



The Association Between Health Regulatory Focus and Responses to Physicians

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INTRODUCTION

Regulatory Focus

- A goal-pursuit theory that explains an individual's motivation to either accomplish gains (promotion-focused) or avoid losses (prevention-focused; Ferrer et al., 2017).

Regulatory Focus and Health

- Past studies suggest that one's regulatory focus may influence one's health behaviors (Uskul et al., 2008).
 - Taking medication is associated with being promotion-focused.
 - Eating healthy food is associated with being prevention-focused.
- When a health message is tailored to fit a person's regulatory focus, it is more effective at promoting health behavior (e.g., Latimer et al., 2008).

Health Regulatory Focus

- The Health Regulatory Focus scale measures regulatory focus specifically toward health goals (Ferrer et al., 2017).
- Health regulatory focus has been linked to a host of health behaviors such as:
 - Purchasing healthy foods or visiting physicians (Gomez et al., 2013).
 - Practicing sports (Laroche et al., 2019).

Health Regulatory Focus and Responses to Physicians

- Past research suggests that health regulatory focus may also relate to how patients respond to physicians. For example:
 - Regulatory focus influences patient adherence (Zhang et al., 2019).
 - Tailoring messages to fit a patient's regulatory focus improves medication adherence (O'Connor et al., 2019).
- Nevertheless, no studies have examined whether health regulatory focus relates to perceptions of physicians.

OBJECTIVE

- In two studies, we examined the associations between health regulatory focus and affective reactions to physicians.
 - Study 1** examined health regulatory focus and reactions to physicians among an online sample
 - Study 2** examined health regulatory focus and reactions to physicians among a patient sample

STUDY 1

Participants

- 524 undergraduates (348 women, 170 men, 1 other, 5 unreported)
- $M_{age} = 19.96$ years, $SD_{age} = 1.65$ years
- 57.6% Latinx/Hispanic

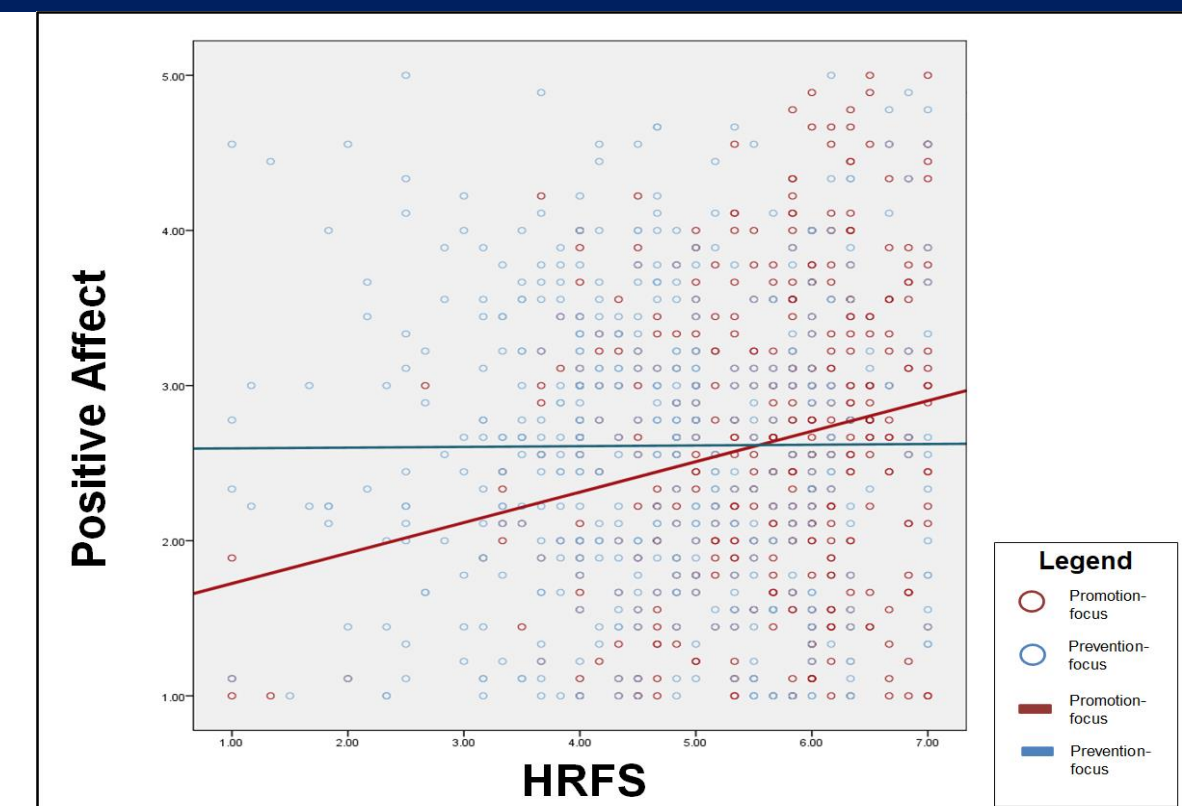
Procedure

- Participants completed an online survey in exchange for research credits.
- Participants watched a video of a physician delivering a medical diagnosis of a fictitious disease.
- After watching the video, participants reported their affective reactions to the physician and completed a measure of their health regulatory focus.

Measures

- Health Regulatory Focus Scale** (Ferrer et al., 2017; 1 = *strongly disagree*, 7 = *strongly agree*)
- Promotion focus subscale** (6 items; $\alpha = .89$)
 - E.g., "I think of good health as a key to a happy life"
- Prevention focus subscale** (6 items; $\alpha = .88$)
 - E.g., "I often imagine myself being ill in the future"
- Affective responses to physicians**
 - 1 = *not at all*, 5 = *extremely*
 - 9 items ($\alpha = .94$)
 - E.g., indicate "...your feelings/emotions toward the physician in the video: Comfortable"

RESULTS



Analysis: Bivariate correlation test

- Promotion focus was positively related to positive affective reactions toward the physician, $r(497) = .213, p < .01$
- Prevention focus was not related to positive affective reactions toward physician, $r(497) = .011, p = .812$.

STUDY 2

Participants

- 97 undergraduates (63 women, 29 men, 2 other, 3 unreported)
- $M_{age} = 21.21$ years, $SD_{age} = 3.89$ years
- 50.5% Latinx/Hispanic

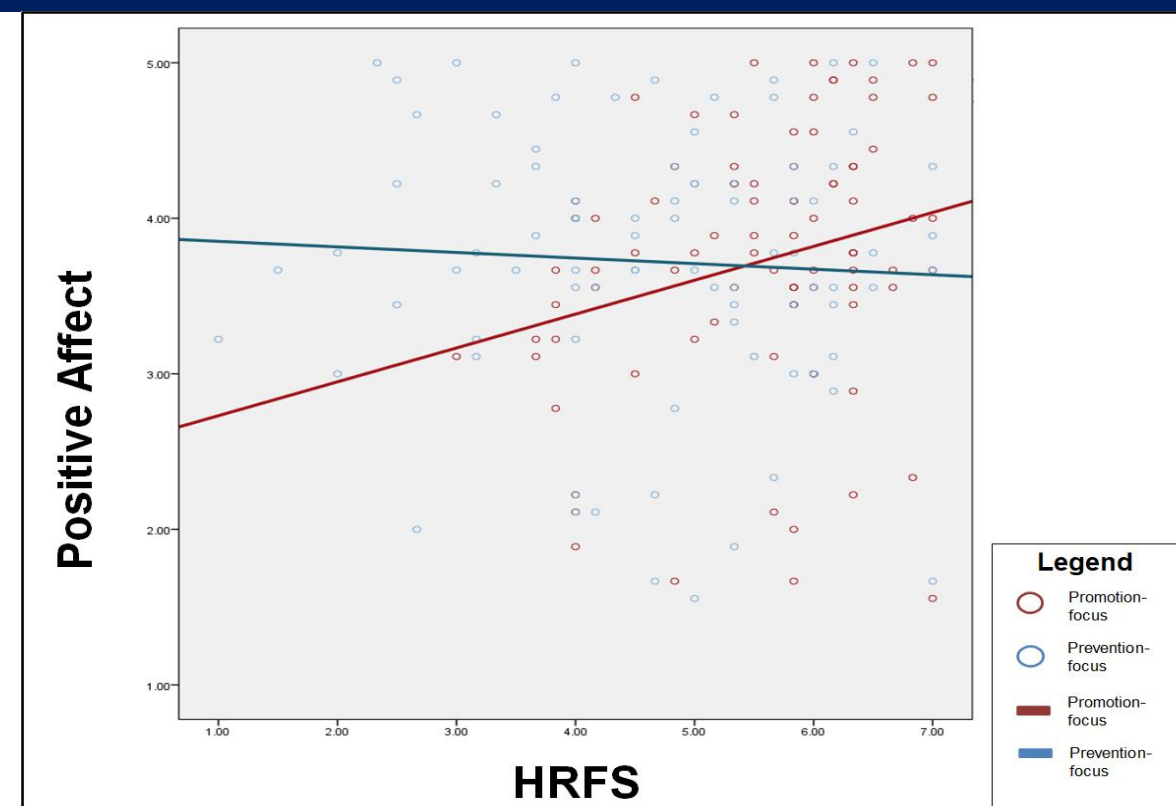
Procedure

- Participants were recruited from a university health center to complete an online survey in exchange for a gift card.
- Following their visit, participants were emailed a link to the survey.
- Participants reported their affective reactions to the physician they saw at the health center and completed a measure of their health regulatory focus.

Measures

- Health Regulatory Focus Scale** (Ferrer et al., 2017; 1 = *strongly disagree*, 7 = *strongly agree*)
- Promotion focus subscale** (6 items; $\alpha = .83$)
 - E.g., "I frequently imagine how I can achieve a state of ideal health"
- Prevention focus subscale** (6 items; $\alpha = .88$)
 - E.g., "I often worry that I am not doing the best I can to improve my health"
- Affective responses to physicians**
 - 1 = *not at all*, 5 = *extremely*
 - 9 items ($\alpha = .92$)
 - E.g., indicate "...your feelings/emotions toward the provider you met recently at the UCM Health Center: Comfortable"

RESULTS



Analysis: Bivariate correlation test

- Promotion focus was positively related to positive affective reactions toward the physician, $r(88) = .250, p = .019$.
- Prevention focus was not related to positive affective reactions toward physician, $r(88) = -.058, p = .592$.

DISCUSSION

Conclusions

- Based on our results, it seems that health regulatory focus is related to perceptions of healthcare providers during physician-patient interactions.
- The findings suggest that being promotion-focused may be related to more positive reactions to physicians.
- Conversely, being prevention-focused was not related to affective reactions to the physician.

Limitations/Future Directions

- Future studies can examine whether health regulatory focus is related to affective responses to healthcare providers among general adult populations as opposed to undergraduate student populations.
- Study 1 involved a simulated office visit in which a physician delivers a diagnosis of a fictitious disease. Future studies should examine whether health regulatory focus is related to responses to physicians during actual medical diagnoses with real diseases.
- Future studies can also examine whether health regulatory focus is related to other patient outcomes such as satisfaction with the visit and trust with the physician.

REFERENCES

- Ferrer, R. A., Lipkus, I. M., Cerully, J. L., McBride, C. M., Shepperd, J. A., & Klein, W. M. P. (2017). Developing a scale to assess health regulatory focus. *Social Science & Medicine*, 195, 50–60. <https://doi.org/10.1016/j.socscimed.2017.10.029>
- Gomez, P., Borges, A., & Pechmann, C. (Connie). (2013). Avoiding poor health or approaching good health: Does it matter? The conceptualization, measurement, and consequences of health regulatory focus. *Journal of Consumer Psychology*, 23(4), 451–463. <https://doi.org/10.1016/j.jcps.2013.02.001>
- Laroche, M., Roussel, P., Mascrot, N., & Cury, F. (2019). Health Regulatory Focus, Selection Optimization and Compensation Strategy and Sports Practice: A Mediation Analysis. *The Spanish Journal of Psychology*, 22, E18. <https://doi.org/10.1017/sjp.2019.22>
- Latimer, A. E., Williams-Piehota, P., Katulak, N. A., Cox, A., Mowad, L., Higgins, E. T., & Salovey, P. (2008). Promoting Fruit and Vegetable Intake through Messages Tailored to Individual Differences in Regulatory Focus. *Annals of Behavioral Medicine*, 35(3), 363–369. <https://doi.org/10.1007/s12160-008-9039-6>
- O'Connor, A., Ladebue, A., Peterson, J., Davis, R., Jung Grant, S., McCreight, M., & Lambert-Kerzner, A. (2019). Creating and testing regulatory focus messages to enhance medication adherence. *Chronic Illness*, 15(2), 124–137. <https://doi.org/10.1177/1742395317753882>
- Uskul, A. K., Keller, J., & Oyserman, D. (2008). Regulatory fit and health behavior. *Psychology & Health*, 23(3), 327–346. <https://doi.org/10.1080/14768320701360385>
- Zhang, R., Lu, X., Wu, W., & Shang, X. (2019). Why do patients follow physicians' advice? The influence of patients' regulatory focus on adherence: an empirical study in China. *BMC Health Services Research*, 19(1), 301. <https://doi.org/10.1186/s12913-019-4127-9>

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