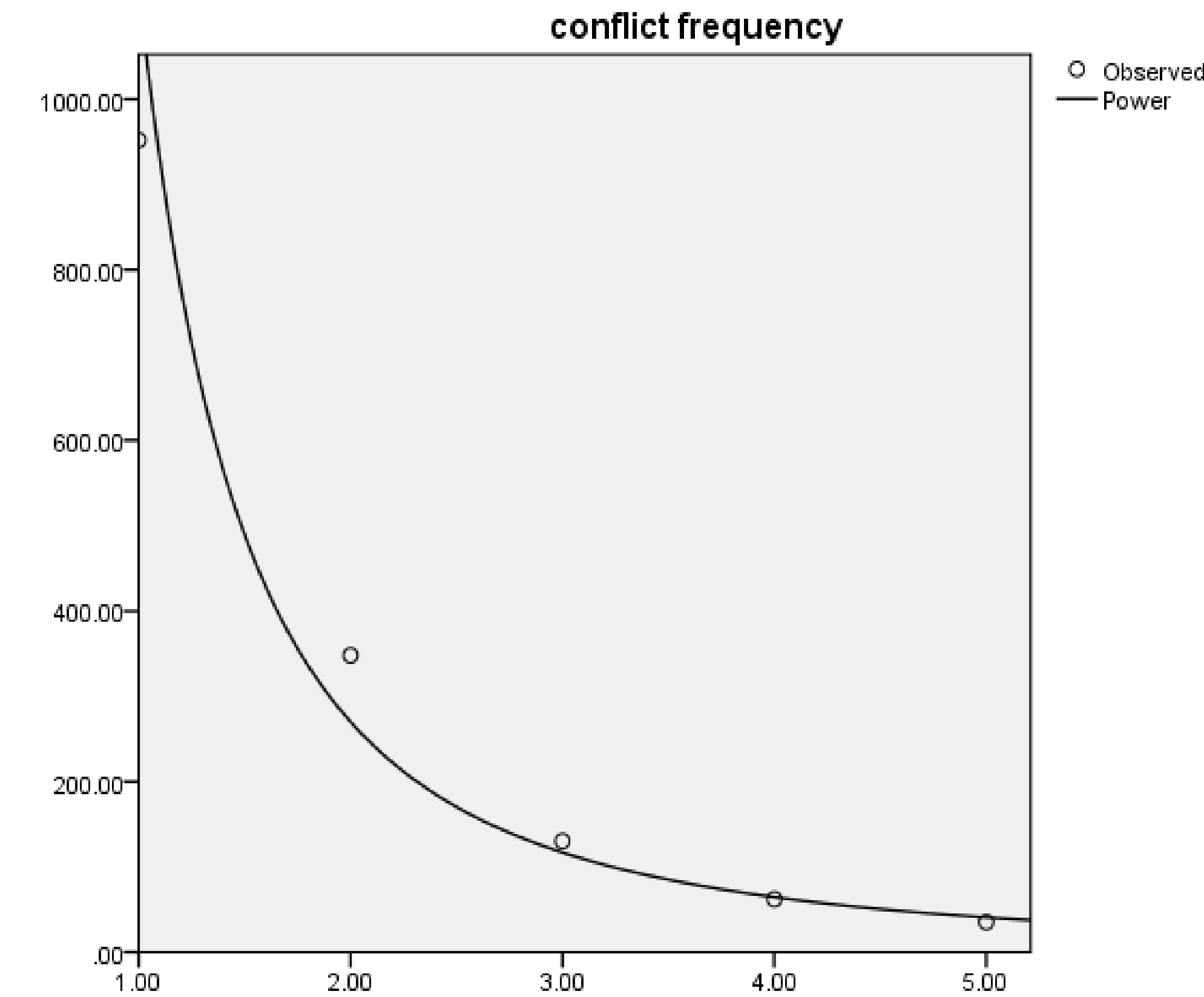
## Experimental Method

**Participants:** Undergraduates in committed dating relationships (N = 27 so far).  
**Design:** Experience Sampling items: Conflict, Satisfaction and Commitment (1-5) 3 x per day for 30 days (n = 90).  
**Analyses:** Group and individual regression analysis (in SPSS) to test fit and shape of distribution of ratings for each variable. Fit and shape used as predictors of satisfaction. Correlations among 3 variable combinations for each individual used as predictors of fit, mean conflict, and mean satisfaction.

**Results:** Overall, the frequency distribution of 1-5 ratings across all participants are fractal.

Means:  
 Conflict = 1.61 (0.96)  
 Satisfaction = 4.20 (1.02)  
 Commitment = 4.45 (0.88)

Conflict (e.g., anger, frustration, disagreement)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	952	62.3	62.3	62.3
	A Little	348	22.8	22.8	85.1
	Medium	130	8.5	8.5	93.6
	A Lot	62	4.1	4.1	97.7
	Extreme	35	2.3	2.3	100.0
	Total	1527	99.9	100.0	
Missing	System	1	.1		
Total		1528	100.0		



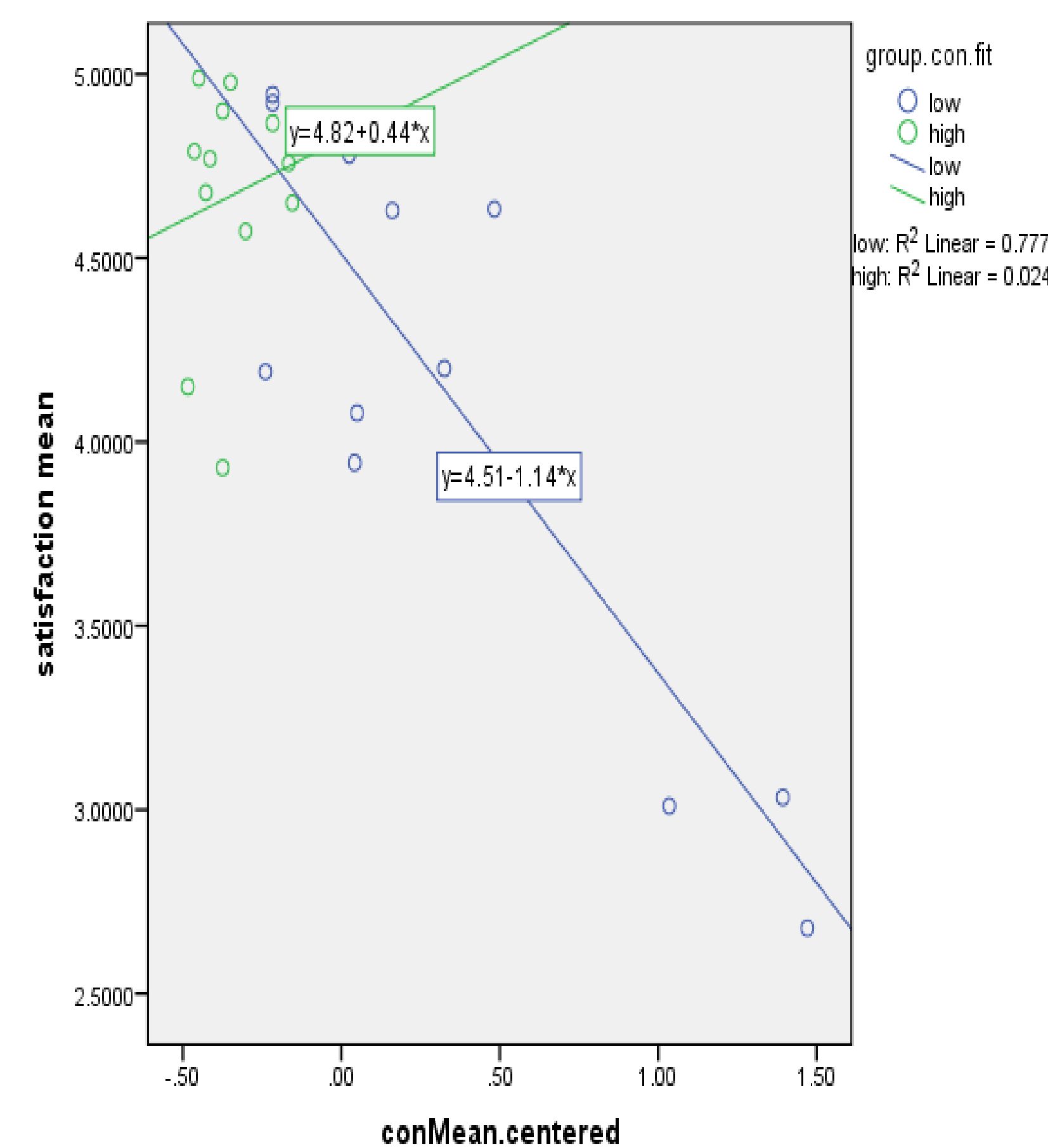
Satisfaction and Commitment reverse scored (e.g., 1=5) for all subsequent analyses.

## Bivariate Correlations

		conflict IPL fit	conflict mean	satisfaction mean	con sat. conflict-satisfaction correlation	con com. conflict-commitment correlation	sat.com. satisfaction-commitment correlation
conflict IPL fit	Pearson Correlation	1	-.898*	.812*	.287	-.298	-.282
	Sig. (2-tailed)		.000	.000	.156	.140	.163
	N	27	26	26	26	26	26
conflict mean	Pearson Correlation	-.898*	1	-.823*	-.442*	-.473*	-.427*
	Sig. (2-tailed)	.000		.000	.024	.015	.029
	N	26	26	26	26	26	26
satisfaction mean	Pearson Correlation	.812*	-.823*	1	.269	-.248	-.299
	Sig. (2-tailed)	.000	.000		.183	.228	.138
	N	26	26	26	26	26	26
con sat. conflict-satisfaction correlation	Pearson Correlation	.287	-.442*	.269	1	.533*	-.691*
	Sig. (2-tailed)	.156	.024	.183		.005	.000
	N	26	26	26	26	26	26
con com. conflict-commitment correlation	Pearson Correlation	-.298	-.473*	-.248	.533*	1	-.744*
	Sig. (2-tailed)	.140	.015	.228	.005		.000
	N	26	26	26	26	26	26
sat.com. satisfaction-commitment correlation	Pearson Correlation	-.282	.427*	-.299	-.691*	-.744*	1
	Sig. (2-tailed)	.163	.029	.138	.000	.000	
	N	26	26	26	26	26	26

\*\* Correlation is significant at the 0.01 level (2-tailed).  
 \* Correlation is significant at the 0.05 level (2-tailed).

## IPL fit x Conflict Interaction on Mean Satisfaction



## Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.423	.082		53.945	.000
	conflict IPL fit Centered	1.483	.241	.788	6.143	.000
	conMean.centered	-.717	.325	-.608	-2.207	.038
2	(Constant)	4.404	.076		57.680	.000
	conflict IPL fit Centered	.450	.518	.239	.869	.394
	conMean.centered	-.717	.325	-.608	-2.207	.038
3	(Constant)	4.609	.105		43.949	.000
	conflict IPL fit Centered	.706	.473	.375	1.492	.151
	conMean.centered	.000	.402	.000	.001	1.000
	con.meanXcon.fit centered	1.209	.470	.560	2.572	.018

a. Dependent Variable: satisfaction mean

## Conclusions: Structure Matters

- Conflict dynamics in dating are generally “fractal” (also other relationship parameters)
- Reactivity among conflict, satisfaction and commitment predicts: a) IPL fit; b) mean conflict and perhaps C) mean satisfaction
- Structure is a complete moderator (i.e, buffer) of conflict on satisfaction (e.g., provides resilience)

## Limitations and Future Research

- Currently have data for 47 participants
- Plan to repeat the analysis with this final number
- Also planning on extending these results to married couples in a clinical setting

## References

- Cramer, A. O. J., & Borsboom, D. (2015). Problems attract problems: A network perspective on mental disorders. *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*.
- Pincus, D., Cadsky, O, Berardi, V, Asuncion, C.M., & Wann, K. (2019). Fractal self-structure and psychological resilience. *Nonlinear Dynamics, Psychology and Life Sciences*, 23(1), 57-78.
- Pincus, D. & Metten, A. (2010). Nonlinear dynamics in biopsychosocial resilience. *Nonlinear Dynamics, Psychology, and Life Sciences*, 14, 253-280.
- Pincus, D. (2014). One bad apple: Experimental effects of psychological conflict on social resilience. *Interface Focus*, 4, 20014003.
- Pincus, D., Eberle, K., Walder, C.S., Sandman, C.A., Kemp, A.S., & Mabini, C. (2014). The role of self-injury in behavioral flexibility and resilience. *Nonlinear Dynamics, Psychology and Life Sciences*, 18(3), 277-298.