

PERCEIVED BENEFITS

VICTORIA CHAMPION

INDIANA UNIVERSITY

Description and Theoretical Background

The construct of perceived benefits is defined as beliefs about the positive outcomes associated with a behavior in response to a real or perceived threat. The perceived benefit construct is most often applied to health behaviors and is specific to an individual's perception of the **benefits that will accrue by engaging in a specific health action**. For example, perceived benefits of mammography screening include a woman's beliefs about the benefits of obtaining a mammogram, e.g., "Having a mammogram will help me find breast lumps early" (Champion, 1999). The perception of benefits is theoretically linked to the woman's beliefs about her own outcomes—not those that might occur for others. Thus, a woman could feel that mammography would help find breast cancer early for others but not necessarily believe it would do so for herself.

The perceived benefit construct is included in many health behavior models. For example, it is one of the four major predictors of health-related behavior in the **Health Belief Model** (Hochbaum, 1958). The health-related behavior is an action which is related to decreasing the risk of a certain disease outcome. The **Transtheoretical Model** (Velicer, DiClemente, Prochaska, & Brandenburg, 1985) includes a decisional balance construct which incorporates both the benefits and barriers to the specific health behavior. The construct of response efficacy plays a prominent role in **Protection Motivation Theory** (Maddux, Ingram, & Desmond, 1995) and conceptually overlaps benefits by identifying an individual's assessment of positive outcomes accompanying a specific behavior. Finally, two expectancy value theories that are often employed in studies to predict health behavior, (the **Theory of Reasoned Action** and the **Theory of Planned Behavior**) also identify an attitudinal construct of expected

consequences of an action (including benefits) that predict intentions to engage in specific behaviors (Ajzen, 1988; Schifter & Ajzen, 1985).

Similar Constructs

Outcome Expectancy

Outcome expectancy is the expectation that a behavior will produce a set of outcomes, i.e., the belief that a given action will lead to a defined result, whether beneficial or not (Bandura, 1982, 1997; DeVries, Dijkstra, & Kok, 1989; Hofstetter, Sallis, & Hovell, 1990). This dimension overlaps with perceived benefits in that the likelihood that a person will pursue a given course of action is dependent upon the expectation that a behavior will produce a desired result (benefit).

Self-Efficacy

Self-efficacy is the belief that a person has the ability to complete an action. The concept was originally defined as a judgment about personal capability (Bandura, 1986), and later conceptualized as a person's belief that he or she has the ability to exercise control over a set of skills needed to complete a specific task (Maddux et al., 1995). Self-efficacy is clearly different than perceived benefits, in that an individual may believe that smoking cessation will reduce the risk of developing lung cancer (perceived benefit), but not believe that he/she is able to quit (perceived self-efficacy). One feature that measures of self-efficacy and perceived benefits have in common, however, is the distinction between general and domain-specific measures – it has been demonstrated that both domain-specific measures of self-efficacy (e.g., “I am capable of quitting smoking”) and domain-specific measures of benefits (e.g., “If I quit smoking I will decrease the likelihood that I will have lung cancer”) predict better than measures assessing a general sense of being efficacious (e.g., “I am a person who usually succeeds at meeting my goals”), or benefits in general (e.g., “If I quit smoking, my health will improve”; Bandura, 1982; DeVries et al., 1989; Meyerowitz & Chaiken, 1987).

Fatalism

Fatalism is the belief that an individual has no control over events related to a cancer occurrence. Powe identified fatalism as including perceptions of hopelessness, worthlessness, meaninglessness, powerlessness and social despair and applied it to cancer; thus, conceptually it is the opposite of thinking that one's actions can be responsible for accruing benefits. More specifically, in the area of health, benefits are positive attributes associated with a health action and fatalism is a perception that there are no benefits associated with any action related to the disease. Thus, fatalism does not refer to a specific behavior but rather to the belief that nothing can be done to change a negative outcome. This construct has been applied to cancer screening as the perception that cancer is beyond the individual's control, thus, there would be no benefit to screening (Powe, 1995; Powe & Weinrich, 1999; Sugarek, Deyo, & Holmes, 1988; Underwood, 1992).

Measurement of Perceived Benefits

Specificity is critical to the assessment of perceived benefits. For example, development of a scale to measure perceived benefits of sun protection must take into account the specific action being considered (e.g., use of sunscreen vs. wearing a hat), and the specific benefits being considered (e.g., decreasing likelihood of skin cancer vs. delaying the appearance of age spots and wrinkles). Thus, developing appropriate operational definitions of benefits will continue to challenge researchers as the construct is used with new behaviors. This work will undoubtedly build on the development of valid and reliable scales during the past decade to assess perceptions of the benefits of screening for breast cancer and colorectal cancer.

Benefits of breast self-examination and mammography

Assessments of benefits of breast cancer screening have included both the behaviors of breast self-examination (Lauver & Angerame, 1988) and mammography (Champion, 1984; Champion, Foster, & Menon, 1997; Champion, 1999). In general, these scales have good predictive validity. For example, Skinner, Champion, Gonin, Hanna et al., (1997) found that perceived benefits for mammography differentiated between women considering a

mammogram and those who were currently adherent for mammography. Specific items that significantly differentiated between these groups included finding lumps early, decreasing chances of dying from cancer, and helping find lumps before they can be felt. In a sample of low-income African American women, perceptions of these benefits were lower for those who had not considered having a mammogram than for those who had considered the test (Champion & Springston, 1999).

A measurement study assessed **benefits for mammography screening scale** for validity and reliability (Champion, 1999). Items included not worrying about breast cancer, helping to find breast lumps early, and treatment won't be as bad (see Appendix A) Internal consistency reliability of .75 was calculated for the scale. Confirmatory factor analysis identified all items as having a Lambda of .40 or greater. Construct validity was also found through exploratory factor analysis and by determining that differences in benefits did exist for persons in different stages of mammography behavior.

Colorectal cancer (CRC)

The development of **benefits scales for colorectal cancer screening** has been guided by the same measurement principles as those for mammography and breast self-examination, and they have also demonstrated good validity and reliability (Rawl, et al., 2001). A good example of measurement specificity can be found in a scale developed by Rawl et al. (2001), which included questions about the benefits of finding cancer early and decreasing the chances of dying from colorectal cancer if one had FOBT, sigmoidoscopy, or colonoscopy. Reliability was measured using Cronbach's alpha and was .65 for FOBT, .67 for flexible sigmoidoscopy, and .70 for colonoscopy. Exploratory factor analysis identified dimensions for benefits of FOBT, sigmoidoscopy, and colonoscopy with respective items loading at .54 to .78 for FOBT, .35 to .58 for flexible sigmoidoscopy, and .62 to .72 for colonoscopy. Theoretically consistent differences were found in all benefits scales and screening participation. Wardle developed a benefits scale specific to sigmoidoscopy using

a 7-item scale with 5-point Likert-like response scales (Wardle et al., 2003). Items demonstrated construct validity by loading at .4 or above on their respective scale. Internal consistency reliability was .83.

Conclusion

The perceived benefits construct is defined as an individual's belief that specific positive outcomes will result from a specific behavior. Research conducted over the last three decades has demonstrated the use of this construct in predicting behavior, but several measurement issues continue to warrant attention when employing a perceived benefits scale. First, perception of benefit is specific to a behavior and the more specifically the behavior is defined, the higher the predictive validity of the scale. For example, a scale to measure benefits of cancer screening would predictive mammography behavior more poorly than a scale designed specifically to identify benefits of mammography screening per se. Second, because the construct of benefits is most useful when developed as behavior-specific, any attempt to use this construct with a new behavior will necessitate development of items specific to that behavior. Thus, the validity and reliability of measures of the construct will continue to be an important issue as scales are developed to assess the benefits on new health behaviors and health threats. When a new scale is developed, it is important to carefully assess its **validity and reliability**.

References

- Ajzen, I. (1988). *Attitudes, personality, and behavior*. Chicago: Dorsey Press.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. In (pp. 390-449). Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Champion, V. (1984). Instrument development for health belief model constructs. *Advances in Nursing Science*, 6(3), 73-85.
- Champion, V., Foster, J. L., & Menon, U. (1997). Tailoring interventions for health behavior change in breast cancer screening. *Cancer Practice*, 5(5), 283-288.
- Champion, V. L. (1999). Revised susceptibility, benefits, and barriers scale for mammography screening. *Research in Nursing & Health*, 22(4), 341-348.
- Champion, V. L., & Springston, J. (1999). Mammography adherence and beliefs in a sample of low-income African American women. *International Journal of Behavioral Medicine*, 6(3), 228-240.
- DeVries, H., Dijkstra, M., & Kok, G. J. (1989). Self-efficacy as a determinant of the onset of smoking and interventions to prevent smoking in adolescents.
- Hochbaum, G. M. (1958). *Public participation in medical screening programs: a socio-psychological study*. Washington, D.C.: U.S. Dept. of Health, Education, and Welfare.
- Hofstetter, C. R., Sallis, J. F., & Hovell, M. F. (1990). Some health dimensions of self-efficacy: analysis of theoretical specificity. *Soc Sci Med*, 31(9), 1051-1056.
- Lauver, D., & Angerame, M. (1988). Development of a questionnaire to measure beliefs and attitudes about breast self-examination. *Cancer Nursing*, 11(1), 51-57.
- Maddux, J. F., Ingram, J. M., & Desmond, D. P. (1995). Reliability of two brief questionnaires for drug abuse treatment evaluation. *Am J Drug Alcohol Abuse*, 21(2), 209-221.
- Meyerowitz, B. E., & Chaiken, S. (1987). The effect of message framing on breast self-examination attitudes, intentions, and behavior. *Journal of Personality and Social Psychology*, 52(3), 500-510.
- Powe, B. D. (1995). Fatalism among elderly African Americans: effects on colorectal cancer screening. *Cancer Nursing*, 18(5), 385-392.
- Powe, B. D., & Weinrich, S. (1999). An intervention to decrease cancer fatalism among rural elders. *Oncology Nursing Forum*, 26(3), 583-588.
- Rawl, S., Champion, V., Menon, U., Loehrer, P., Vance, G., Hunter, C., et al. (2001). Differences on health beliefs by stage of readiness to screen for colorectal cancer among first-degree relatives of affected individuals. *Annals of Behavioral Medicine*, 23(Supplement), S202.
- Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology*, 49(3), 843-851.
- Skinner, C. S., Champion, V. L., Gonin, R., & Hanna, M. (1997). Do perceived barriers and benefits vary by mammography stage? *Psychology, Health & Medicine*, 2(1), 65-75.
- Sugarek, N. J., Deyo, R. A., & Holmes, B. C. (1988). Locus of control and beliefs about cancer in a multi-ethnic clinic population. *Oncology Nursing Forum*, 15(4), 481-486.
- Underwood, S. (1992). Cancer risk reduction and early detection behaviors among Black men: Focus on learned helplessness. *Journal of Community Health Nursing*, 9(1), 21-31.
- Velicer, W. F., DiClemente, C. C., Prochaska, J. O., & Brandenburg, N. (1985). Decisional balance measure for assessing and predicting smoking status. *Journal of Personality and Social Psychology*, 48(5), 1279-1289.
- Wardle, J., Williamson, S., McCaffery, K., Sutton, S., Taylor, T., Edwards, R., et al. (2003). Increasing attendance at colorectal cancer screening: testing the efficacy of a mailed, psychoeducational intervention in a community sample of older adults. *Health Psychol*, 22(1), 99-105.

Appendix A

Champion Benefits Scale for Mammography Screening

<p>If I get a mammogram and nothing is found, I do not worry as much about breast cancer.</p> <p>Having a mammogram will help me find breast lumps early.</p> <p>If I find a lump through a mammogram, my treatment for breast cancer may not be as bad.</p> <p>Having a mammogram is the best way for me to find a very small lump.</p> <p>Having a mammogram will decrease my chances of dying from breast cancer.</p>	*	*	*		*

* SA = Strongly Agree

A = Agree

N = Neutral

D = Disagree

SD = Strongly Disagree

Rawl's Benefits Scale for Fecal Occult Blood Test (FOBT), Flexible Sigmoidoscopy (FS) and Colonoscopy (CS)

	*	*	*	*	*
Identifying CRC (colorectal cancer) early will save your life.					
The treatment for CRC may not be as bad if the cancer is found early.					
(FOBT, FS, CS) will help find CRC early.					
(FOBT, FS, CS) will decrease your chances of dying from CRC.					
(FOBT, FS, CS) will help you not worry as much about CRC					

* SA = Strongly Agree

A = Agree

N = Neutral

D = Disagree

SD = Strongly Disagree