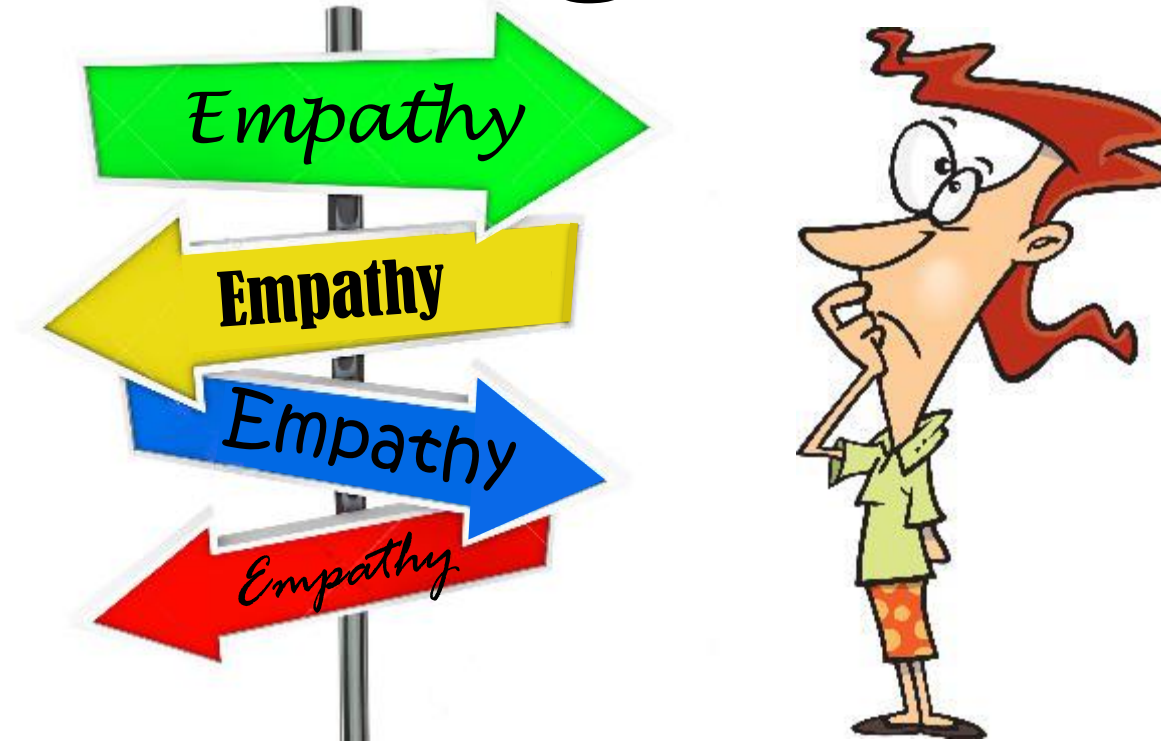# Are You Choosing the Wrong Empathy Measure?

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Background

When a study is published on empathy, does the data refer to *decoding* (i.e., accurately perceiving or understanding) or *encoding* (i.e., reacting or communicating effectively)? A *trait* or an *ability*? Published reports that use the single 'empathy' when referring to theoretically distinct constructs lead us to believe that author's themselves may not even know.

Research Objective: Alleviate this confusion by illustrating how a multitrait-multimethod experimental design (Campbell & Fiske, 1959) clarifies the nature of the empathy construct being assessed by a particular instrument, according to a new empathy model we propose below.
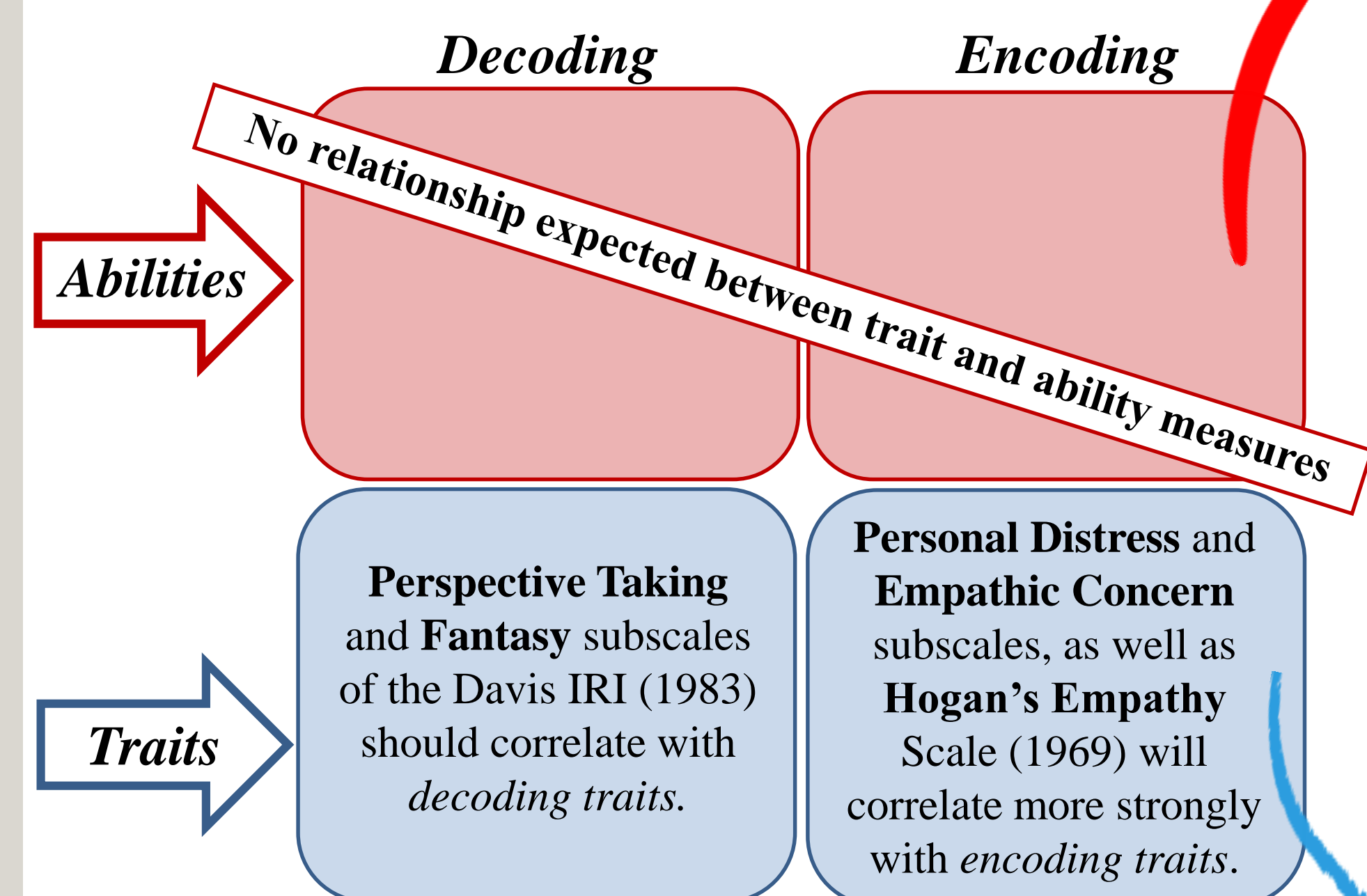
Hypothesis

Figure 1: Proposed Empathy Taxonomy

Method

Participants:

Data was collected from a sample of University students (69 men and 113 women; *N*=182) who took part in a psychological assessment research practicum (Brown & Bernieri, 2017).

Procedure:

Participants completed over 17 different ability measures and trait scales relevant to the empathy construct, over the course of ten weeks. They also completed two trait measures of empathy; the Davis IRI (1983) and Hogan's (1969) Empathy scale.

Results

Multitrait-Multimethod Validity Matrix of Empathy:

Commonly utilized trait empathy measures displayed no relation with empathy encoding or decoding ability (*Table 1*). The Fantasy subscale of the Davis IRI (1983) as well as Hogan's Empathy Scale (1969), although less face valid and rarely used in the literature, were moderately predictive of empathic decoding and encoding skill.

Table 1: Skills/Ability Correlation Matrix with Trait Empathy Scales

		Perspective Taking Empathy	Fantasy Empathy	Personal Distress Empathy	Empathic Concern Empathy	Hogan Empathy
Empathy Decoding Skills	Vocal Affect Decoding	.15	.25*	.14	.14	.27*
	Nonverbal Affect Decoding	.12	.05	-.08	.08	.18*
	DANVA Total	.07	.06	.05	.01	.10
	MSCEIT Perception	.00	.11	-.14	.03	.04
	Profile of Nonverbal Sensitivity	-.05	.08	.00	.01	.07
	Interpersonal Perception Task	.08	.04	.03	.13	.14
	Zero Acquaintance Person-Perception Accuracy	.00	.14	-.07	-.02	.06
	Five Week Person-Perception Accuracy	-.11	.02	.00	.00	-.03
	Nine Week Person-Perception Accuracy	-.05	.02	-.10	-.04	.02
	Decoding Composite	**.02**	**.17***	**-.03**	**.08**	**.18***
Empathy Encoding Skills	Verbal Affect Encoding	.17	.22	.14	.09	.09
	Nonverbal Affect Encoding	-.03	.15	-.17*	-.11	.24**
	Encoding Composite	**.04**	**.20***	**-.09**	**-.05**	**.22****

Note. Decoding composite formed by summing all decoding ability measures. Encoding composite formed by summing all encoding ability measures *p<.05, **p<.01, ***p<.001

As hypothesized, trait measures of empathy demonstrated expected convergent validity with related trait empathy constructs (*Table 2*). Evidence for discriminant validity between empathy decoding and encoding traits was also observed.

Table 2: Trait Correlation Matrix with Trait Empathy Scales

		Perspective Taking Empathy	Fantasy Empathy	Personal Distress Empathy	Empathic Concern Empathy	Hogan Empathy
Empathy Decoding Traits	Alexithymia Total	-.29**	-.01	.36***	-.12	-.32**
	Riggio Emotional Sensitivity	.27***	.27***	-.15*	.33***	.39***
	Riggio Social Sensitivity	.10	.20**	.42***	.29***	-.03
	Decoding Composite	**.31***	**.30***	**-.20**	**.29***	**.41***
Empathy Encoding Traits	Emotion Contagion	.20*	.33***	.33***	.52***	.16
	Narcissism	-.12	-.09	-.35***	-.28**	.27**
	Riggio Emotional Expressivity	-.07	.21**	-.01	.18**	.21**
	Riggio Emotional Control	.14	.00	-.41***	-.16*	.22**
	Riggio Social Expressivity	.07	.14	-.11	.19**	.45***
	Riggio Social Control	.08	.06	-.42***	.02	.42***
	Self-Monitoring	-.08	.15	-.12	-.01	.36***
	Encoding Composite	**.12**	**.48***	**-.07**	**.33***	**.56***

Note. Decoding composite formed by summing Riggio Emotional Sensitivity, Riggio Social Sensitivity, and the reverse of Alexithymia. Encoding composite formed by summing all encoding traits and the reverse of Narcissism. *p<.05, **p<.01, ***p<.001

Table 3: Interrelationships between Empathy Measures

		Davis IRI				Hogan
		1.	2.	3.	4.	5.
1.	Perspective Taking Empathy	(.84)				
2.	Fantasy Empathy	.28**	(.82)			
3.	Personal Distress Empathy	-.13	-.06	(.79)		
4.	Empathic Concern Empathy	.42**	.38**	.21	(.84)	
5.	Hogan Empathy	.36**	.28**	-.23*	.32**	(.71)

Note: Cronbach's Alpha's are displayed in parentheses. *p<.05, **p<.01, ***p<.001

Conclusion

Our multitrait-multimethod matrix clearly revealed that **empathy measures are not interchangeable.**

If a researcher wishes to make a conclusion about empathy, they must take precautions in choosing which measure to use instead of selecting a measure based upon its face validity. Those who continue to assume that trait measures of empathy assess empathic knowledge or perceptual ability will only spread confusion, impede theoretical progress, and damage clinical interventions.

IF…
You use the Davis IRI Perspective Taking subscale as a measure of 'perspective taking' *ability*

THEN
You ARE choosing the wrong empathy measure

References

Brown, J. A., & Bernieri, F. (2017). Trait perception accuracy and acquaintance within groups: Tracking accuracy development. Personality and Social Psychology Bulletin, 43(5), 716-728.

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