

A Theory for Recruiting—and Retaining—Adult Learners

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Abstract

This paper suggests the utility of a theory for understanding how adults form attitudes and make decisions about their behavior, especially in research on participation in adult and continuing education (ACE). The paper describes the theory and its application in ACE, and details how to apply it in research. The paper ends with a description of how to use the results of such a study for increasing and enhancing adult participation.

Introduction

Need for Theory in Adult and Continuing Education?

Does the field of adult and continuing education need more theory? Our field's research has been criticized by some of our leading scholars. Boshier (1980) has argued that the atheoretical nature of continuing education research diminishes its long-term impact on the field; that the use of well-tested theory can have a profound influence on research and ultimately on practice. In Boshier's words: "a theoretically well-anchored discipline has more impact on a field of practice than a congeries of ad hoc and atheoretical research findings, speculations, or guesswork . . ." (p.20). Boshier's call for theory has been echoed recently by Chapman (2005).

If more theory is required, what focus would be of greatest assistance to practice? Most practitioners are concerned with recruiting—and often retaining—adult learners, and participation research has an honored place in the literature. (For example, motivations to participate, e.g., Isaac, Guy, & Valentine, 2001; Boshier, Huang, Song, & Song, L., 2006).

Concerning research on participation in ACE, Cross (1981) has noted: "The construction and testing of plausible theories . . . explaining participation is a powerful tool which has not yet been adequately utilized . . ." (p. 108). Darkenwald and Merriam (1982) argued that the most appropriate focus for ACE participation research "has not to do with reasons for taking a course or generalized motivational orientations, but with the decision to participate . . . this last question demands explanatory models or theories . . ." (p. 130).

Explanatory models of participation have been proposed by Rubenson (1976), Cross (1981), and Cookson (1986) among others. Each model integrates current knowledge of the variables related to participation, including the more proximal and the more distal variables that appear relevant to ACE participation. Although these inclusive models might eventually be most useful in building a comprehensive understanding of ACE participation, their complexity seems likely to inhibit the empirical testing required for their further development. A research focus on the proximal variables constituting the theory of reasoned action, described below, presents at least three possible advantages over the inclusive approach.

First, the proximal variables of the theory mediate any influence of the distal variables, and are therefore, likely to offer better prediction of participation, accounting for more variance. For example, Anderson and Darkenwald's (1979) study found the demographic variables most closely related to participation accounted for only 10% of the variance in participation.

However, the theory of reasoned action, described below, accounted for over 41% of the variance in participatory intentions in a study of oral surgeons (Pryor, 1990).

Second, the proximal variables of the theory provide a more useful explanation of participation, especially for practice. Distal variables, such as IQ, locus of control, or educational level, present few practical implications for increasing participation. However, the proximal variables of the theory, such as beliefs about positively- and negatively-evaluated outcomes of participating in a given program, present rich implications for program development and promotion.

Third, the inclusive models assume consistent relations between distal and proximal variables. Empirical testing of the strength, direction, and consistency of such relations could clarify what influence the distal variables have on participation. The proximal variables of the theory of reasoned action provide a parsimonious and empirically-tested framework for investigating distal-proximal relations.

The Theory of Reasoned Action

The theory of reasoned action was developed by Fishbein (e.g., 1967) and Fishbein and Ajzen (e.g., 1975) to improve prediction, explanation, and control of volitional behavioral intentions. The theory is described fully in Fishbein and Ajzen (1975) and its application to ACE research and practice is described in Pryor (1989). A recent book offers a step-by-step guide to applying the theory in education (Pryor & Pryor, 2005).

The theory holds that a given behavior is determined by an intention to perform that behavior. Intention usually predicts behavior quite well when both variables are measured appropriately and in temporal proximity.

Intention is determined by an *attitude toward the behavior* and a *subjective norm*, a perception of social pressure concerning the behavior. (This norm is subjective because it is most often based on inferences about the behavioral expectations of important others.)

The theory holds that all variables external to it are mediated by attitude and subjective norm (and possibly by personal norm). Other variables can affect intention only by influencing one of the predictor variables, or their relative weights in determining intention. Attitude is often more important than subjective norm in the determination of intention, but this differs across populations and behaviors. Empirical weights (standardized regression coefficients) for the relative values of attitude and norm are obtained through multiple regression. The determination of behavior (B) by intention (I), and of intention by attitude (A) and subjective norm (SN) is expressed:

$$B \approx I = (A)w_1 + (SN)w_2$$

Attitude toward the behavior is determined by a set of beliefs about outcomes of performing the behavior and by a corresponding evaluation of each outcome. The summated products of outcome belief and evaluation scores constitute an estimated measure of attitude. Subjective norm is determined by a set of beliefs that certain referents (important persons or groups) think the person should, or should not, perform the behavior, and the person's motivation to comply with each referent. The summated products of normative belief and motivation scores constitute an estimated measure of subjective norm. The ability of the theory to predict intention in a given behavioral domain is tested by multiple regression of the intention measure on direct measures of attitude and subjective norm. The ability of the theory to explain behavioral intention is tested by correlating direct measures with estimated measures of attitude and subjective norm.

The Theory in ACE Participation Research

Grotelueschen and Caulley (1977), proposed the theory of reasoned action for research on participation in continuing professional education. Ray (1981) tested three variables of the theory (estimated attitude and subjective norm, and personal norm) as predictors of intention and found them to account for only 10% of the variance in intention, no more than demographic variables had previously accounted for (Anderson & Darkenwald, 1979). Although Ray called for further testing of the theory's utility, his study's results might have caused other participation researchers to doubt the theory's potential for investigating ACE participation.

Pryor (1990) tested the entire theory in a study of oral surgeons' and found it to account for just over 41% of the variance in their participatory intentions. Although those results provide support for the theory's predictive and explanatory utility in the domain of ACE participation, further research was needed, especially with other populations. A number of other studies applying the theory followed: Yang, Blunt, and Butler, (1994), Becker, and Gibson, (1998), and Livneh, and Livneh, (1999).

Applying the Theory in Research

Data Collection

The theory can be applied to explaining intentions to perform specific behaviors, to perform behavioral categories (domains), or to achieve behavioral outcomes. For brevity's sake, only the investigation of specific behaviors is discussed below.

A study applying the theory is begun by defining the specific behavioral intention to be investigated (e.g., "I will register for that training workshop coming up next month"), as opposed to a more global behavioral domain (e.g., "I will become more involved in adult and continuing education"). The statements of attitude toward this behavior, and subjective norm concerning this behavior, are written at the exact same level of specificity.

The beliefs that underlie attitude and norm are elicited by interview or open-ended response items in a questionnaire. These ask "What are the *advantages* to your registering for that training workshop?" What are the *disadvantages* to your registering for that training workshop?" Normative beliefs are elicited by asking who would favor or oppose the participant performing the behavior. These results are content analyzed into outcome and normative belief sets that are intended to be modal and salient for the population. (The adequacy of these sets can be empirically tested by correlating the summed belief-evaluation, and belief-motivation-to-comply products, with direct measures of attitude and norm.)

The study questionnaire employs two types of scales: bipolar (e.g., endpoints of *extremely good* and *extremely bad*) and unipolar (e.g., *not at all* and *very much*). To write the questionnaire, the outcome and normative beliefs are content analyzed to form two sets of modal, salient beliefs. Each outcome (e.g., "My registering for that training workshop will help me learn new skills for work") and normative (e.g., "My spouse thinks I should register for that training workshop") belief statement is attached to a bipolar probability scale to measure the direction and strength of belief. Outcome statements (e.g., "My learning new skills for work") are attached to bipolar evaluative scales to measure the direction and strength of evaluation of each outcome. The generic name of each of the referents (e.g., "My spouse") is attached to a unipolar scale of motivation-to-comply with the referent. (Motivation scales are unipolar as few

adults are expected to be counter-dependent.) Direct measures of the theory's variables, as well as external variables (e.g., demographic), are also included in the questionnaire.

Data Analysis

Data are analyzed by multiple regression of intention on the predictor variables of attitude and norm, and correlational analyses of these predictors with variables external to the theory. After a selection of groups to be analyzed (e.g., "intenders" and "non-intenders," or "high-," "middle-," and "low-intenders"), between-group differences on all variables are examined. Hotellings' T^2 or ANOVA are used to test overall differences (e.g., on outcome beliefs, evaluations, and products), and t tests are performed to determine between group differences on the individual belief-evaluation products that determine attitude, and the belief-motivation products that determine norm. Differences on these variables show how the two (or more) groups formed different attitudes or norms. These differences demonstrate what information must be provided to influence beliefs, attitudes, intentions, and behavior in the desired direction.

Applying the Theory's Results to Recruitment (and Retain) Adult Learners

The theory could just as easily be applied to the understanding and change of adult students' intentions to remain in a program as to the intentions of potential adult students to become involved in a program. The discussion below will focus, however, on the latter.

Three Ways to Change Attitude in the Desired Direction

As adults consider registering for a training workshop, they automatically begin forming beliefs about likely outcomes of this behavior, and they automatically evaluate each outcome. Not all adults will hold the same beliefs, but a set of beliefs can be derived that are modally salient for the population of interest (e.g., adults in a given field of work). There are three ways to alter the set of outcome beliefs so as to change attitude in the desired direction, by the provision of information targeting the outcome belief-evaluation products that make the largest contribution to attitude.

The first way to change attitude in a *positive* direction targets those outcomes that are *negatively* evaluated, and attempts to *reduce* the strength with which they are believed. The second way to change attitude targets *positively*-evaluated outcomes and attempts to increase their belief strength. The third way is to provide information that adds new, *positively*-evaluated outcomes to the outcome belief set. (This approach is easiest concerning a behavior which is not highly salient to a population and about which, therefore, they hold fewer strong beliefs about outcomes.)

Three Ways to Change Subjective Norm in the Desired Direction

As adults consider their registering for a training workshop, they automatically form beliefs that certain other people or groups (referents) would favor or oppose their monitoring. Adults will be highly disposed to comply with the expectations of some of these referents, less so with others.

The first way to change subjective norm in a *positive* direction targets *negative* referents (those who are perceived as *not* wanting the adults to register for the training workshop), and attempts to reduce the strength of normative beliefs.

The second way to change subjective norm in a *positive* direction targets *positive* referents (those perceived as wanting the adults to register for the training workshop), and with whom the adults are strongly motivated to comply, and involves *increasing* the strength of normative beliefs that these referents want the adults to register.

The third way is to make the adults aware of *new* referents who would be perceived as wanting them to register, and with whom they would be motivated to comply. For vocationally-oriented programs such new referents might be their professional associations and peers in other firms or agencies. For home-oriented programs (e.g., gardening), such new referents might be their neighbors, friends, and buddies in the neighborhood association.

Conclusion

The theory of reasoned action is a research-tested approach to understanding and influencing people's decisions about their behavior. In response to the calls for more theory in our research, of Boshier (1980) and others, the theory of reasoned action offers an excellent theoretical anchor for investigations of a wide variety of adult behaviors and behavioral domains concerning adult and continuing education. It has at least two contributions to the area of recruitment (and retention) of adult students.

First, the theory's parsimony, clear conceptual and operational definitions, and utility across a wide variety of behaviors and behavioral domains are important for building a comprehensive body of research about how adults make decisions about their involvement in education.

Second, the theory's focus on variables proximal to behavioral decisions makes it an invaluable tool for adult educators to increase and enhance adult educational participation regardless of the type of program concerned. Although the inclusive models of participation might eventually be useful in building a comprehensive understanding of ACE participation, their complexity seems likely to inhibit the empirical testing required for their further development. A research focus on the proximal variables constituting the theory of reasoned action, presents at least three possible advantages over the inclusive approach. Although there have been a number of applications of the theory in adult and continuing education, the theory is still not as widely applied as it could be, to the best advantage of our field.

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