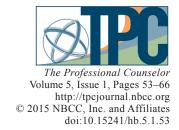
# Career Adaptability, Resiliency and Perceived Obstacles to Career Development of Adolescent Mothers



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Career adaptability, resiliency and perceived obstacles to career development of adolescent mothers were examined using a proposed conceptual framework that combined resiliency and career adaptability. The goals of this study were to gauge the current state of the career development and resiliency of adolescent mothers, including areas of strength and weakness, and to better understand the interactions between the three components of career adaptability (i.e., planfulness, exploration, decision-making), resiliency and perceived obstacles. Adolescent mothers were similar to nonparenting peers on the planfulness and decision-making dimensions of career adaptability, yet lower on career exploration. While adolescent mothers' traits of personal resiliency and emotional reactivity were comparable to those of their peers, their relational resiliency was lower. Based on the findings of the study, proposed strategies to further the three components of career adaptability and the resiliency of adolescent mothers are suggested.

Keywords: adolescent mothers, career development, career adaptability, resiliency, decision-making

In the United States, becoming a parent during adolescence has been described as a premature and nonnormative life event that can present lifelong challenges and growth opportunities in the career development of adolescent mothers (Gruber, 2012; Zachry, 2005). Taylor (2009) reported the most prevalent negative outcomes associated with adolescent parenthood as lowered high school graduation rates, limited educational opportunities after high school, and difficulty achieving stable work and financial independence. These are important career development considerations for this population given the national statistics on adolescent motherhood, previous research findings on the impact of parenting programs on the long-term career outcomes for adolescent mothers, and the viability of the proposed theoretical framework of the integration of career adaptability and resiliency (Barto, Lambert, & Brott, in press).

The national statistics on adolescent mothers indicate a disparity between racial groups with 8.3% of Latina, 6.5% of African American and 2.7% of Caucasian (non-Hispanic) adolescent females becoming mothers (Guttmacher Institute, 2010). Race and ethnicity may influence how an adolescent pregnancy is perceived by the adolescent mother and those around her, further contributing to the mother's obstacles to and opportunities for career development (McAdoo, 2007; Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002). Support from families has been shown to be a positive factor in furthering the career development of adolescent mothers (Brosh, Weigel, & Evans, 2009). Although both African American and Latino families may be disappointed by adolescent pregnancies, these families tend to discourage pregnancy termination or adoption, instead offering assistance to adolescent mothers (McAdoo, 2007; Santiago-Rivera et al., 2002). Conversely, Caucasian adolescent mothers have the highest rates of formal adoptions outside the family; thus, family support for

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attempting to combine motherhood and career development may be lower for Caucasian adolescent mothers than for adolescent mothers in other racial or ethnic groups (Low, Moely, & Willis, 1989).

Adolescent mothers typically report more challenges with life planning when compared to nonparenting peers (Spear, 2004). Related issues can be viewed through the lens of obstacles to and opportunities for career development for adolescent mothers. These obstacles may include completing an education, finding employment and experiencing increased financial strain. Conversely, becoming a mother during adolescence may stimulate resiliency and growth opportunities in the working role (Zachry, 2005). These opportunities could foster the desire to provide financially for self and child, positive attitudes toward the future after becoming a mother (Brubaker & Wright, 2006), and a greater sense of maturity and purpose about the future (Rosengard, Pollock, Weitzen, Meers, & Phipps, 2006). Therefore, adolescent parenting can be simultaneously stressful and meaningful (Perrin & Dorman, 2003) while impacting all areas of life, particularly the working role.

Career development can be viewed as a holistic, dynamic and lifelong process, whereby individuals construct meaning and determine the most appropriate expression of their life roles (Savickas et al., 2009). Life roles are conceptualized as a constellation of interacting enactments that have relative importance to the individual within the context that these roles occur (Brown & Associates, 2002). For adolescent mothers, the addition of the parenting role can influence the dynamics between life roles and affect the perceived importance of the working role (Savickas, 1997).

In both school (Kaplan, Blinn-Pike, Wittstruck, Berger, & Leigh, 2002) and community settings (Gruber, 2012; Sarri & Phillips, 2004), programs and services are designed to meet the unique needs of adolescent mothers. Adolescent mothers have reported that parenting programs are moderately helpful in providing information relevant to their parenting role, such as medically related advice to improve the health of child and mother (Sarri & Phillips, 2004). However, these programs typically do not address finding employment and educational training opportunities (Kaplan et al., 2002, Sarri & Phillips, 2004).

Longitudinal studies investigating the career outcomes (i.e., being employed and self-supporting adults) for adolescent mothers participating in parenting programs have produced mixed results. Horwitz, Klerman, Kuo, and Jekel (1991) reported that 82% of the mothers who participated in an adolescent parenting program were financially self-supporting 20 years later. However, Taylor (2009) reported that when compared with nonparenting peers, adolescent parents had lower incomes and less prestigious occupations 20 years later. Neither Horwitz et al. (1991) nor Taylor (2009) indicated which program components helped or hindered participants' career outcomes. Research is needed to derive evidenced-based intervention strategies and programs for improving career development outcomes of adolescent mothers (Brindis & Philliber, 2003). In the current study, career adaptability and resiliency were used to better understand career development of adolescent mothers as they adjust to their new role as a parent in relation to other life roles, especially the role of worker. Career adaptability includes the dimensions of planning, exploring and decision-making about one's future (Savickas, 1997). Resiliency includes the attributes to develop personal and relational strengths in the process of overcoming adversity (Prince-Embury, 2006). In the current study, attention was given to the unique obstacles in the adolescent mother's career development, as she constructs meaningful expression of her working role (Klaw, 2008; Savickas et al., 2009). The goals of this study were to gauge the current state of the career development and resiliency of adolescent mothers, including areas of strength and weakness; and to better understand the interactions between the components of career adaptability, resiliency and perceived obstacles.

# **Conceptual Framework**

Limited research has focused specifically on the career development and adaptability of adolescent mothers (e.g., Brosh et al., 2009). From a review of the literature, the current authors (in press) found the following impediments to career development of adolescent mothers: pressing immediate needs (e.g., housing, transportation, childcare), limited career development skills (e.g., decision-making skills) and lack of career-related knowledge (e.g., occupational information). Based on the existing literature, a career resiliency model has been suggested to promote career adaptability among high-risk individuals who are experiencing a dramatic life event, such as adolescent mothers (Rickwood, 2002; Rickwood, Roberts, Batten, Marshall, & Massie, 2004). The proposed conceptual framework for the career development of adolescent mothers combines resiliency and career adaptability and (a) addresses challenges (e.g., obstacles), (b) capitalizes on opportunities and strengths (e.g., increased sense of maturity/responsibility), and (c) develops positive intervention strategies and programs to better the long-term outcomes of adolescent mothers. Constructs that support this framework are career adaptability and resiliency, as previously combined by Rickwood (2002) and Rickwood et al. (2004).

# **Career Adaptability**

Career adaptability is a central construct in adolescent career development (Hirschi, 2009) and is defined as the ability to adjust oneself to fit new and changed circumstances in one's career by planning, exploring and making decisions about one's future (Brown & Associates, 2002; Savickas, 1997). Planfulness is a learned skill that allows individuals to develop a future orientation to increase adaptability (Savickas, 1997). Exploration encompasses the understanding of relationships between individual differences and contextual factors that influence career development (Blustein, 1997). In the current conceptual framework, decision-making is expanded beyond the traditional models of career development to consider the multiple alternatives and objectives that are present in the career decision-making process (Phillips, 1997).

Career adaptability is currently used as a theoretical basis for both (a) the assessment of career-related skills and knowledge, and (b) the development and implementation of intervention strategies for adolescents (Creed, Fallon, & Hood, 2009; Hirschi, 2009). The concept of career adaptability is applicable to adolescent mothers, as it focuses on developing skills to address the individual and contextual factors associated with career development (Savickas et al., 2009). These career adaptability skills (i.e., planning, exploring, decision-making) are most relevant to the working role, but can be generalized and utilized easily in considering other life roles (e.g., parenting).

# Resiliency

Resiliency has been defined as one's ability to overcome adversity and be successful (Greene, Galambos, & Lee, 2004). This concept represents a paradigm shift from looking at risk factors associated with problematic situations to searching for more strengths-based personal attributes that help individuals overcome adverse or stressful situations (Richardson, 2002). Some researchers believe that resiliency is a combination of protective factors (i.e., personal characteristics and relationships) and areas of vulnerability (i.e., ability to self-regulate through adversity; Prince-Embury, 2006; Richardson, 2002; Zachry, 2005). In the current study, mastery (i.e., internalized personal characteristics of optimism, self-efficacy and adaptability) is referred to as *personal resiliency*. Relatedness (i.e., social and relational experience concerning trust, support, comfort and tolerance) is referred to as *relational resiliency*, and emotional reactivity (i.e., level of sensitivity, recovery and impairment to self-regulation in response to adverse events or circumstances) is referred to as *emotional vulnerability* (Prince-Embury, 2006; Richardson, 2002). These three resiliency constructs are helpful in understanding the attributes that are displayed by resilient individuals who are able to adapt to difficult or stressful situations (Prince-Embury, 2006; Richardson, 2002).

Researchers have measured the resiliency of adolescent mothers in various ways. For example, resiliency has been paired with the assessment of risks to better understand both the risks and protective factors that promote resiliency, thus moderating the negative effect of adolescent motherhood (Kennedy, 2005). Black and Ford-Gilboe (2004) used resiliency to validate and predict theoretical relationships among variables associated with creating a healthy family environment for adolescent mothers. Furstenberg, Brooks-Gunn, and Morgan (1987) found that a substantial portion of adolescent mothers demonstrated resiliency by overcoming the challenges of adolescent parenthood through maintaining regular employment and establishing financial stability without the need for public assistance (as cited in Kennedy, 2005). In summary, resiliency is thought to be one of the factors influencing the degree of success that adolescent mothers experience as adults (e.g., Schilling, 2008).

# **Career Adaptability and Resiliency**

Linking career adaptability to resiliency may be more favorable to adolescent mothers than approaches that focus on risk factors, problems associated with adolescent motherhood, and career-related skill deficiencies (Perrin & Dorman, 2003). However, even resilient mothers can find the day-to-day demands of motherhood overwhelming. Without attention to the obstacles they may encounter, adolescent mothers may be unable to attend to career adaptability skill development (Klaw, 2008). Recognizing and addressing these pressing immediate needs helps adolescent mothers gain the ability to focus attention and effort on developing their personal career adaptability (Klaw, 2008).

Furthermore, adolescent mothers need to cultivate their own personal and relational attributes in order to foster and encourage resiliency (Zippay, 1995). Personal characteristics (i.e., optimism, self-efficacy, adaptability) can influence levels of resiliency (Prince-Embury, 2006). Socially supportive relationships based on trust, support, comfort and tolerance with family members and mentors have been effective in helping further the career adaptability of adolescent mothers by providing them with career-related information and aiding them in developing career-related skills (Klaw, Rhodes, & Fitzgerald, 2003; Prince-Embury, 2006). Both career adaptability skills and higher levels of personal and relational resiliency may be helpful in overcoming the obstacles experienced by adolescent mothers.

# The Current Study

In the present study, the current state of career adaptability, resiliency and potential obstacles to career development among adolescent mothers from one state in the mid-Atlantic region of the United States was examined. Data were gathered using the career planning (CP) scale from the Career Development Inventory-School Form (CDI-S; Super, Thompson, Lindeman, Jordaan, & Myers, 1979), the self-exploration and environmental exploration scales from the Career Exploration Survey (CES; Stumpf, Colarelli, & Hartman, 1983), the Career Decision-Making Self-Efficacy Scale-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996), the Resiliency Scales for Children and Adolescents (RSCA; Prince-Embury, 2006), and the Obstacle Survey (Klaw, 2008). The participants also received a demographic questionnaire. The research questions that guided the study included the following: (1) What are the relationships between the dimensions of career adaptability (i.e., planfulness, exploration, decision-making) and resiliency? (2) What are the reported obstacles to the career development of adolescent mothers? (3) Can measures of resiliency predict career adaptability in adolescent mothers?

## Method

#### **Participants**

Participants in community- and school-based parenting programs were solicited for the study. The community-based parenting program is a support and self-help organization for assisting members in becoming

more self-sufficient, but no specific career development component exists. The school-based parenting program addresses the unique academic, career and personal issues of parenting students, allowing attainment of a high school diploma in an alternative school setting. Study participants (N = 101) ranged in age from 15–18 years old (65%) and 19–21 years old (35%). Participants' racial backgrounds included Hispanic, Latino or Spanish origin (74%); African American (22%); Caucasian (2%); Asian American (1%); and bi-racial (1%). Roughly half (52%) indicated that English was not the primary language used in their home. All participants had at least one child; some participants had multiple children (one mother had three children, 12 mothers had two children and 14 were currently pregnant with their second child).

Their current living situations included residing with parent or grandparent (57%), with their child(ren)'s father (20%), in foster care with their child(ren) (9%), with family of their child(ren)'s father (8%) or on their own with their child(ren) (6%). Their primary source of income support was from parents and family (38%), their child(ren)'s father or his family (32%), self (20%) or assistance programs (10%). While most participants (63%) reported not being currently employed, 53 participants indicated that they were actively looking for a job; 31 participants worked part-time and six worked full-time. Only seven participants had graduated high school and were not currently enrolled in school. The remaining participants included ninth graders (11%), tenth graders (16%), eleventh graders (26%), twelfth graders (31%) and college students (9%). Participants indicated that their educational plans included pursuing a college degree (65%), only graduating from high school (23%), unsure (7%) and at risk for not graduating from high school (4%).

#### **Instruments**

Career Development Inventory-School Form. The CDI-S has been utilized to assess the career development and adaptability of adolescents (Super et al., 1979; Thompson & Lindeman, 1981). For this study, the CDI-S's CP scale was used, with 12 items for career-planning engagement and eight items for career knowledge. Items are rated on a five-point Likert-type scale: career-planning engagement ranges from 1 (I have not yet given thought to this) to 5 (I have made definite plans and know what to do to carry them out); career knowledge ranges from 1 (hardly any knowledge) to 5 (a great deal of information). For female students in grades 9–12 for the CP scale, CDI-S reliability alphas range from .87–.90 (Betz, 1988; Thompson & Lindeman, 1981). The reliabilities for the current study were .89 for both CP subscales and .90 for the total scale. The content validity has been demonstrated on all scales and subgroups; the factor structure was validated as the scale items appropriately loaded on the subscales (Thompson & Lindeman, 1981). Both content and construct validity have been supported (Savickas & Hartung, 1996).

Career Exploration Survey. The CES (Stumpf et al., 1983) was developed to measure aspects of the career exploration process, including reactions and beliefs (Stumpf et al., 1983). The following two subscales were used in the current study to measure career exploration behaviors: the six-item subscale on environmental exploration (e.g., learning about specific jobs and careers) and the five-item subscale on self-exploration (e.g., reflecting on future career choice based on past experiences). Frequency of career exploration behaviors are self-rated on a five-point Likert scale. The reliabilities reported for the self-exploration and environmental exploration subscales are .87 and .88, respectively (Stumpf et al., 1983). Acceptable content and construct validity have been established (Creed et al., 2009; Stumpf et al., 1983).

*Career Decision-Making Self-Efficacy Scale-Short Form.* The CDSE-SF (Betz et al., 1996) measures one's confidence in making career-related decisions. The 25-item instrument measures self-reported career decision-making behaviors on five subscales: self-appraisal, occupational information, goal selection, planning and problem solving. Reported reliabilities for the subscales range from .73–.83, and reliability for the total scale is .94 (Taylor & Betz, 1983). Content, concurrent and construct validity of the CDSE-SF have been established (Betz, Klein, & Taylor, 1996; Taylor & Betz, 1983).

Resiliency Scales for Children and Adolescents. The RSCA identifies resiliency attributes in children and adolescents (Prince-Embury, 2006) using three scales: Sense of Mastery (MAS), Sense of Relatedness (REL) and Emotional Reactivity (REA). The MAS, which assesses personal resiliency, includes 20 items in three subscales (optimism, self-efficacy and adaptability). The REL assesses relational resiliency and has 24 items in four subscales (sense of trust, support, comfort and tolerance). Emotional vulnerability is measured by the REA, which includes 20 items in three subscales (sensitivity, recovery and impairment). The sum of the subscale scores became the raw score for the respective scale (MAS, REL, REA), which converts to a T score. Higher T scores on the MAS and REL scales and lower scores on the REA indicate more resiliency resources.

The RSCA reliability alphas range from .79–.90 for 15- to 18-year-old females and are considered acceptable (Prince-Embury, 2006). Convergent and divergent validity have been correlated with those of conceptually similar instruments that measure resiliency (e.g., *Reynolds Bully Victimization Scale*); the criterion validity was established by comparing groups of clinical samples to matched groups of nonclinical samples of children and adolescents (Prince-Embury, 2006).

**Obstacle Survey.** The OS (Klaw, 2008) was designed to determine the specific obstacles that adolescent mothers encounter in daily life that could potentially impede their career adaptability, such as needing childcare and facing discrimination because of race. The survey consists of 26 items that could potentially impact participants' career adaptability. The OS is a relatively new instrument designed for use with adolescent mothers; therefore, there is little information available about psychometric properties. However, the information provided by the OS was expected to be helpful in developing a better understanding of the perceived obstacles to the career adaptability of adolescent mothers.

**Demographic Questions.** The demographic items were 12 questions designed to gather the following information about the participants: age, racial/ethnic identity, language used in the home, number and age(s) of children, living situation, socioeconomic status, current school status, and employment status.

#### **Procedure**

After obtaining approval from the Institutional Review Board, the first author developed relationships with the directors of one community-based and one school-based parenting program in order to recruit study participants. All adolescent mothers in both programs who met the study criteria received the opportunity to participate in the study. Given the unstructured nature of both programs, it is unclear what exact percentage of study-eligible adolescent mothers elected not to participate in the study, but informal observations from the first author suggest that almost all the study-eligible adolescent mothers completed the survey. Attendance was voluntary in the community-based program, so the number of adolescent mothers present varied from week to week, but the first author was present at a total of four meetings. For the school-based program, the first author made two scheduled visits to the school, during which she invited adolescent mothers who were present in classes specifically provided for them (e.g., life skills, support group) to participate in the study. Participants under age 18 received parental permission forms and older participants received informed consent forms. Participants completed all instruments via the computer using an online questionnaire created in Survey Monkey, with the exception of the RSCA (Prince-Embury, 2006), which they completed using a paper-andpencil version as the publisher required. Survey completion was untimed. Participants who completed all aspects of the study received \$10.00 in compensation to encourage completion. Three incomplete surveys were excluded from the statistical analysis.

## Results

Career adaptability, resiliency and perceived obstacles were measured using a number of established instruments in order to generate descriptive statistics to better understand the current state of adolescent

mothers' career development. Career adaptability and resiliency were correlated to look for relationships between the two and entered into a multiple regression to determine the predictive power. Career adaptability was defined as and measured by the participants' process of planfulness, exploration and decision-making. In the area of career planfulness, participants' scores were slightly higher than the average score for the norm sample of female adolescents (Thompson & Lindeman, 1981): CP (M = 3.34, SD = 0.78), career-planning engagement (M = 3.15, SD = 0.93) and career knowledge (M = 3.61, SD = 0.88). This finding suggests that adolescent mothers in this study were similar to their peers in terms of career planfulness. For career exploration (M = 2.73, SD = 0.99), participants reported a moderate amount of career exploration behaviors with slightly higher self-exploration (M = 3.16, SD = 1.12) involving reflection on one's future career and past experiences, than environmental exploration (M = 2.34, SD = 1.08) that involves investigating career possibilities. The reliabilities for the current study were .89 for both CP subscales and .90 for the total scale. In terms of career decision-making, there was little variation between the total score (M = 3.26, SD = 0.95) and each of the subscale scores, which ranged from 3.12–3.37. The subscale reliabilities ranged from .87–.90, and reliability for the total scale was .90. Thus, participants were neither strong nor weak in terms of decision-making skills related to selecting a college major, determining one's ideal job, deciding on values related to occupations and preparing for a job search.

Regarding resiliency, participant T scores for the three scales and scaled scores for the subscales were compared to those of the female adolescent norm group (Prince-Embury, 2006). T scores over 60 are considered high, 50–59 are above average, 46–49 are average, 41–45 are below average, and below 40 are low. The reported T scores for participants were average for both the MAS (M = 48.29, SD = 7.93) and the REA (M = 49.44, SD = 10.58) and below average for the REL (M = 44.47, SD = 10.11). The manual reports that scaled scores for the subscales over 16 are considered high, 13–15 are above average, 8–12 are average, 5–7 are below average, and below 5 are low. The related subscale scores for the MAS were average (M = 9.45–9.75); subscales for the REL were average (M = 8.12–8.75); and subscales for the REA were average (M = 9.80–10.39). The subscale reliabilities ranged from .57–.87 and the scale reliabilities ranged from .84–.93.

The participants rated 25 perceived obstacles using the OS (Klaw, 2008). The obstacles were organized into seven categories plus *other* to capture themes that have been reflected in the literature (e.g., pressing immediate needs, work-related concerns, education-related concerns). Ratings of 2 (somewhat of a concern) and 3 (a large concern) were combined and categorized for descriptive and contextual purposes. The most frequent obstacles for adolescent mothers were related to pressing immediate needs (childcare [73%] and transportation [72%]), work-related concerns (need for more job training [72%] and not many jobs available in my area [72%]), and education-related concerns (need more preparation to continue my education [71%] and need money to continue my education [68%]). Another identified obstacle was health-related concerns for mother or child (68%). Of lesser concern for these adolescent mothers was discrimination (facing discrimination because I am a woman [26%] and facing discrimination because of where I live [20%]) and relationship concerns (parents wanting me to work full-time [27%] and my baby's father doesn't want me to work [19%]). Deviant behaviors do not appear to be obstacles for most adolescent mothers surveyed; these behaviors include education-related concerns such as *suspended/expelled from school* (14%) and community concerns such as fear of community violence (21%), being in jail or in trouble with the police (14%), and being part of a gang (5%).

## Relationships Between Career Adaptability and Resiliency

The mean scores for the three dimensions of career adaptability were correlated with the three resiliency scales scores (see Table 1). Within the resiliency measures, personal resiliency (as measured by the MAS scale) and relational resiliency (as measured by the REL scale) demonstrated a moderately strong positive correlation (r = 0.65), while emotional vulnerability (as measured by the REA scale) was weakly and negatively related

to the other two measures (r = -0.22; r = -0.26). The relationships among career adaptability measures suggest that, while each dimension of career adaptability is a separate aspect of career adaptability, they are related. The strongest correlation was between exploration and decision-making (r = 0.70). The interrelationships among career adaptability dimensions and the three resiliency attributes were found to moderately correlate with personal (r = 0.29; r = 0.39; r = 0.49) and relational resiliency (r = 0.27; r = 0.26; r = 0.35); emotional vulnerability was not related to any of the scales for career adaptability. Decision-making demonstrated the strongest positive relationship with personal and relational resiliency (r = 0.49; r = 0.35).

Table 1

Intercorrelations between Resiliency, Dimensions of Career Adaptability, and Obstacles

Variable	1	2	3	4	5	6
Resiliency Measures <sup>a</sup>						
1. Sense of Mastery (MAS)	(.84)					
2. Sense of Relatedness (REL)	0.65*	(.93)				
3. Emotional Reactivity (REA)	-0.22*	-0.26*	(.87)			
Career Adaptability						
4. Career Planfulness <sup>b</sup>	0.29*	0.27*	-0.10	(.90)		
5. Career Exploration <sup>c</sup>	0.39*	0.26*	-0.11	0.61*	(.93)	
6. Career Decision Making <sup>d</sup>	0.49*	0.35*	0.19	0.56*	0.70*	(.98)

Note. Reliability values for this study are shown diagonally (Cronbach alphas). N = 101

## **Predictive Power of Resiliency for Career Adaptability**

Multiple regression was used to examine the predictive power in the three constructs of resiliency to the three dimensions of career adaptability (see Table 2). The three resiliency measures explained a statistically significant 25% of variance in career decision-making (F = 10.96), 15% of variance in career exploration (F = 5.84) and 9% of variance in career planfulness (F = 3.37). Personal resiliency (MAS) was the only resiliency scale that produced statistically significant results in two of the three career adaptability measures (see Table 2). The lack of statistical significance for relational resiliency is due to its high correlation with personal resiliency. Therefore, adolescent mothers who possess higher personal resiliency appear to possess higher levels of career adaptability.

<sup>\*</sup> p < 0.05

<sup>&</sup>lt;sup>a</sup> RSCA (Prince-Embury, 2006)

<sup>&</sup>lt;sup>b</sup> CDI-S (Super et al., 1979)

<sup>&</sup>lt;sup>c</sup> CES (Stumpf, Colarelli, & Hartman, 1983)

<sup>&</sup>lt;sup>d</sup> CDSE-SF (Betz, Hammond, & Multon, 2005)

 Table 2

 Predicting Career Adaptability by Resiliency Scores

	β	t	p value	$R^2$	F	p value
Career Planfulness				0.09	3.37	0.0217*
MAS	0.191	1.50	0.1373			
REL	0.139	1.08	0.2840			
REA	-0.023	-0.23	0.8178			
Career Exploration				0.15	5.84	0.0010**
MAS	0.385	3.12	0.0024*			
REL	-0.001	-0.01	0.9922			
REA	-0.026	-0.27	0.7857			
Career Decision Making			0.25	10.96	< 0.0001**	
MAS	0.455	3.93	0.0002**			
REL	0.035	0.30	0.7667			
REA	-0.080	-0.88	0.3812			

Note. N = 101. MAS = Sense of Mastery; REL = Sense of Relatedness; REA = Emotional Reactivity.

## **Discussion**

The results of this study should inform researchers and practitioners who are interested in assessing and advancing the career adaptability and resiliency of adolescent mothers while concurrently being mindful of perceived obstacles. In terms of career adaptability skills, the adolescent mother participants endorsed similar skills to their peers in both career planfulness and career decision-making, but lower scores in career exploration. Overall, participants appear to be average in their career planfulness skills, including engagement in career planning and career knowledge. This finding suggests that adolescent mothers are just as competent with respect to career planfulness as nonparenting peers in the normative sample of the CP of the CDI-S (Thompson & Lindeman, 1981).

The career exploration scores indicate that environmental exploration (e.g., gathering information about careers of interest, jobs/careers in a local geographical region, jobs/careers with specific companies, career training opportunities; making contact with professionals in career areas of interest) is the most pressing of exploration needs. The results suggest that the participants show a need for increased career exploration skills, especially regarding environmental exploration. However, Porfeli and Skorikov (2010) stressed the importance of both aspects of career exploration. Thus, developing self-exploration skills (i.e., reflecting and connecting past experiences to future career choices and plans) would be beneficial for the participants. Consistent with the findings of Creed et al. (2009), targeted exploration initiatives are recommended to develop effective environmental and self-exploration skills to help adolescent mothers improve their overall career exploration skills.

For career decision-making, participants indicated feeling the most confident in assessing their own interests and abilities, conducting career-related research on the Internet, and planning and goal setting. They indicated feeling the least confident in navigating issues related to college, preparing a résumé, clarifying values, knowing about salary and wages for specific jobs and careers, and identifying potential employers. Several of the skills

<sup>\*</sup>*p* < 0.05

<sup>\*\*</sup> p<0.001

about which participants felt the least confident are reflected in the lower environmental exploration scores (e.g., knowledge of specific career information, such as salary and being able to identify potential employers). Interventions with adolescent mothers surrounding career decision-making skills should be targeted at areas of reported need (Fouad, Cotter, & Kantamneni, 2009).

In terms of resiliency, the participant profiles offer some consistent information about areas of strength and concern. Participants possess similar levels of personal resiliency and emotional vulnerability as sameage and same-gender peers within the normative sample of the RSCA (Prince-Embury, 2006). However, some differences are apparent between the study sample and the norm group on relational resiliency. The adolescent mothers indicated that they had more trouble communicating with others, less effective support systems, less favorable views of interpersonal relationships, and difficulty initiating and maintaining socially supportive and healthy relationships with family and friends, which is consistent with previous research findings (Gee & Rhodes, 2007; Klaw et al., 2003). It is unclear whether the inability to develop and maintain healthy interpersonal relationships is a result of contextual factors related to adolescent pregnancy/parenthood, inadequate social skills present before the pregnancy/parenthood or a combination of factors.

The multiple regression showed that all of the resiliency measures had statistically significant power in predicting the career adaptability dimensions. Personal resiliency, a relative strength for this sample of adolescent mothers, showed the most predictive power. The relational resiliency scores demonstrated less predictive power and were lower than those of the participants' same-age peers. Participants have difficulty initiating and maintaining interpersonal relationships that are comforting, supportive, tolerant and trusting, which is consistent with previous findings (Gee & Rhodes, 2007). This finding raises questions about the relationship between below-average relational resiliency scores and average career adaptability scores. If the relatedness scores were higher, indicating that the adolescent mothers had strong interpersonal relationships, would the career adaptability scores also be higher? Looking at the relationship between career adaptability and resiliency in larger groups of adolescents, both parenting and nonparenting, might provide more information about correlation or predictive relationships between the two variables (e.g., supportive relationships may provide adolescent mothers with more career-related skills and knowledge).

Data collected from adolescent mothers on their reported obstacles are helpful in understanding the challenges of motherhood. Consistent with Klaw's (2008) findings, the most frequently cited challenges were pressing immediate needs (e.g., transportation, childcare, caring for the baby, healthcare). The next most mentioned obstacles were career and education-related concerns (e.g., job training and difficulty in school), also similar to Klaw's (2008) findings. Although the obstacles were not statistically related to career adaptability and resiliency, understanding the obstacles encountered by adolescent mothers may be helpful in designing and implementing strategies to further develop career adaptability and foster resiliency.

The results indicate that the dimensions of career adaptability (i.e., planfulness, exploration, decision-making) can be quantitatively measured and used for assessment purposes to inform future intervention strategies. Additionally, the nature of career adaptability is expanding to include such attributes of resiliency (Savickas, 1997; Savickas et al., 2009). Theorists are moving away from the linear definition of career adaptability as planfulness, exploration and decision-making skills in order to create a more holistic, contextual and developmental conceptualization of career adaptability (Savickas et al., 2009).

# **Proposed Intervention Strategies**

The following are proposed strategies to further the three components of career adaptability (i.e., planfulness, exploration, decision-making) and resiliency among adolescent mothers. Interventions to increase career-

planning skills include fostering a future orientation and optimism, reinforcing positive attitudes toward planning, and teaching and providing practice in planning and goal-setting skills (Muskin, 2004; Savickas, 2005). While Muskin (2004) advocated for more generalized interventions designed to teach adolescents long-and short-term goal setting, Savickas (2005) recommended specific interventions to develop career-planning skills, like the Real Game (Jarvis & Richardt, 2001).

Interventions to help foster exploration include activities designed to help adolescents learn more about themselves (e.g., clarifying values, reflecting on past exploration experiences, assessing personal interests and abilities) and the world of work (e.g., job shadowing, volunteering, reading about various careers) with exercises designed to encourage both types of exploration (Porfeli & Skorikov, 2010). Interventions to foster decision-making must consider how differing perspectives on decision-making (e.g., collectivist or individualistic) can impact the decision-making process (Cardoso & Moreira, 2009; Shea et al., 2009). Other interventions such as assertiveness and decisional training, time and self-management skills training, and discussion groups can be used to foster career decision-making skills (Muskin, 2004; Savickas, 2005). Interventions to foster resiliency focus on building self-efficacy in order for adolescents to feel that they are strong enough to handle current and future situations and typically include role modeling, encouragement, anxiety reduction and developing problem-solving skills (Savickas, 2005).

# **Suggestions for Future Research and Limitations**

The information gathered in this study highlights the need for assessment to accurately measure and enhance the career adaptability and resiliency of adolescent mothers. Adolescent mothers face additional obstacles that necessitate intervention strategies carefully be constructed based on both theoretical and contextual considerations. The combination of resiliency and career adaptability may provide the positive, strengths-based assessment and intervention strategies framework necessary to assist adolescent mothers in overcoming obstacles and becoming self-supporting adults.

Based on observations during data collection, two recommendations were generated for researchers and practitioners working directly with adolescent mothers in further research, assessment or intervention endeavors. First, adolescent mothers indicated that they would have preferred an interview rather than a written survey. The desire for verbal communication over written communication may provide insight into the most effective means of implementing assessment and intervention strategies. Second, many of the participants expressed immediate interest in the results of the study, both personal and overall results. These inquiries suggest that adolescent mothers are interested in and committed to developing career adaptability skills. Capitalizing on this initial enthusiasm may be a key factor in structuring assessment and intervention strategies. Delays in providing results and subsequent interventions to participants may diminish their interest in further developing career adaptability skills. Prescod and Daire (2013) noted the critical need for adolescent mothers to be involved in career development counseling services in both a time-sensitive and culturally sensitive manner for optimal results.

Given the challenges of studying this population, one limitation of the current study is that the assessment data were gathered from a purposeful sample of three programs in a limited geographical region. Yet, this sample was incredibly diverse, adding much information to the literature. Another important limitation was observed during data collection—not all of the scheduled participants attended data collection sessions. As the results of the OS (Klaw, 2008) also demonstrated, the lack of childcare and reliable transportation was evident during the data collection. Many participants brought their children to the data collection sites or were unable to get transportation to the sites.

Furthermore, research has indicated that childcare may lead to socioeconomic advancements of adolescent mothers, as they have increased available time to focus on school and work (Mollborn & Blalock, 2012). Thus, exploring childcare resources and possibly providing childcare resources while adolescent mothers partake in career development programs may be essential in their ability to focus on such efforts. The childcare challenge likely far exceeds the typical time management struggles of today's nonparenting adolescents who are in the process of exploring careers as described by Strom, Strom, Whitten, and Kraska (2014). In the current study, program staff at community and school program sites indicated that attendance was a challenge for adolescent mothers because of these obstacles (i.e., childcare and transportation), highlighting the need for researchers and practitioners to address obstacles that more than 70% of adolescent mothers face in order to work effectively with these clients.

## Conflict of Interest and Funding Disclosure

The authors reported no conflict of interest or funding contributions for the development of this manuscript.

# References

- Barto, H. H., Lambert, S. F., & Brott, P. E. (in press). The career development of adolescent mothers: A review of 25 years of professional literature. *Journal of Employment Counseling*.
- Betz, N. E. (1988). The assessment of career development and maturity. In W. B. Walsh & S. H. Osipow (Eds.), *Career decision making* (pp. 77–136). Hillsdale, NJ: Erlbaum.
- Betz, N. E., Hammond, M. S., & Multon, K. D. (2005). Reliability and validity of five-level response continua for the career decision self-efficacy scale. *Journal of Career Assessment*, 13, 131–149. doi:10.1177/1069072704273123
- Betz, N. E., & Klein, K. L. (1996). Relationships among measures of career self-efficacy, generalized self-efficacy, and global self-esteem. *Journal of Career Assessment*, *4*, 285–298. doi:10.1177/106907279600400304
- Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment*, *4*, 47–57. doi:10.1177/106907279600400103
- Black, C., & Ford-Gilboe, M. (2004). Adolescent mothers: Resilience, family health work and health-promoting practices. *Issues and Innovations in Nursing Practice*, 11, 351–360. doi:10.1111/j.1365-2648.2004.03204.x
- Blustein, D. L. (1997). A context-rich perspective of career exploration across the life roles. *The Career Development Quarterly*, 45, 260–274.
- Brindis, C., & Philliber, S. (2003). Improving services for pregnant and parenting teens. *Prevention Researcher*, 10(3), 9–13.
- Brosh, J., Weigel, D., & Evans, W. (2009). Assessing the supports needed to help pregnant and parenting teens reach their educational and career goals. *Journal of Extension*, 47. Retrieved from <a href="http://www.joe.org/joe/2009february/pdf/JOE\_v47\_1rb8.pdf">http://www.joe.org/joe/2009february/pdf/JOE\_v47\_1rb8.pdf</a>
- Brown, D., & Associates. (2002). Career choice and development (4th ed.). San Francisco, CA: Jossey-Bass.
- Brubaker, S. J., & Wright, C. (2006). Identity transformation and family caregiving: Narratives of African American teen mothers. *Journal of Marriage and Family*, 68, 1214–1228. doi:10.1111/j.1741-3737.2006.00324.x
- Cardoso, P., & Moreira, J. M. (2009). Self-efficacy beliefs and the relation between career planning and perception of barriers. *International Journal for Educational and Vocational Guidance*, *9*, 177–188. doi:10.1007/s10775-009-9163-2
- Creed, P. A., Fallon, T., & Hood, M. (2009). The relationship between career adaptability, person and situation variables, and career concerns in young adults. *Journal of Vocational Behavior*, 74, 219–229. doi:10.1016/j.jvb.2008.12.004
- Fouad, N., Cotter, E. W., & Kantamneni, N. (2009). The effectiveness of a career decision-making course. *Journal of Career Assessment*, 17, 338–347. doi:10.1177/1069072708330678

- Furstenberg, F. F., Jr., Brooks-Gunn, J., & Morgan, S. P. (1987). *Adolescent mothers in later life*. New York, NY: Cambridge University Press.
- Gee, C. B., & Rhodes, J. E. (2007). A social support and social strain measure for minority adolescent mothers: A confirmatory factor analytic study. *Child: Care, Health and Development*, *34*, 87–97. doi:10.1111/j.1365-2214.2007.00754.x
- Greene, R. R., Galambos, C., & Lee, Y. (2004). Resilience theory: Theoretical and professional conceptualizations. *Journal of Human Behavior in the Social Environment*, 8(4), 75–91.
- Gruber, K. J. (2012). A comparative assessment of early adult life status of graduates of the North Carolina adolescent parenting program. *Journal of Child and Adolescent Psychiatric Nursing*, *25*, 75–83. doi:10.1111/j.1744-6171.2012.00324.x
- Guttmacher Institute. (2010). *U.S. teenage pregnancies, births and abortions: National and state trends and trends by race and ethnicity.* Retrieved from <a href="http://www.guttmacher.org/pubs/USTPtrends.pdf">http://www.guttmacher.org/pubs/USTPtrends.pdf</a>
- Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior*, 74, 145–155. doi:10.1016/j.jvb.2009.01.002
- Horwitz, S. M., Klerman, L. V., Kuo, H. S., & Jekel, J. F. (1991). School-age mothers: Predictors of long-term educational and economic outcomes. *Pediatrics*, 87, 862–868.
- Jarvis, P., & Richardt, J. (2001). *The real game series: Bringing real life to career development*. Retrieved from ERIC database. (ED446297)
- Kaplan, M. B., Blinn-Pike, L., Wittstruck, G., Berger, T. J., & Leigh, S. (2002). Journaling for pregnant and parenting adolescents. *Reclaiming Children and Youth*, *11*, 42–46.
- Kennedy, A. C. (2005). Resilience among urban adolescent mothers living with violence. *Violence Against Women*, 11, 1490–1514. doi:10.1177/1077801205280274
- Klaw, E. (2008). Understanding urban adolescent mothers' visions of the future in terms of possible selves. *Journal of Human Behavior in the Social Environment*, 18, 441–462. doi:10.1080/10911350802486767
- Klaw, E. L., Rhodes, J. E., & Fitzgerald, L. F. (2003). Natural mentors in the lives of African American adolescent mothers: Tracking relationships over time. *Journal of Youth and Adolescence*, *32*, 223–232. doi:10.1023/A:1022551721565
- Low, J. M., Moely, B. E., & Willis, A. S. (1989). The effects of perceived parental preferences and vocational goals on adoption decisions: Unmarried pregnant adolescents. *Youth & Society*, *20*, 342–354. doi:10.1177/0044118X89020003007
- McAdoo, H. P. (2007). Black families. Thousand Oaks, CA: Sage.
- Mollborn, S., & Blalock, C. (2012). Consequences of teen parents' child-care arrangements for mothers and children. *Journal of Marriage and Family*, 74, 846–865. doi:10.1111/j.1741-3737.2012.00988.x
- Muskin, M.-B. (2004). The need for a comprehensive competency-based career guidance curriculum for teen mothers. *Educational Considerations*, *31*(2), 41–45.
- Perrin, K. M., & Dorman, K. A. (2003). Teen parents and academic success. *The Journal of School Nursing*, *19*, 288–293. doi:10.1177/10598405030190050701
- Phillips, S. D. (1997). Toward an expanded definition of adaptive decision-making. *The Career Development Quarterly*, 4, 275–287.
- Porfeli, E. J., & Skorikov, V. B. (2010). Specific and diversive career exploration during late adolescence. *Journal of Career Assessment*, 18, 46–58. doi:10.1177/1069072709340528
- Prescod, D. J., & Daire, A. P. (2013). Career intervention considerations for unwed young black mothers in the United States. *Adultspan Journal*, 12, 91–99.
- Prince-Embury, S. (2006). Resiliency scales for children & adolescents: A profile of personal strengths (RSCA). San Antonio, TX: Pearson Education.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, *58*, 307–321. doi:10.1002/jclp.10020
- Rickwood, R. R. (2002). *Enabling high-risk clients: Exploring a career resiliency model*. Retrieved from <a href="http://contactpoint.ca/wp-content/uploads/2013/01/pdf-02-10.pdf">http://content/uploads/2013/01/pdf-02-10.pdf</a>
- Rickwood, R. R., Roberts, J., Batten, S., Marshall, A., & Massie, K. (2004). Empowering high-risk clients to attain a better quality of life: A career resiliency framework. *Journal of Employment Counseling*, *41*, 98–104. doi:10.1002/j.2161-1920.2004.tb00883.x

- Rosengard, C., Pollock, L., Weitzen, S., Meers, A., & Phipps, M. G. (2006). Concepts of the advantages and disadvantages of teenage childbearing among pregnant adolescents: A qualitative analysis. *Pediatrics*, *118*, 503–510. doi:10.1542/peds.2005-3058
- Santiago-Rivera, A. L., Arredondo, P., & Gallardo-Cooper, M. (2002). *Counseling Latinos and* la familia: *A practical guide*. Thousand Oaks, CA: Sage.
- Sarri, R., & Phillips, A. (2004). Health and social services for pregnant and parenting high risk teens. *Children and Youth Service Review*, *26*, 537–560. doi:10.1016/j.childyouth.2004.02.010
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45, 247–259.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, NJ: Wiley & Sons.
- Savickas, M. L., & Hartung, P. J. (1996). The career development inventory in review: Psychometric and research findings. *Journal of Career Assessment*, *4*, 171–188. doi:10.1177/106907279600400204
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M. E., Guichard, J., . . . van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75, 239–250. doi:10.1016/j.jvb.2009.04.004
- Schilling, T. A. (2008). An examination of resilience processes in context: The case of Tasha. *The Urban Review*, 40, 296–316. doi:10.1007/s11256-007-0080-8
- Shea, M., Ma, P.-W. W., Yeh, C. J., Lee, S. J., & Pituc, S. T. (2009). Exploratory studies on the effects of a career exploration group for urban Chinese immigrant youth. *Journal of Career Assessment*, *17*, 457–477. doi:10.1177/1069072709334246
- Spear, H. J. (2004). A follow-up case study on teenage pregnancy: "Havin' a baby isn't a nightmare, but it's really hard." *Pediatric Nursing*, *30*, 120–125.
- Strom, P. S., Strom, R. D., Whitten, L. S., & Kraska, M. F. (2014). Adolescent identity and career exploration. *NASSP Bulletin*, *98*, 163–179. doi:10.1177/0192636514528749
- Stumpf, S. A., Colarelli, S. M., & Hartman, K. (1983). Development of the career exploration survey (CES). *Journal of Vocational Behavior*, 22, 191–226. doi:10.1016/0001-8791(83)90028-3
- Super, D. E., Thompson, A. S., Lindeman, R. H., Jordaan, J. P., & Myers, R. A. (1979). *Career development inventory-school form*. Palo Alto, CA: Consulting Psychologists Press.
- Taylor, J. L. (2009). Midlife impacts of adolescent parenthood. *Journal of Family Issues*, *30*, 484–510. doi:10.1177/0192513X08329601
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22, 63–81. doi:10.1016/0001-8791(83)90006-4
- Thompson, A. S., & Lindeman, R. H. (1981). *Career Development Inventory: Volume 1: User's Manual.* Retrieved from http://www.vocopher.org/ncda2008/data/resources/CDI%20User%20Manual.pdf
- Zachry, E. M. (2005). Getting my education: Teen mothers' experiences in school before and after motherhood. *Teachers College Record*, 107, 2566–2598. doi:10.1111/j.1467-9620.2005.00629.x
- Zippay, A. (1995). Expanding employment skills and social networks among teen mothers: Case study of a mentor program. *Child and Adolescent Social Work Journal*, *12*, 51–69. doi:10.1007/BF01876139

