#### **Implicit Theories of Sexuality Scale**

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#### Purpose

The 24-item Implicit Theories of Sexuality scale (Maxwell et al., 2017) measures individual differences in people's beliefs about how to best maintain sexual satisfaction in long-term relationships. The scale measures two specific beliefs including the belief that sexual satisfaction is attained from hard work and effort (Sexual Growth) and the belief that sexual satisfaction is attained through finding a compatible sexual partner (Sexual Destiny).

### Development

**Initial development.** We created an initial set of items by directly adapting 14 general Growth and Destiny items from the Implicit Theories of Relationships Scale (Knee, Patrick, & Lonsbary, 2003) to reflect the domain of sexuality specifically. We also created 21 face valid items, some of which were inspired by the Relationship Theories Questionnaire (Franiuk, Cohen, & Pomerantz, 2002). We administered these initial 35 items to an online Mechanical Turk sample (N = 264) of individuals in relationships 6 months or longer. Using an exploratory factor analysis we determined that, as anticipated, the scale had a two-factor solution: Sexual Destiny and Sexual Growth beliefs. We then pruned our scale to 24 items that had strong (> .5) factor loadings and low cross-loadings (< .3).

**Confirmatory factor analysis.** We subsequently recruited a new sample of cohabiting/married individuals from Mechanical Turk (N = 456) to conduct a confirmatory factor analysis on our final 13 Sexual Growth items and 11 Sexual Destiny items. Our scale had adequate fit (CFI = .90, BIC = 26350.004, RMSEA = .059, SRMR = .059), and a two-factor solution was more appropriate than an ill-fitting one factor solution (CFI = .71, BIC = 27266.199, RMSEA = .098, SRMR = .13.) We further confirmed our scale's measurement structure in a pre-registered study (N = 364; https://osf.io/afk6j/).

**Short version.** In Study 5 of Maxwell and colleagues (2017) we administered the 5 most face valid or highest loading items from each subscale to create a shortened 10-item version of the scale. Although we did not conduct traditional scale validation procedures for this shortened version, it produced reliability levels, mean scores, and results consistent with the full scale (see Table 1).

### **Response Mode and Timing**

The measure can be completed on a computer or using paper-and-pencil in approximately 2-4 minutes. Participants indicate their agreement with the items on a 7-point scale from *strongly disagree* to *strongly agree*, with no scale anchors labeled in between these endpoints. We worded items to reflect the individual's outlook on sexual relationships in general, and not necessarily one's current relationship specifically.

#### Scoring

No items are reversed scored. The 13 items on the Sexual Growth subscale are averaged to create a total Sexual Growth score, and the 11 items on the Sexual Destiny subscale are averaged to create a total Sexual Destiny score. Higher scores indicate greater endorsement of the respective belief. Sample means for Sexual Growth range from 5.13 to 5.83, and from 2.97 to 3.91 for Sexual Destiny (see Table 1). Sexual Growth and Sexual Destiny are typically moderately negatively correlated (see Table 1). We tend to find higher Sexual Destiny among men (e.g., d = .32), those in shorter relationships (e.g., r = .17), and those having more sex (e.g., r = .12); whereas we find higher Sexual Growth among women (e.g., d = .30) and those in longer relationships (e.g., r = .17).

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### Reliability

Across diverse samples, including undergraduate students, married individuals, and new parent couples, our measure shows consistent reliability, with Cronbach's alpha values ranging from  $\alpha = .83$  to  $\alpha = .93$ . Test-retest reliability conducted after a period of 4 months (N = 156) revealed that Sexual Destiny (r = .66) and Sexual Growth (r = .54) are somewhat stable. Nevertheless, in a daily experience study, these beliefs did show meaningful day variability (Maxwell et al., 2017; Study 3), with Sexual Destiny fluctuating more than Sexual Growth.

# Validity

Although Sexual Destiny and Sexual Growth beliefs strongly correlate with general relationship Destiny and Growth beliefs respectively ( $rs \sim .5$ -.7), our measure uniquely predicts relational outcomes above and beyond general relationship beliefs (see Maxwell et al., 2017). To establish discriminant validity, we differentiated our scale from other personality variables and other sexual beliefs (see Maxwell et al., 2017 for greater discussion). For example, neither of the beliefs significantly correlate with sociosexual orientation (rs < .09). Providing convergent validity, we see small positive associations between Sexual Growth and sexual agency (r = .26) and sexual self-esteem (r = .21). Conversely, Sexual Destiny predicts stronger views that dating is a game (r = .29) and that sex is a barometer of relationship quality (r = .34). Our scale has predominantly been completed by individuals in relationships; however, we have included single individuals in one sample (Table 1, Study 8).

### Summary

Our measure has been used in diverse samples (Canada, U.S., Belgium) both in-lab and online. We consistently find that Sexual Growth is positively associated with sexual satisfaction and relationship quality measures. Conversely, we find the relationship quality of those high in Sexual Destiny is contingent on the level of sexual compatibility they feel with their partner. Examining cultural differences in these beliefs, and whether they shift across one's relationships remain interesting directions for future work.

#### Table 1

Summary of Our Existing Samples Using the Implicit Theories of Sexuality Scale

Sample			Reliability (α)	Correlation between Sexual Growth and Sexual Destiny
<b>Study 1</b> ( <i>N</i> = 264) Mechanical Turk: Individuals in relationships longer than 6 months	Sexual Growth	<i>M</i> = 5.74, <i>SD</i> = .80	<i>α</i> = .91	<i>r</i> =28
	Sexual Destiny	<i>M</i> = 2.97, <i>SD</i> = 1.11	<i>α</i> = .93	
Study 2 ( $N = 456$ ) Mechanical Turk: Cohabitating or married individuals	Sexual Growth	M = 5.83, SD = .75	<i>α</i> =.88	<i>r</i> =36
	Sexual Destiny	M = 3.01, SD = 1.19	α=.91	
<b>Study 3</b> ( <i>N</i> = <b>56</b> ) Craigslist: Cohabitating or	Sexual Growth	M = 5.13, SD = .096	<i>α</i> =.90	<i>r</i> = .09

married individuals	Sexual Destiny	M = 3.91, SD = 1.21	<i>α</i> = .90	
<b>Study 4</b> ( <i>N</i> = <b>198</b> ) In-Lab: Undergraduate couples	Sexual Growth	<i>M</i> = 5.68, <i>SD</i> = .64	<i>α</i> = .83	r =16
	Sexual Destiny	<i>M</i> = 3.19, <i>SD</i> = .98	<i>α</i> = .88	7 –10
<b>Study 5</b> ( <i>N</i> = <b>548</b> ) Online: Couples who were first-time parents	Sexual Growth *short version	M = 5.52, SD = 1.17	<i>α</i> = .87	r =40
	Sexual Destiny *short version	<i>M</i> = 3.58, <i>SD</i> = 1.34	<i>α</i> = .85	7 –40
Study 6 ( $N = 373$ ) Online: Undergraduate students in relationships > 6 months	Sexual Growth	<i>M</i> = 5.56, <i>SD</i> = .71	<i>α</i> = .83	r = .00
	Sexual Destiny	<i>M</i> = 3.29, <i>SD</i> = 1.02	<i>α</i> = .86	7 = .00
Study 7, unpublished (N = 302) Mechanical Turk: Individuals in relationships > 2 years	Sexual Growth	<i>M</i> = 5.79, <i>SD</i> = .74	<i>α</i> = .89	r =43
	Sexual Destiny	<i>M</i> = 3.27, <i>SD</i> = 1.31	<i>α</i> = .93	7 –43
Study 8, unpublished (N = 82) Online: Belgian undergraduate students (scale translated to Dutch)	Sexual Growth	M = 5.28, SD = .56	<i>α</i> = .83	04
	Sexual Destiny	<i>M</i> = 3.07, <i>SD</i> = .79	<i>α</i> = .86	<i>r</i> =04

Note. Unless otherwise specified sample was American/Canadian

# References

- Franiuk, R., Cohen, D., & Pomerantz, E. M. (2002). Implicit theories of relationships: Implications for relationship satisfaction and longevity. *Personal Relationships*, 9, 345-367.
- Knee, C. R., Patrick, H., & Lonsbary, C. (2003). Implicit theories of relationships: Orientation toward evaluation and cultivation. *Personality and Social Psychology Review*, 7, 41–55.
- Maxwell, J. A., Muise, A., MacDonald, G., Day, L. C., Rosen, N. O., & Impett, E. A. (2017). How implicit theories of sexuality shape sexual and relationship well-being. *Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes*, 112, 238-279.