UNDERSTANDING RESPONSIBILITY: A SELF-DIRECTRED LEARNING APPLICATION OF THE TRIANGLE MODEL OF RESPONSIBILITY

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Abstract

Personal responsibility has long been considered an important component in self-directed learning. And yet, a theoretical understanding of personal responsibility that could lead to meaningful instrumentation has eluded the field. The present study considers the merits of the Triangle Model of Responsibility (TMR) (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994) as a useful construct for the field of self-directed learning. This study considers how well the TMR fits with other theoretical constructs and considers possibilities for future research.

From the earliest days in the field of self-directed learning (SDL), personal responsibility has been considered as an important and necessary component. Houle (1961/1993) stated that it was "accepted by most people" (p. 89) that men and women should be responsible for their own learning. Knowles (1975) believed that the reader must feel "secure in taking . . . responsibility" (p. 10) if he or she desires to be a self-directed learner. Guglielmino (1977) identified "a sense of responsibility for one's own learning" (p. 55) as a necessary component of the self-directed learner. Tough (1979) asked the question: why does the self-directed learner "retain the primary responsibility for himself [sic]" (p. 93)? Candy (1988) opined that "adult learners should accept most, if not all, of the responsibility for their own learning" (p. 159). Brockett and Hiemstra (1991) stated that responsibility is the overarching concept for understanding SDL. Garrison (1997) included responsibility as a key concept when he created his own comprehensive model of SDL. Recently, Ponton and Rhea (2006) suggested that personal responsibility is a relevant construct in autonomous learning that needs further study.

For all of the attention that personal responsibility has received, a consistent theoretical construction which could aid researchers in future research has eluded the field. While researchers talk freely about the importance of sensing responsibility (Guglielmino, 1977), accepting responsibility (Brockett & Hiemstra, 1991; Candy, 1988), *taking responsibility* (Garrison, 1997; Knowles, 1975), and being responsible (Houle, 1961/1993), there is no clear theoretical definition of responsibility as it fits into a theoretical construct in SDL. Without a theoretical definition, ambiguity will continue making empirical research, which could move the study of SDL forward, difficult to obtain.

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Schlenker et al. (1994) developed the Triangle Model of Responsibility (TMR) for understanding the various factors that contribute to responsibility attribution. The TMR identifies three linkages that when measured can identify the degree of perceived responsibility of an agent: (a) prescription-event link, (b) identity-event link, and (c) prescription-identity link. Each link represents a belief held by an individual that will be evaluated as he or she attempts to judge the degree of responsibility for his or her own or someone else's behavior. A perception of personal responsibility is the product of the strength of these three factors as they are held by the individual. According to Fishbein and Ajzen (1975), a "belief links an object to some attribute" (p. 12). Personal responsibility in SDL can thus be defined as a personal belief that links the learner (the object) with each of the three components of the TMR (the attributes). The relative strength and content of that belief is better understood once the TMR is explained in the following pages. The purpose of this paper is to investigate the potential of the TMR as a construct for identifying responsibility in self-directed learners and developing teaching methodologies to increase one's perception of personal responsibility in SDL.

Personal Responsibility and Self Directed Learning

We begin by discussing the development of personal responsibility within SDL. While many SDL researchers and theorists have promoted the importance of this construct for over 40 years, a precise and consistent definition is noticeably absent from the literature.

The Early Years

In studying SDL one is often first directed to the figure of Cyril Houle (1961/1993) and his book *The Inquiring Mind*, "a significant milestone in the development" (Candy, 1992, p. 24) of SDL. This book is notably considered to have created the foundation that later work in SDL would be built upon (Candy, 1992). Hence, Houle's book provides a suitable place to begin considering the importance of personal responsibility in SDL. As one reads through Houle's book, the theme of personal responsibility is conspicuous in its absence. However, in the afterword of the third edition, Houle (1961/1993) wrote: "the idea that men and women should assume responsibility for their own learning was tacitly accepted by most people" (p. 89). This assertion by Houle places personal responsibility, as a central concept in adult learning, at the very nascent stages of the movement. Assuming Houle's assessment was correct, one would expect a great deal of theoretical and empirical research on the topic of personal responsibility in SDL throughout the years. In fact, this is not what has occurred.

Like Houle (1961/1993), Knowles (1975) and Tough (1979) continued to infer that personal responsibility was an important attribute for adult learners to posses, especially those who would wish to be self-directed in their learning. Their work, however, focused on uncovering the frequency and trends of adult and self-directed learners and did not provide a theoretical model that would connect responsibility and SDL. In addition, while Tough developed an interview methodology which would enable individuals to assess the level of learning taking place among an adult population, quantitative methods that could more closely analyze the place of personal responsibility in SDL did not emerge.

Guglielmino (1977) recognized a need for instrumentation in order to determine an individual's readiness for SDL. She asserted that an important first step was to "learn more about the highly self-directed learner" (p. 3). Through a utilization of the Delphi technique, Guglielmino identified behavioral and attitudinal characteristics of self-directed learners. From this round-table of experts, which included Houle, Knowles, and Tough, a "sense of responsibility for one's own learning" (Guglielmino, 1977, p. 55) emerged as a necessary component for SDL. The second step in her process was the development of the Self-Directed Learning Readiness Scale (SDLRS) that was validated using exploratory factor analysis. Guglielmino's instrument has had both supporters (e.g., Confessore, 1991; Long, 1989; Long & Agyekum, 1983) and opponents (e.g., Bonham, 1991; Field, 1989) throughout the years. While Guglielmino (1977) took an important first step in identifying personal responsibility among the necessary components for successful SDL, what her work lacked was a theoretical understanding of what it means to have "informed acceptance of responsibility for one's own learning" (p. 65). Without a theoretical understanding it is difficult to ascertain if the items that are loaded into factor 4, the factor associated with personal responsibility, are appropriate measures of personal responsibility. For example, one item, "I consider myself to be average or above average in intelligence" (p. 65), which factored into factor 4 appears to be face-invalid. Hence, while the SDLRS is arguably a useful omnibus measure for determining readiness for SDL, it is not useful as a measure of personal responsibility.

Later Development

Brockett and Hiemstra (1991) sought to be more systematic in positioning personal responsibility into a theoretical construct related to self-direction in adult learning and introduced the Personal Responsibility Orientation (PRO) model. The PRO bridges SDL (instructional methods) and learner self-direction (personality characteristics) through the notion of personal responsibility. In so doing, Brockett and Hiemstra provide a foundational definition of what it means to have personal responsibility: Individuals who are personally responsible "assume ownership for their own thoughts and actions" (p. 26). According to Brockett and Hiemstra, accepting responsibility in learning is a necessary step if proactive learning is desired. In addition, responsibility for SDL not only includes the initial decision to pursue a SDL project but also "accepting the consequences of one's thoughts and actions as a learner" (Brockett & Hiemstra, 1991, p. 28).

Brockett and Hiemstra (1991) presented a clearer picture regarding a place for responsibility within the SDL context. Unfortunately, their use of the term tended to be fluid throughout the book. Overall the PRO presents responsibility as a predecessor or precursor to SDL and self-direction. This indicates that individuals who have personal responsibility will enter into certain learning projects which could be labeled as self-directed, or might be labeled as a SDL. From this perspective, responsibility would seem to be a character attribute. The PRO, however, presents the character attributes of learner self-directedness as distinct from personal responsibility. It is unclear how personal responsibility can lead one to engage in certain activities or exhibit particular tendencies if personal responsibility is not a characteristic of the learner. Later in the book, Brockett and Hiemstra reversed the direction of the PRO, stating that "learner self-direction refers to those individual characteristics that lead to taking responsibility for personal learning" (p. 142). As a result, the PRO presents personal responsibility as both a

precursor and an outcome of self-direction in learning. Such ambiguities make it difficult to construct instrumentation that can lead to meaningful empirical results.

Garrison (1992) hypothesized that personal responsibility and control were key elements in understanding SDL. He defined responsibility as "an obligation for purposeful unconstrained participation in order that the individual may create meaning through the integration of new ideas/values" (p. 143). From this definition responsibility of an individual is closely tied to his or her ability to exert control over the learning process. Garrison (1997) later presented a comprehensive model where "self-directed learning . . . include[d] the process of accepting responsibility to construct meaning and to cognitively monitor the learning process itself" (p. 21). In this work, he identified "responsibility to construct personal meaning" (p. 21) as synonymous with self-monitoring. He further asserted that "[r]esponsibility for self-monitoring reflects a commitment and obligation to construct meaning through critical reflection and collaborative confirmation" (p. 24). This multiple use of responsibility does not help to clarify the term. This construct identifies self-monitoring as a key component for SDL and then indicates that self-directed learners take responsibility in self-monitoring. Furthermore, selfmonitoring is a reflection of the construction of meaning, which is accomplished by individuals who accept responsibility. His definition is circular as responsibility in self-monitoring is used to define the construction of meaning, and those who accept responsibility in the construction of meaning are defined as self-monitoring. Rather than clarify the construct of responsibility, he has created ambiguity.

A Recent Application

Stockdale (2003) sought to create a "reliable measure of self-directedness" (p. 3) based on the PRO. Her goal was to measure self-directedness by looking at the manifestations of personal responsibilities in both thoughts and actions. Based on Brockett and Hiemstra's (1991) work, Stockdale conceptualized personal responsibility as the link between the learning/teaching process and the belief/attitude orientation. The underlying assumption in Stockdale's work is that there should be a connection between what one thinks about a personal sense of responsibility and the actions manifesting those thoughts. While not referenced in Stockdale's work, a similar assumption can be found in cognitive psychology. Fishbein and Ajzen (1975) suggested that beliefs, attitudes, and intentions are related to behavior in a given activity. Further, they identified a process that explains the connection between beliefs, attitudes, intentions, and behaviors through four domains of functioning: cognition, affection, conation, and behaviors. Since Stockdale's assumptions are congruent with Fishbein and Ajzen's behavioral model, their theoretical construction provides an excellent framework for considering the validity of Stockdale's theoretical foundation.

Stockdale's (2003) test items were written to reflect two factors related to the PRO: (a) "a teaching-learning transaction in which the learner demonstrates proactive personal responsibility" (p. 76) and (b) learner characteristics defined as "a degree of self-efficacy and motivation that predisposes one toward taking primary responsibility" (p. 76). The first factor is investigating actions, which indicate the existence of personal responsibility, while the second factor is looking at attributes that cause one to exhibit an action that could be labeled as responsibility. The first factor assumed responsibility to be part of either the cognitive or affective domain where personal responsibility is conceived as either beliefs or attitudes about

one's relationship to SDL. The second factor, however, places responsibility as an intention or a behavior where personal responsibility is the result of beliefs about personal abilities and motivational factors to enact behaviors labeled as responsibility. This lack of theoretical clarification of responsibility has led to a conflation of psychological domains for a single construct. Moore (1991) asserted that theory is "the reduction of our knowledge to the basic ideas, presented in a way that shows their underlying patterns and relationships" (p. 2). As a result, good theoretical definitions assist researchers in making clear connections. Stockdale's conceptualization has not accomplished this task.

Implied within the work of these scholars is an agreement that personal responsibility is an important component and must be a part of the equation if one is to understand SDL. Nonetheless, a useful construct of personal responsibility, which could lead to meaningful instrumentation, has eluded the field. Responsibility is a term that has been used with such regularity that it is assumed that all individuals understand what it means. As shown above, however, the ways in which personal responsibility has been understood and applied has varied widely. As a result a parsimonious definition of personal responsibility has not been constructed within the field of SDL.

The Triangle Model of Responsibility

Schlenker et al. (1994) presented the findings from two research projects investigating responsibility attribution and offered the TMR as a theoretical framework. Within this model it was hypothesized that in order to make evaluative reckonings concerning responsibility, one must have information related to prescriptions, event, and identity. Prescriptions are rules that guide an agent's conduct, an event is the action or occurrence under question, and identity is related to the agent's role and abilities. The linkages that tie these three factors to one another create a triangle (see Figure 1).

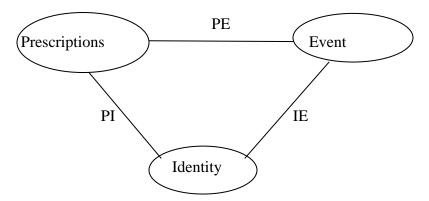


Figure 1. The Triangle Model of Responsibility

Note. From "The Triangle Model of Responsibility," by Schlenker et al., 1994, *Psychological Review*, 101(4), p. 635. Copyright 1994 by the American Psychological Association. Adapted with permission of the author.

The prescription-event (PE) asks, do the established rules and norms relate to the event? The identity-event (IE) asks, is there a connectedness between the agent and the event due to the

agent's role and perception of control? The prescription-identity (PI) asks, is the agent bound to the established rules by virtue of personal attributes? "[T]he combined perceived strengths of the three linkages among the elements determines how responsible the actor [i.e. agent] is judged to be on the occasion" (Schlenker, 1994, p. 635). The adjudicator within the model can either be the agent or someone other than the agent.

In addition to the two original studies that support the model and constitute the original article (Schlenker et al., 1994), the model has been tested in relation to soldiers' responsibility and job engagement (Britt, 1999), students' responsibility and GPA (Schlenker, 1999), responsibility attribution for employment situation (Wohl, Pritchard, & Kelly, 2002), voters and voting tendencies (Britt, 2003), and pharmacists' responsibility for drug therapy outcomes (Planas et al., in press). Over the course of those studies, strong linkages were positively related to greater perceived responsibility. In three of the studies (Britt, 1999, 2003; Schlenker, 1999) strong linkages in the TMR also predicted engagement.

The Triangle Model of Responsibility and Self Directed Learning

Upon further consideration, it is evident how the TMR can also be easily applied to SDL. An individual who perceives responsibility for personal learning would most likely (a) clearly understand what is required for desired learning to take place (PE), (b) connect oneself as the key agent in learning acquisition while having perceived control over the learning process (IE), and (c) perceive a possession of the necessary attributes to accomplish what is required (PI). A person who perceives limited responsibility for SDL will (a) not feel that the method of obtaining knowledge is clearly understood (PE), (b) see the key agent in learning apprehension as being external to the learner or lack sufficient control over the process (IE), and (c) not believe he or she posses the necessary attributes for accomplishing the tasks associated with the learning project (PI).

It is important to understand "[r]esponsibility is a direct function of the combined strength of the three linkages" (Schlenker et al., 1994, p. 640). As a result, an agent could have a high strength in two linkages and a low strength in a third, and this will affect perceived responsibility. Using foreign language acquisition as an example, one may feel that the method by which one acquires a foreign language is well known, and that those methods will lead to language acquisition (prescription event, PE). The learner could understand that unless one personally undertakes the process, no one is going to learn it for the learner. In addition the learner might perceive adequate time and resources available (identify event, IE). And yet, that individual, based on past failures at attempting to learn foreign languages, may not feel capable of actually succeeding (prescription identity, PI). As a result, the individual would be less likely to perceive personal responsibility in this learning project compared to one who had high linkage strength in all three factors.

Based on the TMR, adult education practitioners could foster personal responsibility within an individual by considering how each of the three linkages is being addressed within a class, project, or assignment. For example, clear communication concerning how the assignments lead to desired learning (PE), highlighting for the students how the efforts of the

individual contribute to success (IE), and constructing work that expands upon previously learned skills (PI) should foster an increase in personal responsibility within a specific course.

The Triangle Model of Responsibility and Cognitive Psychology

The three linkages can be associated with other psychological constructs within cognitive psychology. The IE link can be associated with role identity (Hamilton, 1978; Hamilton & Sanders, 1981) and locus of control (Rotter, 1972). The PE link can be associated with outcome expectancy theory (Bandura, 1986; Rotter, Chance, & Phares, 1972). The PI link can be associated with self-efficacy theory (Bandura, 1997; Pajares, 1996). Each cognitive factor associated with the TMR linkages is related to a construct separable from the other two. Self-efficacy is separate from locus of control since self-efficacy is concerned with one's perceived ability to execute particular behaviors and not if the agent perceives himself or herself as having control over the outcomes that those behaviors might produce. Locus of control is separate from outcome expectancy because the focus of an outcome expectancy is on the causality of the behavior based on outcome variations and likelihoods, while the focus of the locus of control is on the causality of the outcome rather with or apart from the agent. Lastly, outcome expectancy is not the same as self-efficacy since outcome expectancy is looking at which behaviors will produce desired outcomes, while self-efficacy is an assessment of an individual's perceived ability to carry out a particular behavior.

Based on the TMR, personal responsibility in SDL is best understood as a personal belief. Fishbein and Ajzen (1975) offered a useful behavioral model in which they hypothesized that "[t]he totality of a person's beliefs serves as the informational base that ultimately determines his [sic] attitudes, intentions, and behaviors" (p. 14). According to Fishbein and Ajzen, attitudes concerning an object are formed from salient beliefs about that specific object. In relation to learning, an agent might hold beliefs concerning the relative value of learning, one's likelihood in achieving learning, or expected outcomes from learning. Once an assessment of beliefs concerning an object has been made and attitudes based on those beliefs have been formed, one might, for example, form intentions to enact certain behaviors related to that object. If one believes there is value in learning and has formed positive attitudes concerning learning, then one might form an intention to read a book that will enable him or her to acquire the desired learning. As a result, it is consistent with Fishbein and Ajzen's theory to hold that beliefs about personal responsibility in SDL could have an impact on the decision to engage in SDL.

Schlenker (1997) opined that this connection between beliefs about personal responsibility and behavior is due to the fact that beliefs concerning personal responsibility engage the self-system. Pratkanis and Greenwald (1985) conceptualized the self as an "organization of knowledge" (p. 312) consisting of the beliefs one has about oneself. This is similar to Bandura's (1997) hypothesized self-concept as "a composite view of oneself that is presumed to be formed through direct experiences and evaluations adopted from significant others" (p. 10). Once the self-system has been engaged, an agent will often enact self-maintenance tasks related to volitional control (Kuhl & Fuhrmann, 1998). Greenwald and Pratkanis (1984) referred to these as ego tasks, which "take precedence over other tasks" (p. 158) because they are used in self-evaluation. Tasks that are important in maintaining one's self-concept become important as one seeks to maintain an internal evaluation of the self. What an

agent considers himself or herself responsible for will be considered important tasks in the regulation of the self. Based on these theories, an accurate measure of perceived personal responsibility in relation to SDL could help to identify individuals who have a positive attitude concerning SDL and are likely to form an intention to partake in such activities.

Possibilities of the Triangle Model of Responsibility for Instrumentation

While it can not be determined ahead of time whether or not an instrument measuring personal responsibility in SDL utilizing the TMR can be predictive of engagement and success in SDL, one can ascertain using existing theory whether or not the TMR is likely to produce such an instrument. When one considers Fishbein and Ajzen's (1975) behavioral model in relation to the TMR, one can hypothesize why an increase in personal beliefs concerning perceived responsibility should be positively correlated with increases in engagement as a predecessor to behaviors. It is reasonable to assume, therefore, that personal perceptions of responsibility will play a part in the formation of attitudes, intentions, and ultimately the decision to engage in specific behaviors. Bandura (1997) suggested that by analyzing the self-referent process of the self-concept one can shed light on an individual's attitudes about themselves and their general outlook on life.

This type of study would assume that one's perception of personal responsibility is part of one's personal beliefs (Schlenker, 1997). According to Wylie (1974), personal belief appraisals can be analyzed in terms of the self-concept. In order to measure one's self-concept a self-referent instrument relating to the appropriate construct should be utilized. Such instruments ask individuals to assign a numerical value relative to the participant's position on a particular subjective dimension. Utilizing the hypothesis of the TMR, we suggest a three dimensional instrument would provides the best measure of personal responsibility in SDL. Any multidimensional scale should be created using a priori theoretically separate factors. The present study hypothesizes that (a) the PI link is closely associated with self-efficacy; (b) the IE link is closely associated with internalized roles and locus of control, and (c) the PE link is closely associated with outcome expectancy. While Likert scales are quite common in educational research, it is the recommendation of Bandura (1997) and Rotter, Chance, and Phares (1972) to use 100 point scales in the measurement of beliefs and attitudes. Likewise, Kline (2000) extolled the virtues of a ratio scale with a known zero over an interval scale. As a result, the proposed instrument would utilize a 100 point scale. By assessing the strength of an individual's perceptions on a 100 point scale in each of the three factors as they relate to SDL, an accurate measure of personal responsibility in SDL can be obtained.

The proposed usefulness of this study would be to accurately measure any adult's perceptions of personal responsibility in SDL. Thus, initial piloting of the instrument should be conducted among a cross section of adults with a variety of ages, occupations, and educational backgrounds.

Possibilities of the Triangle Model of Responsibility for Practitioners

The concept of personal responsibility, as presented here, is based on established concepts within cognitive psychology. As a result one can use analogous research to identify the

prescribed methods for increasing one's perceptions related to self-efficacy, locus of control, and outcome expectancy. Bandura (1997) stated that individuals strengthen self-efficacy through obtaining information from four sources: personal mastery, vicarious experiences, verbal persuasion, and physiological or affective arousal. Personal mastery is related to past successful experiences in the same or similar activities. Vicarious experiences involve personal appraisals of capability by witnessing the success of similar others. Verbal persuasion involves the opinions of important others concerning the abilities of the agent. Lastly, physiological or affective arousals provide feedback that is used to interpret existing ability. Based on this knowledge, adult educators can help to strengthen an individual's sense of efficacy by creating mastery experiences for the student, allowing the student to observe other students' successes in related activities, verbalizing a student's success and associated abilities, and helping the student to interpret physiological or emotive feedback not as indicants of inefficacy but rather as temporary stresses due to expanding abilities.

SDL is enhanced by an increase in learner control over both educational goals and the means for achieving those goals (Mocker & Spear, 1982). Based on the theories presented thus far, it should not be a surprise that increasing learner control could also positively alter one's perception of personal responsibility. The practitioner, however, should be cautioned against simply giving students choices and believing this will increase a sense of control. Harvey, Harris, and Lightner (1979) differentiated between freedom to choose and perceived control. "Often, we may feel free to choose from a wide range of actions but feel little ability to gain control over the course that we have chosen" (Harvey, Harris, & Lightner, 1979, p. 276); in addition, where choice may be considered as somewhat instantaneous, "experiences of control may be viewed as more continuous" (p. 276). Hence, in order to increase a sense of individual control practitioners need to do more than simply give choices to students. Steiner (1979) recommended giving an opportunity for the individual to choose between options based on which alternative will yield the desired result. Harvey et al. (1979) concluded the following about Steiner's work:

Steiner . . . makes it clear that in this type of perceived choice, the person feels that he or she, rather than something in the environment, is the principal causal agent – that is, feels a high degree of control over personal actions. (p. 284)

Rotter, Chance, and Phares (1972) defined outcome expectancy "as a subjective probability or contingency held by the individual that any specific reinforcement or group of reinforcements will occur in any given situation or situations" (p. 24). The first time an individual undertakes a particular behavior, expectancy evaluations are based on past experiences and may be generalized from similar previous situations. After subsequent experiences (both successes and failures), expectancy "will be determined more and more by specific experiences" (Rotter et al., 1972, p. 25). Bandura (1986) asserted that people generally appraise their past actions and subsequent effects and assume that their actions will have some influence on future scenarios. The adult education practitioner has the ability to influence future outcome expectancy evaluations by assisting the student in making clear connections between specific actions and educational goals.

Conclusion

A review of the literature shows that while individuals have identified the importance of personal responsibility, a cohesive understanding that places responsibility within reasoned action theory has yet to be identified. The TMR provides needed understanding into what increases perceptions of responsibility. Instrumentation based on this model could help identify individuals who perceive a high degree of responsibility toward their own learning. Such knowledge could help theorists and practitioners alike as they try to better understand and foster responsibility as a key element in SDL.

References

- Bandura, A. (1986). Social foundation of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bonham, L. A. (1991). Guglielmino's self-directed learning readiness scale: What does it measure? *Adult Education Quarterly*, 41(2), 92-99.
- Britt, T. W. (1999). Engaging the self in the field: Testing the triangle model of responsibility. *Personality and Social Psychology Bulletin*, 25(6), 698-708.
- Britt, T. W. (2003). Motivational and emotional consequences of self-engagement: Voting in the 2000 U.S. presidential election. *Motivation and Emotion*, 27(4), 339-359.
- Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice*. New York: Routledge.
- Candy, P. (1988). Evolution, revolution or devolution: Increasing learner-control in the instructional setting. In D. Boud & V. Griffin (Eds.), *Appreciating adults learning: From the learners' perspective* (pp. 159-178). London: Kogan Page.
- Candy, P. C. (1992). The inquiring mind: A study of the adult who continues to learn. In G. J. Confessore & S. J. Confessore (Eds.), *Guideposts to self-directed learning: Expert commentary on essential concepts* (pp. 23-35). King of Prussia, PA: Organization Design and Development.
- Confessore, G. J. (1991). Human behavior as a construct for assessing Guglielmino's self-directed learning scale: Pragmatism revisited. In H. B. Long & Associates (Eds.), *Self-directed learning: Consensus & conflict* (pp. 123-146). Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.
- Field, L. (1989). An investigation into the structure validity, and reliability of Guglielmino's Self-Directed Learning Readiness Scale. *Adult Education Quarterly*, *39*(3), 125-139.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley Publishing Company.
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-149.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18-33.
- Greenwald, A. G., & Pratkanis, A. G. (1984). The self. In R. S. Wyer, Jr. & T. K. Skrull (Eds.), *Handbook of social cognition* (pp. 129-179). Hillsdale, NJ: Lawrence Erlbaum.
- Guglielmino, L. M. (1977). Development of the self-directed learning readiness scale (Doctoral dissertation, University of Georgia, 1977). *Dissertation Abstracts International*, 38, 6467. (UMI No. 786004)

- Hamilton, V. L. (1978). Who is responsible? Toward a social psychology of responsibility. *Social Psychology*, *41*(4), 316-328.
- Hamilton, V. L., & Sanders, J. (1981). The effect of roles and deeds on responsibility judgments: The normative structure of wrongdoing. *Social Psychology Quarterly*, 44(3), 237-254.
- Harvey, J. H., Harris, B., & Lightner, J. M. (1979). Perceived freedom as a central concept in psychological theory and research. In L. C. Perlmuter & R. A. Monty (Eds.), *Choice and perceived control* (pp. 275-300). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Houle, C. O. (1961/1993). *The inquiring mind: A study of the adult who continues to learn* (3rd ed.). Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education.
- Kline, P. (2000). *Handbook of psychological testing* (2nd ed.). New York: Routledge.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Chicago: Follett.
- Kuhl, J., & Fuhrmann, A. (1998). Decomposing self-regulation and self-control: The volitional components inventory. In J. Heckhausen & C. Dweck (Eds.), *Lifespan perspectives on motivation and control* (pp. 15-49). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Long, H. B. (1989). Some additional criticisms of Field's investigation. *Adult Education Quarterly*, 39(4), 240-243.
- Long, H. B., & Agyekum, S. K. (1983). Guglielmino's Self-Directed Learning Readiness Scale: A validation study. *Higher Education*, 12, 77-87.
- Mocker, D. W., & Spear, G. E. (1982). *Lifelong learning: Formal, nonformal, informal, and self-directed.* Columbus OH: ERIC Clearinghouse on Adult Career and Vocational Education. (ERIC Document Reproduction Services No. ED220723)
- Moore, M. G. (1991). Editorial: Distance education theory. *The American Journal of Distance Education*, 5(3), 1-6.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543-578.
- Planas, L. G., Kimberlin, C. L., Segal, R., Brushwood, D. B., Helper, C. D., & Schlenker, B. R. (in press). *A pharmacist model of perceived responsibility for drug therapy outcomes*. Social Science and Medicine.
- Ponton, M. K., & Rhea, N. R. (2006). Autonomous learning from a social cognitive perspective. New Horizons in Adult Education and Human Resource Development, 20(2), 38-49.
- Pratkanis, A. R. & Greenwald, A. G. (1985). How shall the self be conceived? *Journal for the Theory of Social Behavior*, 15(3), 311-329.
- Rotter, J. B. (1972). Generalized expectancies for internal versus external control of reinforcement. In J. B. Rotter, J. E. Chance, & E. J. Phares (Eds.), *Applications of a social learning theory of personality* (pp. 260-294). New York: Holt, Rinehart and Winston.
- Rotter, J. B., Chance, J. E., & Phares, E. J. (1972). An introduction to social learning theory. In J. B. Rotter, J. E. Chance, & E. J. Phares (Eds.), *Application of a social learning theory of personality* (pp. 1-43). New York: Holt, Rinehart and Winston.
- Schlenker, B. R. (1997). Personal responsibility: Applications of the triangle model. In L. L. Cummings and Barry M. Shaw (Eds.), *Research in Organizational Behavior* (Vol. 19). Greenwich, CT: JAI Press.
- Schlenker, B. R. (1999, June). *Personal responsibility predicts academic achievement*. Paper presented at the meeting of the American Psychological Society, Denver, CO.

- Schlenker, B. R., Britt, T. W., Pennington, J., Murphy, R., & Doherty, K. (1994). The Triangle Model of Responsibility. *Psychological Review*, *101*(4), 632-652.
- Steiner, I. D. (1979). Three kinds of reported choice. In L. C. Perlmuter & R. A. Monty (Eds.), *Choice and perceived control* (pp. 17-28). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Stockdale, S. L. (2003). The Development of an instrument to measure self-directedness (Doctoral dissertation, University of Tennessee, 2003). *Dissertation Abstracts International*, 64, 1976. (UMI No. 3092836)
- Tough, A. (1979). The adult's learning project: A fresh approach to theory and practice in adult learning (2nd ed.). Austin, TX: Learning Concepts.
- Wohl, M. J. A., Pritchard, E. T., & Kelly, B. (2002). How responsible are people for their employment situation? An application of the Triangle Model of Responsibility. *Canadian Journal of Behavioral Science*, 34(3), 201-209.
- Wylie, R. C. (1974). The self-concept. Lincoln, NB: The University of Nebraska.