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Relationships between Stages and Processes of Change for Effective Stress Management in Japanese College Students

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ABSTRACT

With a primary prevention focus, it would be important to help populations engage in stress management. The Transtheoretical Model of Behavior Change is one of potentially useful models to formulate interventions. The model describes behavior change as progression through five stages: precontemplation (not ready), contemplation (getting ready), preparation (ready), action, and maintenance. Processes of change (strategies and techniques to enhance the progression) facilitate stage transition. Their use is hypothesized to depend on stage of change. The processes tend to be used the least at the precontemplation stage. Use of experiential processes (affective and/or cognitive strategies such as seeking information) increase over time and tend to peak at the contemplation or preparation stage and then decrease. In contrast, behavioral processes (behavioral strategies such as seeking social support) tend to be used most at the action and/or maintenance stage. This study examined relationships between stages and processes of change for effective stress management. Effective stress management is defined as any form of healthy activity such as exercising, meditating, relaxing, and seeking social support, which is practiced for at least 20 minutes. Four hundred and five Japanese college students participated in this study. A paper-pencil survey was conducted at colleges in Japan. The process use was least in precontemplation. Experiential processes peaked in preparation. Except for one experiential process, no significant difference was found between preparation and maintenance. Behavioral processes peaked in preparation, action, or maintenance. Most of these inter-stage differences of processes are in line with the prediction from the model. This study represented an initial but important test of validity of applying processes of change to stress management. The results partially supported its application.

KEYWORDS

Processes of Change; Stage of Change; Effective Stress Management; Transtheoretical Model

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References

- [1] Anderson, N. B., Nordal, K. C., Breckler, S. J., Ballard, D., Bufka, L., & Bossolo, L. et al. (2010). Stress in America findings. American Psychological Association. <http://www.apa.org/news/press/releases/stress/national-report.pdf>
- [2] Armitage, C. J. (2009). Is there utility in the transtheoretical model? *British Journal of Health Psychology*, 14, 195-210. doi:10.1348/135910708X368991
- [3] Armitage, C. J., Sheeran, P., Conner, M., & Arden, M. A. (2004). Stages of change or changes of stage? Predicting transitions in transtheoretical model stages in relation to healthy food choice. *Journal of Consulting and Clinical Psychology*, 72, 491-499. doi:10.1037/0022-006X.72.3.491
- [4] Byrne, F., & Chapman, S. (2005). The most cited authors and papers in tobacco control. *Tobacco Control*, 14, 155-160. doi:10.1136/tc.2005.011973
- [5] Cohen J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ:

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- [6] DiClemente, C. C., & Prochaska, J. O. (1982). Self-change and therapy change of smoking behavior: A comparison of processes of change in cessation and maintenance. *Addictive Behaviors*, 7, 133-142. doi:10.1016/0306-4603(82)90038-7
- [7] European Foundation for the Improvement of Living and Working Conditions (2006). Fourth European working conditions survey. Luxembourg: Office for Official Publications of the European Communities. <http://www.eurofound.europa.eu/pubdocs/2006/98/en/2/ef0698en.pdf>
- [8] Evers, K. E., Evans, J. L., Fava, J. L., & Prochaska, J. O. (2000). Development and validation of transtheoretical model variables applied to stress management. 21st Annual Scientific Sessions of the Society of Behavioral Medicine, Nashville.
- [9] Evers, K.E., Prochaska, J.O., Johnson, J. L., Mauriello, L. M., Padula, J. A., & Prochaska, J. M. (2006). A randomized clinical trial of a population- and transtheoretical model-based stress-management intervention. *Health Psychology*, 25, 521-529. doi:10.1037/0278-6133.25.4.521
- [10] Horiuchi, S., Tsuda, A., Tanaka, Y., Okamura, H., Yajima, J., & Tsuda, S. (2009). Stage of change distribution of stress management behavior in Japanese university students. *Japanese Journal of Health Promotion*, 11, 1-8.
- [11] Horiuchi, S., Tsuda, A., Kim, E., Hong, K-S., Park, Y-S., & Kim, U. (2010). Relationships between stage of change for stress management behavior and perceived stress and coping. *Japanese Psychological Research*, 52, 291-297. doi:10.1111/j.1468-5884.2010.00444.x
- [12] Horiuchi, S., Tsuda, A., Kobayashi, H., & Prochaska, J.M. (2012). The reliability and validity of the Japanese version of Pro-Change' s decisional balance measure for effective stress management (PDSM). *Japanese Psychological Research*, 54, 128-136. doi:10.1111/j.1468-5884.2011.00490.x
- [13] Japan Health Promotion & Fitness Foundation (1996). Attitude survey on health promotion FY 1996.
- [14] Johnson, S. S., Driskell, M. M., Johnson, J. L., Prochaska, J. M., Zwick, W., & Prochaska, J. O. (2006). Efficacy of a transtheoretical model-based expert system for antihypertensive adherence. *Disease Management*, 9, 291-301. doi:10.1089/dis.2006.9.291
- [15] Kopp, M. S., Skrabski, á., Székely, A., Stauder, A., & Williams, R. (2007). Chronic stress and social changes, socioeconomic determination of chronic stress. *Annals of the New York Academy of Sciences*, 1113, 325-338. doi:10.1196/annals.1391.006
- [16] Marcus, B. H., Rossi, J. S., Selby, V. C., Niaura, R. S., & Abrams, D. B. (1992). The stages and processes of exercise adoption and maintenance in a worksite sample. *Health Psychology*, 11, 386-95. doi:10.1037/0278-6133.11.6.386
- [17] Padlina, O., Aubert, L., Gehring, T. M., Martin-Diener, E., & Somaini, B. (2001). Stages of change for perceived stress in a Swiss population sample: An explorative study. *Sozialund Pr?ventivmedizin*, 46, 396-403. doi:10.1007/BF01321666
- [18] Pro-Change Behavior Systems, Inc. (2003). Road to healthy living: A guide for effective stress management. Kingston, RI: Pro-Change Behavior Systems, Inc.
- [19] Prochaska, J. O., Butterworth, S., Redding, C.A., Burden, V., Perrin, N., Leo, M. et al. (2008). Initial efficacy of MI, TTM tailoring and HRI' s with multiple behaviors for employee health promotion. *Preventive Medicine*, 46, 226-231. doi:10.1016/j.ypped.2007.11.007
- [20] Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51, 390-395. doi:10.1037/0022-006X.51.3.390
- [21] Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47, 1102-1114. doi:10.1037/0003-066X.47.9.1102
- [22] Redding, C. A., Prochaska, J. O., Pallonen, U. E., Rossi, J. S., Velicer, W. F., Rossi, S. R. et al. (1999). The transtheoretical individualized multimedia expert systems targeting adolescents' health behaviors. *Cognitive and Behavioral Practice*, 6, 144-153. doi:10.1016/S1077-7229(99)80025-X
- [23] Pruitt, S. L., McQueen, A., Tiro, J. A., Rakowski, W., Diclemente, C. C., Vernon, S. W. (2010). Construct