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# What to expect when you're expecting: gaps in utility perceptions of the online adult learner

Byron Shane Lowery

*Louisiana State University and Agricultural and Mechanical College*, lowerybs@gmail.com

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WHAT TO EXPECT WHEN YOU'RE EXPECTING: GAPS IN UTILITY PERCEPTIONS OF  
THE ONLINE ADULT LEARNER

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
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in

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by

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## **ABSTRACT**

The adult learner can be defined as someone who, while enrolled in an academic institution, is involved in other major life responsibilities such as work or family obligations. Recently, there has been an increase in the number working adults pursuing a college education. However, empirical research regarding the job-related utility of obtaining this education is limited. Therefore, it is becoming increasingly important to examine not only the expectations regarding how a degree may be useful for career advancement, but the work and life outcomes associated with obtaining the degree as well. This study examined job-related utility perceptions for obtaining an online college degree. Furthermore, it examined the overlap between Expected Utility and Actual Utility, and the extent to which congruence between the two may influence one's psychological contract at work and have consequences for other related job outcomes. Overall, the results showed Actual Utility was positively related to Psychological Contract Breach, Job Performance, and Job Commitment, suggesting the perceived usefulness of a degree may determine how adult learners are impacted within the organization, regardless of prior expectations of obtaining the degree.

## INTRODUCTION

In the realm of higher education, student populations are changing. Academic degree programs are seeing an increase in enrollment among adult learners (Deggs, 2011; Thoms, 2001), students who balance major life responsibilities such as families or work obligations while enrolled in academic degree programs (Flint & Associates, 1999). A recent study of adult learners in Louisiana (Dumais, Rizzuto, Cleary, & Dowden, 2012) found that approximately 88% were employed at least part-time. Nationally, approximately 5.7 million adults in the U.S. over the age of 25 were enrolled in 4-year degree institutions in 2009 (National Center for Education Statistics, 2010). Despite the prevalence of adults engaged in this dual employee-learner role, until recently very little empirical research has examined the degree to which adult learners' development needs and expectations are met through the pursuit of education (Knowles, Holton, & Swanson, 2005). Even less research investigates the adult learner within the organizational workplace context. This is unfortunate because, by definition, adult learners are engaged in the workforce. These work and life demands of adult learners create a need to articulate the perceived value of college education to working adults and their employers and to understand the impact that degree obtainment has on important psychological and organizational outcomes (Deggs, 2011). As such, this study sought to explore the concept of congruence between adult learner expectations and their perceived utility of obtaining a degree. That is, how expectations for obtaining a degree match actual outcomes. Furthermore, this study proposed that Psychological Contract Breach perceptions may serve as a mediator between that congruence and important job outcomes such as Commitment and Performance.

The field of organizational development (OD) offers theories that suggest ways adult learners may strengthen their job-related knowledge and skills in order to enhance their

workplace performance (Kenner & Weinerman, 2011). In this literature, there is a clear linkage between formal learning experiences that increase skill acquisition and job performance. However, Cheesman (2006) noted that formal training within organizations is on the decline, and that workers are looking elsewhere for training and development, which includes turning to e-learning. As such, a growing number of adult learners are turning to online learning because of the many advantages it provides (e.g. scheduling convenience, self-paced). For this reason, it is important to examine the perceived utility of obtaining an online college education (utility perceptions) and its impact on the psychological contract (i.e. the unwritten agreement) between the adult learner and his/her employer (Rousseau, 1989). Because psychological contracts are pivotal to the health of the employee-employer relationship, this study also explored linkages between the adult learners educational experiences and job outcomes that are particularly valued by employers, such as perceived Job Performance and Job Commitment.

Because this study examined adult learner expectations as well as perceived outcomes, two forms of utility perceptions were explored. Expected Utility is described as the potential hopes and beliefs of the utility of pursuing education *prior* to enrolling, while Actual Utility is defined as “the perceived usefulness of some activity (e.g. obtaining an online degree) to a person’s current or future life” (Chen & Liu, 2008, p. 263), and congruence will be measured as the overlap between the two variables. The goal of this research project was to establish:

1. The relationship between the Expected Utility and Actual Utility of a college education, which will be referred to here as Utility Congruence
2. The relationship between the Utility Congruence held by adult learners and their supervisors, referred to here as Actor Congruence
3. The degree to which Utility Congruence and Actor Congruence affects the psychological contracts (Psychological Contract Antecedents)
4. The relationship between the psychological contract and perceived Job Performance and Job Commitment of the adult learner. (Psychological Contract Outcomes)

Secondarily, this study aimed to explore demographic differences between full-time and part-time learners, full-time and part-time workers, and degree completion statuses (e.g. graduated, enrolled, or dropout students).

The hypotheses originally proposed in the scope of this research project are presented in Appendix 1. However, an unanticipated data collection issues resulted in the need for modifications to this study's research design and model. As described in the Modifications section, this study's model was revised and some hypotheses were omitted from the analysis.

## **REVIEW OF LITERATURE**

With andragogical theory of adult learning as the theoretical base, principles of expectancy confirmation (Oliver, 1980) and psychological contracts (Rousseau, 1989) provided rationale to support this study's research hypotheses about Utility Congruence and the influence it has on Psychological Contract Breach, Job Commitment, and Job Performance. A review of the relevant literatures follows.

### **Andragogical Theory of the Adult Learner**

This investigation was examined through the lens of Knowles' (1984) andragogical adult learner theory, which holds that adults have learning styles that tend to be self-directed and pragmatic, and manage life and work demands that can impede or facilitate academic progress in a manner different from traditional students in a college environment (Kenner & Weinerman, 2011; Knowles et al., 2005). Moreover, because adult learners are known to prioritize concrete, practical outcomes (Thoms, 2001), it was important to determine the role college education plays in one's ability to secure desired outcomes like career and/or personal advancement.

Understanding the role perceived utility plays in the adult learners' motivation toward college degree completion, employment attitudes, and ultimate personal and professional outcomes has broader societal implications, given the fact that adults who achieve academic success are more likely to benefit personally and economically in society (Ritt, 2008).

The concept of andragogy, the theories and strategies of learning applied to adults, was first introduced by Malcolm Knowles in the 1970s (Knowles et al., 2005). Within this theory, six principles are identified: (1) the learner's need to know (i.e. why should something be learned before it is learned) (2) self-concept of the learner, (3) prior experience of the learner, (4) readiness to learn, (5) orientation to learning, (6) motivation to learn (p. 3). However, while these

principles are considered a core basis, several factors may cause the adult to draw closer or veer away from the core. These include situational factors, goals, personal growth, and individual differences (Knowles et al., 2005). As an extension of andragogy, Knowles (1974) was able to identify four characteristics identifying the adult learner: (1) adult learners are self-directed, usually taking responsibility for their own actions and are often resistant when information is forced upon them; (2) adult learners often have a wealth of knowledge gained from personal experiences, which can serve as part of the foundation of their self-identity; (3) adult learners are often ready to learn and pursuing education voluntarily; and (4) adult learners tend to be task motivated. These learners are often pursuing further education for a specific goal or purpose such as better jobs, promotions, or higher salaries (Knowles et al., 2005), which could indirectly be influenced by the outcome variables in this study (e.g. Job Performance and Commitment). To wit, it should be noted that adult learners are not traditional students and may have learning styles (e.g. self-directed and pragmatic) or personal life experiences that may either cause hindrances or allow them to thrive in an academic environment (Kenner & Weinerman, 2011). To summarize, the Andragogical Theory informs this investigation by differentiating adult learner expectations about education from their perception of its Actual Utility, and by exploring outcomes relevant to both personal and work life.

### **Expectation Confirmation Theory**

In addition to theoretical support, the expectation confirmation theory (ECT) provided structure for the hypotheses models used in this study. Related to expectations and perceived outcomes, ECT stems from the marketing field and was originally proposed by Richard Oliver (1980). And while ECT is often used to study consumer satisfaction and repurchase intentions,

one objective of this study was to apply the model to utility perceptions of the adult learner and supervisor within an organization.

According to ECT, expectations combined with perceived performance, can lead to post-purchase satisfaction for consumers and will eventually lead to repurchase intentions. Furthermore, this relationship is mediated through positive or negative confirmation of expectations by way of performance. That is, if a product outperforms prior expectations, satisfaction will occur, and vice-versa. It is this satisfaction that leads to repurchase intentions of the product (Chou, Lin, Woung, Tsai, 2012; Oliver, 1980). For this study, the initial ECT model was modified to examine the relationship between Expected Utility and Actual Utility, how Utility and Actor Congruence relates to Psychological Contract Breach, and if these breach perceptions influence job outcomes. Often times, it is the immediate supervisor, serving as a representative of the organization, that has to make promises that an employee may base expectations on (Lester, Turnley, & Bloodgood, 2000). For example, a supervisor may offer incentives related to additional training or education (e.g. obtaining a college degree) and thus, if these incentives are not met, the employee may feel that this “promise” has been broken. Accordingly, situations may exist in which the immediate supervisor and employee have different perspectives regarding what is involved in a psychological contract (Lester et al., 2000). Therefore, it seems imperative that the relationship between adult learner and supervisor be one of mutual understanding and common expectations. Building on andragogical foundation, this study used expectation confirmation theory (Oliver, 1980) to determine whether congruence in utility perceptions have an impact on the adult learners psychological contracts at work and job outcomes. More specifically, by using this framework and showing how utility perceptions can eventually lead to outcome variables such as Job Performance, this study provides insight into

how core andragogical concepts such as motivation and personal payoff (e.g. better salaries or promotions) can be influenced by: (a) level of congruence in utility perceptions of the adult learner and (b) level of congruence in utility perceptions between the adult learner and supervisor. In summary, the ECT model provided the framework used to develop the utility models presented below.

### **Utility Model for the Adult Learner**

Drawing the influences from Andragogy and ECT into one model, Figure 1 depicts the perceived relationship between utility perceptions (e.g. Expected and Actual Utility) and congruence measures (e.g. Utility and Actor Congruence).

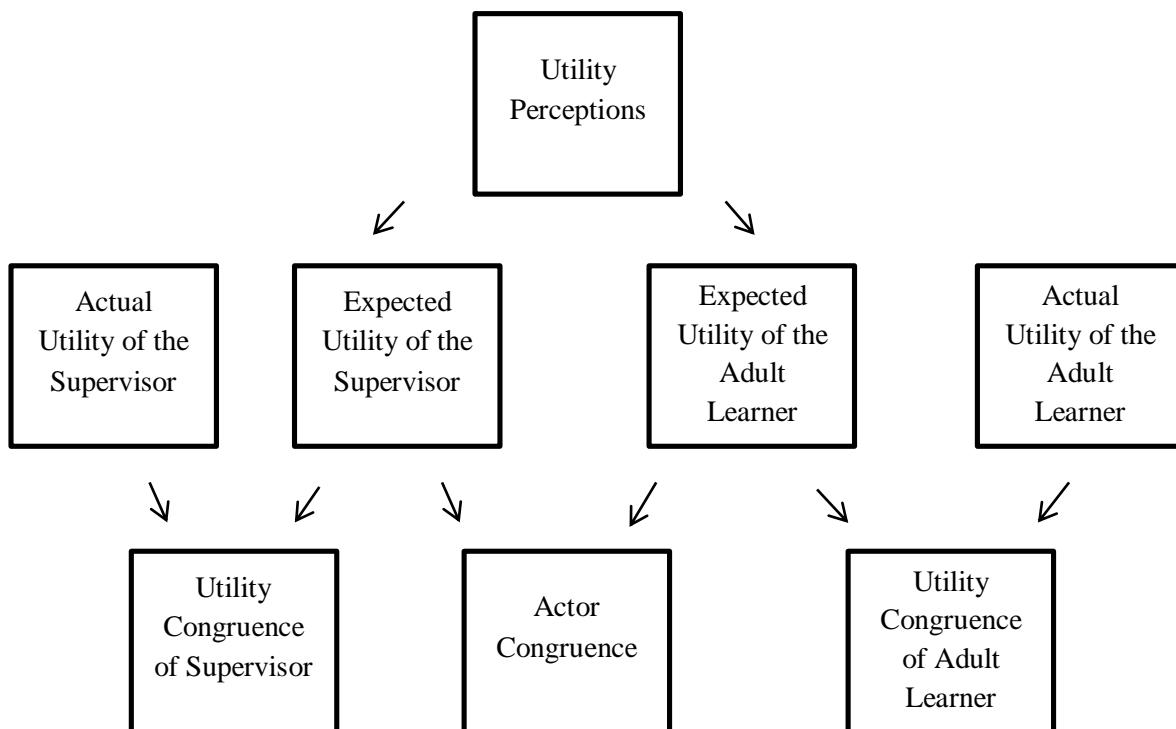


Figure 1 - Utility model for the adult learner and supervisor.

In relation to ECT, expectations, combined with perceived outcomes, lead to either a confirmation or disconfirmation of expectations regarding some situation (Chou, Lin, Woung, Tsai, 2012). Examined here, this would imply that the adult learner and supervisor have some prior expectancy regarding the utility of pursuing online education and, when compared with actual utility, will form some level of congruence with the education attainment process. It can also be inferred that unmet expectations may evoke negative feelings and outcomes. Therefore, a goal of this project was to examine the congruence in utility perceptions. Hypothesis 1 explored the relationship between Expected and Actual Utility. Next, the degree of alignment between the two forms of utility perceptions was evaluated and observed as a congruence construct (Utility Congruence) that served as a key variable in Hypothesis 2. Given the importance of the actor perceiving the Expected and Actual Utility, the study distinguished congruence among adult learners from congruence among workplace supervisors.

### **Utility Congruence Hypothesis**

This study examined the relationship between two forms of utility perceptions, Expected Utility and Actual Utility, among adult learners pursuing a college education while employed. Typically, individuals have some expectations about the outcomes of an event, how certain processes work, or the relationship between two variables (Masnick & Zimmerman, 2009; Nickerson, 1998). Often times, these expectations bias the perceived outcomes or evidence related to the event (Marsh & Hanlon, 2007) and become a confirmation bias. In social psychology, confirmation bias refers to an individual's propensity to seek, remember, and value information that confirms one's prior beliefs and expectations (Hergovich, Schott, & Burger, 2010; Nickerson, 1998). That is, an individual will be more likely to not only believe, but remember evidence if it confirms their own beliefs and hypotheses. Furthermore, an individual

may attempt to minimize or devalue information that fails to agree with prior beliefs (Nickerson, 1998).

Marsh and Hanlon (2007) studied the influence of prior expectations on behavioral observations in behavioral biologists. The researchers manipulated how expectations concerning the behaviors of salamanders were presented to participants. The results showed that indeed, while the effect was only moderate, the prior expectations of the observers biased the behavioral observations. Snyder and Swann (1978) examined the processes an individual may use to test hypotheses in social interactions. Initially, participants were presented with hypotheses (e.g. is the target introverted or extroverted) about the personal attributes of certain targets. Next, the participants developed a set of questions to ask the targets that would test these hypotheses. The results showed that in each of the experiments, participants were more likely to test the hypotheses by searching for information that would confirm each hypothesis. That is, if the hypothesis was that the target was extroverted, the participants were more likely to seek information that confirmed this behavior.

An important feature in the examination of congruence is the role of the actor who does the perceiving. While the underlying cognitive mechanisms (e.g. confirmation bias) may be the same across actors, it is plausible that adult learners and supervisors experience different degrees of congruence between expected and actual utility perceptions due to the nature of their expectations. For instance, employees are often times more motivated by intrinsic goals such as promotion and growth, or job security, while supervisors may be motivated by more concrete outcomes such as a larger paycheck or overall increase in profits (Kovach, 2001). Thus, the motivations behind pursuing an education may be different for both parties. While adult learners may have high expectancies for a promotion or more security, supervisors may be more focused

on the bottom line. Furthermore, the adult learner may show a higher level of congruence; given they have a direct and vested interest in obtaining the education. Therefore, these constructs were examined separately with the intention of comparing the two sides later on.

Since this bias is innate and does not take into account the strength (e.g. high or low) or the valence (e.g. positive or negative) of the expectations, it is expected that the relationship will be the same for both the adult learner and the supervisor. That is, it seems that an individual, regardless of position, is more likely to seek information that confirms prior expectations. For example, regardless of whether expectations may be highly positive or only slightly negative, an individual, due to the confirmation bias, when presented with information that disagrees with prior beliefs, will tend to ignore these findings and instead seek out information to support prior expectations (Masnick & Zimmerman, 2009). Thus, it seems logical that a positive relationship would exist between expectations and perceived outcome. That is, it seems that if an individual has high expectations regarding the expected utility of college education, then that person will strive to seek out information that confirms this belief. As such, the following was hypothesized:

**Hypothesis 1:** Expected Utility will be positively related to Actual Utility.

### **Actor Congruence Hypothesis**

Next, this study examined the level of congruence between the adult learner and his/her supervisor with regard to expected utility. Research indicates a strong relationship between the perceptual congruence of the subordinate –supervisor relationship regarding important job outcomes (Schnake, Dumler, Cochran, & Barnett, 1990, p. 38). The quality of the relationship between employee and supervisor, referred to as leader-member exchange, has been positively linked to attitudes and important job outcomes (Gerstner & Day, 1997). Furthermore, research has suggested that if discrepancies exist between work responsibilities such as job definitions

(Morrison, 1994), tasks, or benefit packages, these discrepancies between employee and supervisor perspectives can have a negative impact on attitudes and outcomes (Hsiung & Tsai, 2009). In relation to this study, the adult learner and his/her immediate supervisor may have different expectations for education. This may include, from the learner's perspective, a chance for promotion, salary increase, increased job security, or more job opportunities. From the supervisor's perspective, having workers pursue additional education may have implications for better job performance, a more skilled workforce, or added human capital for the organization. Therefore, it seems necessary to examine the congruence in the utility expectations for the adult learner and supervisor. As such, given that the adult learner may have more of a vested interested in obtaining a college education (i.e. more of a direct impact regarding outcomes), and the supervisor may only see the adult learner as a small piece in a larger puzzle regarding organizational outcomes, it is predicted that adult learner may have higher expectation ratings than the supervisors. However, given that obtaining an online education will benefit both actors, it is believed that a positive relationship exists between expected utility. Therefore, the following was hypothesized:

**Hypothesis 2:** Expected Utility of the adult learner and supervisor will be positively related.

### **Psychological Contracts**

The second half of the model (Figure 4) explored how the congruence of Expected Utility can lead to Job Commitment and Job Performance. Psychological contracts refer to an individual's belief that a reciprocal relationship exists between themselves and another (Rousseau, 1989). That is, individuals develop certain ideas or notions about what to expect in return for some given output. For instance, if an individual is hired to complete a certain job or task, that individual typically expects to be properly compensated once the job is complete. A

perceived failure to compensate the individual properly may result in what is known as a Psychological Contract Breach or violation (Morrison and Robinson, 1997; Rousseau, 1989). These breaches may then impact important job outcomes such as performance and commitment. It should be noted that psychological contract breach should be treated as an interval variable rather than a dichotomous. That is, the extent to which a psychological contract or breach occurs should be the primary focus. Please see Figure 2 for a visual representation of these concepts.

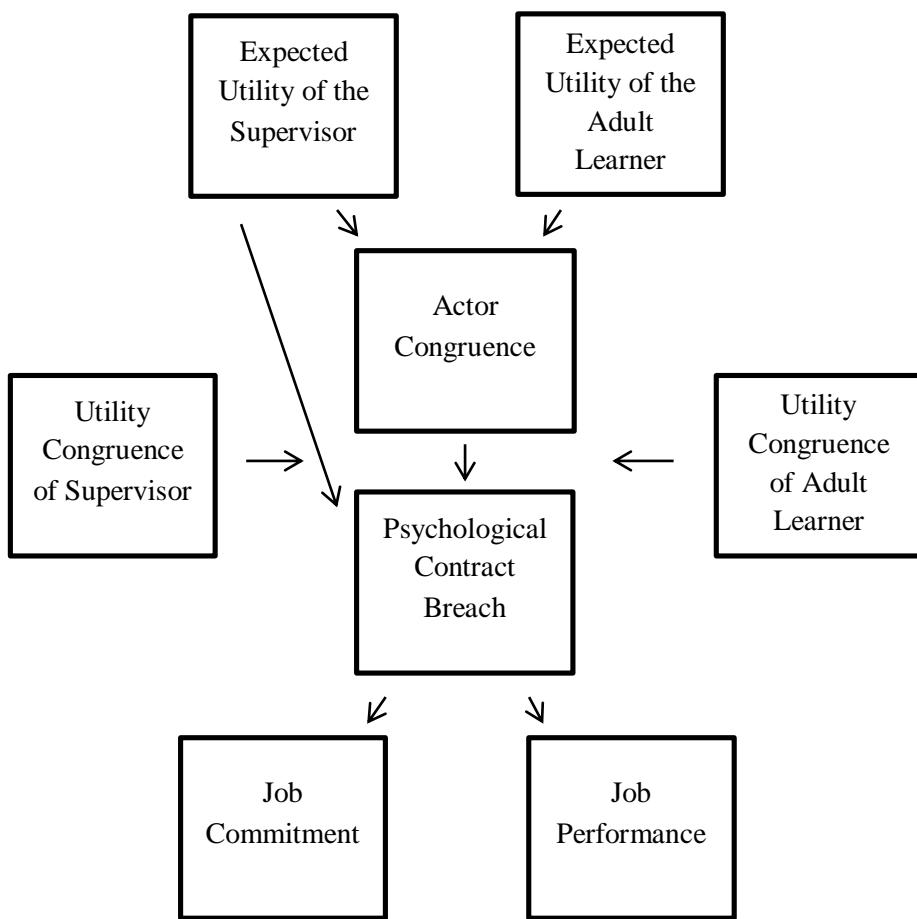


Figure 2 - Congruence – Job Outcome Model

The met expectation literature, while frequently cited, has not been studied thoroughly (Wanous, Poland, Premack, & Davis, 1992). Porter and Steers (1973) developed an expectations

hypothesis that argued that met expectations can be described as the discrepancy between an employee's experiences, whether positive or negative, on a job, and what they expected to encounter. Furthermore, these discrepancies have been known to cause negative feelings, attitudes, and behaviors that may influence certain job outcomes (Wanous et al., 1992).

Moreover, Taris, Feij, and Capel (2006) believe that met expectations allow the employee to develop positive attitudes and beliefs regarding the organization.

Within an organization, psychological contracts may involve perceived informal promises made by the employer to the employee or employee beliefs regarding organizational relationships and generally relies on the role of reciprocity in exchange relationships (Rousseau, 2001; Conway & Coyle-Shapiro, 2011). Often times during recruitment, socialization, or early interactions with coworkers or supervisors, employees may form certain beliefs and ideas about what to expect during employment (Rousseau, 2001). These perceived unwritten promises between the employee and employer are imperative for developing strong exchange relationships (Zagenczyk, Gibney, Few, & Scott, 2011).

Primarily, research on psychological contracts has focused on the employee perspective, but early researchers noted the needs of both parties need to be met (Nadin & Williams, 2012). For example, Schein (1965) believed that psychological contracts should be understood from both perspectives, with careful consideration given to the role of the organization. However, Rousseau (1989) contends that a contract is formed by an individual's belief in reciprocity, and thus the contract is primarily held by the employee, not both parties. More recent literature suggests that this subjective agreement exists in the mind of not only the employee, but in the mind of the organization's representative that may have made the promises to the employee

(Cohen, 2011; Maguire, 2002). Therefore, this study attempted to examine the psychological contract with input from both the adult learner and the immediate supervisor.

### **Psychological Contract Antecedent Hypothesis**

The next area of focus examined congruence as an antecedent of Psychological Contract Breach (PCB). As previously mentioned, when an individual perceives that a given output has not been properly compensated, a Psychological Contract Breach may occur. When this happens, negative outcomes may arise (Ng, Feldman, & Lam, 2010; Rousseau, 1989). Furthermore, mismatched expectations of an outcome can lead to perceived psychological contract breach (Rousseau, 1989). This would mean that if congruence is low between the Expected Utility of the adult learner and the supervisor (i.e. the expectations are mismatched), perceptions of Psychological Contract Breach may occur.

While research has seemingly provided support that unmet expectations cause negative job outcomes (Taris, Feij, & Capel, 2006), research regarding Psychological Contract Breach as a mediator between this incongruence and negative job outcomes seems to be limited. However, Robinson and Morrison (2000) while exploring antecedents to Psychological Contract Breach, found incongruence, defined as “different understandings about whether a given obligation exists or about the nature of a given obligation” (p. 526), to be one of the root causes of a perceived breach. Furthermore, equity theory and ECT explains that low congruence between expectations and perceived outcome can cause negative emotions and attitudes, all of which can be seen as precursors to Psychological Contract Breach. Therefore, it was proposed that if congruence regarding Expected Utility of the adult learner and supervisor is low, it will lead to perceptions of a Psychological Contract Breach.

**Hypothesis 3:** Actor congruence regarding Expected Utility will be negatively associated with PCB perception for adult learners.

In addition to exploring actor congruence as a possible antecedent to Psychological Contract Breach, this study examined how Utility Congruence of the adult learner may also directly affect contract breach perceptions. Indeed, one of the defining characteristics of a Psychological Contract Breach is that it may occur when a given party perceives that expectations have been unmet regarding certain outcomes (Rousseau, 1989). Another way to look at PCB is that it can be seen as incongruity between what an employee feels was promised to them and what was actually delivered (Lambert, 2011). For example, Kim and Choi (2010), while examining the effects of unmet tenure expectations found that these unmet expectations not only reduced trust in new employers, but also negatively affected the quality of psychological contracts with the new employer. In addition, Robinson and Morrison (2000) suggest that perceptions of PCB may be a result of incongruence, a difference in perceptions between the employee and organization. With regard to this study, the unmet expectations (i.e. low congruence of Expected Utility and Actual Utility) of the adult learner regarding the utility of obtaining a college degree may directly affect a perceived breach. Therefore, the following was hypothesized:

**Hypothesis 4:** Utility Congruence of the adult learner will be negatively associated with PCB perception.

### **Psychological Contract Breach –Job Outcome Effects Hypotheses**

**Job Commitment.** Lastly, this study examined whether perceptions of Psychological Contract Breach will negatively affect important job outcomes, specifically Job Commitment and Job Performance. Within the workplace, employee attitudes and work behaviors may be negatively affected by a perceived contract breach (Morrison & Robinson, 1997; Robinson, 1996). That is, if an employee feels the organization has not met obligations related to their side

of the psychological contract, imbalance is perceived and the employee may take action to restore balance (Conway & Coyle-Shapiro, 2011). These actions may come in the form of reduced actions or behaviors related to performance (e.g. a drop-off in production), commitment (e.g. a decrease in involvement with the organization), or job engagement (e.g. a lack of motivation).

Up to this point, research has shown a negative effect of unmet expectations on job outcomes, including organizational commitment (Taris et al., 2006). Porter, Steers, Mowday, & Boulian (1974) define organizational commitment as “the strength of an individual’s identification with and involvement of a particular organization (p. 604).” Furthermore, the authors believed commitment could be characterized using three factors: “(a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a definite desire to maintain organizational membership (p. 604).” Allen and Meyer (1996) developed a three component model of commitment. The first component is known as affective commitment, which refers to the employee’s emotional attachment to organization. This includes how the employee identifies with the organization and how involved they are. The second component is referred to as continuance commitment. This type of commitment refers to the cost associated with the employee leaving the organization. That is, this commitment is based on the potential drawbacks and issues that may arise by leaving the organization. The final component is normative commitment. This refers to the employee’s felt obligation to remain with the organization.

Within the psychological contract research, studies examining commitment are on the rise, but remain somewhat limited (Cohen, 2011). Previous findings suggest that Psychological Contract Breach can negatively impact affective commitment (Ng, Feldman, & Lam, 2010). In

fact, in recent meta-analyses, researchers found negative associations between psychological contract breach and commitment (Cantisano, Morales Dominguez, & Depolo, 2008; Zhao, Wayne, Glibkowsky, & Bravo, 2007). Ng et al. (2010) examined how Psychological Contract Breach influenced affective commitment longitudinally over a period of 6 months. The researchers found that not only did perceptions of contract breach strengthen over time; these perceptions were associated with decreased levels of commitment as well. Cohen (2011) studied the relationship between psychological contracts and several forms of workplace commitment. His findings suggested that psychological contracts are not only related to organizational commitment, but also job and workgroup commitment as well. Ali, Haq, Ramay, and Azeem (2010) examined the relationship between Psychological Contract Breach and affective commitment of employees in private organizations in Pakistan. The authors used two forms of psychological contracts, relational contracts and transactional contracts. Relational contracts are those associated with emotional interactions of the contract relationship while transactional contracts refer to the economic exchange relationship. The results indicated a significant relationship between relational contracts and affective commitment, while a negative relation was found between the transactional contracts and commitment. In sum, perceptions of Psychological Contract Breach are significantly related to lower organizational commitment.

Therefore, the following hypothesis was proposed:

**Hypothesis 5:** Psychological Contract Breach will negatively affect Job Commitment for the adult learner.

**Job Performance.** In addition to job commitment, psychological contract fulfillment or breach can also impact Job Performance. Conway and Coyle-Shapiro (2011) examined the reciprocal relationship between perceptions of psychological contract fulfillment and employee performance and the moderating effects of relationship quality and tenure. The researchers

hypothesized that perceptions of contract fulfillment would positively predict employee performance. The relationship between psychological contract fulfillment and performance increased over time. Furthermore, the researchers found that the quality of the social exchange relationship “buffered” the potential breach perceptions in early stages but not as time went on.

Along similar lines, Bal, Chiaburu, and Jansen (2009) investigated how social exchanges buffered the relationship between contract breach and work performance. Again, the researchers found a negative relationship existed between contract breach and work performance, but was moderated by social exchanges. That is, for employees who perceived more organizational support, trust, and were in better exchange relationships showed a stronger relationship between contract breach and performance. Restubog, Bordia, and Tang (2006), while examining the relationship between Psychological Contract Breach, Commitment and Performance, found that Psychological Contract Breach led to lower affective commitment, which mediated the relationship between breach and civic virtue performance. Given this, the following hypothesis was proposed:

**Hypothesis 6:** Psychological Contract Breach will negatively affect Job Performance for the adult learner.

### **Control and Exploratory Variables**

**Age.** The idea behind the adult learner is that it is more based on life circumstances rather than age (Merriam & Caffarella, 1999). That is, the situation, rather than age, may occur that causes the learner to want to go back to school and pursue a degree. This may be related to job issues or simply self-fulfillment (Merriam & Caffarella, 1999).

In the literature however, some differences with regard to age, *once enrolled*, have been found. Therefore, age may be seen as a factor that could affect the outcomes of obtaining a degree (Actual Utility). Chu (2010) found that older adults seem to be more frustrated with

regard to the internet. As such, this may indicate that older workers might not (a) be inclined to enroll in an online degree program, or (b) might struggle and therefore, not complete the program. Holyoke and Larson (2009) suggests that there may be a generation effect for how adult learners may learn. That is, depending on what generation the adult learner belongs to (age) may influence how they learn and the best techniques used to help them learn. Given this, age was examined as an extraneous variable. The participants were separated into age groups and tested for differences within each construct before collapsing into a single sample.

**Supervisor/Adult Learner Relationship.** The quality of the relationship between employee and supervisor, referred to as leader-member exchange (LMX), may also influence outcomes such as perceptions of psychological contract breach and work attitudes. LMX has been positively linked to attitudes and important job outcomes (Gerstner & Day, 1997). Furthermore, research has suggested that if discrepancies exist between work responsibilities such as job definitions (Morrison, 1994), tasks, or benefit packages, these discrepancies between employee and supervisor perspectives can have a negative impact on attitudes and outcomes (Hsiung & Tsai, 2009). Therefore, the quality of the adult learner-supervisor relationship may affect the actual utility of pursuing a college degree, in addition to psychological breach perceptions. That is, if the quality of the relationship is low, the supervisor may not be inclined to provide any of the potential benefits that may come from obtaining the degree (e.g. promotion, salary increase). Furthermore, if the LMX relationship is low, it may be an indication of other problems between the adult learner and supervisor. Therefore, an LMX scale was used to determine the relationships between the adult learners and supervisors. The groups were divided into high and low LMX relationships using a mean split (Mansour-Cole & Scott, 1998) in order

to determine if any statistical differences exist between high quality and low quality LMX groups.

**Academic Classifications.** Whether the adult learner has completed his/her online degree, or how far he/she are into the program, may impact the measure of actual utility. That is, the outcomes of obtaining the degree may take time to unfold. For instance, if the goal of the adult learner was to obtain a degree to get a promotion, he/she may not see this change instantly. Furthermore, if the adult learner is still in the degree program, the idea of the promotion may not even be a consideration yet. Therefore, participants were divided into groups based on the number of semesters they had completed. The groupings followed the academic classifications (e.g. freshman, sophomore) where participants were separated based on how many semesters had been completed.

### **Modifications to the Proposed Research Study**

During data collection, it became apparent that participants were hesitant to provide contact information for their workplace supervisors. Of the 135 respondents who completed the survey, only 29 provided supervisor contact information. Subsequently, only one supervisor responded to the follow up email asking to participate in the survey.

Comments from the participants indicated that the reasons for partial participation in the study were not random. When asked why adult learners may be hesitant to provide supervisor information, 83% of those who responded typically stated in some form: “My supervisor may believe I am getting ready to leave the organization,” “My supervisor would think I am trying to take his/her job,” or “My supervisor may think I am not devoting enough time to my work.”

As such, participants’ fears or concerns for workplace retribution in response to an employer’s knowledge about educational enrollment status led to the following modifications to the study. The decision was made to exclude supervisory input, but still retain the investigation

into the alignment of expectations about online education and psychological contract breach. The exploration into job performance and commitment was retained as well. As can be seen from Figure 3, the main difference in the model is that Utility Congruence was measured using the difference between the expected utility and actual utility of the adult learner, rather than from the expected utility of both the adult learner and the supervisor. This portion of the model still reflected in Hypothesis 1. However, with the elimination of supervisor input, Hypotheses 2 and 3 were eliminated. Hypotheses 4, 5, and 6 remained intact. The original list of hypotheses, along with a complete list of new hypotheses can be found in Appendix 1. The remaining sections of this paper were based on the modifications stated above.

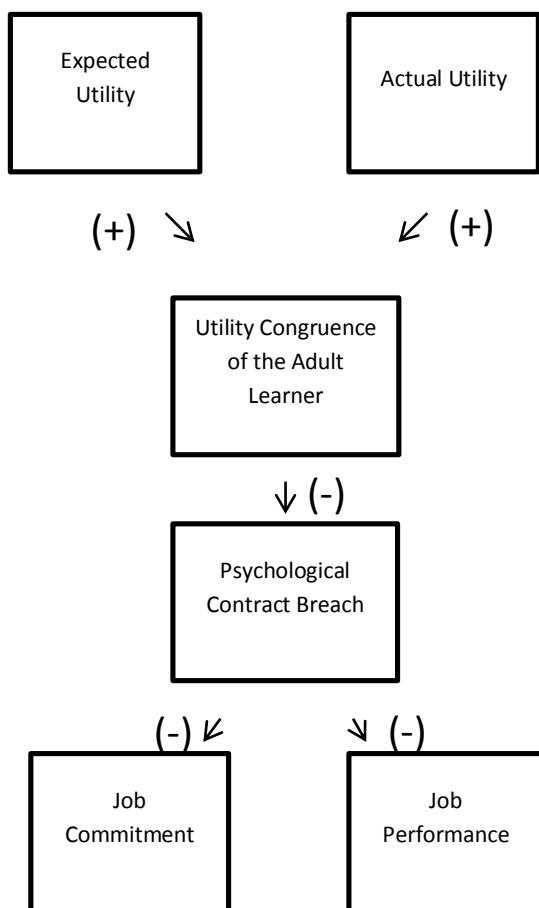


Figure 3 - Modified utility model for the adult learner

## METHODS

### Participants

Approximately 1200 adult learners enrolled in an online education program at a southern university were contacted for this study. This program was selected because it not only had a large student population, but because it also offered a variety of academic programs at every degree level including Associate, Bachelor, Master's, and Ph.D. programs. Of the 1200 students who received the initial email invitation, 240 participated in the survey, for an initial response rate of 20%. However, 107 participants were excluded because of incomplete data. Of these, 51 were excluded because they did not complete any of the survey questions, while the remaining 56 were excluded because they had at least one quantitative data point missing from their responses, which appeared to be missing at random. Participants were not excluded if they did not answer the qualitative questions. The final sample size included 133 adult learners. Seventy nine percent of the participants were female, and on average were 33.7 years of age ( $SD = 9.9$ ). Sixty one percent were African-American, while 31% were Caucasian. Gender and Age demographics were consistent with a previous Louisiana adult learner study (*Mean Age = 38, Female = 69%*; CALL, 2011). However, that study found that African-American participants encompassed 37% of their sample, as opposed to the 61% in this study.

Most (53%) of this study's participants were enrolled in Bachelor's degree program, while 26% were in Master's programs, and 11% were enrolled in a Ph.D. program. Only seven of the participants had already completed their degree. The participants were enrolled in an average of 10 hours this semester, and were on average four semesters into their degree program. Thirty (30%) percent were employed within the education industry, 23% within the healthcare industry, and 9% were employed within an industrial setting (e.g. construction site or oil and gas industry). There were only 11 (8%) part-time workers and the participants worked an average of

37 hours per week. Again, this was consistent with a previous Louisiana adult learner profile that showed 11% of adult learners were employed part time, while 78% were employed full time (CALL, 2011).

## Measures

**Utility Perceptions.** This study measured two forms of Utility Perceptions to assess adult learner's thoughts about the usefulness of post-secondary education. The first, Expected Utility, refers to the beliefs regarding the usefulness of obtaining a college degree prior to enrolling. However, Expected Utility was being measured while the adult learner was enrolled. Expected Utility was assessed using a modified version a scale developed by Ford and Noe (1987) (Appendix 2). This is a 5-item scale is designed to measure attitudes toward training utility and was measured on seven point likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree), generating a score from low to high Expected Utility. This scale was modified to reflect the expected utility of pursuing a college degree while employed. Past studies have shown psychometrically acceptable levels of internal consistency with coefficients ranging from 0.87 to 0.92 (Madera, Steele, & Beier, 2011), which was consistent with the metrics established for this study ( $\alpha = .90$ ;  $M = 5.99$ ,  $SD = 1.07$ ).

Actual Utility refers to the perceived usefulness of the college degree after obtainment, but again, was being measured while the adult learner was still enrolled in a degree program. It was assessed using the same scale used for expected utility (Appendix 3). Again, this measure was modified to reflect the perceived utility of college education while currently enrolled. It was measured on seven point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Past studies have shown internal consistency coefficients ranging from 0.87 to 0.92 (Madera, Steele, & Beier, 2011), which was consistent with this study ( $\alpha = .90$ ;  $M = 5.77$ ,  $SD = 1.16$ ). In addition, the qualitative question, "Did you see any benefits or negative outcomes after you

obtained your degree or enrolled in the program, particularly on your job?" was asked to learn more about the actual utility of obtaining a college degree. Of the 105 responders, 53% reported benefits, while only 10% reported negative outcomes. In addition, 30% felt they hadn't seen any benefits or negative outcomes. The remaining percentage were miscellaneous or ambiguous responses.

Because Expected Utility and Actual Utility were measured using the same scale, a confirmatory factor analysis was conducted in AMOS 20 to determine whether the measures could be treated as two separate factors. That is, were the participants able to distinguish between past expectations and actual utility? The two factor model [ $\chi^2 = 154.12$ ,  $p < .01$ , CFI = .88, RMSEA = .16] showed significantly better fit statistically than the one factor model [ $\chi^2 = 306.18$ ,  $p < .01$ , CFI = .73, RMSEA = .24]. The two factor model suggests that participants were able to distinguish between the scales and thus, distinguish between utility perceptions before and after their enrollment.

Because this study is one of the first of its kind to explore utility perceptions in the adult learner population, a contribution of this research project is that it included a qualitative data collection component. Participants were asked, "What were your expectations regarding the obtaining a college degree through your online program?" A total of 101 adult learners responded to the question. Of these, 34% had expectations of career advancement, 26% expected to obtain a degree, 16% commented on the ease of obtaining a degree online, 13% had expectations for personal growth, and the remaining 8% were miscellaneous or ambiguous responses. These themes will be further analyzed and explored in the presentation of this study's results.

**Utility Congruence.** Utility Congruence is the degree of overlap between Expected and Actual Utility. It was measured by calculating the difference score between Expected and Actual Utility. Difference scores have been used in previous organizational research to measure a variety of congruence constructs including congruence between actual and desired job attributes (Locke, 1976), leader-subordinate congruence (Bin Ahmad, 2008), and person-environment fit (Kaufmann & Beehr, 1989). Overall, congruence between the two utility measures was high ( $M = -.22$ ,  $SD = .89$ ). In addition, the qualitative question “Do you feel the expectations you had regarding obtaining your degree match the actual outcomes? Why or why not?” was asked to learn more about how they felt their expectations were being met. Eighty one percent (81%) of the eighty six respondents indicated their expectations were met.

**Psychological Contract Breach.** Psychological contract breach was measured using a modified version of Robinson and Morrison’s (2000) scale (Appendix 4). This scale is frequently used as a global measure of PCB and has shown reliability coefficients ranging from .72-.88 (Restubog, Bordia, Tang, & Krebs, 2010). Internal consistency was consistent with previous studies, ( $\alpha = .75$ ;  $M = 2.22$ ,  $SD = .97$ ). This scale was modified to reflect the adult learners perceptions concerning the perceived promises related to obtaining college education while employed and was measured on a five point likert scale ranging from 1 (Not at All) to 5 (To a very great extent). In addition, a qualitative question regarding PCB was presented to the adult learner. The question was, “Do you feel that any promises made regarding how you would benefit from obtaining a degree have been broken?” One hundred and one (101) participants responded to this question. Of these 46% felt no promises were broken, 34% felt no promises were made, and only 9% felt promises made by their organization had been broken.

**Job Commitment.** Job Commitment was assessed using the Affective Commitment Scale developed by Allen and Meyers (1990) (Appendix 5). This 8-item scale is designed to measure the affective aspect of organizational commitment, which is essentially an employee's emotional involvement and attachment to an organization. It was measured on seven point likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). This measure showed an internal consistency reliability estimate of .87 in its original development (Allen & Meyers, 1990) and has frequently been used as a standard for job commitment measurement. In this study, the scale showed internal consistency reliability of ( $\alpha = .90$ ;  $M = 5.61$ ,  $SD = 1.2$ ). The qualitative question, "Do you feel your overall commitment to your organization has changed since your enrollment or completion of your online degree?" was asked to learn more about the adult learner's commitment to their organizations. One hundred participants responded to the question. Of these, 62% felt their commitment had not changed, while 27% felt it had.

**Job Performance.** Job Performance was measured using a modified version of a scale developed by Williams and Anderson (1991) (Appendix 6). This 8-item measure is designed to measure employee in-role behavior, and was self-rated by the adult learner. This scale has previously been used for supervisory ratings as well as a self-reported performance measure (Korsgaard, Meglino, & Lester, 2004) and was measured on seven point likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Studies using this measure have found reliability coefficients ranging from .70 (Korsgaard et al., 2004) to .94 (Sparrowe, Liden, Wayne, & Kraimer, 2001). In this study, the internal consistency was ( $\alpha = .68$ ;  $M = 6.37$ ,  $SD = .70$ ). However, the removal of item #8 (Engages in activities that will directly affect his/her performance evaluation) increased the internal consistency to ( $\alpha = .79$ ). The deletion of this item can be seen in other studies as well (e.g. Korsgaard et al., 2004) and may be due to the ambiguity

of the question. That is, employees may not know if activities they engage in will directly affect performance. The qualitative question “Do you feel your overall job performance has changed since your enrollment or completion of your online degree?” was also asked. Of the 106 participants who responded, 61 (58%) felt their performance had not changed, while 35% felt it had.

**Leader Member Exchange.** Leader Member Exchange was assessed using the LMX7 (Appendix 7), the most widely used measure for LMX (Bernerth, Armenakis, Field, Giles, & Walker, 2007). It was developed by Scandura and Graen (1984) and showed an internal consistency rating of .84. This 7-item measure was modified from its original form so that it could be assessed on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). See Liden, Wayne, & Stilwell (1993) for an example of this modification. The scale showed great reliability overall ( $\alpha = .94$ ;  $M = 38.5$ ,  $SD = 8.7$ ). For the analyses, participants were divided into high and low LMX using a mean split (Mansour-Cole & Scott, 1998). Results of the analyses showed no statistically significant differences between high and low LMX groups for any of the dependent variables. Results of these analyses can be found in Table 1.

**Academic Classification.** For exploratory purposes, participants were divided into groups based on the number of semesters they had completed within their respective program. A total of six groups were distinguished ( $\leq 2$  semesters, 3-4 semesters, 5-6 semesters, 7-8 semesters, 9-10 semesters, and  $<10$  semesters). The goal was to determine whether the amount of time enrolled in a program would have an effect on the variables, particularly, Actual Utility. However, no statistically significant differences were found between groups for any of the measured variables. Results are shown in Table 1.

**Type of Degree Program.** Participants were divided into groups based on the type of program they were enrolled in. A total of five groups (Associates, Bachelors, Master's, Ph.D., and other; N=129) were created. Results of the ANOVA analyses (found in Table 1) showed no differences among groups for any of the variables.

**Age.** As an exploratory variable, participant age was categorically divided into decades (e.g. 20's, 30's, etc.) in order to test whether age differences existed for each of the dependent measures. A total of six groups were created (20s-60s). No differences were found between groups for any of the variables.

Finally, the Expected Utility and Actual Utility of the supervisor, Actor Congruence, and the Utility Congruence of the Supervisor were not measured due to the modifications of the study.

As reported above, all measures showed acceptable internal consistency. Means for expected utility ( $M = 5.99$ ), actual utility ( $M = 5.77$ ), job commitment ( $M = 5.61$ ), and job performance ( $M = 6.37$ ) were all high relative to the highest possible score of seven. The measure of psychological contract breach had the lowest mean ( $M = 2.22$ ). The difference score calculated for utility congruence had a mean of ( $M = -.22$ ), suggesting a high degree of overlap between expected and actual utility. Descriptive statistics, correlations, internal consistencies, and ANOVA statistics are reported in Table 1.

## **Procedure**

The adult learners were invited to complete a web-based survey through the online website [www.qualtrics.com](http://www.qualtrics.com). Participants were recruited from the enrollment records of the University's online academic programs. The invitation email (Appendix 8) was sent to the adult learners explaining the purpose of the study, along with the potential benefits. In addition, three follow-up emails were sent at two-week intervals following the initial invitation. While the

program administrators at the university were intrigued by the study, no formal encouragement was sent asking for participation from its students. Overall, the participants had approximately 45 days to complete the study. Participants who completed the study were entered into a drawing for a \$50 prize, which was awarded to one of the participants.

Psychometric analyses, including reliability, path and factor analyses, were conducted in SPSS v. 21 and AMOS v. 20 to establish the fit of the measures for inclusion in inferential analyses. Path Analyses can be described as structural models that use observed variables, rather than latent variables (Kline, 2005). Furthermore, path models are useful when a variable has only one indicator. Because utility congruence used a single indicator (e.g. difference score), a path analysis was more appropriate than a structural equation model. Another advantage of path modeling is that it allows researchers to “estimate causal versus non-causal aspects of observed correlations (Kline, 2005, p. 94). Path analysis essentially uses standardized regression weights instead of correlations between variables. Fit statistic criteria were adapted from Kline (2005) where a “good fitting model” has a non-significant chi-square (susceptive to sample size), a root mean square error of approximation (RMSEA) below .08, and a comparative fit index (CFI) above .90.

Qualitative data was synthesized using a grounded theory approach to content analysis whereby responses to each question were synthesized into modal themes. Grounded theory is an inductive approach where by theory is dictated “from the ground up” by the empirical data collected as opposed to imposing a theory to vet the fit the data gathered. The grounded approach begins with data collection. The data is then synthesized and coded to form specific themes or patterns (Engward, 2013). A grounded theory approach was used for two reasons. First, most of the qualitative questions were categorized into “yes” or “no” categories, so theories regarding the

responses were not needed. The second reason a grounded approach was more suitable was as it allowed for response themes to develop naturally, rather than trying to “fit” responses based on previous theory. Had the responses been categorized using a more theoretical foundation, adult learning theories would have been used to group responses.

Two raters reviewed and synthesized the qualitative data. Both were graduate students with previous experience in coding qualitative data. Data were categorized based on the themes that emerged. If fewer than two responses were categorized into a theme, those responses were collapsed into a “miscellaneous” category. Ambiguous responses or responses in which the raters disagreed on the category were discussed and either placed in the proper category, or placed in the miscellaneous response category. Across questions, a total of 44 out of 599 responses were placed in miscellaneous categories, for an agreement rate of approximately 93%.

## **RESULTS**

### **Quantitative Analysis**

In what follows, Hypotheses 1, 4, 5, 6 were tested while Hypotheses 2 and 3 were excluded due to the previously described project modifications. Correlations and means can be found in Table 1.

Hypothesis 1 suggested a positive relationship would exist between expected utility (i.e. the perceived usefulness of a college degree before enrollment) and actual utility (i.e. the perceived usefulness of a college degree once the student was enrolled or the degree was obtained). The data showed a significant Pearson's correlation between expected utility and actual utility ( $r = .68, p < .01$ ), supporting Hypothesis 1. This suggests that, although learners can readily differentiate expected and actual utility perceptions as unique constructs, they see the constructs as related phenomena. Specifically, adult learners who have high expectations for their education experience ultimately perceive a high degree of utility in their education.

Hypothesis 4 proposed a negative relationship between Utility Congruence and Psychological Contract Breach, suggesting that as the degree of overlap between expected and actual utility increased, perceptions of psychological contract breach would decrease. This hypothesis was not supported, ( $r = -.16, p = .07$ ).

Hypothesis 5 proposed a negative relationship between Psychological Contract Breach and Job Commitment. A Pearson's correlation analysis showed support for this relationship ( $r = -.40, p < .01$ ). As such, Job Commitment may be negatively affected if an employee perceives psychological contracts have been violated. This hypothesis was also supported in the path analysis mentioned below ( $\beta=-.40, p<.01$ ).

Lastly, Hypothesis 6, which proposed a negative relationship between Psychological Contract Breach and Job Performance, was not supported ( $r = -.12, p = .18$ ), although the relationship was in the predicted direction.

While not specifically tied to any hypotheses, a few other significant results should be noted and were used to develop an alternative model discussed below. Other significant correlations included Actual utility and Psychological Contract Breach ( $r = -.24, p < .01$ ), Actual Utility and Job Commitment ( $r = .34, p < .01$ ), and Actual Utility and Job Performance ( $r = .48, p < .01$ ). Paths between Actual Utility and PCB ( $\beta = -.29, p = .01$ ) and PCB and Job Commitment ( $\beta = -.40, p < .01$ ) were also significant in the path analyses mentioned below. This suggests that as utility perceptions increase, job commitment and performance will also increase, but psychological contract breach perceptions will decrease. This model, with the exclusion of Utility Congruence, was tested using structural equation modeling. Results of this analysis are discussed below.

### **Path Analysis**

One path model and one structural equation model were examined. A path model is a statistical procedure designed to measure causal relationships in observed correlations (Klein, 2005). As such, this model uses the participant's scale scores from each of the dependent measures. Overall, this model showed great fit [ $\chi^2 (3) = 3.47, p < .05$ , CFI = .98, RMSEA = .03]. The CFI and RMSEA scores are consistent with Kline (2005) criteria for a good fitting model (CFI < .9, RMSEA > .08). However, the only significant path coefficient was found between psychological contract breach and job commitment ( $\beta = -.40, p < .01$ ), which was consistent with Hypothesis 5 that proposed a negative relationship between the variables. Figure 4 shows the path model along with the standardized path estimates.

Table 1 – Correlation Matrix

<b>Measure</b>	<b>n</b>	<b>M</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	
1. Expected Utility	133	5.99	1.07	(.90)									
2. Actual Utility	133	5.77	1.16	.68*** (.90)									
3. Utility Congruence	133	-22	.89	-.31** .48**	1.0								
4. Psychological Contract Breach	133	2.22	.97	-.13	-.24**	-.16	(.75)						
5. Job Commitment	133	5.61	1.20	.29	.34**	.10	-.40*** (.90)						
6. Job Performance	133	6.37	.70	-.004	.48**	.15	-.12	-.02	(.79)				
7. Age	126	33.7	9.9	-.20*	-.18*	.02	-.03	-.05	.15	1.0			
8. Time in School	101	3.9	2.4	.08	.07	.001	-.05	-.01	.09	.14	1.0		
9. LMX	133	38.54	8.67	-.12	-.13	-.02	-.01	-.04	-.05	.10	.01	(.94)	
<b>ANOVAS</b>													
Age Generations	126	6	.84 (.52)	1.45 (.21)	.61 (.70)	1.1 (.36)	.53 (.75)	.65 (.66)					
Academic Classification	103	6	.45 (.82)	.10 (.99)	-.112 (.35)	.47 (.80)	1.2 (.34)	1.0 (.43)					
LMX	130	2	1.0 (.32)	1.0 (.31)	.02 (.89)	.12 (.73)	.02 (.89)	.05 (.83)					
Type of Degree Program	129	5	.50 (.74)	.61 (.66)	.87 (.49)	.35 (.84)	.92 (.46)	1.6 (.19)					

Note. \*p<.05, \*\*p<.01. Internal consistencies appear in parentheses for correlations. Significance values appear in parentheses for F-value.

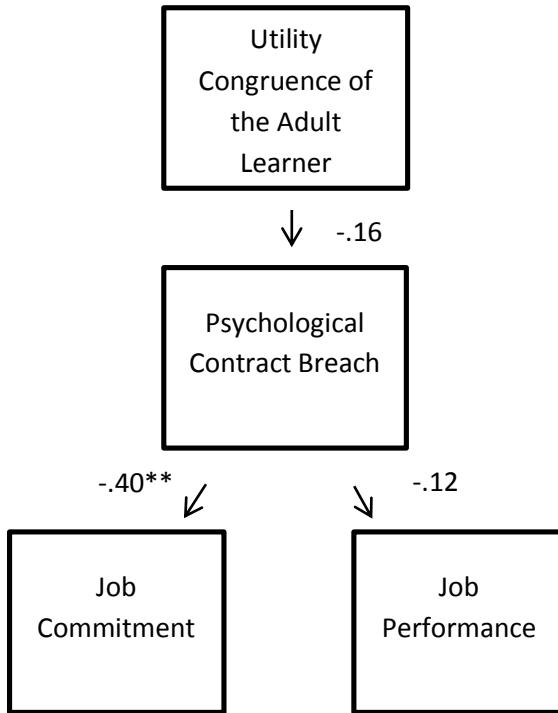


Figure 4 - Path Measurement Model of the “Utility Model of the Adult Learner.”

The second model was analyzed using structural equation modeling and included the Expected and Actual Utility measures but did not include Utility Congruence. Unlike path analysis, structural equation modeling uses “latent variables,” which are variables that are not directly observed, but are inferred from participant responses. That is, rather than using the scale scores from each participant, the responses for each question by each participant were used as predictors of a “unobserved” factor. This analysis was conducted because of the significant correlations found between Expected and Actual Utility, as well as between Actual Utility and the job outcomes. The goal of this analysis was to learn more about the direct relationship between the utility measures and the other measured variables. More specifically, this model was created to determine whether Utility Congruence is actually a factor in determining Psychological Contract Breach, or if the utility measures affect PCB directly. Although the chi-square of this model was extremely high (susceptible to sample size), other statistics showed

moderate fit based on Kline's criteria mentioned above [ $\chi^2(85) = 804.2, p < .01$ , CFI = .82, RMSEA = .09]. This model contained two significant path estimates, one between actual utility and psychological contract breach ( $\beta = -.36, p < .01$ ) and one between psychological contract breach and job commitment ( $\beta = -.43, p < .01$ ). This model suggests, regardless of expectations or Utility Congruence, that Actual Utility may be the important factor in determining breach perceptions and job commitment. Figure 5 displays this SEM model along with the standardized path estimates.

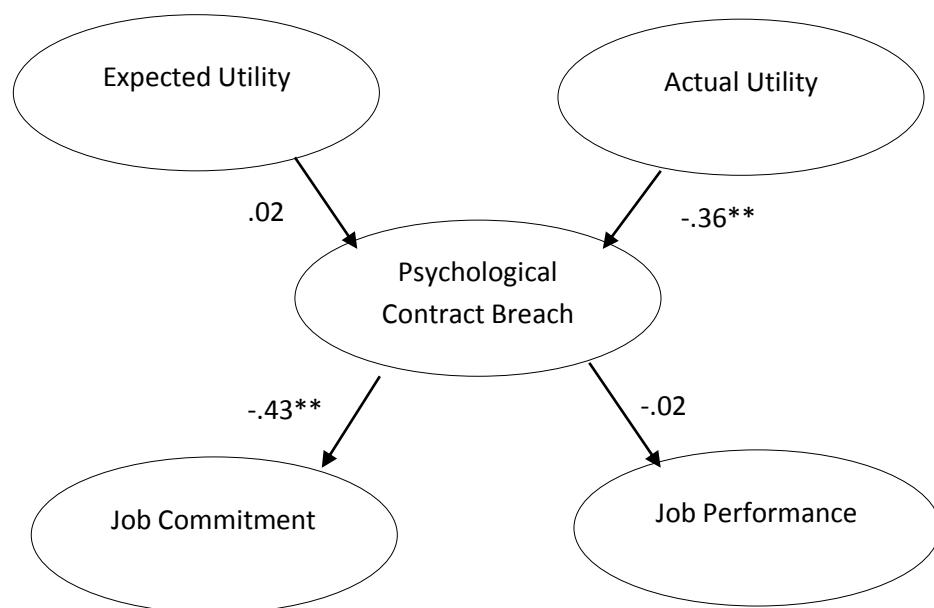


Figure 5 - Structural Equation Model of Utility

### Qualitative Analysis

As previously stated, a grounded theory approach was used to synthesize the qualitative data into emerging themes. Two raters reviewed the data and categorized the responses. In the event of disagreement, responses were discussed and either placed into the proper category or moved to a “miscellaneous” response section. Results of the qualitative question regarding expectations (n=101) revealed that 34% of participant expectations for obtaining a college degree

were for career advancement, 26% had expectations for obtaining their degree, while 16% commented on the ease of obtaining a degree online, while 13% had expectations for personal growth. The remaining students either had no expectations or had responses that did not fall into one of these primary categories. The career advancement and personal growth themes were consistent with (Knowles et al., 2005), who stated adult learners may obtain education for personal growth or to achieve goals related to career advancement. In addition, 81% of the 86 participants who responded to the question regarding whether their expectations match actual outcomes stated their expectations had been met.

When asked whether participants saw any potential benefits or negative outcomes after enrolling in the program (n=105), 53% stated they had seen benefits, 10% experienced negative outcomes, and 30% stated they had not experienced either. Of the individuals stating they had seen benefits, 38% specifically stated they had seen benefits on their job, while 8.5% experienced personal growth. The remaining percentage were not specific, but did state they had seen benefits as a result of enrolling. Table 1 shows the comparison between those who reported positive benefits, negative outcomes, or neither one.

Lastly, 86 participants responded to the question that asked whether they felt their expectations for enrollment matched the actual outcomes. Of these, 81% believed their expectations had been met. This is consistent with the qualitative data which showed a high level of congruence between Expected and Actual Utility. Figure 6 displays a word cloud with the most common words from the individuals who stated their expectations had been met.

Table 2 - Benefits seen by adult learners after enrollment.

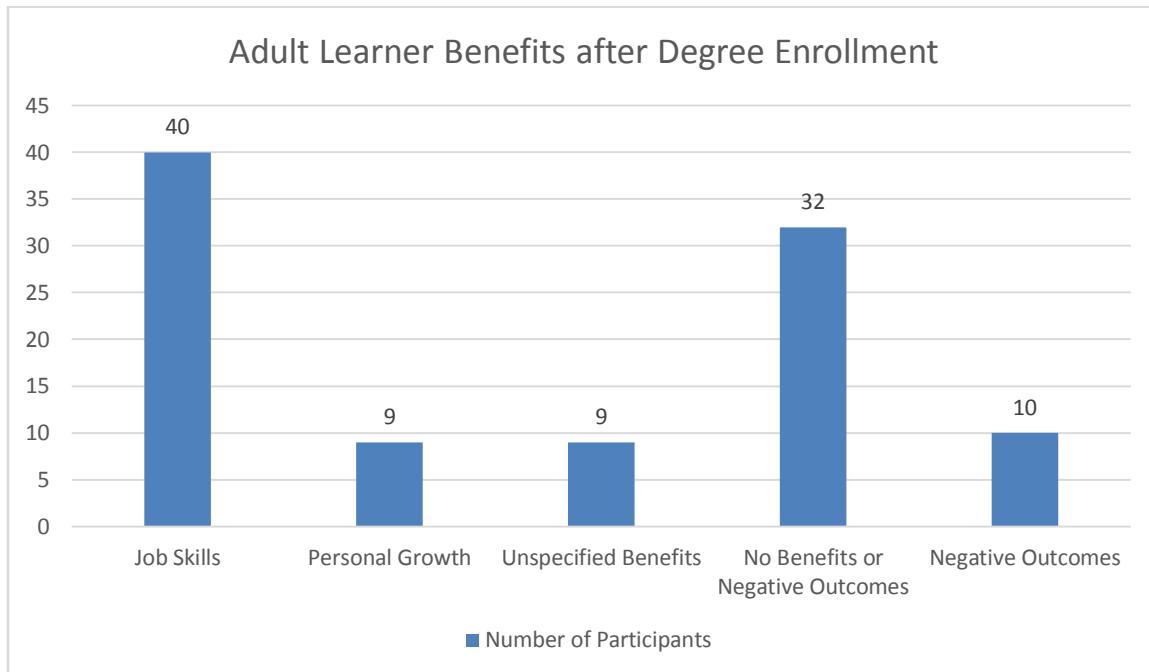


Figure 6 - Word cloud displaying responses for whether expectations matched outcomes.

When asked about psychological contract breach, and whether the participants felt their employees had broken any promises regarding obtaining their degree (n=101), only 9 adult learners stated they felt a breach in promises from their organization. The majority (46%) of participants didn't feel their organization broke any promises, while 34% didn't feel any promises were ever made. The low number "yes" responses seems to be consistent with the quantitative results of the Psychological Contract Breach scale, which showed low breach perceptions across the sample. Next, only 27% (n=27) of individuals felt they had an increase in commitment to their organization since enrolling in their degree program. Finally, 35% of the 106 who responded felt their job performance had improved since enrolling in their degree program.

### **Exploratory Analyses**

Given the dearth of research on adult learners and postsecondary online degree programs, exploratory analyses were conducted to provide greater understanding about the demographic profiles of these individuals and the factors that shape their learning and employment experiences. The results of these analyses can be found in Table 1.

First, to account for extraneous variables, separate ANOVAs were analyzed for each measured variable with age, which used a "decades" split, and time in the program as the independent variables (e.g. freshman, sophomore, etc.). No significant differences were found between either age groups or academic classification. However, it should be noted that age was significantly correlated with both expected and actual utility, suggesting that as adult learners get older, their expectations for the usefulness of a degree, as well as the actual utility perceptions, increase.

In addition, a t-test was conducted using the Leader-Member Exchange measure where groups were defined as hi or low LMX by using a mean split. The LMX measure was included in the study to examine how the supervisor relationship may affect perceptions of psychological contract breach. That is, would someone with low LMX have greater breach perceptions because of their relationship with their supervisor? The results showed no differences between groups for any of the dependent measures. Therefore, participants were collapsed into one group for these respective variables.

## DISCUSSION

This study tested the hypothesis that congruence between the Expected and Actual Utility of obtaining a college degree may impact Psychological Contract Breach perceptions. Moreover, these breach perceptions may affect Job Commitment and Job Performance. Overall, the results of this study suggest that adult learner perceptions of utility for obtaining a college degree online may indeed be related to the variables mentioned above. The results showed significant correlations between Actual Utility and Psychological Contract Breach, Job Commitment, and Job Performance. When a learner perceived the online degree to be useful, psychological contracts are stronger and Job Commitment and Performance are higher. The fact that Expected Utility, along with Utility Congruence were not related to Psychological Contract Breach, Commitment, or Performance, may suggest that Actual Utility is the more important variable in determining how adult learners will be affected within their organization once they are enrolled in a degree program.

The data showed a significant positive relationship between Expected Utility and Actual Utility, supporting Hypothesis 1. In fact, the mean difference score between the two measures (Utility Congruence) was nearly zero ( $M = -.22$ ), which implies a high level of congruence. However, it should be noted that the same scale was used for both Utility measures, although factor analyses suggested participants were able to distinguish between the two measures. The results suggest that adult learners who have high Expected Utility also feel their degree is useful. Qualitative analysis confirmed that 81% of the participants felt their expectations were being met with regard to utility, lending support to the quantitative findings.

Hypothesis 2 was not supported by the data, as the difference score between Expected and Actual Utility did not show a significant relationship with Psychological Contract Breach.

Further analysis also suggested there was no difference between those who qualitatively stated their expectations had been met versus those who had not. Although this suggests that no relationship exists, previous findings suggest that unmet expectations would indeed increase the likelihood of Psychological Contract Breach (Rousseau, 1989). One explanation for the non-significant result may be due to participants not believing a psychological contract existed in the first place. As stated previously, 34% of the 101 participants who responded to the qualitative question regarding PCB felt no promises were made in the first place, leading to a lower scale score. High Utility Congruence scores ( $M = -.22$ ) may also have impacted this relationship in that lower congruence may have led to higher PCB scores.

Psychological Contract Breach was significantly related to Job Commitment, which supports hypothesis 3. This is consistent with previous findings that suggests if a breach is perceived, an employee may show a decrease in commitment and involvement with the organization (Cantisano et al., 2008; Ng et al., 2010). Hypothesis 4 however, was not supported, as no significant relationship between breach perceptions and Job Performance was found. Previous literature suggests this relationship does exist (Bal et al., 2009; Conway & Coyle-Shapiro, 2011). However, studies of this relationship typically use objective measures of performance, rather than self-rated measures. With the elimination of supervisor input from this study, the measure of Job Performance became self-rated by the adult learner. As with Psychological Contract Breach however, Actual Utility was significantly related to Job Commitment, as well as Performance, suggesting again that individuals who perceive high usefulness with their degree will also show high Commitment and Performance.

## **Implications**

Theoretically, findings from this study expand the literature on variable career management among adult learners and in particular explores a controversial and rapidly expanding avenue for knowledge and skill development among working adult postsecondary online degree programs. This line of inquiry is both practically and intellectually important. Given the trend among adult learners toward online learning and the exponential market growth in online programs, Knowles, Holton, and Swanson (2005) have stressed the need for adult learner research, which has seen minimal exploration to date. As such, this study provides not only provides insight into a specific subset of adult learners (e.g. online learners), but also examines these learners in an organizational context.

Furthermore, this study examined organizational outcomes related to adult learner expectations. This is important because as previous studies (e.g. Dumais, Rizzuto, Cleary, and Dowden, 2012) have found most adult learners work in an organization. Therefore, it is imperative that this population of student be examined within an organizational context. This study suggests that when adult learners enroll in school, whether they can actually use the information they learn on the job may in fact have an effect on job outcomes.

From a practical standpoint, the population of adult learners enrolling in academic degree programs is on the rise (Deggs, 2011). As such, it is becoming increasingly important for universities to be able to meet the needs of this population of students. Furthermore, if the needs of adult learners are not being met, it may be beneficial to the university to tailor these programs to better fit the needs of the student. As such, since a large portion of adult learners are enrolling in programs for career advancement or to increase job skills, universities may consider providing courses or programs to fit these needs.

## **Limitations**

A significant limitation to this study was the inability to acquire supervisor input. While the hesitancy of adult learners to provide supervisor contact information could not be predicted, not having supervisor input meant not being able to fully test all of the original hypotheses. In addition, this meant the performance rating for the adult learners was self-rated, rather than from a superior's perspective. However, while this limitation led to significant modifications within this study, it inadvertently opened a new line of questions regarding adult learners and their caution in informing organizations of their enrollment. Since several adult learners were hesitant to tell their supervisor they were enrolled in a degree program, future studies should include organizations that fully support adult learner education and gain supervisor input and buy-in up front.

The second limitation deals with measuring the expectations of the adult learner. While an ideal study of this kind would be done longitudinally, time restraints did not permit this methodology here. Therefore, expectations had to be measured retroactively. In doing so, adult learner perceptions of their expectations may not have been as clear as they once were. That is, participants may not remember what their expectations were, or the expectations may have changed over time.

Also, by assessing expectations and Actual Utility perceptions together, one had the ability to bias the other, although the scales were presented at random in order to decrease this effect. This also may have led to a restriction of range because both Expected and Actual Utility scores were at the top end of the scale. Another issue involved the Actual Utility measure and time. As stated previously, most students were still enrolled in their degree programs, and while some indicated their expectations had been met, and that they were able to use what they have

learned on their job, some participants may have not been able to see the effects of their gained knowledge. That is, it may take some time for the adult learner to be able to use what they learn on their job.

A final limitation to the study involved the analyses of both the path model and structural equation model. Typically, models such as these should have approximately 200 or more participants (Klein, 2005). To compensate, fit indexes such as the CFI and RMSEA were included because unlike the chi-square statistic, these are not influenced by sample size. Another issue with path and SEM models is that these models were assumed to be recursive, meaning the causal relationships were seen as unidirectional. As Klein (2005) noted, many variables are often contained in a process or feedback loop where one may be influencing another, but in a backwards direction. While this study did assume the relationships were unidirectional, because the utility perceptions were measured pre and post enrollment, and PCB, Job Commitment, and Job Performance were also measured post enrollment, it seems unlikely that any sort of feedback loop may have been occurring.

### **Suggestions for Future Research**

A suggestion for future research would be to expand the knowledge regarding the expectations of adult learners. That is, more information should be gathered as to why adult learners are going back to school, what their expectations are, and what they want to get out of a degree. This would allow academic administrators to better tailor academic programs to fit the needs of their adult learner students. In addition, more research should be done that examines the adult learner population within an organizational setting. For instance, longitudinal studies could be conducted that examine and track outcomes such as Performance and Commitment over time.

This would allow organizations to objectively observe the effects of obtaining a degree over time, which could help prepare and align incentives for their workers to return to school.

## **CONCLUSION**

The present study sought to examine how expectations and actual outcomes regarding the usefulness of obtaining a college degree would affect important job outcomes. The results showed that Actual Utility, the perceived usefulness of obtaining a degree once the adult learner was enrolled, was significantly related to Psychological Contract Breach, Job Commitment, and Job Performance. However, Utility Congruence, which is the degree of overlap between Expected Utility and Actual Utility, was not related to breach perceptions, which may indicate Actual Utility is the more important variable and that expectations may not be as imperative. That is, regardless of expectations, if an adult learner perceives the degree as useful once he/she is enrolled in or graduated from a program, this may lead to better performance or commitment to the organization, rather than a Psychological Contract Breach. Overall, while more research is needed to learn more about the role of Expected Utility and how mismatched expectations may impact these variables, this study has implications regarding how Actual Utility perceptions can influence the organizational outcomes of Commitment and Job Performance.

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## **APPENDIX 1** **COMPLETE LIST OF HYPOTHESES**

### **Original Hypotheses**

Hypothesis 1: Expected utility will be positively related to actual utility.

Hypothesis 2: Expected utility of the adult learner and supervisor will be positively related.

Hypothesis 3. Actor congruence regarding expected utility will be negatively associated with PCB perception for adult learners

Hypothesis 4. Utility congruence of the adult learner will be negatively associated with PCB perception.

Hypothesis 5: Psychological Contract Breach will negatively affect job commitment for the adult learner.

Hypothesis 6: Psychological Contract Breach will negatively affect job performance for the adult learner.

### **Modified Hypotheses**

Hypothesis 1: Expected utility will be positively related to actual utility.

Hypothesis 4: Utility congruence of the adult learner will be negatively associated with PCB perception.

Hypothesis 5: Psychological Contract Breach will negatively affect job commitment for the adult learner.

Hypothesis 6: Psychological Contract Breach will negatively affect job performance for the adult learner.

## **APPENDIX 2** **EXPECTED UTILITY SCALE**

Directions (Adult Learner): Please rate the following questions concerning your expectations of obtaining an online college degree *prior* to when you enrolled. In other words, what were your expectations leading up to your actual enrollment in your degree program?

Directions (Supervisor): Please rate the following questions concerning your expectations of your employee obtaining an online college degree *prior* to when he or she enrolled. In other words, what were your expectations leading up to when your employee actually enrolled into a degree program?

The online education program I (my employee) am enrolled in will be useful for my development as an employee.

Most of the material in the program I (my employee) attend will be relevant to skills I hope to develop.

The time spent away from my (his/her) job to work on my (his/her) education will be worthwhile.

I (He/She) will be able to apply to the job what I (they) have learned in the program.

I (He/She) will have opportunities to practice the skills emphasized in the program on my (their) job.

Response Scale:

7: Strongly Agree

6: Agree

5: Somewhat Agree

4: Neither Agree or Disagree

3: Somewhat Disagree

2: Disagree

1: Strongly Disagree

### **APPENDIX 3** **ACTUAL UTILITY SCALE**

Directions: Please rate the following questions concerning the usefulness of obtaining your online college degree. In other words, now that you have completed your degree or are in the process of completion, rate the following questions in terms of how useful you have found your degree to be.

The online education program I am enrolled in has been useful for my development as a employee.

Most of the material in the program I attended has been relevant to skills I had hoped to develop.

The time spent away from my job to work on my education has been worthwhile.

I have been able to apply to the job what I have learned in the program.

I have opportunities to practice the skills emphasized in the program on my job.

Response Scale:

7: Strongly Agree

6: Agree

5: Somewhat Agree

4: Neither Agree or Disagree

3: Somewhat Disagree

2: Disagree

1: Strongly Disagree

## **APPENDIX 4**

### **PSYCHOLOGICAL CONTRACT BREACH SCALE**

Directions: (Adult Learner) The following questions are designed to gather information on how well you feel your organization has kept its promises to you for pursuing an online college degree.

Directions: (Supervisor) The following questions are designed to gather information on how well you feel your organization has kept its promises to your employee for pursuing an online college degree.

Almost all of the promises made by my employer regarding my pursuit of an online education have been kept so far.

I feel that my employer has come through in fulfilling the promises made to me when I chose to pursue an online degree.

So far my employer has done an excellent job of fulfilling its promises to me.

I have not received everything promised to me in exchange for my pursuing an online degree.

My employee has broken off many of its promises to me even though I've upheld my side of the deal.

Response Scale:

5: To a very great extent

4: Moderately

3: somewhat

2: Slightly

1: Not at All

## **APPENDIX 5** **AFFECTIVE COMMITMENT SCALE**

Directions: If you were to rate our feelings regarding your commitment to your organization after enrolling or completing your online degree, how would you rate yourself on the following statements?

I feel a strong sense of belonging to my organization.

I feel personally attached to my work organization.

I am proud to tell others I work at my organization.

Working at my organization has a great deal of personal meaning to me.

I would be happy to work at my organization until I retire.

Response Scale:

7: Strongly Agree

6: Agree

5: Somewhat Agree

4: Neither Agree or Disagree

3: Somewhat Disagree

2: Disagree

1: Strongly Disagree

## **APPENDIX 6** **JOB PERFORMANCE SCALE**

Directions (Adult Learner): If your supervisor were asked to rate your performance after you enrolled in your degree program, or completed your degree, how do you think they would rate you based on the following statements?

Directions (Supervisor): Please rate your employee on the following statements since they have enrolled or completed his/her online degree program.

Adequately completes assigned duties.

Fulfils responsibilities specified in job description.

Neglects aspects of the job he/she is obligated to perform.

Performs tasks that are expected of him/her.

Fails to perform essential duties.

Meets formal performance requirements of the job.

Consistently performs work tasks in a high quality manner.

Engages in activities that will directly affect his/her performance evaluation

Response Scale:

7: Strongly Agree

6: Agree

5: Somewhat Agree

4: Neither Agree or Disagree

3: Somewhat Disagree

2: Disagree

1: Strongly Disagree

## **APPENDIX 7** **LEADER MEMBER EXCHANGE SCALE**

Directions: Please rate the following statements based on your relationship with your supervisor/employee

Regardless of how much power he/she has built into his/her position, my supervisor would be personally inclined to use his/her power to help me solve problems in my work.

I can count on my supervisor to “bail me out,” even at his or her own expense, when I really need it.

My supervisor understands my problems and needs.

My supervisor recognizes my potential.

My supervisor has enough confidence in me that he/she would defend and justify my decisions if I were not present to do so.

I usually know where I stand with my supervisor.

I have a good working relationship with my supervisor.

Response Scale:

7: Strongly Agree

6: Agree

5: Somewhat Agree

4: Neither Agree or Disagree

3: Somewhat Disagree

2: Disagree

1: Strongly Disagree

**APPENDIX 8**  
**INVITATION LETTER FOR STUDY TO THE ADULT LEARNER**

Greetings,

You have been invited to participate in a study regarding your perceptions of obtaining a college degree online. Because you are currently enrolled in an online degree program or have completed an online degree, we consider your opinions a valuable resource in helping us complete this study. This study is designed to measure the general expectations for what a college education can provide and its actual usefulness and how this may affect important job outcomes. We hope that this study will shed insight into the expectations of pursuing an online degree and how these expectations line up with actual job outcomes.

In order to complete this study, you must be enrolled in or have completed an online degree program in Louisiana, work at least 20 hours per week, and work under a supervisor at your place of employment (i.e. you must not be self-employed). In addition, you will be asked to provide the name and contact information of your supervisor so that we may assess their opinions regarding online degree programs as well. Participation in this study is completely optional and anonymous. Furthermore, if you do choose to participate in the study, you may opt out at any time. For those who do agree to participate and complete the study, you will be entered into a drawing to receive a \$50 gift card to Wal-Mart.

Sincerely,

Shane Lowery  
Graduate Student  
Louisiana State University  
Department of Psychology  
blower4@lsu.edu  
(318) 614-2576

## APPENDIX 9 IRB APPROVAL

### Application for Approval of Projects Which Use Human Subjects

This application is used for projects/studies that cannot be reviewed through the exemption process.

– Applicant, Please fill out the application in its entirety and include two copies of the completed application as well as parts A-E, listed below. Once the application is completed, please submit to the IRB Office for review and please allow ample time for the application to be reviewed. Expedited reviews usually takes 2 weeks. Carefully completed applications should be submitted 3 weeks before a meeting to ensure a prompt decision.

– A Complete Application Includes All of the Following:

- (A) Two copies of this completed form and two copies of part B thru F.
- (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)
- (C) Copies of all instruments to be used.

\*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.

(D) The consent form that you will use in the study (see part 3 for more information.)

(E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (<http://phrp.nihtraining.com/users/login.php>)

(F) IRB Security of Data Agreement: (<http://research.lsu.edu/files/item26774.pdf>)



Institutional Review Board  
Dr. Robert Mathews, Chair  
131 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.5983  
irb@lsu.edu  
lsu.edu/irb

1) Principal Investigator\*: Dr. Tracey Rizzuto

Rank Associate Professor

\*PI must be an LSU Faculty Member

Dept: HRE

Ph:

578-2453

E-mail:

trizzut@lsu.edu

2) Co Investigator(s): please include department, rank, phone, and e-mail for each

Shane Lowery, Department of Psychology, graduate student, (318) 614-2576, blower4@lsu.edu

3) Project Title:

What to Expect When You're Expecting: Gaps in Utility Perceptions of the Online Adult Learner, A Thesis.

IRB# 3378 LSU Proposal #

- Full  
 Expedited  
 Human Subjects Training  
 Complete Application

4) Proposal Start Date: 3/25/13

5) Proposed Duration Months: 12

6) Number of Subjects Requested: 200

7) LSU Proposal #: \_\_\_\_\_

8) Funding Sought From: \_\_\_\_\_

#### ASSURANCE OF PRINCIPAL INVESTIGATOR named above

I accept personal responsibility for the conduct of this study (including ensuring compliance of co-investigators/co-workers) in accordance with the documents submitted herewith and the following guidelines for human subject protection: The Belmont Report, LSU's Assurance (FWA00003892) with OHRP and 45 CFR 46 (available from <http://www.lsuhsc.edu/irb>). I also understand that copies of all consent forms must be maintained at LSU for three years after the completion of the project. If I leave LSU before that time, the consent forms should be preserved in the Departmental Office.

Signature of PI:

Date 3/8/13

#### ASSURANCE OF STUDENT/PROJECT COORDINATOR named above. If multiple Co-Investigators, please create a "signature page" for all Co-Investigators to sign. Attach the "signature page" to the application.

I agree to adhere to the terms of this document and am familiar with the documents referenced above.

Signature of Co-PI (s):

Date 3/8/13

STUDY APPROVED BY:  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 Davis Boyd Hall  
225.578.8692 | [www.lsuhsc.edu/irb](http://www.lsuhsc.edu/irb)  
Approval Expires: 3/24/2014

## **VITA**

Shane Lowery is a native of West Monroe, LA. He attended the University of Louisiana at Monroe where he received his Bachelor of Arts degree in Psychology in December 2009, and his Masters of Science degree in General Experimental Psychology in July 2011. Shane began his academic career at Louisiana State University in the fall semester of 2011. He is currently a third year graduate student in the Industrial- Organizational Psychology program. He will receive his master's degree in May 2014 and will immediately begin working on his doctorate.

Throughout his career, Shane has worked on numerous research projects with various organizations including the Susan G. Komen Foundation, the 4<sup>th</sup> Judicial District Court of Louisiana, PALA Construction, the Louisiana Workforce Commission, and Community Coffee Company. His primary research interests include employee selection, competency modeling, and employee development.